

Balance Sheet

Assets

Cash

Marketable Securities

Accounts Receivable

Inventory

Property, Plant, and Equipment

Intangible Assets

Other Assets

Liquidity

Quick Ratio

Current Ratio

Days Accounts Payable

Days Inventory

Days Working Capital

Accounts Receivable Turnover

Inventory Turnover

Intermediate Financial Reporting

An IFRS Perspective

Nelson Lam
Peter Lau



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Intermediate Financial Reporting
An IFRS Perspective



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In 2001, by using the then latest IFRSs and HKFRSs in analysing one of the largest takeover cases in Asia, Mr Lam was the winner in an accounting case competition, which consisted of entries from professors of different universities. He is now an external assessor of Module A: Financial Reporting and a Master Workshop Facilitator of the Qualification Programme run by the Hong Kong Institute of Certified Public Accountants (HKICPA). In recognition of his contribution to the professional examination, the HKICPA presented him the Master Workshop Facilitator Award in 2004 and 2007. Mr Lam is also a member of the Financial Reporting Review Panel in Hong Kong, the chairman of the Accounting and Auditing Standards Committee of the Society of Chinese Accountants and Auditors, and a member of the Financial Reporting Standards Committee of the HKICPA. He is a guest lecturer and speaker in financial reporting subjects in several universities and the co-author of *Auditing and Assurance in Hong Kong* (with Dr Peter Lau).

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Dr Lau has more than 20 years of experience in teaching both graduate and undergraduate degree courses and conducting workshops, revision courses and examination assistance seminars for various accounting and auditing papers of the Association of Chartered Certified Accountants (ACCA) and HKICPA examinations. He is now an examiner of Module C: Auditing and Information Management of the Qualification Programme of the HKICPA. Dr Lau is also an external examiner for various accounting programmes of the University of Hong Kong and the Open University of Hong Kong. He has published over 20 papers in the areas of accounting, auditing and taxation. He is the co-author of *Auditing and Assurance in Hong Kong* (with Mr Nelson Lam) and *Hong Kong Auditing* (with Mr Millichamp A.).

Preface

No one using, performing, teaching or studying financial reporting can avoid IFRS!

IFRS, or International Financial Reporting Standards, is the most popular topic in financial reporting and accounting in recent years. As of early 2008, almost 100 countries and places have used, allowed to use or proposed to use IFRS in corporate financial reporting. Even in the United States, the Securities and Exchange Commission will soon have public consultation to allow IFRS as a basis for US entities in preparing financial reports, and the American Institute of Certified Public Accountants (AICPA) is also recruiting volunteer members to support the relevant issues of IFRS.

Unfortunately, the market still lacks sufficient books on financial reporting or accounting in the context of IFRS. The few books that exist contain theoretical summaries without sufficient illustrative examples and cases. The regular changes in IFRS also make this situation more complicated.

Purpose and Features of the Book

Intermediate Financial Reporting – An IFRS Perspective illustrates and explains the financial reporting concepts, accounting treatments and requirements, and preparation and presentation of financial statements encountered at the corporate or individual entity level by using the most updated set of IFRS. Issues and requirements encountered in some listed entities or in special industries will be covered in our forthcoming advanced financial reporting book. This book also contains several illustrative examples and real-life cases to help readers digest and understand the IFRS.

The real-life cases in this book are sourced from those countries and places that have adopted or permitted the use of IFRS, including Australia, China, Finland, France, Germany, Hong Kong, Italy, the Netherlands, Singapore, the United Kingdom and some emerging markets such as the Russian Federation.

Structure of the Book

The 24 chapters of this book are structured into the following five parts:

Part I: Conceptual and Regulatory Framework (Chapters 1–2) explains the relationship between financial reporting and the IFRS and the IFRS Framework in preparing and presenting financial statements.

Part II: Elements of Financial Statements – Assets (Chapters 3–10) illustrates and explains the financial reporting issues and requirements on assets held by an entity, including property, plant and equipment, leases, investment property, intangible assets, borrowing costs, impairment of assets, inventories and construction contracts.

Part III: Elements of Financial Statements – Liabilities, Equity, Income and Expenses (Chapters 11–14) illustrates and explains the financial reporting issues and requirements on liabilities, equity, income and expenses accounted for by an entity.

Part IV: Financial Instruments (Chapters 15–18) illustrates and explains the financial reporting issues and requirements on financial instruments, one of the most difficult topics in IFRS, including their

definition, initial recognition and measurement, classification and subsequent measurement, presentation and disclosure.

Part V: Presentation of Financial Statements and Related Topics (Chapters 19–24), after the illustration and explanation of all common items and transactions in the financial statements, illustrates how to present a complete set of financial statements, and the relevant issues and requirements that an entity should consider in reporting its financial position and financial performance.

For Practitioners

Users and preparers of financial reports may not only find the concepts and explanations in this book useful in their daily work, but also use it as their reference in analysing, auditing and preparing their financial reports. The abundance of examples and real-life cases from various countries and places should be a rich database for them to use for practical guidance and reference.

For Academics

Professors and lecturers teaching financial reporting and accounting should find this book a good text for their undergraduate and postgraduate intermediate and advanced accounting and financial reporting courses. Each chapter of this book can serve as a single topic, and the examples and real-life cases can make their sharing and presentation more practical and lively and stimulate students' interest.

Many exercises, problems and case studies are incorporated in this book for students' class discussion, homework and practice exercises. A supplementary guide will also be provided to professors and lecturers using this book; this guide will contain answers to all exercises, problems and case studies. In addition, PowerPoint presentations with animation effects and a test bank for each chapter of the book have been created and are available to professors and lecturers.

For Students

Students learning financial reporting and accounting in universities or taking professional examinations offered by, for example, ACCA, CPA Australia and HKICPA, should consider this book as a good textbook and reference for their understanding of financial reporting and IFRS to help them pass their professional examinations. The exercises, problems and case studies can help them practise and understand the concepts and examination requirements; in addition, questions from past professional examinations are also adapted and included in each chapter for students' practice and understanding.

We have accumulated cases on using, practising and teaching IFRS and related topics for several years now. For example, the website of Nelson Lam's firm (www.NelsonCPA.com.hk) is uploaded with more than 200 sets of PowerPoint slides in PDF format. These are based on his public presentations during the last few years and are available for free public download. With a solid background and hands-on experience in the academic, practical and professional arenas, we know the demands, interests and limitations of academics, practitioners, students and examiners of professional examinations. We have written this book with reference to these considerations.

Rome was not built in a day!

Many days and nights, and sweat and tears went into gathering and assembling the concepts,

theories, requirements, examples and, in particular, real-life cases to complete this book. We thank ACCA and HKICPA for their past examination questions adapted in our book. We appreciate the greatest assistance, support, time and efforts from many parties. In particular, Peter Lau tenders his special thanks to his wife, Lydia, and his children, Stanley and Shirley, for their love. Nelson Lam tenders his wholehearted thanks to his wife, Stephanie, for her love, patience and care and his colleagues and friends for their support.

Nelson Lam and Peter Lau

PART I

Conceptual and Regulatory Framework

- 1 Financial Reporting and International Financial Reporting Standards
- 2 Framework for International Financial Reporting



1

Financial Reporting and International Financial Reporting Standards

Learning Outcomes

This chapter enables you to understand the following:

- 1 Brief history of financial reporting
- 2 Objective of financial reporting
- 3 Development of International Accounting Standards Board
- 4 Scope and development of International Financial Reporting Standards
- 5 Current development of international accounting
- 6 Current trends and challenges to the International Financial Reporting Standards

What is accounting? What is financial reporting? Are they the same? Merriam-Webster Online Dictionary refers to accounting as “the system of recording and summarizing business and financial transactions and analyzing, verifying, and reporting the results”. Encyclopaedia Britannica Online refers to accounting as “systematic development and analysis of information about the economic affairs of an organization”. However, neither Merriam-Webster nor Encyclopaedia Britannica has defined financial reporting.

Nowadays, “accounting” and “financial reporting” are often used interchangeably; at least, the International Accounting Standards Board (IASB) regards its International Financial Reporting Standards (IFRSs) as being the same as the International Accounting Standards (IASs).

Since 1494 when the Italian mathematician and Franciscan friar Fra Luca Bartolomeo de Pacioli Fa (or Luc Pacioli) wrote his book *Summa de Arithmetica Geometria Proportioni et Proportionalita*, with a brief introduction of the double-entry concept, the double-entry bookkeeping system has been the backbone of development in accounting and financial reporting. Even though statements of income and balances emerged in 1600 and different countries and places have different procedures, principles and standards for recording and preparing a financial report, a complete record of transactions and affairs and the preparation of the financial statements of an entity still rely on the double-entry concept and bookkeeping system.

The establishment of the International Accounting Standards Committee (IASC) in 1973 and the later IASB did not change this situation; rather, it only promoted the harmonisation of the accounting procedures and standards around the world by, inter alia, issuing the IFRSs and IASs. The road is long, but the achievement so far has been significant. According to the IASB, up to March 2008, nearly 100 countries and places had required or permitted the use of, or had a policy of convergence with, IFRSs.

This book explains the requirements and application of IFRSs and IASs in the daily business transactions and affairs of an entity. Although this book is titled *Intermediate Financial Reporting – An IFRS Perspective* and is aimed at the intermediate accounting courses for IFRSs and IASs in university undergraduate and postgraduate programmes, it is not only an intermediate-level financial reporting textbook. Rather, the competence level and requirements for this book range from elementary to advanced levels in accounting and financial reporting curricula.

This chapter provides a brief history of accounting and financial reporting and then describes the development of IFRSs and IASB and their road in the past and ahead.

1.1 Objective of Financial Reporting and the IFRSs

The user of an entity’s financial statements aims at knowing what has happened in the entity. However, before reading the financial statements, the user should be familiar with the basis for their preparation, i.e., the principles and standards that the entity used to prepare the financial statements.

**Real-life
Case 1.1**
PCCW Limited

In August 2000, PCCW Limited (previously, Pacific Century Cyberworks Limited) completed the largest merger and acquisition deal ever in Asia excluding Japan at that time and acquired Cable and Wireless HKT Limited (HKT). It made a total consideration of HK\$225 billion and ended up with HK\$172 billion, more than 75% of the consideration, as goodwill in financial reporting. The financial statements of PCCW Limited for the year 2000 were prepared and reported in Hong Kong and the United States using the respective accounting practices of these places. Some of the results are summarised as follows:

- In Hong Kong, PCCW's goodwill was eliminated to the equity, and net loss in 2000 was HK\$6.9 billion.
- In the United States, goodwill was capitalised as an asset and amortised to profit or loss over the estimated life, and the net loss in 2000 was HK\$14.6 billion.

Because of only one accounting discrepancy between Hong Kong and the United States, the difference of PCCW's net loss in Hong Kong and the United States amounted to HK\$7.7 billion, or US\$1 billion.

Each country or place used to have different accounting procedures, principles and standards for governing the preparation of financial statements of entities within its jurisdiction. The driving forces for these differences are a lengthy list of reasons, including political, economical, social, technological, historical, cultural, legal and other issues.

With the aim of resolving and reconciling such accounting differences, the IFRSs and IASs have been issued since 1974, one year after the establishment of the IASC.

1.2 History and Structure – From the IASC to the IASB

IFRSs are currently issued and administered by the International Accounting Standards Board (IASB), an independent standard-setting board based in London. The IASB was preceded by the International Accounting Standards Committee (IASC), which was founded in 1973 as a result of an agreement by accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States. These bodies constituted the board of IASC at that time. From 1983 to 2001, the IASC's members included all the professional accountancy bodies that were members of the International Federation of Accountants (IFAC).

In 1999, after a two-year review process, the board of IASC approved a restructuring plan. Under the terms of the restructuring, the IASC would become a separate corporate entity and the parent body would be a not-for-profit corporation governed by the trustees and funding the activities of the IASB, which in turn would be responsible for the technical agenda and the development and approval of new IFRSs.

In March 2001, the IASC Foundation was formally incorporated in the state of Delaware in the United States. It acts as the parent entity of the IASB. Effective

1 April 2001, the IASB assumed accounting standard setting responsibilities from its predecessor body, the IASC.

In accordance with the constitution of the IASC Foundation, a review of the constitution was completed in June 2005 and certain amendments to the constitution, which governs the IASC Foundation's operational arrangements, were approved.

1.2.1 Changing Role and New Objectives

The establishment of the IASC in 1973 was intended to promote the harmonisation of accounting procedures and standards around the world, and the IASs issued by the IASC were tailored for that purpose. The IASC used to have no authority to require individual countries or entities to comply with its standards.

The IASC did not have a comprehensive set of IASs at its infant stage, and most developed countries had their own set of accounting standards. Only a few countries, which did not have their domestic standards, adopted the IASs during that period.

As additional and revised IASs were issued and more and more countries began to participate in the IASC's activities, the IASC's status as an international authority grew. Its status was further enhanced after the following significant developments:

- 2002: The European Commission passed the European Regulation 1606 on 19 July 2002 to require listed entities in the European Union to adopt IFRSs from 2005.
- 2002: The IASB and the accounting standard setter in the United States, the Financial Accounting Standards Board (FASB), announced initiatives to achieve compatibility in financial reporting standards and to coordinate future work programmes.
- 2003: Australia, Hong Kong and New Zealand committed to the adoption of IFRSs.
- 2005: Nearly 7,000 listed businesses in 25 countries in Europe switched to IFRSs.
- 2006: The IASB and FASB agreed on a road map for convergence between IFRSs and the generally accepted accounting practices (GAAP) in the United States.
- 2006: China, the country with the largest population, adopted accounting standards substantially in line with IFRSs.
- 2007: Brazil, Canada, Chile, India, Japan and Korea established timelines to adopt or converge with IFRSs.
- 2007: The Securities and Exchange Commission (SEC) in the United States removed the reconciliation requirement for non-US companies reporting under IFRSs, and consulted on IFRSs for domestic companies.

After the IASC's reconstitution to the IASB and the IASC Foundation in 2000 and further amendments in 2002 to 2007, the objectives of the IASC Foundation were refined as follows:

1. To develop, in the public interest, a single set of high-quality, understandable and enforceable global accounting standards that require high-quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions;
2. To promote the use and rigorous application of those standards;

3. In fulfilling the objectives associated with (1) and (2), to take account of, as appropriate, the special needs of small and medium-sized entities and emerging economies; and
4. To bring about convergence of national accounting standards and IASs and IFRSs towards high-quality solutions.

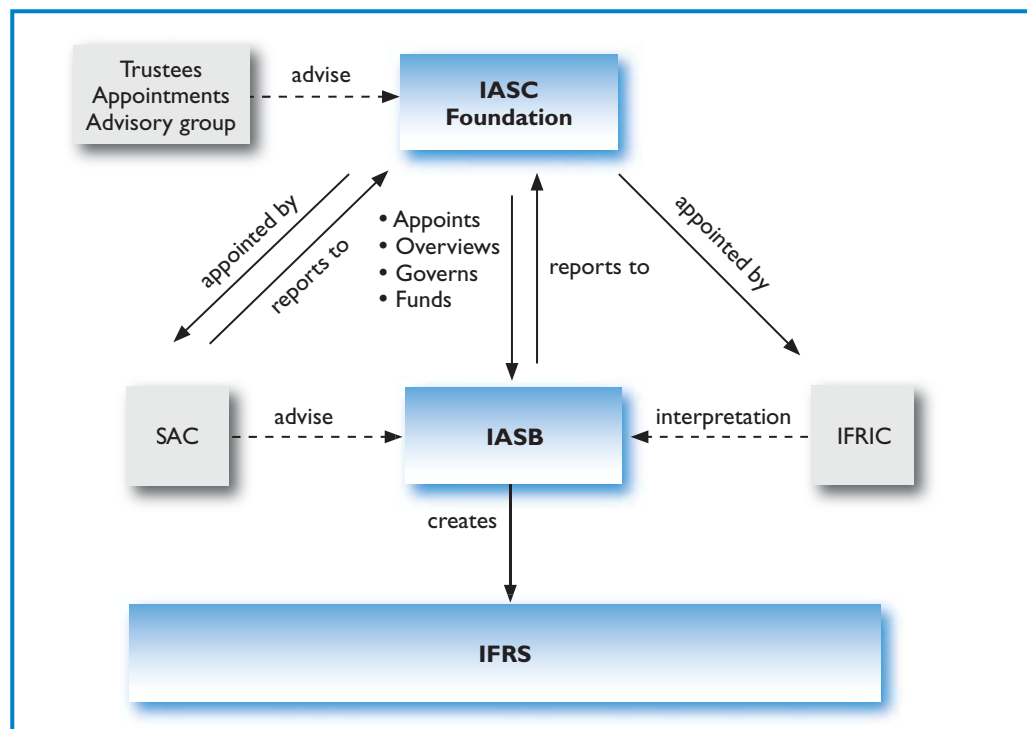
1.2.2 Current Structure

The IASB is appointed and overseen by a geographically and professionally diverse group of trustees (i.e., the IASC Foundation) who are accountable to the public interest. It is also supported by an external advisory council (i.e., the Standards Advisory Council, or SAC) and an interpretations committee (the International Financial Reporting Interpretations Committee, or IFRIC) to offer guidance where there is any divergence in practice. Figure 1.1 summarises the relationship of the various groups.

The IASC Foundation is an independent organisation composed of two main bodies: the trustees and the IASB. The governance of the IASC Foundation rests with 22 trustees. The trustees' responsibilities include appointing the members of the IASB and associated councils and committees, as well as securing financing for the organisation.

FIGURE 1.1

Organisational structure of the IASB



Source: International Accounting Standards Board website, www.iasb.org

The IASB has the sole responsibility of setting accounting standards, with 12 full-time and two part-time members who come from different countries and have a variety of functional backgrounds. These members are not dominated by any particular constituency or regional interest, and their foremost qualification for IASB membership is technical expertise.

The structure of the IASC Foundation includes another two bodies. The Standards Advisory Council (SAC) provides a forum and a formal vehicle for participation by organisations and individuals with an interest in international financial reporting. The participants have diverse geographical and functional backgrounds. The SAC's objective is to give advice to the IASB on priorities and on major standard-setting projects.

The other body within the structure of the IASC Foundation is the International Financial Reporting Interpretation Committee (IFRIC), which is the IASB's interpretative body and comprises 14 voting members and a non-voting chairman, all appointed by the trustees. The IFRIC replaced the former Standing Interpretations Committee (SIC) in 2002. The role of the IFRIC is to prepare interpretations of IFRSs for approval by the IASB and, in the context of the Framework, to provide timely guidance on financial reporting issues.

1.3 IFRSs, IASs and Interpretations

An accounting standard issued by the IASB is designated an "International Financial Reporting Standard" or "IFRS", while an accounting standard issued by its predecessor, the IASC, continues to be designated an "International Accounting Standard" or "IAS". The Preface to IFRSs issued in 2002 makes it clear that IFRSs include IASs pursuant to the resolution of the IASB passed in April 2001: "all Standards and Interpretations issued under previous Constitutions continue to be applicable unless and until they are amended or withdrawn".

In consequence, IFRSs in this book collectively refer to the following standards and interpretation not yet amended or withdrawn:

1. International Financial Reporting Standards (IFRSs);
2. International Accounting Standards (IASs);
3. IFRIC Interpretations (IFRICs); and
4. SIC Interpretations (SICs).

1.3.1 IFRSs in Issue

The current IFRSs, IASs and Interpretations in issue up to 1 March 2008 are summarised below.

IFRS 1	<i>First-time Adoption of International Financial Reporting Standards</i>
IFRS 2	<i>Share-based Payment</i>
IFRS 3	<i>Business Combinations</i>
IFRS 4	<i>Insurance Contracts</i>
IFRS 5	<i>Non-current Assets Held for Sale and Discontinued Operations</i>
IFRS 6	<i>Exploration for and Evaluation of Mineral Resources</i>

IFRS 7	<i>Financial Instruments – Disclosures</i>
IFRS 8	<i>Operating Segments</i>
IAS 1	<i>Presentation of Financial Statements</i>
IAS 2	<i>Inventories</i>
IAS 7	<i>Statements of Cash Flows</i>
IAS 8	<i>Accounting Policies, Changes in Accounting Estimates and Errors</i>
IAS 10	<i>Events after the Reporting Period</i>
IAS 11	<i>Construction Contracts</i>
IAS 12	<i>Income Taxes</i>
IAS 16	<i>Property, Plant and Equipment</i>
IAS 17	<i>Leases</i>
IAS 18	<i>Revenue</i>
IAS 19	<i>Employee Benefits</i>
IAS 20	<i>Accounting for Government Grants and Disclosure of Government Assistance</i>
IAS 21	<i>The Effects of Changes in Foreign Exchange Rates</i>
IAS 23	<i>Borrowing Costs</i>
IAS 24	<i>Related Party Disclosures</i>
IAS 26	<i>Accounting and Reporting by Retirement Benefit Plans</i>
IAS 27	<i>Consolidated and Separate Financial Statements</i>
IAS 28	<i>Investments in Associates</i>
IAS 29	<i>Financial Reporting in Hyperinflationary Economies</i>
IAS 31	<i>Interests in Joint Ventures</i>
IAS 32	<i>Financial Instruments – Presentation</i>
IAS 33	<i>Earnings per Share</i>
IAS 34	<i>Interim Financial Reporting</i>
IAS 36	<i>Impairment of Assets</i>
IAS 37	<i>Provisions, Contingent Liabilities and Contingent Assets</i>
IAS 38	<i>Intangible Assets</i>
IAS 39	<i>Financial Instruments – Recognition and Measurement</i>
IAS 40	<i>Investment Property</i>
IAS 41	<i>Agriculture</i>
IFRIC 1	<i>Changes in Existing Decommissioning, Restoration and Similar Liabilities</i>
IFRIC 2	<i>Members’ Shares in Cooperative Entities and Similar Instruments</i>
IFRIC 4	<i>Determining Whether an Arrangement Contains a Lease</i>
IFRIC 5	<i>Rights to Interests Arising from Decommissioning, Restoration and Environmental Rehabilitation Funds</i>
IFRIC 6	<i>Liabilities Arising from Participating in a Specific Market – Waste Electrical and Electronic Equipment</i>
IFRIC 7	<i>Applying the Restatement Approach under IAS 29 Financial Reporting in Hyperinflationary Economies</i>
IFRIC 8	<i>Scope of IFRS 2</i>
IFRIC 9	<i>Reassessment of Embedded Derivatives</i>

- IFRIC 10 *Interim Financial Reporting and Impairment*
- IFRIC 11 *IFRS 2 – Group and Treasury Share Transactions*
- IFRIC 12 *Service Concession Arrangements*
- IFRIC 13 *Customer Loyalty Programmes*
- IFRIC 14 *IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and Their Interaction*

- SIC-7 *Introduction of the Euro*
- SIC-10 *Government Assistance – No Specific Relation to Operating Activities*
- SIC-12 *Consolidation – Special Purpose Entities*
- SIC-13 *Jointly Controlled Entities – Non-monetary Contributions by Venturers*
- SIC-15 *Operating Leases – Incentives*
- SIC-21 *Income Taxes – Recovery of Revalued Non-depreciable Assets*
- SIC-25 *Income Taxes – Changes in the Tax Status of an Enterprise or Its Shareholders*
- SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*
- SIC-29 *Service Concession Arrangements – Disclosure*
- SIC-31 *Revenue – Barter Transactions Involving Advertising Services*
- SIC-32 *Intangible Assets – Web Site Costs*

1.3.2 Coverage and Approach of Intermediate Accounting Textbook

This book, as explained at the beginning of this chapter, aims at addressing the requirements and application of IFRSs and IASs in the daily business transactions and affairs of an entity. Like other textbooks intended for the intermediate accounting courses in university undergraduate and postgraduate programmes, it focuses on the accounting requirements for the transactions and events in the income statement and balance sheet and the preparation of financial statements.

Based on the above objective, the scope of this book includes the relevant IFRSs and IASs with appropriate discussion on the relevant Interpretations. The requirements of IFRSs and IASs, the cases and the examples are sourced from, and make reference to, the original IFRSs and IASs. This book, however, will not cover all the IFRSs. Some IFRSs, in particular those relating to group accounting, consolidation and equity accounting, which are usually covered in advanced accounting textbooks, will not be covered.

Although this book is titled *Intermediate Financial Reporting: An IFRS Perspective*, it is not targeted solely at an intermediate level of competence. The competence level and requirements for the book range from elementary (for example, basic bookkeeping) to advanced (for example, theoretical and argumentative reasoning) in accounting and financial reporting curricula.

Every chapter of the book contains not only examples illustrating the application of the IFRSs, but also various real-life cases sourced from listed entities around the world, mainly Australia, China, Finland, France, Germany, Hong Kong, Italy, the

Netherlands, Singapore, the United Kingdom, and some emerging markets such as the Russian Federation, where the local accounting requirements have conformed to or are substantially the same as IFRSs, or the entities have adopted the IFRSs. Similar to a doctor having patients and a barrister having court cases to practise on, an accountant or a financial reporting preparer or user requires real-life financial statements on which to practise the application of IFRSs.

1.4 Authority of IFRSs

The IASB achieves its objectives primarily by developing and publishing IFRSs and promoting the use of those standards in general purpose financial statements and other financial reporting. However, the IASB has no authority to require compliance with its accounting standards. It only prescribes that, where IFRSs are the required accounting standards, or an entity chooses to comply with IFRSs, the requirements of all IFRSs should be regarded as mandatory.

The most significant recent developments are as follows:

1. Since 2005, all publicly listed businesses in the European Union have been required to prepare their financial statements in conformity with IFRSs. From the same date, Australia, Hong Kong and New Zealand have adopted IFRSs as their national accounting standards.
2. In 2007, the US SEC removed the reconciliation requirement for non-US companies reporting under IFRSs.

1.4.1 Due Process for IFRSs

In developing the IFRSs, the IASB follows a rigorous and open due process. It ensures that IFRSs are of high quality and are developed only after giving IASB's constituencies opportunities to make their views known at several points in the standard-setting due process. The procedure of its due process aims at transparency and accessibility, extensive consultation and responsiveness, and accountability.

The IASB's standard-setting process comprises the following six stages, with the trustees having the opportunity to ensure compliance at various points throughout the process.

- Stage 1: Setting the agenda
- Stage 2: Project planning
- Stage 3: Development and publication of a discussion paper
- Stage 4: Development and publication of an exposure draft
- Stage 5: Development and publication of an IFRS
- Stage 6: Procedures after an IFRS is issued

1.4.2 National Accounting Standard Setters

In developing IFRSs, the IASB works with national accounting standard setters to maximise the convergence of IFRSs and national standards. It serves as a partnership relationship with the national accounting standard setters. Its "Statement of Best Practice: Working Relationships between the IASB and other Accounting Standard-setters" of

February 2006 assumed and reconfirmed the ultimate aims of IASB and other national accounting standard setters in developing a single set of high-quality, understandable and enforceable global accounting standards and bringing about a convergence of national accounting standards and IFRSs towards high-quality solutions.

1.5 Application and Use of IFRSs

IFRSs are used in general purpose financial statements and other financial reporting. Other financial reporting comprises information provided outside financial statements that

- assists in the interpretation of a complete set of financial statements; or
- improves users' ability to make efficient economic decisions.

1.5.1 Contents and Structure of IFRSs

From the contents perspective, IFRSs set out recognition, measurement, presentation and disclosure requirements dealing with transactions and events that are important in general purpose financial statements. They may also set out such requirements for transactions and events that arise mainly in specific industries.

IFRSs include paragraphs in bold type and plain type, which have equal authority. The paragraphs in bold type indicate the main principles. An individual standard should be read in the context of the objective stated in the standard and the Preface to IFRSs.

In some cases, IFRSs permit different treatments for given transactions and events. For example, IAS 16 *Property, Plant and Equipment* permits a choice between cost model and revaluation model to subsequently measure a class of property, plant and equipment. In certain cases, one treatment is also identified as the “benchmark treatment” and the other as the “allowed alternative treatment”. The financial statements of an entity may appropriately be described as being prepared in accordance with IFRSs whether they use the benchmark treatment or the allowed alternative treatment.

Nonetheless, the IASB's objective is to require like transactions and events to be accounted for and reported in a like way and unlike transactions and events to be accounted for and reported differently, both within an entity over time and among entities. Consequently, the IASB intends not to allow choices in accounting treatment. In addition, the IASB has reconsidered, and will continue to reconsider, those transactions and events for which IASs permit a choice of accounting treatment, with the objective of reducing the number of those choices.

1.5.2 Application to Profit-oriented Entities

From the entity perspective, IFRSs are designed to apply to general purpose financial statements and other financial reporting of all profit-oriented entities. Profit-oriented entities include those engaged in commercial, industrial, financial and similar activities, whether organised in corporate or in other forms. They include organisations such as mutual insurance companies and other mutual cooperative entities that provide

dividends or other economic benefits directly and proportionately to their owners, members or participants. Although IFRSs are not designed to apply to not-for-profit activities in the private sector, public sector or government, entities with such activities may find them appropriate.

The Public Sector Committee of the International Federation of Accountants has issued a guideline stating that IFRSs are applicable to government business entities. The Public Sector Committee prepares accounting standards for governments and other public sector entities, other than government business entities, based on IFRSs.

1.6 Current Trends and Future Challenges of IFRSs

From the new IFRSs and amendments issued in recent years and observations around the world, several trends and developments of IFRSs have been identified:

1. Globalisation of the accounting standards is unstoppable, and convergence of US GAAP to IFRSs is foreseeable.
2. Convergence is not only on practices and requirements but also on terminology to be used. For example, the formal name of a balance sheet is no longer a balance sheet, but rather a statement of financial position (see Chapters 2 and 19).
3. Fair value measurement is frequently and increasingly used and is considered to be more relevant. Throughout the book, this is one of the clear messages. In addition, measurement fallback from fair value to cost is often not allowed.
4. Fair value should reflect the market condition at the balance sheet, i.e., revaluated at each balance sheet instead of annually or regularly, and the changes in fair value are directly recognised in profit or loss, instead of recognised in equity (or other comprehensive income, another new terminology in IFRSs).
5. Fewer accounting choices will be available. Soon there may be only one rule for like transactions and events.
6. Off-balance sheet items can no longer be “off”, and they must be recognised in the balance sheet (or, formally and most updated, in the statement of financial position).
7. Beyond the fair value measurement, risk approach or oriented disclosures are required, for example, the risk analysis and sensitivity analysis disclosures in accordance with IFRS 7 (see Chapter 18).

Real-life Case 1.2

Societe Generale Group

In January 2008, after the financial year-end but before the issuance of the financial statements, Societe Generale Group, one of the largest banking groups in France, “uncovered unauthorised and concealed trading activities of exceptional scale involving directional positions taken during 2007 and the beginning of 2008 by a trader”. A loss of €6.4 billion named as “allowance expense on provision for the total cost of the unauthorised and concealed trading activities” was finally recognised by Societe Generale in the financial statements of 2007.

**Real-life
Case 1.2**
(cont'd)

Societe Generale considered that it was appropriate to recognise the loss of €6.4 billion in 2007, instead of 2008, even though it was a departure from IAS 10 *Events after the Reporting Period* (or *Events after the Balance Sheet Date*) and IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

In respect of this departure, the *International Herald Tribune* of 6 March 2008 had the following to report:

- “It is inappropriate,” said Anthony Cope, a retired member of both the IASB and its American counterpart, the Financial Accounting Standards Board. “They are manipulating earnings,” he added.
- John Smith, a member of the IASB, said, “This raises a question as to just how creative they are in interpreting accounting rules in other areas.”
- While the London-based International Accounting Standards Board writes the rules, there is no international organisation with the power to enforce them and assure that companies are in compliance.

The current development and future of IFRSs seem quite encouraging and prosperous. AccountancyAge.com even reported that Robert Herz, chairman of the FASB, had a vision that there would be a merger between the IASB and FASB one day and that they would become a single organisation, under which FASB would be a US branch of the IASB and there would be other branches around the world, including China. However, before this vision can be realised, certain challenges are faced by the IASB and IFRSs.

1. Historical accounting differences have resulted from a lengthy list of reasons, including political, economical, social, technological, historical, cultural, legal and other issues. The differences may not be reconciled or removed simply by the adoption of IFRSs.
2. Corporate failures, including Enron and Baring, have significantly changed the regulatory framework on business, including accounting. Failures in different countries and places may still affect respective national practices and IFRSs, and changes seem inevitable. Will Societe Generale or Bear Stearns affect the IFRSs soon?
3. Experience in applying IFRSs is still limited, and a process of experience accumulation may take a longer period. Further changes or even a revolution in IFRSs may still occur.
4. The IASB is an independent body, and it is responsible for issuing and interpreting IFRSs. However, it does not have a proactive or reactive mechanism to resolve application disputes, an inconsistent application or misapplication issues around the world. Different countries, places and regulators may have different applications or even different interpretations that the IASB has not addressed.
5. In cases of dispute, as detailed in Real-life Case 1.2, there is no international organisation with the power to enforce the IFRSs and assure that entities using

IFRSs are really in compliance with them. The *International Herald Tribune* further addressed the case that Societe Generale might have achieved its agenda but “at the cost of igniting a debate over how well international accounting standards can be policed in a world with no international regulatory body”.

1.7 Summary

“Financial reporting” and “accounting” are often used interchangeably. While the double-entry bookkeeping system is still the backbone of development in financial reporting and accounting, accounting standards and principles around the world are converging towards the International Financial Reporting Standards (IFRSs).

IFRSs are issued and administered by the International Accounting Standards Board (IASB), an independent standard-setting board that was preceded by the International Accounting Standards Committee (IASC) established in 1973. Both the then IASC and the current IASB aim at promoting the harmonisation of accounting procedures and standards by, inter alia, issuing the IFRSs. IFRSs collectively include the IFRSs, International Accounting Standards (IASs), IFRIC Interpretations and SIC Interpretations.

The IASB has no authority to enforce the usage and application of IFRSs, but since 2005 many entities around the world have begun to adopt IFRSs in preparing their financial statements. Most critical developments are the IFRS requirements of the European Union on all listed entities and the removal of the reconciliation requirement of the Securities and Exchange Commission in the United States on a non-US entity so long as it uses IFRSs in preparing financial statements.

The contents of IFRSs include recognition, measurement, presentation and disclosure requirements on different transactions and events, and all bold and non-bold paragraphs of IFRSs have equal authority. The application of IFRSs is mainly on profit-oriented entities but can still be found appropriate for non-profit making entities.

While the current development of IFRSs seems quite encouraging and prosperous and certain key trends can be observed, certain challenges may still lie ahead or along the road to convergence.

Review Questions

1. What are accounting and financial reporting? Are they the same?
2. Describe the role of the double-entry bookkeeping system in financial reporting.
3. List the significant developments of the IASB and IFRSs in recent years.
4. What is the IASC? List the objectives of the IASC Foundation.
5. What is the IASB? Describe the structure of the IASB.
6. Describe the role of the IFRIC.
7. List all the IFRSs in issue.
8. What is the authority of IFRSs?
9. What are the differences between the bold-type paragraphs and plain-type paragraphs in each IFRS?

10. State the differences and implication of benchmark treatment and allowed alternative treatment in an IFRS.
11. Define the scope of application of IFRSs.
12. Discuss the current trend and development of IFRSs.
13. Discuss the challenges to the IASB and IFRSs.

Exercises

- Exercise 1.1** The International Financial Reporting Standards (IFRSs) refers to IFRSs, IASs and Interpretations, and they are issued by different bodies. Explain the differences between IFRSs, IASs and Interpretations and whether there is any implication of their being issued by different bodies.
- Exercise 1.2** Explain the role and objectives of the International Accounting Standards Board (IASB) and the differences between the role and objectives of the IASB and the International Financial Reporting Interpretation Committee (IFRIC) and Standards Advisory Council (SAC).

Problems

- Problem 1.1** There are persons alleging that accounting standards or financial reporting standards, in particular IFRSs, are designed only for profit-making entities to prepare their financial statements. Concerns have been raised that the public sectors or non-profit making entities are neglected.
- Explain the validity of the challenges and concerns and suggest ways to accommodate them.
- Problem 1.2** Amy Yeung, the managing director of CC & CL Worldwide Limited, is interested to know to what extent the integrity and authority of the IFRSs lend credibility and give recognition to the company worldwide. She is preparing to have an initial public offering of her company and is considering whether her company should adopt IFRSs in preparing the financial statements.
- Explain to Amy Yeung the authority and due process for IFRSs to establish her understanding and recognition on IFRSs.

Case Studies

- Case Study 1.1** Autol, a public limited company incorporated in Accaland, currently prepares its financial statements under the local GAAP (Generally Accepted Accounting Principles) of Accaland. It currently operates in the telecommunications industry and has numerous national and international subsidiaries. It is also quoted on the Accaland Stock Exchange.

The company wishes to expand its business activities and raise capital on international stock exchanges. The directors are somewhat confused over the financial reporting requirements of multinational companies as they see a variety of local GAAP and reporting practices being used by these companies, including the preparation of reconciliations to alternative local GAAP such as that of the United States, and the use of the accounting standards of the International Accounting Standards Board (IASB).

The directors have considered the use of US GAAP in the financial statements but are unaware of the potential problems that might occur as a result of this move. Further, the directors are planning to list the company's shares on the stock exchange of Country Wonderland and are, therefore, considering currently the use of IFRSs in the preparation of the consolidated financial statements. They require advice on the potential impact on reported profit of a move from local GAAP to IFRSs. The stock exchange of Country Wonderland permits a non-Wonderland entity to use IFRSs.

Required:

Write a report suitable for presentation to the directors of Autol that sets out the following information:

1. The variety of local GAAP and reporting practices currently being used by multinational companies, setting out brief possible reasons why such companies might prepare financial statements utilising a particular set of generally accepted accounting practices.
2. Advise as to whether Autol should prepare a single set of consolidated financial statements that comply only with US GAAP.
3. The problems relating to the current use of GAAP reconciliations by companies and whether the use of such reconciliations is likely to continue into the future.

(ACCA 3.6 December 2002, adapted)

2

Framework for International Financial Reporting

Learning Outcomes

This chapter enables you to understand the following:

- 1 The framework for the preparation and presentation of financial statements
- 2 The objective of financial statements
- 3 The underlying assumptions in preparing and presenting financial statements
- 4 The qualitative characteristics of financial statements
- 5 The elements of financial statements
- 6 The recognition and measurement of the elements of financial statements
- 7 The concept of capital and capital maintenance

**Real-life
Case 2.1**
Societe Generale Group

In respect of its “unauthorised and concealed trading activities” as set out in Real-life Case 1.2, Societe Generale Group departed from IAS 10 *Events after the Reporting Period* (or *Events after the Balance Sheet Date*) and IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* and recognised a loss of €6.4 billion named as “allowance expense on provision for the total cost of the unauthorised and concealed trading activities” in 2007, instead of 2008. In Note 1 to its consolidated financial statements it made the following clarifications:

- For the information of the shareholders and the public, the group considered that the application of IAS 10 *Events after the Balance Sheet Date* and IAS 39 *Financial Instruments: Recognition and Measurement* for the accounting of transactions relating to the unauthorised activities and their unwinding was inconsistent with the objective of the financial statements described in the Framework of IFRS standards.
- For the purpose of a fair presentation of its financial consequences of the unwinding of these unauthorised activities under a separate caption in consolidated income for the 2007 financial year.

Framework for the Preparation and Presentation of Financial Statements (“the Framework”) is the framework for the IFRSs and should be the “Framework of IFRS standards” mentioned by Societe Generale Group in Real-life Case 2.1. One of the contents of the Framework is exactly the objective of financial statements; however, the Framework might have not stated the reason for the inconsistency between it and IAS 10 or IAS 39.

Rather, the Framework sets out the concepts that underlie the preparation and presentation of financial statements for external users and states that it is not an IFRS and that there is nothing in this Framework overriding any specific IFRS, including IAS 10 and IAS 39.

While IAS 1 *Presentation of Financial Statements* was revised in 2007, the Framework has not been amended. One reason is that the IASB and the Financial Accounting Standards Board (FASB) of the United States, which pioneered the conceptual framework of accounting in the 1970s, are undertaking a joint project to develop an improved common conceptual framework. This chapter explains what the current Framework for the IFRSs is, and its role and relationship with the IFRSs. The future development of a converged framework between the IASB and FASB is also discussed as a closing remark to this chapter.

2.1 Purpose and Scope of the Framework

The Framework addresses the concepts underlying the information presented in general purpose financial statements. The objective of the Framework is to facilitate

the consistent and logical formulation of IFRSs. The Framework also provides a basis for the use of judgement in resolving accounting issues and assisting the standard setters, including the IASB, in developing new accounting standards and reviewing existing standards; assisting the preparers of financial statements in applying accounting standards; and assisting the users of financial statements in interpreting the financial statements prepared in accordance with the relevant accounting standards.

The Framework specifically clarifies that it is not an IFRS and does not define standards for any particular measurement or disclosure issue. Nothing in the Framework overrides any specific accounting standard. Where in a limited number of cases there may be a conflict between the Framework and an IFRS, the requirements of the IFRS prevail over those of the Framework.

The Framework attempts to define the objective of financial statements and the qualitative characteristics to drive the financial statements to meet the objective. In constructing the financial statements that meet the defined objective and qualitative characteristics, the Framework lists the elements that should be incorporated in the statements and addresses the detailed attributes of such elements. In consequence, the Framework deals with the following issues:

1. The objective of financial statements (see Section 2.2);
2. The qualitative characteristics of information in financial statements (see Section 2.3);
3. The elements of financial statements and their definitions (see Section 2.4);
4. The recognition of the elements of financial statements (see Section 2.5);
5. The measurement of the elements of financial statements (see Section 2.6); and
6. Concepts of capital and capital maintenance (see Section 2.7).

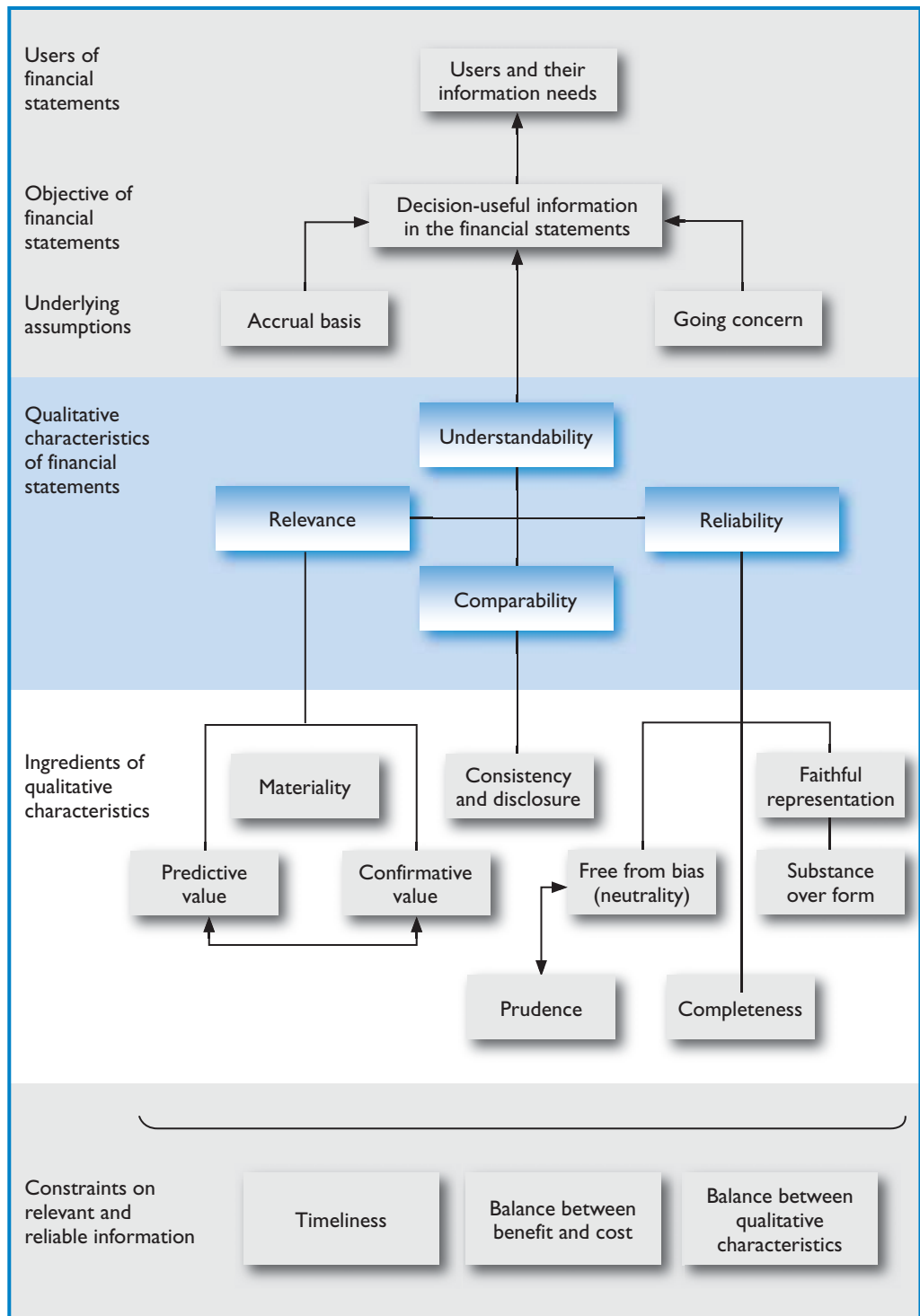
General purpose financial statements, including consolidated financial statements, are the concern of the Framework. Such financial statements are prepared and presented at least annually and are directed towards the common information needs of a wide range of users. Special purpose financial reports, for example, prospectuses and computations prepared for taxation purposes, are outside the scope of this Framework. Nevertheless, the Framework may be applied in the preparation of such special purpose reports where their requirements permit.

While the FASB's Statement of Financial Accounting Concepts No. 2 *Qualitative Characteristics of Accounting Information* contains a figure titled "A Hierarchy of Accounting Qualities" to illustrate its conceptual framework, the Framework of the IASB does not contain such a figure or hierarchy. By reference to the FASB's hierarchy, a hierarchy of accounting qualities of the Framework is set out as shown in Figure 2.1.

2.2 Objective of Financial Statements and Underlying Assumptions

The Framework states the objective of financial statements as "to provide information about the financial position, performance and changes in financial position of an

FIGURE 2.1 Hierarchy of accounting qualities



entity that is useful to a wide range of users in making economic decisions”. IAS 1 *Presentation of Financial Statements* (revised 2007) has a similar objective but further specifies “changes in financial position of an entity” as “cash flows of an entity” and the financial statements to show the results of the management’s stewardship of the resources entrusted to it.

2.2.1 Decision-useful Financial Information

The users of financial statements include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public. Information provided in the financial statements should meet their information needs and be useful in their economic decision making.

Example 2.1 Users may be required to make economic decisions, for example, in the following situations:

1. Deciding when to buy, hold or sell an equity investment;
2. Assessing the stewardship or accountability of management;
3. Assessing the ability of the entity to pay and provide other benefits to its employees;
4. Assessing the security for amounts lent to the entity;
5. Determining taxation policies;
6. Determining distributable profits and dividends;
7. Preparing and using national income statistics;
8. Regulating the activities of entities.

Governments, in particular, may specify different or additional requirements for their own purposes. These requirements should not, however, affect financial statements published for the benefit of other users unless they also meet the needs of those other users.

2.2.2 Financial Position, Performance and Cash Flows

To meet the need for user-oriented information, a set of financial statements includes the following statements and notes as required by IAS 1:

1. A statement of financial position (or balance sheet) as at the end of the period;
2. A statement of comprehensive income (including profit and loss account or income statement) for the period;
3. A statement of changes in equity for the period;
4. A statement of cash flows for the period;
5. Notes, comprising a summary of significant accounting policies and other explanatory information; and

6. A statement of financial position as at the beginning of the earliest comparative period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements.

IAS 1 was revised in 2007, and in consequence, some formal titles of the statements have been amended, including the following:

- The “balance sheet” representing an entity’s financial position is now called “statement of financial position”.
- The “income statement” representing an entity’s financial performance is now called “statement of comprehensive income”.

Throughout this book, since the amendment of IAS 1 is effective from 2009 and, most important, an entity is still allowed to use titles for the statements other than those used in IAS 1 after the effective date, the traditional names of “balance sheet”, “income statement” and “profit and loss account” are still used for illustration. Chapter 19 has further explanations on IAS 1 revised in 2007 and the presentation of financial statements.

2.2.3 Underlying Assumptions – Accrual Basis and Going Concern

In order to meet the objectives of financial statements, financial statements are prepared on the accrual basis of accounting and on the assumption that an entity is a going concern. Accrual basis of accounting implies that the effects of transactions and other events are recognised when they occur, rather than when they have been received or paid, and they are recorded in the accounting records and reported in the financial statements of the periods to which they relate. Going concern assumes that an entity will continue in operation for the foreseeable future.

2.3 Qualitative Characteristics of Financial Statements

To meet the objective of providing user-oriented information, the financial statements should have adequate qualitative characteristics. The Framework sets out four principal qualitative characteristics:

1. Understandability;
2. Relevance;
3. Reliability; and
4. Comparability.

To supplement the Framework, which is not an IFRS, IAS 1 specifically requires that a fair presentation of the financial statements requires an entity, *inter alia*, “to present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information”.

2.3.1 Understandability

In order to address users and meet their needs, the financial statements must be readily understandable by the users. Thus, understandability is an essential quality of the information provided in the financial statements. However, the users are assumed to have a reasonable knowledge of business and economic activities and accounting, and they should also have a willingness to study the information with reasonable diligence.

2.3.2 Relevance

Information can be useful only if it is relevant to the users' decision-making needs. Information has the quality of relevance when it influences the economic decisions of users by

1. helping them evaluate past, present or future events, i.e., the information has predictive value; or
2. confirming or correcting their past evaluations, i.e., the information has confirmatory value.

The predictive and confirmatory roles of information are interrelated. A certain piece of information that confirms past predictions can serve as a basis for further prediction. The relevance of information is affected by its nature and materiality. Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. IAS 1 has a formal definition on materiality.

Material is defined in IAS 1 as follows:

- Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the financial statements.
- Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor (IAS 1.7).

2.3.3 Reliability

Information can be useful only if it is also reliable to the users. Information has the quality of reliability when

1. it is free from material error and bias (i.e., neutral or free from bias); and
2. it can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent (i.e., faithful representation).

2.3.3.1 Faithful Representation

Information is reliable if it represents faithfully the transactions and other events it either purports to represent or could reasonably be expected to represent. For example, an entity's balance sheet should represent faithfully the transactions and other events that result in assets, liabilities and equity of the entity at the reporting date that meet the recognition criteria.

2.3.3.2 Substance over Form

If information is to represent faithfully the transactions and other events that it purports to represent, it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form. The substance of transactions or other events is not always consistent with that which is apparent from their legal or contrived form.

Example 2.2 Melody Limited has recognised a disposal of its motor vehicle to Tony Corporation at \$100,000. Pursuant to this disposal, simultaneously, Melody agrees with Tony upon the following arrangements:

1. The title of the vehicle has been registered in the name of Tony.
2. Melody granted an option to Tony that Tony could request Melody to buy back the vehicle at \$120,000 one year later.
3. Tony granted an option to Melody that Melody could buy back the vehicle at \$120,000 one year later.
4. Melody still holds and maintains the vehicle and can freely use it.

Based on these facts, even though the legal title has been transferred to Tony, the reporting of a disposal would not represent faithfully the transaction entered into. In substance, however, Melody has not disposed of the vehicle. While it continues to enjoy the future economic benefits embodied in the asset, the arrangement of the transaction as a whole is a secured loan from Tony.

2.3.3.3 Neutrality or Free from Bias

To be reliable, the information contained in financial statements must be neutral, that is, free from bias. Financial statements are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgement in order to achieve a predetermined result or outcome.

2.3.3.4 Prudence and Neutrality

Uncertainties inevitably surround many events and circumstances in preparing financial statements, and such uncertainties are recognised by the disclosure of their nature and extent and by the exercise of prudence in the preparation of the financial statements.

Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. However, the exercise of prudence does not allow overriding the quality of neutrality, i.e., the quality of reliability.

2.3.3.5 Completeness

In addition to faithful representation and neutrality, the information in financial statements to be reliable must be complete within the bounds of materiality. Lack of complete information can cause information to be false or misleading and thus unreliable and deficient in terms of its relevance.

2.3.4 Comparability

In order to evaluate an entity's financial position and performance, users are required to compare the financial statements over time and between entities. Comparability is thus one of the qualitative characteristics of financial statements, and it helps users perform the following analyses:

1. Time-series (or trend) analysis, i.e., comparing the financial statements of an entity through time in order to identify trends in an entity's financial position and performance.
2. Cross-sectional analysis, i.e., comparing the financial statements of different entities in order to evaluate their relative financial position, performance and cash flows.

2.3.4.1 Consistency, Disclosure and Comparatives

In order to allow and enhance comparability, the measurement and display of the financial effect of like transactions and other events should be carried out in a consistent way throughout an entity and over time for that entity and in a consistent way for different entities.

An important implication of the qualitative characteristic of comparability is that users be informed of the accounting policies employed in the preparation of the financial statements, any changes in those policies and the effects of such changes. Users need to be able to identify differences between the accounting policies for like transactions and other events used by the same entity from period to period and by different entities. Compliance with IFRSs, including the disclosure of the accounting policies used by the entity, helps to achieve comparability.

To compare the financial position, performance and cash flows of an entity over time, it is also important that the financial statements show corresponding information for the preceding periods. IAS 1 specifically requires that all amounts reported in the financial statements should have comparative information in respect of the previous period, except when IFRSs permit or require the exemption of such information (IAS 1.38). Different exemption permissions and requirements are set out in different IFRSs, while general requirements on comparative information as set out in IAS 1 are explained in Chapter 19.

2.3.5 Constraints on Relevant and Reliable Information

To provide relevant and reliable information to meet the users' needs, the financial statements should also be subject to certain constraints as follows:

1. **Timeliness.** Even when a reliable set of information is given, there may be undue delay in providing such information. The reliable information may lose its relevance. An entity may need to balance the benefits in having timely reporting and the provision of reliable information.
2. **Balance between benefit and cost.** It is a pervasive constraint, and the benefits derived from information should exceed the cost of providing it. The evaluation of benefits and costs is substantially a judgemental process.
3. **Balance between qualitative characteristics.** There is a trade-off between qualitative characteristics. It is necessary to achieve an appropriate balance among the characteristics in order to meet the objective of financial statements. The relative importance of the characteristics in different cases is also a matter of judgement.

2.3.6 True and Fair View or Fair Presentation

The Framework does not directly deal with the concept of a true and fair view of, or as presenting fairly, the financial position, performance and cash flows of an entity; even the financial statements are usually described as presenting fairly or showing a true and fair view of the financial position, performance and cash flows of an entity. The application of the qualitative characteristics and appropriate accounting standards normally results in financial statements that give a true and fair view of, or as presenting fairly, such information.

2.4 The Elements of Financial Statements and Their Definitions

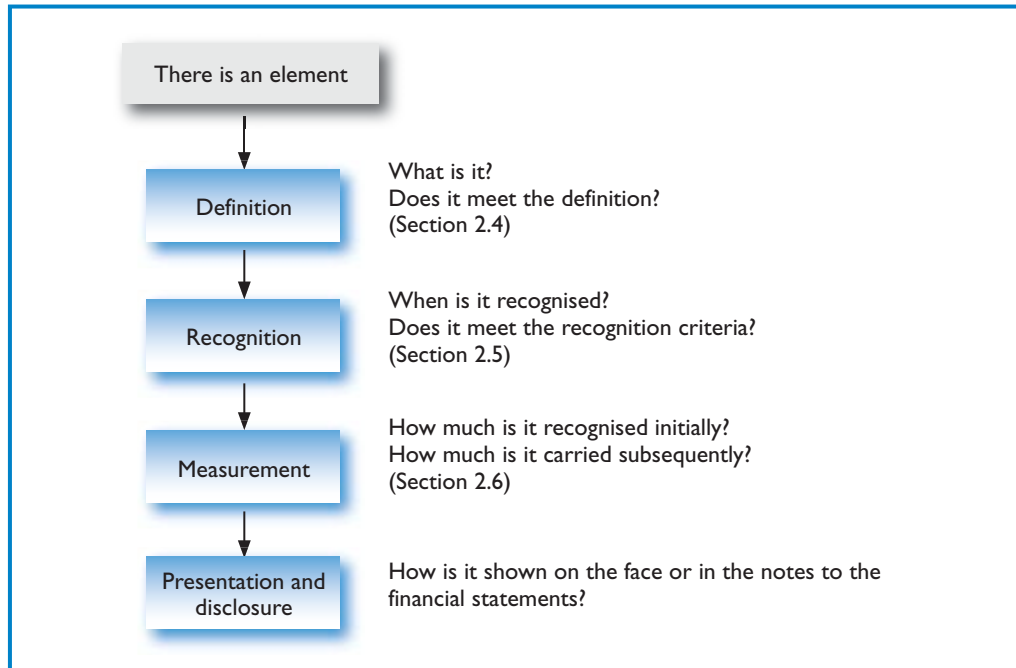
The Framework has grouped the financial effects of transactions and events into broad classes based on their economic characteristics to display the financial position and performance of an entity. These broad classes are set out in the financial statements and termed as the “elements of financial statements”. There are five elements defined in the Framework for a set of IFRS balance sheet and income statements: assets, liabilities, equity, income and expenses.

A process of sub-classification of the elements by their nature or function is required to set out the most useful information to the users for their economic decisions, for example, assets are sub-classified into intangible assets, property, plant and equipment and other assets.

No elements are identified to the statement of cash flows in the Framework since the statement usually reflects income statement elements and changes in balance sheet elements.

Figure 2.2 summarises the general explanation of the Framework in accounting for an element and this flow or approach is adopted in the IFRSs in preparing and presenting different transactions and events.

FIGURE 2.2 The Framework – An IFRS approach



2.4.1 Elements for Financial Position (in the Balance Sheet)

The elements, assets, liabilities and equity are directly related to the measurement of financial position in the balance sheet (or statement of financial position). These are defined as follows:

An **asset** is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.

A **liability** is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

Equity is the residual interest in the assets of the entity after deducting all its liabilities.

The definitions of an asset and a liability identify their essential features but do not attempt to specify the criteria that need to be met before they are recognised in the balance sheet. Thus, the definitions may embrace items that are not recognised as assets or liabilities in the balance sheet, because they do not satisfy the criteria for recognition as discussed in Section 2.5. In assessing whether an item meets the definition of an asset, liability or equity, attention needs to be given to its underlying substance and economic reality and not merely its legal form (i.e., substance over form).

2.4.1.1 Asset and Liability

The definitions of both asset and liability require them to be resulting from past events and involving the flow of economic benefits. First, a result of past events coincides with accrual basis of accounting and excludes transactions and events not occurred or expected to occur in the future. Second, the flow of economic benefits or resources may be effected in various ways.

Example 2.3 The future economic benefits embodied in an asset may flow to the entity in a number of ways, including the following:

1. Used singly or in combination with other assets in the production of goods or services to be sold by the entity;
2. Exchanged for other assets;
3. Used to settle a liability; or
4. Distributed to the owners of the entity.

The settlement of a present obligation, which results in an outflow from the entity of resources embodying economic benefits, may also occur in a number of ways, including the following:

1. Payment of cash;
2. Transfer of other assets;
3. Provision of services;
4. Replacement of that obligation with another obligation; or
5. Conversion of the obligation to equity.

An obligation may also be extinguished by other means, such as a creditor waiving or forfeiting its rights.

Based on the definitions of asset and liability in the Framework, sub-classification of assets and liabilities would be further defined with their respective specific definition as set out in different IFRSs and IASs. For example, an intangible asset is an asset but is further defined as an identifiable non-monetary asset without physical substance.

2.4.1.2 Equity vs. Capital

Equity is a residual. It comprises share capital, retained earnings and other reserves. Equity can equate with capital, but an entity may also define a wide or narrower scope of capital for its management purposes. In consequence, equity after adding and/or subtracting some other components, for example hedging reserves and subordinated loans, may be defined by an entity as its capital. In other words, equity is defined by the Framework and the IFRSs while capital is defined by an entity itself. Capital disclosure is one of the new disclosure requirements effective from 2007. Further explanation can be found in Chapter 19.

2.4.2 Elements for Financial Performance (in Income Statement)

The elements directly related to the measurement of financial performance of an entity in the income statement (or statement of comprehensive income) are income and expenses. The financial performance of an entity is often evaluated in terms of its profit, i.e., the income minus the expenses. Profit is thus also a measure of performance and can also be a basis for other measures, including return on investment, return on equity or earnings per share.

Income is defined as increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

Expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

The above definitions of income and expenses identify their essential features but do not attempt to specify the criteria that would need to be met before they are recognised in the income statement. Criteria for the recognition of income and expenses are discussed in Section 2.5.

2.4.2.1 Income and Expenses

The definition of income encompasses both revenue and gains. Revenue arises in the course of the ordinary activities of an entity and is referred to by a variety of names, including sales, fees, interest, dividends, royalties and rent. Gains represent other items that meet the definition of income and may, or may not, arise in the course of the ordinary activities of an entity. Gains represent increases in economic benefits and as such are no different in nature from revenue. Hence, they are not regarded as constituting a separate element in this Framework.

The definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity. Expenses that arise in the course of the ordinary activities of the entity include, for example, cost of sales, wages and depreciation. They usually take the form of an outflow or depletion of assets such as cash and cash equivalents, inventory, property, plant and equipment. Losses represent other items that meet the definition of expenses and may, or may not, arise in the course of the ordinary activities of the entity. Losses represent decreases in economic benefits, and as such they are no different in nature from other expenses. Hence, they are not regarded as a separate element in this Framework.

2.4.2.2 Capital Maintenance Adjustments

Certain IFRSs, for example IAS 16 *Property, Plant and Equipment* and IAS 39 *Financial Instruments – Recognition and Measurement*, allow or require certain assets

and liabilities to be revalued or restated. The revaluations or restatements of assets and liabilities may result in increases or decreases in equity, and they meet the definition of income and expenses. However, they are not included in the income statement under certain concepts of capital maintenance. Instead, they are included in equity as “capital maintenance adjustments” or “revaluation reserves”. The concepts of capital maintenance are discussed in Section 2.7.

In accordance with the revised IAS 1 in 2007 (as detailed in Chapter 19), items of income and expense that are not recognised in profit or loss as required or permitted by IFRSs are termed as “other comprehensive income”, and each component of other comprehensive income classified by nature should be separately presented in the “statement of comprehensive income”.

2.5 Recognition of the Elements of Financial Statements

Recognition is the process of incorporating in the balance sheet or income statement an item that

1. meets the definition of an element; and
2. satisfies the criteria for recognition.

It involves the depiction of the item in words and by a monetary amount and the inclusion of that amount in the balance sheet or income statement totals. Items that satisfy the recognition criteria should be recognised in the balance sheet or income statement. The failure to recognise such items is not rectified by disclosure of the accounting policies used nor by notes or explanatory material.

2.5.1 Criteria for Recognition

An item that meets the definition of an element should be recognised if:

1. It is probable that any future economic benefit associated with the item will flow to or from the entity; and
2. The item has a cost or value that can be measured with reliability.

In assessing whether an item meets these criteria and therefore qualifies for recognition in the financial statements, regard needs to be given to the materiality considerations discussed in Section 2.3.2. The interrelationship between the elements means that an item that meets the definition and recognition criteria for a particular element automatically requires the recognition of another element. It can also be regarded as a result of the operation of the double-entry system.

2.5.1.1 Probability of Future Economic Benefits

The first criterion for recognition is the probability of future economic benefit flow. The concept of probability refers to the degree of uncertainty that the future economic benefits associated with the item will flow to or from the entity. Uncertainty is inevitable in the economic environment, and the concept of probability coincides with this characteristic. An entity assesses the probability or the degree of uncertainty in the flow of future economic benefits based on the evidence available in preparing its financial statements.

Example 2.4 When a trade receivable is not yet received, it is still recognised as an asset in the balance sheet so long as an entity will probably receive it in future. However, if the debtor is insolvent and is unable to settle the receivable, the probability of future economic benefit inflow is in doubt and the recognition of such an asset may not meet that recognition criterion.

Similarly, an obligation in a lawsuit occurred but not yet finalised before the balance sheet date is recognised as a liability if the chance of failure in the lawsuit is high or probable. However, if the failure is remote based on the evidence, for example, the solicitor's representation, a liability may not be recognised.

2.5.1.2 Reliability of Measurement

The second criterion for the recognition of an item is whether the cost or value of that item can be measured with reliability. In ascertaining or estimating the cost or value of an item, the use of reasonable estimate is an essential part of the preparation of financial statements and does not undermine the reliability of the financial statements. If the cost or value of an item cannot be reliably measured or estimated, it will not be recognised in the balance sheet or income statement.

Example 2.5 Even though the expected outcome of the lawsuit in Example 2.4 is probably unfavourable to the entity and the obligation to settle the outcome meets the definition of a liability, the obligation may not be recognised as a liability in the balance sheet if the entity cannot estimate the extent of loss or amount of the obligation reliably.

2.5.1.3 Application of the Recognition Criteria to the Elements

When the recognition criteria are applied to the elements of the financial statements, the following summary can be drawn:

1. An asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably. Expenditure incurred but not qualified for recognition in the balance sheet would result in the recognition of an expense in the income statement.
2. A liability is recognised in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably.
3. Income is recognised in the income statement when an increase in future economic benefits related to an increase in an asset or a decrease of a liability

has arisen that can be measured reliably. This means, in effect, that recognition of income occurs simultaneously with the recognition of increases in assets or decreases in liabilities.

4. Expenses are recognised in the income statement when a decrease in future economic benefits related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably. This means, in effect, that recognition of expenses occurs simultaneously with the recognition of an increase in liabilities or a decrease in assets.

Together with the definition of the elements, the application of recognition criteria to the elements of the financial statements exhibits the spirit of the Framework, that is, it displays whether the elements follow a “balance sheet approach” or “financial position approach”. The balance sheet approach requires that a transaction or event can only be recognised in the balance sheet when it meets the definition and recognition criteria; otherwise, any movement of resources for that transaction or event is recognised in the income statement, which is often viewed as the residual statement in the Framework and in the IFRS. For example, the recognition of deferred tax in accordance with IAS 12 *Income Taxes* is often regarded as the application of the balance sheet liability method.

Real-life Case 2.2

Investment property under fair value model

In accordance with IAS 40, if an entity adopts the fair value model for its investment property, it will be required to revalue the investment property to reflect the market condition at each balance sheet date. Any consequential changes in the fair value of the investment property are recognised in profit or loss. Some market comments on such revaluation requirements are extracted below:

- “Once year on year changes in asset values of investment properties are included in the profit and loss account, using reported profit as a yardstick to measure a company’s performance would be simplistic and possibly misleading.” (Robert Gazzi and Ming Tse of PricewaterhouseCoopers, *Hong Kong Accountant*, June 2002)
- “The new accounting standard if adopted (to recognise the fair value changes of investment property in profit or loss) will make an entity’s profit more volatile; in consequence, our group has reservations on that.” (Translated from *Ming Pao*, Hong Kong, 18 June 2005)

The balance sheet approach may create an expectation gap from the users, who focus on the income or profit as a measure of an entity’s financial performance, having an “income statement focus” or “financial performance focus”. The usefulness of the financial statements with a balance sheet approach is criticised since it may not meet the need of the users.

2.6 Measurement of the Elements of Financial Statements

When a transaction or event meets the definition of an element and the recognition criteria, it can be recognised at a monetary amount. Measurement of an element is the process of determining the monetary amount of the element to be recognised and carried in the balance sheet and income statement.

The measurement process involves the selection of the particular basis of measurement. The Framework lists and discusses several measurement bases and explains that they are employed to different degrees and in varying combinations in financial statements. The measurement bases listed in the Framework include the following:

1. **Historical cost:** Assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds received in exchange for the obligation or, in some circumstances (for example, income taxes), at the amounts of cash or cash equivalents expected to be paid to satisfy the liability in the normal course of business.
2. **Current cost:** Assets are carried at the amount of cash or cash equivalents that would have to be paid if the same or an equivalent asset was acquired currently. Liabilities are carried at the undiscounted amount of cash or cash equivalents that would be required to settle the obligation currently.
3. **Realisable (settlement) value:** Assets are carried at the amount of cash or cash equivalents that could currently be obtained by selling the asset in an orderly disposal. Liabilities are carried at their settlement values; that is, the undiscounted amounts of cash or cash equivalents expected to be paid to satisfy the liabilities in the normal course of business. Certain IFRSs define “fair value less costs to sell” (previously “net selling price”), which is a concept of realisable value.
4. **Present value:** Assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate in the normal course of business. Liabilities are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business. Certain IFRSs define “value in use”, which is a concept of present value.

Historical cost is the most commonly used measurement basis in preparing and presenting the financial statements. It is also combined with other measurement bases in measuring an item, for example, “net realisable value” in IAS 2 *Inventories*, and “value in use” and “fair value less costs to sell” in IAS 36 *Impairment of Assets*. However, there is a trend in the IFRSs to increasingly use fair value in measuring an element of the financial statements, for example, fair value of equity instruments in IAS 39 *Financial Instruments – Recognition and Measurement* and fair value of investment property in IAS 40 *Investment Property*.

Example 2.6 Fair value measurements of assets, liabilities and components of equity may arise from either the initial recognition and measurement or the subsequent measurement or both. Changes in fair value measurements that occur over time may be treated in different ways under IFRSs. Changes in fair value are accounted for in equity in some IFRSs and in income statement in some other IFRSs.

Examples of fair value applied to the initial measurement but not applied to the subsequent measurement include the following:

- Held-to-maturity investments (IAS 39);
- Loans and receivables (IAS 39).

Examples of fair value not applied to initial measurement but applied to subsequent measurement (on a selective basis) include the following:

- Property, plant and equipment (IAS 16);
- Intangible assets (IAS 38);
- Investment property (IAS 40).

Examples of fair value applied to both the initial measurement and subsequent measurement include the following:

- Financial assets and liabilities at fair value through profit or loss (IAS 39);
- Available-for-sale financial assets (IAS 39);
- Agriculture (IAS 41).

2.7 Concept of Capital and Capital Maintenance

The Framework carries a brief discussion on the concepts of capital and capital maintenance and illustrates their differences and implications. While it states that the financial concept of capital is often used by most entities in preparing their financial statements, no specific conclusion is drawn as to which concept is preferable.

The Framework explains that the recognition and measurement of income and expenses, and hence profit, depends in part on (1) the concepts of capital, and (2) the concepts of capital maintenance used by the entity in preparing its financial statements.

The concepts of capital include a financial concept of capital and a physical concept of capital as follows:

1. A financial concept of capital implies that capital, such as invested money or invested purchasing power, is synonymous with the net assets or equity of the entity. It is adopted by most entities in preparing their financial statements.
2. A physical concept of capital implies that capital is regarded as the productive capacity of the entity based on, for example, units of output per day.

The users' needs of the financial statements drive the selection of an appropriate concept of capital. It depends on whether the users are concerned with the maintenance of nominal invested capital (or "purchasing power of invested capital") for the financial concept of capital, or the operating capability of the entity for the physical concept of capital. The selected concept then drives the objective in maintaining capital and

deriving profit. In consequence, they are correlated with the concepts of capital maintenance. The concepts of capital maintenance include the following:

1. Financial capital maintenance implies that a profit or loss is derived only if the financial (or money) amount of the net assets of an entity from one period to another period is maintained (and after the distribution to or contribution from the owners). Financial capital maintenance can be measured in either nominal monetary units or units of constant purchasing power.
2. Physical capital maintenance implies that a profit or loss is derived only if the physical productive capacity (or operating capability) of an entity from one period to another period is maintained (and after the distribution to or contribution from the owners).

When an entity defines a capital and chooses a concept of capital and a concept of capital maintenance, it links to the concept of profit and defines how profit is measured. Profit or loss is a residual amount. If income exceeds expenses, the residual is a profit. If expenses exceed income, the residual amount is a loss.

The selection of the measurement bases and concept of capital maintenance will determine the accounting model in preparing the financial statements. However, the Framework does not prescribe a particular model.

2.8 Development of a Single Converged Framework

Since 2004, the IASB and FASB have been engaged in a joint project to develop an improved common conceptual framework (i.e., a single converged framework) that builds on their existing frameworks, i.e., the Framework of the IASB and the conceptual framework of the FASB's Statements of Financial Accounting Concepts. They intend to provide a sound foundation for developing future financial reporting standards and are essential to fulfilling their goal of developing standards that lead to financial reporting that provides the information required for the users.

In accordance with the IASB and FASB, the project will do the following:

1. Focus on changes in the environment since the original frameworks were issued, as well as omissions in the original frameworks, in order to efficiently and effectively improve, complete, and converge the existing frameworks.
2. Give priority to addressing and deliberating those issues within each phase that are likely to yield benefits to the IASB and FASB in the short term; that is, cross-cutting issues that affect a number of their projects for new or revised standards.
3. Initially consider concepts applicable to private sector business entities. Later, the IASB and FASB will jointly consider the applicability of those concepts to private sector not-for-profit organisations.

The IASB and FASB are conducting the project in eight phases: (1) objectives and qualitative characteristics, (2) elements and recognition, (3) measurement, (4) reporting entity, (5) presentation and disclosure, (6) purpose and status, (7) application to not-for-profit entities, and (8) remaining issues, if any.

After the publication of a discussion paper on the first phase, i.e., objective and

qualitative characteristics, in 2006, the IASB and FASB planned to publish an exposure draft on it in 2008 and a discussion paper on the second to the fourth phases, i.e., elements and recognition, measurement and reporting entity, in 2008 to 2009. The remaining phases were still inactive at the beginning of 2008.

2.9 Summary

Framework for the Preparation and Presentation of Financial Statements (the Framework) addresses the concepts underlying the information presented in general financial statements and aims at facilitating the consistent and logical formulation of IFRSs and providing a basis for the use of judgement in resolving accounting issues. The Framework deals with the objective, the qualitative characteristics required, and the elements (including their definition, recognition and measurement) of the financial statements.

The objective of financial statements is to provide useful information about an entity's financial position, performance and cash flows to the users for decision making. The underlying assumptions in preparing financial statements are accrual basis and going concern.

The Framework lists four principal qualitative characteristics of financial information: understandability, relevance, reliability and comparability. Understandability implies financial statements be readily understandable by the users for their decision making. Information is relevant if it has predictive and confirmatory value and is material to decision making. Information is reliable if it faithfully represents the substance of the transactions and events and is free from bias. Comparability enhances the ability to compare over time and between entities.

The elements of financial statements are assets, liabilities, equity, income and expenses. An item or transaction is recognised when it meets the definition of an element and fulfils the recognition criteria. The general recognition criteria include the inflow or outflow of probable future economic benefits and the reliable measurement of the cost or value involved.

When an item or transaction can be recognised, it is measured on a particular basis of measurement. Historical cost, current cost, realisable value and present value are discussed in the Framework, while fair value basis has been increasingly used in recent years. The proper measurement basis and proper concept of capital maintenance may further depend on a selected concept of capital that is not strictly prescribed by the Framework.

Review Questions

1. What is the purpose of a framework of accounting?
2. What should be included in a framework of accounting?
3. State the objective of financial statements.
4. State the underlying assumptions in preparing financial statements.
5. State the principal qualitative characteristics of financial information.
6. Why is it important to have the quality of understandability in financial statements?

7. What kinds of financial information are relevant?
8. What kinds of financial information are reliable?
9. What is the purpose for comparability?
10. Discuss the constraints on relevant and reliable information.
11. Define the elements of financial statements.
12. State the recognition criteria set out in the Framework.
13. What kinds of measurement basis are discussed in the Framework?
14. Discuss the relationship between the concepts of capital and capital maintenance.

Exercises

- Exercise 2.1** An entity's financial statements can be used by different users and for different purposes. List the types of users interested in the financial statements and their purposes in using the financial statements.
- Exercise 2.2** Isabella, the bankers of MKT Inc., found that MKT changed its accounting policies in the financial statements on certain areas every year. Isabella is one of the users of the financial statements and asks your advice on whether the Framework of financial statements avoids such situations.
Advise Isabella on the requirements in the Framework regarding comparability.
- Exercise 2.3** Croco Panda Limited is studying a research report to ascertain whether there is any way to improve its operations. Simultaneously, without referring to any particular IFRS, it wants to know whether such efforts on research reports can be recognised as an asset in its balance sheet. Explain the requirements in the Framework for the recognition of such efforts.

Problems

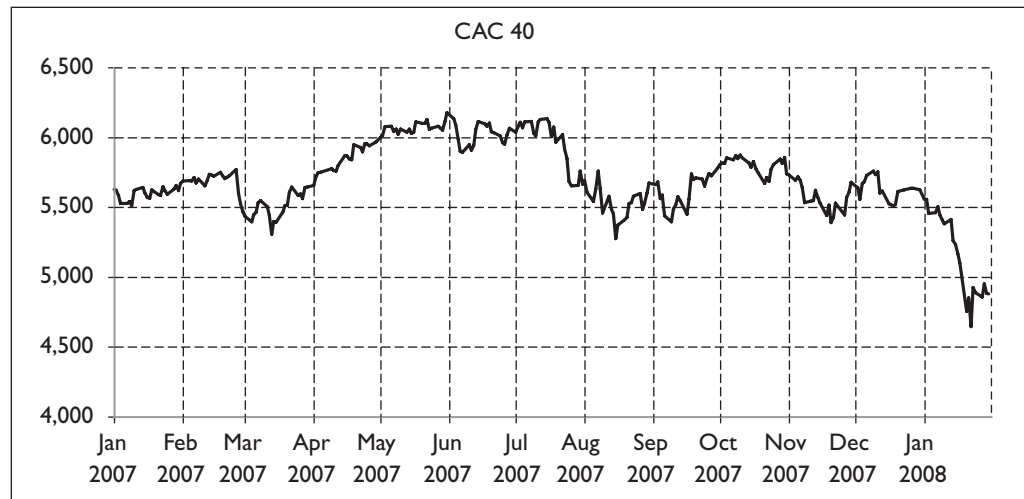
- Problem 2.1** June Junior, the founder and chairman of June and Partners Limited, is quite cost conscious and keeps on asking, except for legal and regulatory requirements, the objective of preparing financial statements for the company. Because she is the head of the company and knows everything about the company, she considers the financial statements not useful for her daily operations.
Advise June on the objective of financial statements.
- Problem 2.2** June Junior, the founder and chairman of June and Partners Limited, considers that if financial statements can be useful, they must be available for her use as soon as possible. Timely reporting is her main concern. She thinks all the other users should share the same view.
Discuss the qualitative characteristics of the information in financial statements and consider whether June's argument is acceptable.

Problem 2.3 Samantha considers that all expenditures for her company, Smart Talent Corporation, can generate future benefits to her company. She is not convinced why the expenditures cannot be recognised as an asset in accordance with the Framework.

Discuss with Samantha and clarify the requirements of recognition in the Framework.

Case Studies

Case Study 2.1 The following chart shows the performance of the CAC 40 stocks index in France from from January 2007 to February 2008.



Societe Generale Group incurred “allowance expense on provision for the total cost of the unauthorised and concealed trading activities” of €6.4 billion mainly because of the closing and unwinding of “directional position taken during 2007 and at the beginning of 2008”. Societe Generale Group stated in its annual report of 2007 that: “the identification and analysis of these positions on January 19 and 20, 2008 prompted the Group to close them as quickly as possible while respecting market integrity”.

Societe Generale Group also stated that application of the provision of IAS 10 and IAS 39 would have led to only presenting the pre-tax loss of €6.4 billion incurred by it in January 2008 in the note to the financial statements of 2007. However, the group considered that this presentation was inconsistent with the objective of financial statements described in the Framework of IFRS standards and that for the purpose of a fair presentation of its financial situation at 31 December 2007, it decided to depart from IAS 10 and IAS 39.

Discuss the case and consider whether the decision of Societe Generale Group resulted in the financial statements faithfully representing its financial performance and position.

**Case
Study 2.2**

Nette, a public limited company, manufactures mining equipment and extracts natural gas. The directors are uncertain about the role of the *Framework for the Preparation and Presentation of Financial Statements* (the Framework) in corporate reporting. Their view is that accounting is based on the transactions carried out by the company and these transactions are allocated to the company's accounting period by using the matching and prudence concepts. The argument put forward by the directors is that the Framework does not take into account the business and legal constraints within which companies operate.

Required:

Explain the importance of the Framework to the reporting of corporate performance and whether it takes into account the business and legal constraints placed upon companies.

(ACCA 3.6 June 2004, adapted)

**Case
Study 2.3**

Guide, a public limited company, is a leading international provider of insurance and banking services. It currently prepares its financial statements using a national GAAP that is not based upon International Financial Reporting Standards (IFRSs). It is concerned about the impact of the change to IFRSs which is required by local legislation.

The company is particularly worried about the impact of IFRS in the following areas:

1. The practical factors it will need to consider in implementing the change to IFRS; and
2. The views of financial analysts.

Required:

Write a report to the company to address the above two areas.

(ACCA 3.6 December 2003, adapted)

PART
II

Elements of Financial Statements – Assets

- 3 Property, Plant and Equipment
- 4 Leases
- 5 Investment Property
- 6 Intangible Assets
- 7 Borrowing Costs
- 8 Impairment of Assets
- 9 Inventories
- 10 Construction Contracts



3

Property, Plant and Equipment

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of property, plant and equipment (the definition)
- 2 The timing in recognising property, plant and equipment (the recognition criteria)
- 3 The amount to be recognised and measured on property, plant and equipment (the initial and subsequent measurement)
- 4 The difference between cost model and revaluation model
- 5 The issues in determining the depreciation of property, plant and equipment

Real-life

Case 3.1

China Petroleum & Chemical Corporation and Juventus Football Club SpA

China Petroleum & Chemical Corporation (or Sinopec Corp.) is the largest listed company in China based on turnover and one of the largest petroleum and petrochemical companies in China and Asia. Its consolidated total assets were RMB 612 billion in 2006, but nearly 60% of its assets (RMB 364 billion) are property, plant and equipment.

In 2005, Sinopec Corp. stated in its annual report as follows:

- With effect from 1 January 2005, IAS 16 requires an entity to determine cost, useful life and depreciation charge separately for each significant part of an item of property, plant and equipment, and derecognise the carrying amount of a part of an item of property, plant and equipment if that part has been replaced.
- IAS 16 also requires an entity to include the costs of dismantlement, removal or restoration, the obligation for which an entity incurs as a consequence of installing the item in the cost of that item of property, plant and equipment.

Juventus Football Club SpA, one of the most famous football clubs in Italy, named this practice “to determine cost, useful life and depreciation charge separately for each significant part of an item of property, plant and equipment” as a “component approach” criterion as follows:

- The capitalisation of the costs regarding the expansion, modernisation or improvement of structural elements owned or leased is made exclusively within the limits to which these meet the requirements to be classified separately as assets or part of an asset by applying the “component approach” criterion.

Property, plant and equipment is often a significant item in the balance sheet of an entity, for example, Real-life Case 3.1 sets out that property, plant and equipment of Sinopec Corp. are over RMB 364 billion or nearly 60% of its consolidated total assets. The depreciation and impairment of property, plant and equipment may also be significant in the income statement of an entity. The determination of their initial recognised amount and subsequent measurement become critical issues.

“To determine cost, useful life and depreciation charge separately for each significant part of an item of property, plant and equipment” as explained by Sinopec Corp. or the “component approach” criterion of Juventus can reflect one of the latest developments, i.e., component accounting, in accounting for property, plant and equipment.

This chapter aims at illustrating the contemporary practices on accounting for property, plant and equipment, including the elimination of separate recognition principles and the guidance on component accounting.

3.1 Meaning of Property, Plant and Equipment

Historically, property, plant and equipment are known as fixed assets and refer to tangible assets held for long-term purposes. However, the formal definition of property, plant and equipment should also include (1) its mode of usage, and (2) term of holding by an entity (see the definition below).

Property, plant and equipment are tangible items that

1. are held
 - (a) for use in the production or supply of goods or services;
 - (b) for rental to others; or
 - (c) for administrative purposes; and
2. are expected to be used during more than one period (IAS 16.6).

The current set of accounting standards, including both IFRSs and IASs, has not properly defined fixed assets. Property, plant and equipment are not necessarily fixed assets and are only one kind of non-current assets.

In some places, for example the United Kingdom and Hong Kong, the term “fixed assets” can be found in the respective laws and regulations that require the disclosure of fixed assets in the balance sheet. However, some places may not have a specific definition of the term. General practice still refers to property, plant and equipment as fixed assets while some practices have grouped property, plant and equipment, investment property and/or leasehold land as fixed assets.

3.2 Applicable Standard and Scope

IAS 16 *Property, Plant and Equipment* prescribes the accounting treatment for property, plant and equipment. An entity should apply IAS 16 in accounting for property, plant and equipment, except when another accounting standard requires or permits a different accounting treatment and does not apply to some items of property, plant and equipment within the scope of other accounting standards, including the following:

- Assets held for sale (under IFRS 5 *Non-Current Assets Held for Sale and Discontinued Operations*);
- Biological assets related to agricultural activity (under IAS 41 *Agriculture*);
- Exploration and evaluation assets (under IFRS 6 *Exploration for and Evaluation of Mineral Resources*).

In order to better understand the accounting treatment of IAS 16, proper knowledge is also required of the accounting treatments in respect of leases (IAS 17) and investment property (IAS 40).

- IAS 17 sets out how to classify property, plant and equipment held under leases, and it also refers the accounting treatment for some assets, including their depreciation, to IAS 16.

- Newly purchased property under construction that would be held as investment property after the construction should be initially recognised as property, plant and equipment. Once the construction is complete, the property becomes investment property under IAS 40.
- An entity using the cost model for investment property in accordance with IAS 40 should use the cost model in IAS 16.

Example 3.1 Phoebe Limited has the following items of property, plant and equipment:

- Copier acquired under an operating lease;
- Owned property used for rental purposes;
- Investment property under redevelopment;
- Property held for a currently undetermined future use;
- Leasehold land separated from the leasehold building;
- Motor vehicle acquired under finance leases;
- Sewing machine purchased by a manufacturing subsidiary.

Discuss whether the above items can be recognised as property, plant and equipment.

Answers

Except for the motor vehicle acquired under finance leases and sewing machine purchased by the manufacturing subsidiary, none of the other items can be recognised as property, plant and equipment under IAS 16. The accounting standards applicable to the other items are as follows:

- IAS 17 *Leases* for copier acquired under an operating lease, and leasehold land separated from the leasehold building;
- IAS 40 *Investment Property* for owned property used for rental purposes, investment property under redevelopment, and property held for a currently undetermined future use.

3.3 Recognition

In order to recognise property, plant and equipment in the balance sheet, the common recognition criteria of the accounting standard must be fulfilled. An entity should recognise an item of property, plant and equipment as an asset if, and only if:

1. It is probable that future economic benefits associated with the item will flow to the entity; and
2. The cost of the item can be measured reliably (IAS 16.7).

3.3.1 Initial Cost and Subsequent Cost

Expenditure not fulfilling the above recognition criteria should be charged to the income statement. For example:

- Spare parts and servicing equipment are not recognised as property, plant and equipment but are often carried as inventory. They are recognised in the income statement as consumed. Major spare parts and standby equipment to be used for more than one period may be recognised as property, plant and equipment instead.
- Day-to-day servicing expenditures on an item of property, plant and equipment are described as “repairs and maintenance” and charged to the income statement when they are incurred.

To determine whether the subsequent cost on an item of property, plant and equipment, including replacement of parts and major overhaul, should be recognised, “improvement” was used as an assessment criterion in the past. It was different from the recognition criteria on initial cost. The accounting standard at that time required a probable inflow of “future economic benefits in excess of the originally assessed standard of performance”.

The current recognition criteria abolish such a “two-tier system”, and the recognition criteria on initial cost and subsequent cost of an item of property, plant and equipment are the same now. So long as the recognition criteria are met, the subsequent cost can also be recognised in the balance sheet. For example:

- Aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe and their replacement cost can be recognised as property, plant and equipment. The cost of the items being replaced should be derecognised accordingly.
- The cost of major inspection performed on a railway is recognised as a replacement of an item of property, plant and equipment if the recognition criteria are satisfied. Any remaining carrying amount of the cost of the previous inspection is derecognised (see Section 3.8).

Real-life Case 3.2

China Petroleum & Chemical Corporation

Following the description of 2005 (see Real-life Case 3.1), Sinopec Corp. included the following explanation in its accounting policy on property, plant and equipment in its annual report of 2006:

- The group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied with the item will flow to the group and the cost of the item can be measured reliably.
- All other expenditure is recognised as an expense in the income statement in the year in which it is incurred.

The abolishment of the two-tier recognition criteria is an improvement to the recognition of property, plant and equipment because it aligns with the asset recognition

criteria in the Framework. By using the same set of asset recognition criteria, an entity now recognises those expenditures meeting the recognition criteria as assets and charges all other expenditures failing to meet the recognition criteria to the income statement, as Sinopec Corp. in Real-life Case 3.2 did.

The separate accounting for each part of an item of property, plant and equipment is also termed as “component accounting”, under which each significant part of an item of property, plant and equipment is separately recognised, depreciated, replaced and derecognised. Practices on different aspects of component accounting are also discussed in the remaining sections of this chapter.

Real-life Case 3.3

Sichuan Expressway Company Limited

Sichuan Expressway Company Limited had a clear summary of its policy in recognising subsequent expenditure in 2006 as follows:

- Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to the income statement in the period in which it is incurred or capitalised as an additional cost of that asset or as a replacement, on the following bases:
 - Ad hoc repairs and maintenance expenditure is charged to the income statement in the period in which it is incurred.
 - The cost of replacing concrete road surface of expressways is recognised in the carrying amount of expressways and the carrying amount of the replaced concrete road is derecognised.
 - The expenditure for upgrading the asphalt road surface of an expressway is capitalised as an additional cost of the expressway.
 - In other situations where it can be clearly demonstrated that the expenditure has resulted in an increase in the future economic benefits expected to be obtained from the use of the property, plant and equipment, the expenditure is capitalised as an additional cost of that asset.

3.4 Measurement at Recognition

Once an item of property, plant and equipment can be recognised, the amount recognised for that item should be measured at its cost (IAS 16.15).

Cost is defined in IAS 16 as

- the amount of cash or cash equivalents paid or the fair value of other consideration given to acquire an asset at the time of its acquisition or construction; or
- where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other accounting standards, e.g., IFRS 2 *Share-based Payment* (IAS 16.6).

Cost of an asset may also include some other amounts attributed to the asset recognised in accordance with other accounting standards, for example, borrowing costs (IAS 23), share-based payment (IFRS 2) and gains or losses on cash flow hedge (IAS 39).

3.4.1 Elements of Cost

The cost element of an item of property, plant and equipment comprises the following:

1. Its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
2. The directly attributable cost, being any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
3. The estimated dismantling cost, being the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

In bringing an asset to its intended use, an entity may be required to install the asset or modify the site in which the asset is located, for example, installing an air conditioner on the wall of a leased office. The entity may be later required to remove such an instalment or restore such a modification. Once the asset is installed or the site is modified, the entity has the obligation to make such a removal or restoration. In consequence, such costs, except for those relating to produce inventories, are recognised as part of the cost of an asset.

Example 3.2 ASJ Design House Limited leased an office for a lease term of 5 years in 2007 and incurred \$500,000 in decorating the office. The lease requires ASJ to restore the office to its original status when the lease expires. Amy Au, the finance director of ASJ, estimates that the total cost of restoration will be around \$60,000 at that time and the discount rate to ASJ is 6%. Determine the cost of the decoration.

Answers

The cost of the decoration should be \$500,000 plus the initial estimates of the costs of removing the decoration and restoring the office, i.e., $\$60,000 \div (1 + 6\%)^5 = \$44,835$. Therefore, the total cost of decoration recognised initially in the balance sheet is \$544,835 and the journal entry is as follows:

Dr Property, plant and equipment	\$544,835	
Cr Cash		\$500,000
Liabilities – obligation on restoration.....		44,835

Real-life

Case 3.4

BP plc and CNOOC Limited

The capitalisation of dismantling and restoration costs can often be found in the financial statements of petroleum companies.

BP plc, a UK company and the largest integrated oil entity, has adopted IFRS since 2005 and stated its cost of property, plant and equipment in its annual report of 2006 as follows:

- Property, plant and equipment is stated at cost, less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises
 - its purchase price or construction cost;
 - any costs directly attributable to bringing the asset into operation;
 - the initial estimate of any decommissioning obligation, if any; and
 - for qualifying assets, borrowing costs.

CNOOC Limited, the largest producer of offshore crude oil and natural gas in China, clarified its dismantling obligation and expenses in its annual report of 2006 as follows:

- The group estimates future dismantlement costs for oil and gas properties with reference to the estimates provided from either internal or external engineers after taking into consideration the anticipated method of dismantlement required in accordance with the current legislation and industry practices.
- The associated cost is capitalised, the liability is discounted and an accretion expense is recognised using the credit-adjusted risk-free interest rate in effect when the liability is initially recognised.

3.4.1.1 Cost of Self-constructed Asset

The cost of a self-constructed asset is determined using the same principles as for an acquired asset. The recognition of all such costs in property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, costs incurred in using or redeploying an item are not included as part of the cost of the asset. Similarly, the cost of abnormal amounts of wasted material, labour or other resources incurred in self-constructing an asset is not included in the cost of the asset.

Example 3.3

John and Sherman Engineering Limited introduced a new production line. The expenditures incurred for this new line include the following:

1. \$50,000 for the employee costs in fixing the interior of the factory to suit the production line;

2. \$100,000 in preparing the factory site;
3. \$5,000,000 in purchasing the machines for the line;
4. \$60,000 in arranging the initial delivery;
5. The installation and assembly costs of the machines of \$55,000;
6. Costs of initial testing of \$40,000;
7. Professional fees in assessing the function and installation of \$20,000;
8. Costs of the grand opening of the new line of \$30,000;
9. Costs of introducing a new product manufactured by this new production line of \$950,000; and
10. Administration and other general overhead costs in studying and following up the installation of \$25,000.

Discuss and determine the cost of the new production line.

Answers

The cost of the new production line recognised as property, plant and equipment should be \$5,325,000. The costs incurred not directly attributable to the acquisition and installation of the line to its intended use cannot be recognised. Therefore, the following costs are not included:

- Costs of the grand opening of the new line of \$30,000.
- Costs of introducing a new product manufactured by this new production line of \$950,000.
- Administration and other general overhead costs in studying and following up the installation of \$25,000.

3.4.1.2 Measurement of Cost

Payment of cost deferred beyond normal credit terms may imply that part of the payment is not the cost of the asset. The difference between the cash price equivalent of the asset and the total payment is recognised as interest over the period of credit unless such interest is recognised in the carrying amount of the item in accordance with IAS 23 *Borrowing Costs*.

3.4.1.3 Exchange of Assets

The recognition of an exchange for non-monetary asset is measured at fair value unless

1. the exchange transaction lacks commercial substance; or
2. the fair value of neither the asset received nor the asset given up is reliably measurable.

Historically, fair value of an acquired item in an exchange transaction was recognised if the exchange involved “dissimilar assets” instead of “commercial substance”. However, it raised issues about how to identify whether assets exchanged are similar in nature

and value, and there are arguments that “similarity” may not indicate the completion of an earning process. IAS 16 thus adopts the “commercial substance” approach to supersede the “dissimilarity” approach and intends to give users of financial statements assurance that the substance of a transaction in which the acquired asset is measured at fair value is the same as its legal form.

In consequence, if an exchange lacks commercial substance or fair value cannot be measured reliably, the acquired item in the exchange is not measured at fair value and is measured at the carrying amount of the asset given up.

If an entity is able to determine reliably the fair value of either the asset received or the asset given up, then the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.

In order to determine whether an exchange transaction has commercial substance, an entity can evaluate the following:

1. The configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or
2. The entity-specific value of the portion of the entity’s operations affected by the transaction changes as a result of the exchange; and
3. The difference between 1 and 2 above is significant relative to the fair value of the assets exchanged.

3.5 Measurement after Recognition

After initial recognition, an entity is required to choose either of the following two models as its accounting policy for an entire class of property, plant and equipment:

1. The cost model; or
2. The revaluation model (IAS 16.29).

3.5.1 Cost Model

If an entity chooses the cost model as its accounting policy in subsequently measuring its property, plant and equipment, an item of property, plant and equipment is carried at

- its cost;
- less any accumulated depreciation; and
- less any accumulated impairment losses (IAS 16.30).

3.5.2 Revaluation Model

If an entity can reliably measure the fair value of an item of property, plant and equipment, it can choose the revaluation model as its accounting policy in subsequently measuring the property, plant and equipment. An item of property, plant and equipment is then carried at

- a revalued amount, being its fair value at the date of the revaluation;
- less any subsequent accumulated depreciation; and
- less any subsequent accumulated impairment losses (IAS 16.31).

No matter whether the cost model or the revaluation model is chosen in subsequently measuring the assets, an entity is still required to provide the depreciation and, if criteria are met, the impairment losses on the assets. The depreciation is calculated in accordance with IAS 16, while the criteria and calculation of impairment losses are set out in IAS 36 *Impairment of Assets* (see Chapter 8).

Under the revaluation model, there are no explicit requirements on the revaluation frequency or interval. Different assets can have different intervals. IAS 16 has just required that revaluations should be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the balance sheet date (IAS 16.31).

Fair value is defined as the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction (IAS 16.6).

3.5.2.1 Determination of Fair Value

All the accounting standards share the same definition of fair value while the fair value of property, plant and equipment may be determined by using the explanation in IAS 16. IAS 16 identifies the following reference in determining the fair value of an item of property, plant and equipment:

Items of property, plant and equipment	Determination of fair value
Land and buildings	Their fair value is usually determined from market-based evidence by appraisal that is normally undertaken by professionally qualified valuers.
Other items of plant and equipment	Their fair value is usually their market value determined by appraisal.

If there is no market-based evidence of fair value because of the specialised nature of the item of property, plant and equipment and the item is rarely sold, except as part of a continuing business, an entity may need to estimate fair value using an income approach (for example, discounted future cash flows of the assets) or a depreciated replacement cost approach.

Example 3.4 The non-current assets have been revalued by one of the directors of Berry Corp., who holds no recognised professional qualification and has used estimated realisable value as the basis of valuation. The plant and equipment is of a highly specialised nature; it is constructed by the company itself and is mainly computer hardware.

Discuss whether this treatment is appropriate.

Answers

The tangible non-current assets have been valued by one of the directors of Berry Corp. IAS 16 gives guidance that the value should be determined by “appraisal normally undertaken by professionally qualified valuers”, and the director is not a qualified valuer. This fact places doubt on the values placed on the tangible non-current assets.

The plant and equipment is of a specialised nature and is, therefore, difficult to value, especially as it has been constructed by the company itself. It could be argued that the director is perhaps the best person to value such assets. However, the lack of independence in the process and the lack of compliance with IAS 16 increase the risk of reliance upon the figures for tangible non-current assets.

IAS 16 also states that the fair value of land and buildings and plant and equipment is usually market value, not an estimate of realisable value. Further, where there is no evidence of market value for plant and equipment because of its specialised nature (as is the case in this instance), they are valued at depreciated replacement cost.

Assets other than properties are easily valued, and therefore there is suspicion as to the underlying reasons for the valuation of plant and equipment and the authenticity of the figures for tangible non-current assets.

(ACCA 3.6 June 2003, adapted)

Depreciated replacement cost is not defined in the accounting standards, but International Valuation Guidance Note No. 8 (revised 2005) issued by the International Valuation Standards Committee states it as “the current cost of reproduction or replacement of an asset less deductions for physical deterioration and all relevant forms of obsolescence and optimisation”. The guidance further clarifies that depreciated replacement cost is an application of the cost approach used in assessing the value of specialised assets for financial reporting purposes, where direct market evidence is limited and, as an application of the cost approach, it is based on the principle of substitution.

Real-life**Case 3.5****Hong Kong Exchanges and Clearing Limited**

In Mainland China and Hong Kong, listed companies often use the depreciated replacement cost approach in valuing the separable building portion of a property. Hong Kong Exchanges and Clearing Limited is one such company, and its annual report of 2006 stated the following:

- The building component of owner-occupied leasehold properties is stated at valuation less accumulated depreciation. Fair value is determined by the directors based on independent valuations which are performed periodically. The valuations are on the basis of depreciated replacement cost.
- Depreciated replacement cost used as open market value cannot be reliably allocated to the building component.

3.5.2.2 Revaluation of Entire Class

If an item of property, plant and equipment is revalued, an entity is required to revalue the entire class of property, plant and equipment to which that asset belongs (IAS 16.36). One of the reasons for requiring revaluation of an entire class of assets is to reduce the chance for an entity to revalue a particular asset selectively in order to achieve a particular purpose, for example, increasing the total asset value to fulfil a loan covenant.

A class of property, plant and equipment is a grouping of assets of a similar nature and use in an entity's operations. The following are examples of separate classes: (1) land; (2) land and buildings; (3) machinery; (4) ships; (5) aircraft; (6) motor vehicles; (7) furniture and fixtures; and (8) office equipment.

3.5.2.3 Revaluation Surplus and Deficit

When an item of property, plant and equipment is revalued, the revaluation surplus or deficit together with any accumulated depreciation at the revaluation can be treated in one of the following ways:

1. Accumulated depreciation is restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount. This method is often used when an asset is revalued by means of applying an index to its depreciated replacement cost.
2. Accumulated depreciation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset. This method is often used for buildings.

Example 3.5 At year-end, a class of motor vehicles with a cost of \$100,000 and accumulated depreciation of \$40,000 has been revalued. In consequence, the revalued amount of that class of motor vehicles is \$90,000.

Show the revaluation effect and how the cost and accumulated depreciation will be affected.

Answers

1. Accumulated depreciation restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount:
 - a. Cost restated ($\$100,000 \times 90,000 \div 60,000$) = \$150,000
 - b. Accumulated depreciation restated ($\$40,000 \times 90,000 \div 60,000$) = (\$60,000)
2. Accumulated depreciation eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount:
 - a. Cost = \$100,000
 - b. Accumulated depreciation eliminated ($\$40,000 - \$30,000$) = (\$10,000)

If an asset's carrying amount is increased as a result of a revaluation, an entity is required to credit the increase directly to equity under the heading of revaluation surplus. However, if there is a revaluation decrease of the same asset already recognised in profit or loss previously, an entity is required to recognise the increase in profit or loss to the extent that it reverses the previous revaluation decrease (IAS 16.39).

**Real-life
Case 3.6**

LVMH Moët Hennessy – Louis Vuitton (LVMH Group)

LVMH Group, a group with some worldwide prestige brands, made the following explanation in its financial statements of 2007:

- Vineyard land is recognised at the market value at the balance sheet date. This valuation is based on official published data for recent transactions in the same region, or on independent appraisals. Any difference compared to historical cost is recognised within equity in “Revaluation reserves”. If market value falls below acquisition cost, the resulting impairment is charged to the income statement.

If an asset's carrying amount is decreased as a result of a revaluation (i.e., revaluation deficit), an entity is required to recognise the decrease in profit or loss. However, if there is a revaluation surplus already recognised in respect of that asset, an entity is required to debit the decrease directly to the revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset (IAS 16.40). An accumulated revaluation surplus of an asset cannot be offset with the accumulated revaluation deficit of another asset.

Example 3.6 In 2005, an entity buys a machine at \$1,000 and adopts the revaluation model for subsequent measurement. At year-end of 2005, the fair value of the machine rises to \$1,500. At year-end of 2006, its fair value falls to \$800.

Ignoring the depreciation, prepare a journal for each situation above.

Answers

At the date of acquisition, the machine was accounted for as follows:

Dr Property, plant and equipment	\$1,000	
Cr Cash		\$1,000

At year-end of 2005, the fair value of machines increased to \$1,500.

Dr Property, plant and equipment (\$1,500 – \$1,000)	\$500	
Cr Revaluation surplus		\$500

At year-end of 2006, the fair value of machines decreased to \$800.

Dr Revaluation surplus	\$500	
Profit and loss	200	
Cr Property, plant and equipment (\$1,500 – \$800).....		\$700

Real-life Case 3.7

MTR Corporation Limited

MTR Corporation Limited, a privatised mass transportation company in Hong Kong, clarified its revaluation policy on property, plant and equipment in its annual report of 2006 as follows:

- Revaluations are performed by independent qualified valuers every year, with changes in the value arising on revaluations treated as movements in the fixed asset revaluation reserve, except in the following situations:
 - Where the balance of the fixed asset revaluation reserve relating to a self-occupied land and building is insufficient to cover a revaluation deficit of that property, the excess of the deficit is charged to the profit and loss account; and
 - Where a revaluation deficit had previously been charged to the profit and loss account and a revaluation surplus subsequently arises, this surplus is first credited to the profit and loss account to the extent of the deficit previously charged to the profit and loss account, and is thereafter taken to the fixed asset revaluation reserve.

3.5.2.4 Transfer of Revaluation Surplus

The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of.

However, some of the surplus may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to retained earnings are not made through profit or loss. This implies that no revaluation surplus can be recycled to the income statement and revaluation surplus can only be transferred to retained earnings through reserve movements or changes in equity.

Example 3.7 CJS Limited bought a car at a cost of \$50,000 on 1 January 2005 and adopted the revaluation model. The estimated useful life of the car is 5 years. On 1 July 2005, the car was revalued with a fair value of \$49,500 at that date.

Prepare the journal entries for the year ended 31 December 2005.

Answers

On 1 January 2005, the car was accounted for as follows:

Dr Property, plant and equipment	\$50,000	
Cr Cash		\$50,000

Up to 30 June 2005, the depreciation was provided to the car as follows:

Dr Profit and loss ($\$50,000 \div 5 \text{ years} \div 2$)	\$5,000	
Cr Accumulated depreciation		\$5,000

On 1 July 2005, the fair value of the car was increased to \$49,500.

Dr Accumulated depreciation ($\$49,500 - (\$50,000 - \$5,000)$)	\$4,500	
Cr Revaluation surplus		\$4,500

At 31 December 2005, the depreciation subsequent to the revaluation was recognised based on the revalued amount as follows:

Dr Profit and loss ($\$49,500 \div 4.5 \text{ years} \div 2$)	\$5,500	
Cr Accumulated depreciation ($\$49,500 \div 4.5 \text{ years} \div 2$)		\$5,500

At 31 December 2005, the revaluation surplus can be transferred to retained earnings as the asset is used by an entity as follows:

Dr Revaluation surplus ($(\$49,500 - \$45,000) \div 4.5 \text{ years} \div 2$)	\$500	
Cr Retained earnings		\$500

The effects of taxes on income, if any, resulting from the revaluation of property, plant and equipment are recognised and disclosed in accordance with IAS 12 *Income Taxes* (see Chapter 13).

3.6 Depreciation

No matter whether an item of property, plant and equipment is subsequently measured by using the cost model or revaluation model, depreciation is required in order to derive its carrying amount and match with the future economic benefits to be flowed to the entity.

Depreciation is defined as the systematic allocation of the depreciable amount of an asset over its useful life (IAS 16.6).

3.6.1 Separate Depreciation on Significant Parts

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is also depreciated separately (IAS 16.43). This approach in depreciating each part or “component” of an item of property, plant and equipment is consistent with the “component accounting” in IAS 16, and a clearer guidance on how to depreciate a component is thus set out.

Example 3.8 At 1 January 2006, Celia Inc. bought a laser-printing machine at \$50 million. The machine would be used for 5 years (maximum useful life) and then be disposed of at zero value. The machine’s laser head would operate 500 hours. After that period, a new replacement laser head would cost \$10 million at that time with an estimated disposable value of zero. The entity has the clear intention of using the laser machine to the end of its useful life.

Discuss the implication on depreciation.

Answers

Celia’s two components of the laser machine (i.e., laser head and the machine other than the laser head) are depreciated separately as the cost of the laser head is significant in relation to the total cost of the machine.

Real-life Case 3.8

China Construction Bank Corporation and Deutsche Telekom AG, Bonn

The annual report of China Construction Bank Corporation stated its depreciation policy in 2006 as follows:

- Where an item of property and equipment comprises major components having different useful lives, the cost or deemed cost of the item is allocated on a reasonable basis between the components and each component is depreciated separately.

Deutsche Telekom AG, Bonn, a Germany telecommunications group, stated similarly for its depreciation in its annual report of 2007 as follows:

**Real-life
Case 3.8***(cont'd)*

- If an item of property, plant and equipment consists of several components with different estimated useful lives, the individual significant components are depreciated over their individual useful lives.

3.6.2 Depreciation Charges

An entity should recognise the depreciation charge for each period in profit or loss unless it is included in the carrying amount of another asset (IAS 16.48).

Sometimes, the future economic benefits embodied in an asset are absorbed in producing other assets. In this case, the depreciation charge constitutes part of the cost of the other asset and is included in its carrying amount.

For example, the depreciation of manufacturing plant and equipment is included in the costs of conversion of inventories (see IAS 2). Similarly, depreciation of property, plant and equipment used for development activities may be included in the cost of an intangible asset recognised in accordance with IAS 38 *Intangible Assets*.

In order to calculate and provide the depreciation of an asset, an entity is required to determine the following:

1. The commencement and cessation of depreciation;
2. The depreciable amount, including the residual value, of the asset;
3. The useful life of the asset; and
4. The depreciation method to be applied to the asset, i.e., the basis used for the systematic allocation of depreciable amount.

3.6.3 Commencement and Cessation of Depreciation

Depreciation of an asset begins when it is available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Even if the asset has not been used or is retired from active use during a period, depreciation is still provided on the asset except in the case that the asset is depreciated by reference to the units of its production and it has produced nothing during the period.

Depreciation of an asset ceases at the earlier of the date that the asset is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with IFRS 5 and the date that the asset is derecognised. Therefore, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usage methods of depreciation the depreciation charge can be zero if there is no production.

3.6.4 Depreciable Amount

The depreciable amount of an asset is the cost of an asset or other amount substituted for cost, less its residual value, and it should be allocated on a systematic basis over the useful life of the asset (IAS 16.50).

Residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Useful life is

- the period over which an asset is expected to be available for use by an entity; or
- the number of production or similar units expected to be obtained from the asset by an entity (IAS 16.6).

The residual value and the useful life of an asset should be reviewed at least at each financial year-end, i.e., once a year. If the expectations differ from previous estimates, the change is accounted for as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (IAS 16.51).

3.6.4.1 Residual Value

The residual value of an asset, in practice, is often insignificant and therefore immaterial in the calculation of the depreciable amount. Theoretically, it may increase to an amount equal to or greater than the asset's carrying amount. If it does, the asset's depreciation charge is zero unless its residual value subsequently decreases to an amount below the asset's carrying amount. However, such a situation would be feasible only when the entity clearly intends to dispose of the asset before the end of its physical usage life; otherwise, its estimated residual value is minimal or even zero.

The residual value must be the amount that an entity could receive for the asset currently (at the financial reporting date) if the asset were already as old and worn as it will be when the entity expects to dispose of it. Thus, an increase in the expected residual value of an asset because of past events will affect the depreciable amount; expectations of future changes in residual value other than the effects of expected wear and tear will not.

Example 3.9 Based on the information in Example 3.8, assume that, other things being the same, the price of a new laser machine increases to \$75 million at the end of 2006. Can Celia Inc. revise the residual value of the machine at 31 December 2006?

Answers

No. Celia has not changed its usage plan, and the estimated residual value after the estimated useful life would still be zero.

3.6.4.2 Useful Life

The useful life of an asset is defined in terms of the asset's expected utility to the entity. The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Therefore, the useful life of an asset may be shorter than its economic life. The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.

Example 3.10 Based on the information in Example 3.8, how should Celia Inc. determine the useful life of the machine?

Answers

The useful life of the laser head and the machine can be determined separately as follows:

- The laser head is depreciated over 500 hours.
- The laser machine other than laser head is depreciated over 5 years.

In determining the useful life of an asset or a component of an asset, an entity is required to consider all the following factors:

- Expected usage of the asset;
- Expected physical wear and tear;
- Technical or commercial obsolescence arising from market or technology changes; and
- Legal or similar limits on the use of the asset, such as the expiry dates of related leases.

Real-life

Case 3.9

Denway Motors Limited

The annual report of Denway Motors Limited in 2006 provides an example for determining the useful life for the cost of restoring and improving property, plant and equipment that is regarded as a component of an asset:

- The plant components are depreciated over the period to overhaul.
- Major costs incurred in restoring the plant components to their normal working condition to allow continued use of the overall asset are capitalised and depreciated over the period to the next overhaul.
- Improvements are capitalised and depreciated over their expected useful lives to the group.

3.6.5 Depreciation on Land and Building

Land and buildings are separable assets and are accounted for separately, even when they are acquired together.

- Freehold land usually has an unlimited useful life and therefore is not depreciated.
- Buildings have a limited useful life and therefore are depreciable assets. An increase in the value of the land on which a building stands does not affect the determination of the depreciable amount of the building.

3.6.6 Depreciation Method

The depreciation method is determined in order to have a systematic allocation of the depreciable amount of an asset. It should reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity (IAS 16.60).

Real-life

Case 3.10

Bayerische Motoren Werke Aktiengesellschaft (BMW Group)

BMW Group, which is one of the ten largest car manufacturers in the world and possesses the brands of BMW, MINI and Rolls-Royce, explained its depreciation policy in its annual report of 2007 as follows:

- Depreciation on property, plant and equipment reflects the pattern of their usage and is generally computed using the straight-line method.
- Components of items of property, plant and equipment with different useful lives are depreciated separately.
- For machinery used in multiple-shift operations, depreciation rates are increased to account for the additional utilisation.

A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life:

1. The straight-line method (results in a constant charge over the useful life if the asset's residual value does not change);
2. The diminishing balance method (results in a decreasing charge over the useful life); and
3. The units of production method (results in a charge based on the expected use or output).

Example 3.11 A machine costs \$600,000. Its estimated useful life is 3 years or 30,000 machine hours, and its estimated residual value is zero. The estimated machine hours used for the first, second and third years are 8,000, 12,000 and 10,000, respectively.

Calculate the estimated depreciation charge for the next 3 years under different depreciation methods.

Answers

	Depreciation change			Accumulated depreciation at end of Year 3 \$
	Year 1 \$	Year 2 \$	Year 3 \$	
Straight-line method (\$600,000 ÷ 3 years).....	200,000	200,000	200,000	600,000
Diminishing balance method (Assuming at 70%, the annual depreciation is the carrying amount times 70%)	420,000	126,000	37,800	583,800
Unit of production method (\$600,000 ÷ 30,000 × Estimated machine hours for the year)	160,000	240,000	200,000	600,000

The depreciation method selected by an entity should be applied consistently to an asset from period to period, but it should also be reviewed at least at each financial year-end, i.e., once a year. If there is a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the depreciation method should be changed to reflect the changed pattern. Such a change is accounted for as a change in an accounting estimate in accordance with IAS 8 (IAS 16.61); see Chapter 20.

3.7 Impairment

To determine whether an item of property, plant and equipment is impaired, an entity applies IAS 36 *Impairment of Assets*. IAS 36 explains

1. how an entity reviews the carrying amount of its assets;
2. how it determines the recoverable amount of an asset; and
3. when it recognises, or reverses the recognition of, an impairment loss.

Chapter 8 sets out the details of the impairment of assets.

Compensation from third parties for items of property, plant and equipment that were impaired, lost or given up should be included in profit or loss when the compensation becomes receivable (IAS 16.65).

3.8 Derecognition

The carrying amount of an item of property, plant and equipment should be derecognised

1. on disposal; or
2. when no future economic benefits are expected from its use or disposal (IAS 16.67).

The gain or loss arising from the derecognition of an item of property, plant and equipment should be included in profit or loss when the item is derecognised. An entity should not classify such gains as revenue (IAS 16.68).

3.8.1 Disposal

The disposal of an item of property, plant and equipment may occur in a variety of ways (e.g., by sale, by entering into a finance lease or by donation). In determining the date of disposal of an item, an entity applies the criteria in IAS 18 *Revenue* for recognising revenue from the sale of goods. IAS 17 applies to disposal by a sale and leaseback.

3.8.2 Replacement

IAS 16 sets out the guidance in derecognising a replaced component, and it is consistent with the component accounting. If, under the initial recognition criteria, an entity recognises the cost of a replacement for part of the item in the carrying amount of an item of property, plant and equipment, then the entity is required to do either of the following:

1. Derecognise the carrying amount of the replaced part regardless of whether the replaced part has been depreciated separately, or
2. Use the cost of the replacement, i.e., the new component, as an indication of what the cost of the replaced part was at the time it was acquired or constructed to estimate the amount to be recognised, if it is not practicable for an entity to determine the carrying amount of the replaced part.

Example 3.12 Based on the information in Example 3.8, at 31 December 2007, replacement of the laser head is required after 400 hours of operation. The cost of a new laser head is \$8 million.

Discuss the implication of replacement and calculate the financial implication.

Answers

The laser head being replaced should have a carrying amount of \$2 million at 31 December 2007 [$\$10 \text{ million} - (\$10 \text{ million} \div 500 \times 400)$]. That replaced laser head of \$2 million should be derecognised and the new laser head of \$8 million should be recognised.

As the replaced laser head had been used for only 400 hours, the current estimate of the useful life of the new laser head would probably be 400 hours instead of 500 hours. The new laser head should then be depreciated over 400 hours.

Real-life

Case 3.11

MTR Corporation Limited

MTR Corporation Limited clarified its policy on recognising and derecognising replacement in 2006 as follows:

- Subsequent expenditure relating to the replacement of certain parts of an existing fixed asset is recognised in the carrying amount of the asset if it is probable that future economic benefit will flow to the group and the cost of the item can be measured reliably.
- The carrying amount of those parts that are replaced is derecognised, with gain or loss arising therefrom dealt with in the profit and loss account.

3.8.3 Gain or Loss on Derecognition

The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between

- the net disposal proceeds, if any; and
- the carrying amount of the item (IAS 16.71).

3.9 Disclosure

For each class of property, plant and equipment, an entity should disclose the following information:

1. The measurement bases used for determining the gross carrying amount;
2. The depreciation methods used;
3. The useful lives or the depreciation rates used;
4. The gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and
5. A reconciliation of the carrying amount at the beginning and end of the period showing the following:
 - a. Additions;
 - b. Assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
 - c. Acquisitions through business combinations;
 - d. Increases or decreases resulting from revaluations (i.e., the requirements of the revaluation model) and from impairment losses recognised or reversed directly in equity in accordance with IAS 36;
 - e. Impairment losses recognised in profit or loss in accordance with IAS 36;
 - f. Impairment losses reversed in profit or loss in accordance with IAS 36;
 - g. Depreciation;
 - h. The net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency, including the translation of a foreign operation into the presentation currency of the reporting entity; and
 - i. Other changes (IAS 16.73).

The financial statements should also disclose the following:

1. The existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;
2. The amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of its construction;
3. The amount of contractual commitments for the acquisition of property, plant and equipment; and
4. If it is not disclosed separately on the face of the income statement, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss (IAS 16.74).

An entity is also required to disclose the following:

1. The depreciation methods adopted;
2. The estimated useful lives or depreciation rates on the property, plant and equipment;
3. The depreciation, whether recognised in profit or loss or as a part of the cost of other assets, during a period; and
4. The accumulated depreciation at the end of the period.

In accordance with IAS 8, an entity discloses the nature and effect of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in subsequent periods. For property, plant and equipment, such disclosure may arise from changes in estimates with respect to the following:

1. Residual values;
2. The estimated costs of dismantling, removing or restoring items of property, plant and equipment;
3. Useful lives; and
4. Depreciation methods.

If items of property, plant and equipment are stated at revalued amounts, i.e., the revaluation model is adopted, the following should be disclosed:

1. The effective date of the revaluation;
2. Whether an independent valuer was involved;
3. The methods and significant assumptions applied in estimating the items' fair values;
4. The extent to which the items' fair values were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques;
5. For each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and
6. The revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders (IAS 16.77).

In accordance with IAS 16 and 36, certain additional information is also required or encouraged for disclosures.

3.10 Summary

Property, plant and equipment are tangible items that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and are expected to be used during more than one period.

Property, plant and equipment are recognised when it is probable that future economic benefits will flow to the entity and their cost can be measured reliably. The same criteria are used in recognising the initial cost and subsequent expenditure, and property, plant and equipment are recognised at cost plus direct attributable cost and initial estimate of dismantling and removal costs.

After initial recognition, an entity can choose either the cost model or the revaluation model to subsequently measure an item of property, plant and equipment. Both models require the determination of depreciation and impairment (if criteria are met) in order to derive the carrying amount of an asset classified as property, plant and equipment.

If the revaluation model is adopted, it should be applied to an entire class of property, plant and equipment, and the revalued amount at the date of the revaluation should be the fair value of the asset. Revaluation surplus and deficit are normally dealt with in the equity, not profit or loss, unless the surplus is insufficient to offset the deficit of the same asset.

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. The depreciable amount is the cost or the revalued amount less the estimated residual value of the asset. The depreciation method in achieving the systematic allocation should reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. Annual review at financial year-end is required on the depreciation method, residual value and useful life.

Property, plant and equipment should be derecognised on disposal or when no future economic benefits are expected from the use or disposal of the assets.

Review Questions

1. Define property, plant and equipment.
2. What are the differences between property, plant and equipment, fixed assets and non-current assets?
3. What kinds of property, plant and equipment are not accounted for as property, plant and equipment under IAS 16?
4. Discuss the interaction between property, plant and equipment (IAS 16), leases (IAS 17) and investment property (IAS 40).
5. Clarify the recognition criteria on property, plant and equipment.
6. What kinds of cost elements can be capitalised as property, plant and equipment?
7. State the choices in subsequently measuring property, plant and equipment.
8. Describe the cost model and revaluation model.
9. How does an entity determine the fair value of an item of property, plant and equipment?

10. How does an entity account for the revaluation surplus and deficit under the revaluation model?
11. What is component accounting?
12. How does an entity determine the depreciation?
13. When should depreciation be commenced and ceased?
14. Why is residual value normally minimal or zero?
15. When and how should an item of property, plant and equipment be derecognised?
16. How does an entity account for a replacement for part of an item of property, plant and equipment?

Exercises

Exercise 3.1 June Luke, the managing director of Sixth Casual Limited, was advised by the auditors that, based on IAS 16, certain removal costs of an item of property, plant and equipment incurred in future should be capitalised at the date when the item was purchased. June asks your opinion on the following two issues:

1. Why is there such a requirement when she is of the opinion that the removal costs have not been incurred?
2. What kinds of removal costs should be capitalised?

Exercise 3.2 June Luke, the managing director of Sixth Casual Limited, proposed changing accounting policy in revaluing the property, plant and equipment regularly to measuring them by using the cost model.

Discuss.

Exercise 3.3 Wader is reviewing the accounting treatment of its buildings. The company uses the revaluation model for its buildings. The buildings originally cost \$10 million on 1 June 2005 and had a useful economic life of 20 years. They are being depreciated on a straight-line basis to a nil residual value. The buildings were revalued downwards on 31 May 2006 to \$8 million, which was the buildings' recoverable amount. At 31 May 2007 the value of the buildings had risen to \$11 million, which is to be included in the financial statements. The company is unsure how to treat the above events.

Discuss the accounting treatment of the items in the financial statements for the year ended 31 May 2007.

(ACCA 3.6 June 2007, adapted)

Problems

Problem 3.1 SCJ Limited plans to install several of the same air-conditioning plants in its leasehold properties. When the properties are returned to the landlord in 4 years, the plants should be removed. The properties include a factory (three plants installed), showroom (one plant installed) and head office (two plants installed).

The purchase cost of each plant is \$1,000 and the installation cost for each plant is also \$1,000. The present value of removal costs of each plant is estimated to be \$800, of which \$400 will result from its installation and \$400 will result from the usage of each plant during the 4 years.

Explain and determine the cost of each plant to be recognised.

Problem 3.2 Argent values its remaining properties independently on the basis of “existing use value”, which is essentially current value. The directors have currently opted for a policy of revaluation in the financial statements with the annual transfer of the depreciation on the revalued amount from revaluation reserve to accumulated reserves. Local GAAP requires a full valuation every three years with gains and losses taken to income when the asset is available for sale.

Discuss the implications for the Argent Group financial statements of a move from using local GAAP to using IFRS.

(ACCA 3.6 December 2003, adapted)

Problem 3.3 At 1 January 1985, NPS Inc. bought a flat in Tai Koo Shing at \$500,000. It aimed to use it for 50 years until the end of its estimated useful life. The original estimated residual value is zero. Depreciation is calculated on a straight-line basis. At 31 December 2004, the depreciated historical cost (and carrying amount) of the property was \$300,000.

1. At the beginning of 2005, the price of a similar flat in Tai Koo Shing was about \$3 million. Can NPS Inc. revise the residual value?
2. If NPS Inc. clearly changes its intention and aims to dispose of the flat in 10 years (i.e., 2015), can it revise the residual value?

Problem 3.4 Company A’s tangible non-current assets are split into long leasehold properties (over 50 years) and short leasehold properties, which are all occupied by the company. The company’s accounting policy as regards long leasehold properties is not to depreciate them on the grounds that their residual value is very high and the market value of the property is in excess of the carrying amount. Short leasehold properties are only depreciated over the final 10 years of the lease. The company renegotiates its short leaseholds immediately before the final 10 years of the lease, and thus no depreciation is required up to this point.

Discuss.

(ACCA 3.6 December 2002, adapted)

Case Studies

Case Study 3.1 Before adopting HKAS 16 (equivalent to IAS 16), the annual report of the Community Chest for 2004/05 states the following:

Major items of expenditure representing leasehold improvements and computer development are depreciated on a straight-line basis over 3 years. Other fixed assets are written off in the year of purchase.

Subsequent expenditure relating to a fixed asset that has already been recognised is added to the carrying amount of the asset when it is probable that future economic benefits, in excess of the originally assessed standard of performance of the existing asset, will flow to the Chest.

All other subsequent expenditure is recognised as an expense in the period in which it is incurred.

Discuss the implication of IAS 16 or HKAS 16 to the Community Chest.

Case Study 3.2

From the year beginning on or after 1 January 2005, all companies in Hong Kong and Europe preparing their financial statements in accordance with IFRSs or HKFRSs (equivalent to IFRSs substantially) are required to apply IAS 16 or HKAS 16 *Property, Plant and Equipment*. CLP Holdings Limited and Nokia Corporation are two of the companies applying IAS 16 or HKAS 16 since 2005. CLP Holdings Limited stated the following accounting policy for its fixed assets in its annual report of 2005 (pages 143 and 144):

Fixed assets are stated at cost less accumulated depreciation and accumulated impairment losses.

Major renewals and improvements which will result in future economic benefits, in excess of the originally assessed standard of performance of the existing assets, are capitalised, while maintenance and repair costs are charged to the profit and loss account in the year in which they are incurred.

Additions represent new or replacement of specific components of an asset. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Nokia Corporation stated the following in its accounting policy for repairs and maintenance in its annual report of 2007 (Form 20-F page F-13):

Maintenance, repairs and renewals are generally charged to expense during the financial period in which they are incurred. However, major renovations are capitalized and included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the group. Major renovations are depreciated over the remaining useful life of the related asset. Leasehold improvements are depreciated over the shorter of the lease term or useful life.

Based on IAS 16 (or HKAS 16), evaluate the above accounting policies.

Case Study 3.3

Handrew, a listed company, is adopting IFRS in its financial statements for the year ended 31 May 2005. Its directors are worried about the effect of the move to IFRS on their financial performance and the views of analysts. The directors have highlighted some "headline" differences between IFRS and their current local equivalent standards and require a report on the impact of a move to IFRS on the key financial ratios for the current period.

Previous GAAP requires the residual value of a non-current asset to be determined at the date of acquisition or latest valuation. The residual value of much of the plant and equipment is deemed to be negligible. However, certain plant (cost \$20 million and carrying value \$16 million at 31 May 2005) has a high residual value. At the time of

purchasing this plant (June 2003), the residual value was thought to be approximately \$4 million.

However, the value of an item of an identical piece of plant already of the age and in the condition expected at the end of its useful life is \$8 million at 31 May 2005 (\$11 million at 1 June 2004). Plant is depreciated on a straight-line basis over 8 years.

Discuss the impact of the change to IFRS on the reported profit and balance sheet of Handrew at 31 May 2005.

(ACCA 3.6 June 2005, adapted)

4

Leases

Learning Outcomes

This chapter enables you to understand the following:

- 1 The classification of leases into operating leases and financial leases
- 2 The classification of a lease of land and a lease of land and building
- 3 The accounting of leases in the financial statements of a lessee
- 4 The accounting of leases in the financial statements of a lessor
- 5 The accounting implication of sale and leaseback transactions

Real-life

Case 4.1

Sun Hung Kai Properties Limited

Lease accounting used to be a topic without significant debate. The convergence of the accounting standard to IAS 17 *Leases* in some places, however, affected many listed companies that held properties in Hong Kong, Mainland China and the United Kingdom. For example:

- The opening retained profits of Sun Hung Kai Properties Limited, one of the Hong Kong blue-chip companies engaged in property development, as at 1 July 2005 and 1 July 2004 were decreased by HK\$144 million and HK\$126 million, respectively.
- The fixed assets of HKEx, The Hong Kong Exchanges and Clearing Limited, dropped HK\$170 million in its first year of adoption of HKAS 17.

Sun Hung Kai Properties Limited made a brief explanation on this change in its annual report of 2006 as follows:

- In prior years, leasehold land and buildings were included in fixed assets and stated at cost or valuation less accumulated depreciation and impairment, if any.
- Following the adoption of HKAS 17 *Leases*, leasehold land is regarded as operating lease and stated at cost and amortised over the lease period on a straight-line basis.

Lease accounting should be viewed from the perspective of lessors and lessees, and it is one of the topics without significant debate. Since the accounting standard in respect of leases in some places has been fully converged to IAS 17 *Leases*, however, most entities may not be able to classify their purchased property as property, plant and equipment or investment property. It is mainly because the property is only “leased” from the respective government and is not “owned” or “freely held” by those entities.

This chapter not only explains the classification of leases and the related accounting treatments and disclosures for lessors and lessees, but also illustrates the issues in classifying a lease of land and a lease of building and land.

4.1 Applicable Standard and Scope

Lease is accounted for in accordance with IAS 17 *Leases*.

A **lease** is defined as an agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time (IAS 17.4).

An entity is required to apply IAS 17 in accounting for all leases other than the following:

1. Leases to explore for or use minerals, oil, natural gas and similar non-regenerative resources; and
2. Licensing agreements for such items as motion picture films, video recordings, plays, manuscripts, patents and copyrights.

Some leases should be classified in accordance with IAS 17, but they are not measured in accordance with IAS 17. In other words, IAS 17 is not applied as the basis of measurement for these leases, including the following:

1. Property held by lessees that is accounted for as investment property under IAS 40 *Investment Property* (see Chapter 5).
2. Investment property provided by lessors under operating leases to be accounted for under IAS 40 (see Chapter 5).
3. Biological assets held by lessees under finance leases (under IAS 41 *Agriculture*).
4. Biological assets provided by lessors under operating leases (under IAS 41 (IAS 17.2)).

IAS 17 applies to agreements that transfer the right to use assets even though substantial services by the lessor may be called for in connection with the operation or maintenance of such assets. However, it does not apply to agreements that are contracts for services that do not transfer the right to use assets from one contracting party to the other.

4.2 Classification of Leases

An entity is required to classify a lease into a finance lease or an operating lease. Their definitions are as follows:

A **finance lease** is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.

An **operating lease** is a lease other than a finance lease (IAS 17.4).

The definition of a finance lease implies that a lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. If a lease is not classified as a finance lease, it is classified as an operating lease as it does not transfer substantially all the risks and rewards incidental to ownership (IAS 17.8).

Real-life Case 4.2

Bayerische Motoren Werke Aktiengesellschaft (BMW Group)

BMW Group, which is one of the ten largest car manufacturers in the world and possesses the brands of BMW, MINI and Rolls-Royce, explained the “risks and rewards approach” in classifying its leases by using IAS 17 directly in its annual report of 2007 as follows:

**Real-life
Case 4.2**
(cont'd)

- Non-current assets also include assets relating to leases. The BMW Group uses property, plant and equipment as lessee and also leases out assets, mainly vehicles produced by the group, as lessor.
- IAS 17 *Leases* contains rules for determining, on the basis of risks and rewards, the economic owner of the assets. In the case of finance leases, the assets are attributed to the lessee, and in the case of operating leases, the assets are attributed to the lessor.

4.2.1 Inception and Commencement of a Lease

In accounting for a lease, an entity first has to ascertain the date of inception of the lease, because it is the date

1. to determine the classification of a lease as either a finance lease or an operating lease; and
2. to determine the amount to be recognised for a finance lease.

The **inception of the lease** is defined as the earlier of

- the date of the lease agreement; and
- the date of commitment by the parties to the principal provisions of the lease (IAS 17.4).

At the inception of a lease, an entity has to evaluate whether there are one or more situations and indicators of a finance lease incorporated in the lease (see Section 4.2.2). This date may not be the date of recognition, but it is the date to determine the lease classification.

In the case of a finance lease, an entity should at the same date determine the amounts to be recognised for the lease (further discussions on the amount to be recognised for finance leases are set out in Sections 4.4.1 and 4.5.1). The date to determine the amount of a finance lease may not be the date of recognition of the finance lease. The date of initial recognition of a finance lease is the commencement of the lease term.

The **commencement of the lease term** is defined as the date from which the lessee is entitled to exercise its right to use the leased asset.

The commencement of the lease term is the date of initial recognition of the lease (i.e., the recognition of the assets, liabilities, income or expenses resulting from the lease, as appropriate) (IAS 17.4).

The time lag between the inception and the commencement of a lease is not significant in normal cases. When there is a time lag, the amount measured for recognition at inception may not be the same with the amount if measured at commencement. IAS 17 specifies that the timing of recognition is at commencement but the amount for recognition is based on the measurement at inception.

Example 4.1 On 1 February 2008, Honey Group signed a lease agreement with Tony Inc. to obtain the right to use several new plastic injection machines for 20 years. Tony agreed to assemble the machines and deliver them to Honey on 25 June 2008. The lease payments were fixed in the agreement, and the present value of the payments was nearly the same as the fair value of the machines on 1 February 2008. Tony finally delivered the machines to Honey on 25 June 2008, but the fair value of the machines significantly increased because of the increased cost of assembly.

Determine the inception date and commencement date of the lease and, if it is a finance lease, when Honey recognises and measures the leased machines.

Answers

The inception date of the lease is 1 February 2008, the date on which Honey and Tony signed the lease agreement. The commencement date of the lease is 25 June 2008, the date on which Honey was entitled to exercise its right to use the leased machines.

Honey should determine the amount of recognition for the leased machines on 1 February 2008, i.e., the inception date, but should not recognise the amount. It can only recognise the finance lease of the machines on 25 June 2008, i.e., the commencement date.

Real-life

Case 4.3

BMW Group and Deutsche Telekom AG, Bonn

BMW Group stated clearly the fair value of the leased assets at the inception date of a lease in its annual report of 2007 as follows:

- In accordance with IAS 17, assets leased under finance leases are measured at their fair value at the inception of the lease or at the present value of the lease payments, if lower.

Deutsche Telekom AG, Bonn, a Germany telecommunications group, stated the recognition of the leased assets at the commencement date of a lease in its annual report of 2007 as follows:

- At the commencement of the lease term, Deutsche Telekom recognises a lease liability equal to the carrying amount of the leased asset.

IAS 17 requires that, if a provision to adjust the lease payment is included in a lease agreement, the effect of any such changes is deemed to have taken place at the inception of the lease for the purposes of IAS 17.

If at any time the lessee and the lessor agree to change the provisions of the lease, other than by renewing the lease, in a manner that would have resulted in a different classification of the lease if the changed terms had been in effect at the inception of the lease, the revised agreement is regarded as a new agreement over its term.

However, changes in estimates (for example, changes in estimates of the economic life or of the residual value of the leased property) or changes in circumstances (for example, default by the lessee) do not give rise to a new classification of a lease for accounting purposes.

Example 4.2 Provisions to adjust the lease payments include the following situations:

- For changes in the construction or acquisition cost of the leased property.
- For changes in some other measure of cost or value, such as general price levels, or in the lessor's costs of financing the lease, during the period between the inception of the lease and the commencement of the lease term.

4.2.2 Indicators of Finance Lease

Lease classification depends on the substance of the lease or the transactions, rather than the form of the lease. In determining whether a lease is a finance lease (otherwise, it is classified as an operating lease), an entity evaluates whether any one or more of the following indicators or situations of a finance lease exist:

1. The lease transfers ownership of the asset to the lessee by the end of the lease term.
2. The lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised.
3. The lease term is for the major part of the economic life of the asset even if title is not transferred.
4. At the inception of the lease, the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset.
5. The leased assets are of such a specialised nature that only the lessee can use them without major modifications.
6. If the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee.
7. Gains or losses from the fluctuation in the fair value of the residual accrue to the lessee.
8. The lessee has the ability to continue the lease for a secondary period at a rent that is substantially lower than market rent.

Example 4.3 Celia Corp. obtains the right to use a car by hire purchase contract. The contract contains a provision giving Celia an option to acquire title to the car upon the fulfilment of agreed conditions. This contract is a lease, which is classified as finance or operating lease by using the same criteria in IAS 17.

The situations and indicators to finance lease in IAS 17 follow the “principle-based” approach instead of set out a specific rule. The management of an entity has to exercise its judgement to gauge what “major part of the economic life” or “at least substantially all of the fair value” is in order to classify a lease. No specific rules or specific percentage threshold, for example “75% of the economic life” or “at least 90% of the fair value”, are set out in IAS 17.

Management judgement by using the principles in IAS 17 can minimise the mechanical application of the accounting rule, but no doubt it may be subjective in some cases. It may also reduce the consistency and comparability within an entity or across different entities.

In addition, the situations and indicators to finance leases are not always conclusive. If it is clear from other features that an entity has not obtained substantially all risks and rewards incidental to ownership from a lease, the lease is not classified as a finance lease. Such a lease will then be classified as an operating lease. Specific issues and situations are further explained below.

Example 4.4 Melody Corporation signs a contract to lease a power generation plant for 5 years. The plant can be used for 10 years, and the present value of the lease payment is substantially lower than its fair value. The lease terms also allow Melody to pay the fair value of the plant at the time of payment to obtain the ownership of the asset during the lease period.

Is the lease of the plant a finance lease?

Answers

The lease of the plant is not a finance lease because it has no indicators of a finance lease. The lease term of 5 years may not be a major part of the plant’s economic life of 10 years. The present value of the lease payment is substantially lower than its fair value. The option to purchase the plant can only be exercised at the plant’s fair value.

In short, there are no indicators reflecting that Melody has obtained substantially all such risks and rewards incidental to ownership of the plant. The lease is classified as an operating lease.

4.2.2.1 Major Part of the Economic Life of the Leased Asset

A lease without title or ownership transfer is classified as a finance lease if its lease term is for the major part of the economic life of the asset. In determining whether the lease term meets the “major part” requirement, an entity has to first determine the lease term and then gauge what constitutes a “major part”.

Lease term is defined as the non-cancellable period for which the lessee has contracted to lease the asset together with any further terms for which the lessee has the option to continue to lease the asset, with or without further payment, when at the inception of the lease it is reasonably certain that the lessee will exercise the option (IAS 17.4).

The definition of a lease term implies that a lease term includes a non-cancellable term and the further terms, if the further terms meet the following two conditions:

1. The lessee has already got its option to extend (i.e., further) the lease term.
2. At the inception of the lease, it is reasonably certain that the lessee will exercise that option.

The further terms of a lease are the terms on which the lessee has an option to extend the lease term. They can be added as part of the lease term so long as the above two conditions are met. The requirement to make payment or not to make payment for the further terms is not a decidable factor.

Example 4.5 Bonnie Group signed the following three leases:

1. Lease A contains a 2-year initial term and another 2-year further term. The lessor has an option to cancel the further term.
2. Lease B contains a 2-year initial term. Bonnie has the right to extend to a 2-year further term, but it has not decided to take this term at the inception of the lease.
3. Lease C contains a 2-year initial term. Bonnie has the right to extend to a 2-year further term, and it has decided to take the further term at the inception of the lease.

Determine the lease term for each of the above leases.

Answers

The lease terms of the leases are determined as follows:

1. The lease term of Lease A is 2 years as Bonnie has no discretionary right to exercise its renewal option. The lessor has its own discretion to cancel or to extend the further term.

2. The lease term of Lease B is 2 years. Even if Bonnie has an option to further the term for another 2 years, it is not reasonably certain that Bonnie will exercise the option at the inception.
3. The lease term of Lease C is 4 years. Bonnie has an option to extend, and it has decided to extend. In other words, it is reasonably certain that Bonnie will exercise the option at the inception.

“Major part” is not defined in IAS 17, and no specific percentage threshold is provided. Previously, the accounting standard used a benchmark of 75% of the asset’s economic life in determining whether a lease was a finance lease. It required that if the lease term was over 75% of the economic life of the asset, the lease would be a finance lease. IAS 17 has no such benchmark and implicitly requires the entities to make their own judgement to set their criteria in explaining “major part”. Of course, 75% may still be one of the references.

4.2.2.2 Substantially All of the Fair Value of the Leased Asset

At the inception of the lease, the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset. In determining whether the present value of the minimum lease payments meets the “at least substantially all” requirement, an entity has to define minimum lease payments, to discount the minimum lease payments to present value and to gauge what constitutes “substantially all”.

1. Minimum Lease Payments

The minimum lease payments for a lessee are not the same as those for a lessor, and the difference is the residual value guaranteed to the lessor by a third party unrelated to the lessor as stated above. The definition of minimum lease payments is set out below.

Minimum lease payments are the payments over the lease term that the lessee is or can be required to make, excluding contingent rent, costs for services and taxes to be paid by and reimbursed to the lessor, together with the following:

- For a lessee, any amounts guaranteed by the lessee or by a party related to the lessee; or
- For a lessor, any residual value guaranteed to the lessor by
 - the lessee;
 - a party related to the lessee; or
 - a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee (IAS 17.4).

In addition, the minimum lease payments may comprise the minimum payments payable over the lease term to the expected date of exercise of a purchase option and the payment required to exercise the option (instead of the full term of lease term), if the option meets certain conditions (IAS 17.4).

Example 4.6 On 2 January 2008, AJS Limited signed a 5-year lease up to 31 December 2012 to use an electricity plant to be installed in its factory with an annual payment of \$100,000. AJS paid the initial annual payment on 2 January 2008 to the lessor, C & P Inc., which agreed to deliver and install the plant by 10 January 2008. Five remaining annual lease payments would be made at the end of each year beginning from 31 December 2008.

AJS also committed a guarantee to C & P that the leased plant should have a value not less than \$100,000 at the end of the lease. The parent of AJS, JSA Holding Inc., arranged a further guarantee of \$20,000 in respect of the leased plant.

To protect its interest in the plant, C & P Inc. in turn obtained a guarantee from an insurance agent that the residual value was not less than \$130,000.

Determine the minimum lease payments of the lease to AJS and C & P.

Answers

The minimum lease payment is:

	For AJS \$	For C & P \$
Payments over the lease term ($\$100,000 \times 6$).....	600,000	600,000
Guarantee made by:		
AJS.....	100,000	100,000
JSA, the parent of AJS.....	20,000	20,000
Insurance agent ($\$130,000 - \$100,000 - \$20,000$)	—	10,000
	<u>720,000</u>	<u>730,000</u>

Example 4.6 implies that even when the same and consistent definitions are used by the lessor and lessee, the application of these definitions to the differing circumstances of the lessor and lessee may result in different classifications in the same lease being classified differently by the two parties. If the benefits from a residual value guarantee provided by the insurance agent, a party unrelated to AJS Limited, the lessee, for C & P Inc. in the above example is significant, AJS Limited may classify the lease as a finance lease but C & P Inc. may classify the lease as an operating lease.

Guaranteed residual value is

- for a lessee, that part of the residual value that is guaranteed by the lessee or by a party related to the lessee (the amount of the guarantee being the maximum amount that could, in any event, become payable); and
- for a lessor, that part of the residual value that is guaranteed by the lessee or by a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee (IAS 17.4).

2. Present Value of Minimum Lease Payments

The discount rate to be used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease, if this is practicable to determine. If it is not practicable to determine the interest rate implicit in the lease for a lessee, the lessee's incremental borrowing rate shall be used (IAS 17.20).

The **interest rate implicit in the lease** is the discount rate that, at the inception of the lease, causes the aggregate present value of

- the minimum lease payments; and
- the unguaranteed residual value to be equal to the sum of
 - the fair value of the leased asset; and
 - any initial direct costs of the lessor.

Initial direct costs are incremental costs that are directly attributable to negotiating and arranging a lease, except for such costs incurred by manufacturer or dealer lessors.

The **lessee's incremental borrowing rate of interest** is the rate of interest the lessee would have to pay on a similar lease or, if that is not determinable, the rate that, at the inception of the lease, the lessee would incur to borrow over a similar term, and with a similar security, the funds necessary to purchase the asset (IAS 17.4).

Example 4.7 Based on Example 4.6, the interest rate implicit in the lease of AJS Limited is 8%. Calculate the present value of the lease's minimum lease payments to AJS.

Answers

The present value of the minimum lease payment is \$580,941, as calculated below:

	Minimum lease payment \$	Discount factor $1 \div (1 + 8\%)^T$	Present value \$
Payments over the lease term:			
2 January 2008 ($T = 0$)	100,000	1.000000	100,000
31 December 2008 ($T = 1$).....	100,000	0.925926	92,593
31 December 2009 ($T = 2$).....	100,000	0.857339	85,734
31 December 2010 ($T = 3$).....	100,000	0.793832	79,383
31 December 2011 ($T = 4$).....	100,000	0.735030	73,503
31 December 2012 ($T = 5$).....	100,000	0.680583	68,058
Guarantee made at the end of 2012 ($T = 5$) by:			
AJS	100,000	0.680583	68,058
JSA, the parent of AJS.....	<u>20,000</u>	0.680583	<u>13,612</u>
	<u>720,000</u>		<u>580,941</u>

3. Substantially All

A lessee should classify a lease as a finance lease if the present value of the minimum lease payments of the lease meets the “at least substantially all” requirement. In accordance with the principle-based approach, management has to judge its entity’s level to meet “at least substantially all”, that is not defined in IAS 17. The previous accounting practice referred to 90% as “substantially all”, and this may serve as a reference. For example, when the present value of minimum lease payments is over 90% of the fair value of a lease asset, the lease would be classified as a finance lease.

4.3 Classification of Leases of Land and of Buildings

Leases of land and of buildings are classified as finance or operating leases in the same way as leases of other assets. The previous accounting standard was not explicit about how to classify a lease of land and buildings. However, in some places, including Hong Kong, Mainland China and the United Kingdom, property rights are obtained under long-term leases, for example, under a lease of land of 50 years, 999 years, etc. The substance of those leases differs from buying a freehold property. IAS 17 sets out specific requirements on the lease of land and buildings.

4.3.1 Lease of Land

Based on an argument that a characteristic of land is an indefinite economic life, IAS 17 judges that, if title of a land is not expected to pass to the lessee by the end of the lease term, the lessee normally does not receive substantially all the risks and rewards incidental to ownership. In other words, all the other criteria to classify a lease as a

finance lease would not be used to classify a lease of land, and IAS 17 specifically requires that a lease of land without title transfer can only be an operating lease.

In consequence, a payment made for such lease of land accounted for as an operating lease represents prepaid lease payments that are amortised over the lease term in accordance with the pattern of benefits provided (see Section 4.4.2).

Real-life Case 4.4

CLP Holdings Limited

CLP Holdings Limited, one of the largest investor-owned power businesses in Asia, stated in its annual report of 2006 as follows:

- Payments made under an operating lease, e.g., upfront payments for leasehold land or land use rights, are amortised on a straight-line basis over the term of the lease to the income statement.

4.3.2 Lease of Land and Building

In some places a lease of property right is a de facto lease of two elements: land and buildings. IAS 17 requires these two elements of a lease to be considered separately for the purposes of lease classification.

If title to both land and building elements (whether analysed as one lease or as two leases) is expected to pass to the lessee by the end of the lease term, both elements are classified as a finance lease, unless other features indicate an alternative classification.

4.3.2.1 Separate Measurement of Land and Building as Land Title Not Expected to Pass

If title of the land is not expected to pass to the lessee by the end of the lease term, the lessee should consider whether the land and building elements can be allocated reliably.

In order to classify and account for a lease of land and buildings, the minimum lease payments (including any lump-sum upfront payments) of a lease are allocated between the land and the building elements in proportion to the relative fair values of the leasehold interests in the land element and building element of the lease at the inception of the lease.

Example 4.8

On 10 March 2008, MTH Property Limited committed a purchase contract to acquire a building in Kowloon Bay as its own office at \$180 million with the condition that the seller should renovate the building within 3 months. The building is composed of a five-floor office tower and a lease of land granted by the Hong Kong government. The five-floor office tower had not been renovated over 10 years. On 5 June 2008, the renovated building was finally transferred to MTH and MTH settled the purchase by the consideration of new share issues.

On 10 March 2008, a surveyor estimated that the fair value of the leasehold interest in a similar land was \$120 million and the construction cost of a similar renovated five-floor office tower was \$80 million.

On 5 June 2008, the same surveyor concluded the renovation was in order and its original estimate on the office tower was reliable. However, the estimated fair value of the land interest should increase to \$140 million.

Determine the accounting entries of the purchase of the building.

Answers

On 10 March 2008, the inception of the lease, the land and building was classified and allocated. The upfront payment of \$180 million was allocated between the land and the building elements in proportion to the relative fair values of the land and building element at that date. Then, the separate measurement would result in:

Land ($\$180 \text{ m} \times \$120 \text{ m} \div (\$120 \text{ m} + \$80 \text{ m})$)	\$108 million
Building ($\$180 \text{ m} \times \$80 \text{ m} \div (\$120 \text{ m} + \$80 \text{ m})$).....	\$72 million

On 5 June 2008, the commencement of the lease that MTH was entitled to exercise its right to use the building, the land and building was recognised as follows:

Dr Prepaid lease payment on land	\$108 million	
Property, plant and equipment – building.....	72 million	
Cr Equity – share capital		\$180 million

1. Land and Building Can Be Reliably Allocated

When the land element without title transfer is reliably allocated from the building element, it is classified as an operating lease (as the land has an indefinite economic life). The building element is classified as a finance or operating lease in accordance with the normal criteria under IAS 17. In Hong Kong, all leases of land separable from building should be classified as operating leases.

Real-life Case 4.5

Sun Hung Kai Properties Limited

In view of the new separate measurement of land and building under IAS 17, Sun Hung Kai Properties Limited, as set out in Real-life Case 4.1, made the following explanation on its change on accounting policies on land in its annual report of 2006:

- In prior years, leasehold land and buildings were included in fixed assets and stated at cost or valuation less accumulated depreciation and impairment, if any.

**Real-life
Case 4.5**
(cont'd)

- Following the adoption of HKAS 17 *Leases*, leasehold land is regarded as operating lease and stated at cost and amortised over the lease period on a straight-line basis.

2. Land and Building Cannot Be Reliably Allocated

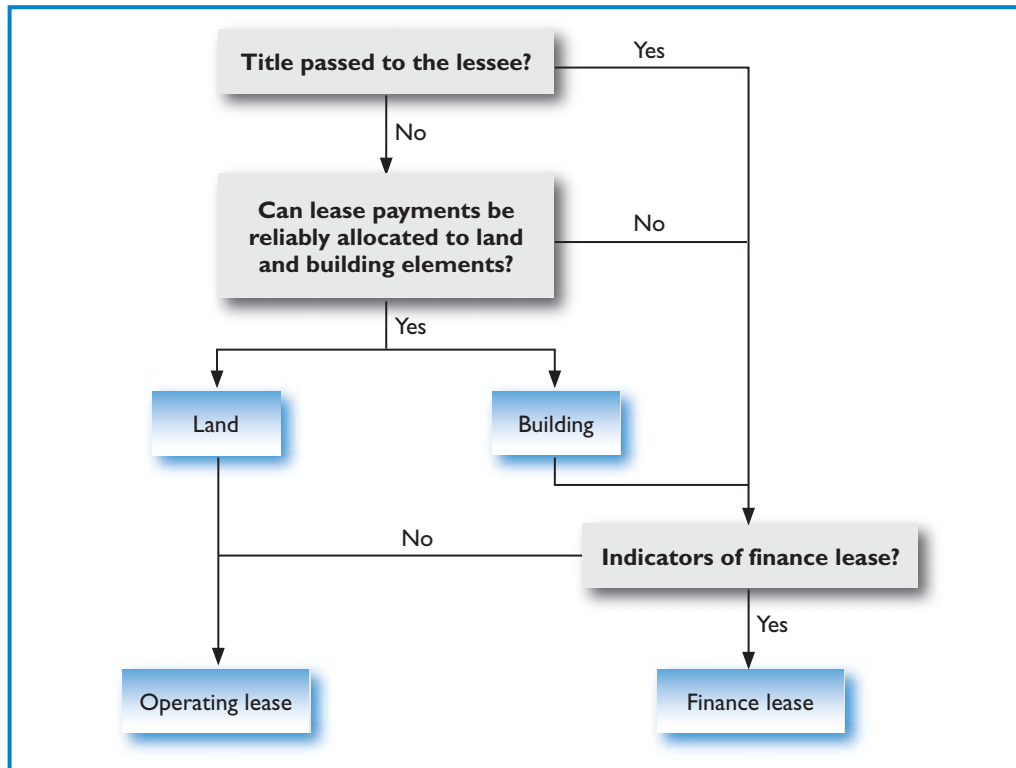
When the lease payments cannot be allocated reliably between the land and building elements, the entire lease is classified as a finance lease, unless it is clear that both elements are operating leases, in which case the entire lease is classified as an operating lease. Examples of leases of property interests without reliable allocation of the land and building elements include similar land and buildings that are not sold or leased separately (IAS 17.BC12).

**Real-life
Case 4.6**
BOC Hong Kong (Holdings) Limited and Founder Holdings Limited

When adopting the new accounting requirements in separating the land and building elements in a lease, certain listed companies in Hong Kong have different reasons for arguing that the land and building elements cannot be reliably allocated. Examples include the following:

- BOC Hong Kong (Holdings) Limited stated in its annual report of 2005 as follows:
 - On adoption of the deemed cost at the date of merger (2001), the group made reference to the independent property valuation conducted as at 31 August 2001 for the purpose of the merger, which did not split the values of the leasehold properties between the land and building elements.
 - Any means of subsequent allocation of the valuation of the leasehold properties at the date of merger between the land and building elements would be notional and therefore would not represent reliable information.
 - It is determined that the values of the land and building elements of the group's leasehold properties cannot be reliably split and the leasehold properties are treated as finance leases.
 - The group has also adopted the revaluation model under IAS 16 by which assets held for own use arising under these finance leases are measured at fair value less any accumulated depreciation and impairment losses.
- Founder Holdings Limited stated in its 2005 annual report as follows:
 - In the opinion of the directors, the lease payments of the group cannot be allocated reliably between the land and building elements; therefore, the entire lease payments are included in the cost of land and building and are amortised over the shorter of the lease terms and useful lives.

FIGURE 4.1 Classification of a lease of land and building



Based on the requirements in IAS 17, the flow chart in Figure 4.1 is set out to describe the decision in classifying a lease of land and building.

3. Immaterial Land Element Initially Recognised

When the land element is immaterial in initial recognition, both land and building may be considered as a single unit for lease classification and classified as a finance or operating lease as other assets. In other words, the argument for an indefinite economic life on the land is not considered, and the economic life of the building is regarded as the economic life of the entire leased asset.

4.3.2.2 Separate Measurement of Land and Buildings Not Required

The lessee is not required to separately classify and measure the land and building elements of a lease of land and building if it is allowed and chooses to classify its interest in the land and building as an investment property in accordance with IAS 40 (see Chapter 5).

In case the lessee is allowed and chooses to comply with IAS 40 in order not to separately measure the land and building, the whole property interest is accounted for as if it were a finance lease and the fair value model under IAS 40 must be used in accounting for the property interest. However, the lessee is required to continuously

account for such property interest as a finance lease, even if a subsequent event leads to the property interest no longer being classified as investment property.

Example 4.9 Siu Hung Investment Limited (SHI) has accounted for its property interests held to earn rental as investment property in accordance with IAS 40. In 2008, SHI decided to change the use of two property interests as follows:

1. SHI began to occupy one property as its own office.
2. SHI granted a sublease that transferred substantially all the risks and rewards incidental to ownership of the interest to THL Limited, an unrelated third party.

Discuss the accounting implication of the above changes.

Answers

1. When SHI began to occupy one property as its own office, the property accounted for as finance lease before should still be continuously accounted for as finance lease. The property interest is transferred from investment property to owner-occupied property, i.e., property, plant and equipment, at a deemed cost, that is equal to its fair value at the date of change in use.
2. When SHI granted a sublease as set out above, such sublease is accounted for by SHI as a finance lease to the third party (even though it may be accounted for as an operating lease by THL Limited, the third party).

4.4 Leases in the Financial Statements of Lessees

When a lessee has classified its lease into a finance lease or an operating lease, the lessee is required to follow the respective accounting treatments for finance and operating lease applicable to the lessees in IAS 17.

4.4.1 Finance Leases in the Financial Statements of Lessees

Section 4.2.1 explains that the amounts to be recognised for finance leases are determined at the inception of the lease and the inception date may not be the same as the commencement of the lease term. The initial recognition of the finance leases of lessees are at the commencement of the lease term.

4.4.1.1 Initial Recognition of Finance Leases for Lessees

At the commencement of the lease term (i.e., the lessee is entitled to exercise its right to use the leased asset), lessees are required to recognise finance leases as assets (according to the nature of the assets) and liabilities in their balance sheets at amounts equal to

1. the fair value of the leased property at the inception of the lease; or
2. if lower, the present value of the minimum lease payments at the inception of the lease (IAS 17.20).

Both the fair value and present value of the minimum lease payments of the leased assets are determined at the inception of the lease.

Any initial direct costs of the lessee are added to the amount recognised as an asset (IAS 17.20).

Initial direct costs are incremental costs that are directly attributable to negotiating and arranging a lease, except for such costs incurred by manufacturer or dealer lessors (IAS 17.4).

More discussion on the fair value of different assets can be found in Chapters 3 and 5. The calculation of the present value of the minimum lease payments is detailed in Section 4.2.2.2 and, as discussed, the discount rate to be used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease. If it is impracticable to determine the interest rate implicit in the lease, the lessee's incremental borrowing rate shall be used.

The liabilities for leased assets are presented separately in the financial statements, and they are not presented as a deduction from the leased assets. If the lessee distinguishes and presents the current liabilities and non-current liabilities separately on the face of the balance, the same distinction is made for lease liabilities.

Real-life

Case 4.7

MTR Corporation Limited

MTR Corporation Limited follows HKAS 17 (equivalent to IAS 17) and stated in its 2006 annual report as follows:

- Where the group (i.e., MTR) acquires the use of assets under finance leases,
 - the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments (computed using the rate of interest implicit in the lease), of such assets are included in “fixed assets”; and
 - the corresponding liabilities, net of finance charges, are recorded as “obligations under finance leases”.

Example 4.10 Based on Examples 4.6 and 4.7, AJS Limited estimated that the fair value of the leased plant was around \$600,000. C & P finally delivered and installed the plant as scheduled by 10 January 2008.

Discuss the accounting implication and prepare the journal entries of AJS at initial recognition.

Answers

Based on the answers to Example 4.7, the present value of minimum lease payment of the leased plant is \$580,941, which is 96.8% of the fair value estimated by AJS. It should be regarded as “substantially all” of the fair value of the leased plant, and the lease should be classified as a finance lease by AJS.

At the inception of the lease, i.e., 2 January 2008, AJS made the initial annual payment, but the plant has not been delivered and installed. The initial annual payment was recognised as deposit at the inception as follows:

Dr Deposit for leased plant	\$100,000	
Cr Cash		\$100,000
Being initial annual payment made on 2 January 2008.		

At the commencement of the lease term, i.e., 10 January 2008, the plant was delivered and installed, and AJS should recognise the leased plant as assets, property, plant and equipment, and liabilities as follows:

Dr Property, plant and equipment	\$580,941	
Cr Deposit for leased plant		\$100,000
Obligations under finance leases		480,941
To recognise the leased plant as property, plant and equipment and liabilities.		

4.4.1.2 Subsequent Measurement of Finance Leases for Lessees

A lessee is required to apportion the minimum lease payments of a finance lease between

1. the finance charge; and
2. the reduction of the outstanding liability.

Contingent rents are charged as expenses in the periods in which they are incurred (IAS 17.25).

Contingent rent is that portion of the lease payments that is not fixed in amount but is based on the future amount of a factor that changes other than with the passage of time (e.g., percentage of future sales, amount of future use, future price indices, future market rates of interest) (IAS 17.4).

1. Finance Charge and Depreciation Expense

A finance lease for a lessee gives rise to depreciation expense for depreciable assets as well as finance expense for each accounting period.

The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability (IAS 17.25). In practice, in allocating the finance charge to periods during the lease term, a lessee may use some form of approximation to simplify the calculation.

Real-life**Case 4.8****Adidas Group and Deutsche Telekom AG, Bonn**

Similar to many other companies, Adidas Group (adidas AG Herzogenaurach), a well-known worldwide brand in sport products, explained the following policy in allocating the minimum lease payments of its finance leases in its annual report of 2007:

- Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability.
- The finance expense is allocated to each period during the lease term so as to produce a constant periodic interest rate on the remaining balance of the liability.

Deutsche Telekom AG, Bonn, however, explained the recognition and measurement of minimum lease payments in its annual report of 2007 by using the effective interest method:

- At the commencement of the lease term, Deutsche Telekom recognises a lease liability equal to the carrying amount of the leased asset.
- In subsequent periods, the liability decreases by the amount of lease payments made to the lessors using the effective interest method.
- The interest component of the lease payments is recognised in the income statement.

The effective interest method can provide a constant periodic rate of charge on the outstanding liabilities and it is commonly used in the accounting treatments for financial instruments. Further discussion on the effective interest method can be found in Chapter 16.

The depreciation policy for depreciable leased assets is required to be consistent with that for depreciable assets that are owned by the lessee, and the depreciation recognised is calculated in accordance with IAS 16 *Property, Plant and Equipment* (see Chapter 3) and IAS 38 *Intangible Assets* (see Chapter 6). If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset will be fully depreciated over the shorter of the lease term and its useful life (IAS 17.27).

Useful life is the estimated remaining period, from the commencement of the lease term, without limitation by the lease term, over which the economic benefits embodied in the asset are expected to be consumed by the entity (IAS 17.4).

Example 4.11 Based on Examples 4.6, 4.7 and 4.10, AJS estimated that the useful life of the leased plant was around 6 years.

Calculate the finance charges and the depreciation expenses for the finance lease of AJS and prepare the journal entries for the years ended 31 December 2008 and 2009. (Assume the effect between 2 January 2008 and 10 January 2008 as being insignificant.)

Answers

The finance charges of the finance lease of AJS are calculated as follows:

Payment schedule	Liabilities after annual payment \$	Finance charge (8%) \$	Annual payment \$	Ending liabilities \$
2008	480,941	38,475	(100,000)	419,416
2009	419,416	33,553	(100,000)	352,969
2010	352,969	28,238	(100,000)	281,207
2011	281,207	22,497	(100,000)	203,704
2012	203,704	16,296	(100,000)	120,000

The liabilities at the end of 2012 (\$120,000) represent the total amounts of guarantee made by AJS and its parent, JSA.

There is no indication that AJS will obtain ownership by the end of the lease term; the leased plant will be fully depreciated over 5 years, i.e., the shorter of the lease term (5 years) and its useful life (6 years). The depreciation expense for each year would be \$116,188 ($\$580,941 \div 5$ years).

At the end of 2008, AJS paid the annual payment for 2008 and had the following entries:

Dr Finance charges	\$38,475	
Obligations under finance leases	61,525	
Cr Cash		\$100,000
Being the lease payment apportioned between finance charges and reduction of outstanding liabilities for 2008.		
<hr/>		
Dr Depreciation expenses	\$116,188	
Cr Accumulated depreciation		\$116,188
Being depreciation expense for 2008.		

At the end of 2009, AJS paid the annual payment for 2009 and had the following entries:

Dr Finance charges	\$33,553	
Obligations under finance leases	66,447	
Cr Cash		\$100,000
Being the lease payment apportioned between finance charges and reduction of outstanding liabilities for 2009.		
<hr/>		
Dr Depreciation expenses	\$116,188	
Cr Accumulated depreciation		\$116,188
Being depreciation expense for 2009.		

2. Impairment on Leased Assets for Lessees

IAS 17 requires a lessee to apply IAS 36 *Impairment of Assets* to determine whether a leased asset has become impaired, but it does not explicitly specify whether IAS 36 is also applicable in recognising, measuring and reversing the impairment loss on a leased asset. However, as IAS 36 has not specifically excluded leased assets from its scope, IAS 36 should be applicable to all leased assets, including assets held under operating leases.

4.4.1.3 Lessees' Disclosure on Finance Leases

Lessees are required, in addition to meeting the requirements of IFRS 7 *Financial Instruments – Disclosures*, to make the following disclosures for finance leases:

1. For each class of asset, the net carrying amount at the balance sheet date.
2. A reconciliation between the total of future minimum lease payments at the balance sheet date, and their present value. In addition, an entity shall disclose the total of future minimum lease payments at the balance sheet date, and their present value, for each of the following periods:
 - a. Not later than one year;
 - b. Later than one year and not later than five years;
 - c. Later than five years.
3. Contingent rents recognised as an expense in the period.
4. The total of future minimum sublease payments expected to be received under non-cancellable subleases at the balance sheet date.
5. A general description of the lessee's material leasing arrangements including, but not limited to, the following:
 - a. The basis on which contingent rent payable is determined;
 - b. The existence and terms of renewal or purchase options and escalation clauses; and

- c. Restrictions imposed by lease arrangements, such as those concerning dividends, additional debt and further leasing (IAS 17.31).

In addition, the requirements for disclosure in accordance with IAS 16, IAS 36, IAS 38, IAS 40 and IAS 41 apply to lessees for assets leased under finance leases.

**Real-life
Case 4.9**

BMW Group

BMW Group disclosed its minimum lease payments (in million euro) of the relevant leases in its annual report of 2007 as follows:

	31 December 2007 € million	31 December 2006 € million
Total of future minimum lease payments:		
Due within one year	85	91
Due between one and five years	318	413
Due later than five years	201	257
	<u>604</u>	<u>761</u>
Interest portion of future minimum lease payments:		
Due within one year	16	16
Due between one and five years	48	59
Due later than five years	73	111
	<u>137</u>	<u>186</u>
Present value of future minimum lease payments:		
Due within one year	69	75
Due between one and five years	270	354
Due later than five years	128	146
	<u>467</u>	<u>575</u>

4.4.2 Operating Leases in the Financial Statements of Lessees

A lessee is required to recognise the lease payments under an operating lease as an expense on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern of the user's benefit (IAS 17.33).

**Real-life
Case 4.10**

Deutsche Telekom AG, Bonn

Deutsche Telekom AG, Bonn, had a concise explanation of its operating lease in its annual report of 2007:

- Beneficial ownership of a lease is attributed to the lessor if this is the party to which all the substantial risks and rewards incidental to ownership

**Real-life
Case 4.10**
(cont'd)

of the asset are transferred. The lessor recognises the leased asset in their balance sheet.

- Deutsche Telekom recognises the lease payments made during the term of the operating lease in profit or loss.
- Deutsche Telekom's obligations arising from non-cancellable operating leases are mainly related to long-term rental or lease agreements for network infrastructure, radio towers and real estate. Some leases include extension options and provide for stepped rents.

The term of “the lease payments under an operation lease” should include all kinds of payments under an operating lease and, technically, also includes contingent rent. In consequence, the contingent rent should be estimated at the inception of the lease and recognised on a straight-line basis over the lease term. However, because the requirements to a lessee for its finance leases (Section 4.4.1.2) stated that “contingent rents are charged as expenses in the periods in which they are incurred”, most lessees follow the same practice on their operating leases.

The IASB also noted the ambiguities on contingent rent and, pursuant to its annual improvement project for 2007–08, proposed to amend that contingent rent relating to an operating lease should be recognised as incurred and to achieve consistency in the treatment of contingent rent for both finance and operating leases.

4.4.2.1 Incentive for Operating Leases for Lessees

The definition and other details of lease term were explained in Section 4.2.2.1. Lease payments exclude costs for services such as insurance and maintenance but include all incentives for a new or renewed operating lease.

SIC Interpretation 15 *Operating Leases – Incentives* requires that the incentives are recognised as an integral part of the net consideration agreed for the use of the leased asset. The lessee is required to recognise the aggregate benefit of incentives as a reduction of rental expense over the lease term, on a straight-line basis unless another systematic basis is representative of the time pattern of the lessee's benefit from the use of the leased asset.

Example 4.12 AccoTechnology Honest Knowledge Limited (AHK) has signed a 5-year contract to lease a new office from 2008 to 2012 with a monthly rental payment of \$20,000. AHK is granted a rent-free period of 6 months in 2008. For the year ended 31 December 2008, AHK paid rental of \$120,000 and charged it to the income statement.

Discuss and suggest the proper accounting entries.

Answers

Lease payments under an operating lease after deducting the incentives are recognised as an expense on a straight-line basis over the lease term.

The payment made by AHK in 2008 only represents the cash flow (\$120,000), and the lease expense for 2008 should be $\$20,000 \times (60 \text{ months} - 6 \text{ months}) \div 5 \text{ years} = \$216,000$.

In other words, a payable should be accounted for in the financial statements of 2008 as follows:

Dr Rental payables	\$120,000	
Cr Cash		\$120,000
Being cash rental paid during 2008.		
<hr/>		
Dr Income statement	\$216,000	
Cr Rental payables		\$216,000
Being the rental charges for 2008.		

Real-life
Case 4.11
BOC Hong Kong (Holdings) Limited

BOC Hong Kong (Holdings) Limited explained its accounting treatment on operating leases together with the incentives in its annual report of 2006 as follows:

- The total payments made under operating leases (net of any incentives received from the lessor), which include land use rights with payments that are separately identifiable at inception of the lease, are charged to the profit and loss account on a straight-line basis over the period of the lease.

4.4.2.2 Lessees' Disclosure on Operating Leases

Lessees are required, in addition to meeting the requirements of IFRS 7, to make the following disclosures for operating leases:

1. The total of future minimum lease payments under non-cancellable operating leases for each of the following periods:
 - a. Not later than one year;
 - b. Later than one year and not later than five years;
 - c. Later than five years.
2. The total of future minimum sublease payments expected to be received under non-cancellable subleases at the balance sheet date.

3. Lease and sublease payments recognised as an expense in the period, with separate amounts for minimum lease payments, contingent rents and sublease payments.
4. A general description of the lessee's significant leasing arrangements including, but not limited to, the following:
 - a. The basis on which contingent rent payable is determined;
 - b. The existence and terms of renewal or purchase options and escalation clauses; and
 - c. Restrictions imposed by lease arrangements, such as those concerning dividends, additional debt and further leasing (IAS 17.35).

Real-life**Case 4.12****LVMH Moët Hennessy – Louis Vuitton (LVMH Group)**

LVMH Group, a group having various prestige brands, disclosed the following contingent rent arrangements and exposure (in million euro) in its financial statements of 2007:

- In certain countries, leases for stores are contingent on the payment of minimum amounts in addition to a variable amount, especially for stores with lease payments indexed to revenue. The total lease expense for the group's stores breaks down as follows:

	2007	2006	2005
	€ million	€ million	€ million
Fixed or minimum lease payments	402	356	266
Variable portion of indexed leases	176	173	185
Airport concession fees – fixed portion or minimum amount	204	209	248
Airport concession fees – variable portion . . .	196	194	171
Commercial lease expenses for the period . . .	978	932	870

4.5 Leases in the Financial Statements of Lessors

Like a lessee, when a lessor has classified its lease into an operating lease or a finance lease, it is required to follow the respective accounting treatments for operating and finance lease applicable to the lessors in IAS 17.

4.5.1 Finance Leases in the Financial Statements of Lessors

Under a finance lease, a lessor transfers substantially all the risks and rewards incidental to legal ownership to the lessee. The leased asset held under a finance lease represents a net investment to be receivable from the lessee, and it is recognised and presented in the same manner.

4.5.1.1 Initial Recognition of Finance Leases for Lessors

The lessor is required to recognise assets held under a finance lease in its balance sheets, but it is also required to present them as a receivable at an amount equal to the net investment in the lease (IAS 17.36).

Net investment in the lease is the gross investment in the lease discounted at the interest rate implicit in the lease.

Gross investment in the lease is the aggregate of

- the minimum lease payments receivable by the lessor under a finance lease; and
- any unguaranteed residual value accruing to the lessor.

Unguaranteed residual value is that portion of the residual value of the leased asset, the realisation of which by the lessor is not assured or is guaranteed solely by a party related to the lessor (IAS 17.4).

The difference between the gross investment in the lease and the net investment in the lease represents the unearned finance income in the lease. The lease payment receivable is treated by the lessor as

1. repayment of principal; and
2. finance income to reimburse and reward the lessor for its investment and services.

Unearned finance income is the difference between

- the gross investment in the lease; and
- the net investment in the lease (IAS 17.4).

Example 4.13 Based on Example 4.6, from the perspective of the lessor, C & P Inc., the interest rate implicit in the lease is also 8%. C & P estimated that the fair value of the plant was \$600,000 at the inception, and the unguaranteed residual value at the end of the lease was roughly \$18,000.

Calculate the gross investment, net investment and unearned finance income in the lease of C & P and prepare the journal entries at the inception.

Answers

The gross investment, net investment and unearned finance income in the finance lease are calculated as below:

	Minimum lease payment \$	Discount factor $1 \div (1 + 8\%)^T$	Present value \$
Payments over the lease term:			
2 January 2008 ($T = 0$)	100,000	1.000000	100,000
31 December 2008 ($T = 1$).....	100,000	0.925926	92,593
31 December 2009 ($T = 2$).....	100,000	0.857339	85,734
31 December 2010 ($T = 3$).....	100,000	0.793832	79,383
31 December 2011 ($T = 4$).....	100,000	0.735030	73,503
31 December 2012 ($T = 5$).....	100,000	0.680583	68,059
Guarantee made at the end of 2012 ($T = 5$) by:			
AJS	100,000	0.680583	68,059
JSA, the parent of AJS.....	20,000	0.680583	13,612
Insurance agent.....	10,000	0.680583	6,806
	<u>730,000</u>		<u>587,749</u>
Unguaranteed residual value.....	18,000	0.680583	12,251
	<u>748,000</u>		<u>600,000</u>

The gross investment in the lease to C & P is \$748,000 and the net investment in the lease is \$600,000, which is nearly the same as the estimated fair value of the plant. The difference, representing the unearned finance income, is \$148,000.

The journal entries in recognising the plant held under finance lease at the inception and commencement of the lease are as follows:

Dr Net investment in finance lease.....	\$500,000	
Cash.....	100,000	
Cr Property, plant and equipment.....		\$600,000
To recognise the plant held under finance lease and the cash received.		

Initial direct costs, such as commissions, brokers' fees and legal fees, for finance leases (other than those involving manufacturer or dealer lessors) are included in the initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term. The initial direct costs incurred by manufacturer or dealer lessors are further discussed in Section 4.5.1.3.

The interest rate implicit in the lease is defined in such a way that the initial direct costs are included automatically in the finance lease receivable; there is no need to add them separately.

4.5.1.2 Subsequent Measurement of Finance Leases for Lessors

A lessor is required to recognise the finance income based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the finance lease (IAS 17.39). Lease payments relating to the period, excluding costs for services, are applied against the gross investment in the lease to reduce both the principal and the unearned finance income.

Real-life Case 4.13

Deutsche Telekom AG, Bonn

Deutsche Telekom AG, Bonn, also had a concise explanation of its financial leases, when it acted as a lessor, in its annual report of 2007:

- Deutsche Telekom acts as lessor in connection with finance leases. Essentially, these relate to the leasing of routers that Deutsche Telekom provides to its customers for data and telephone network solutions.
- Deutsche Telekom recognises a receivable in the amount of the net investment in the lease.
- Lease income is classified into repayments of the lease receivable and finance income.
- The lease receivable is reduced using the effective interest method, and the carrying amount is adjusted accordingly.

Example 4.14 Based on Examples 4.6 and 4.13, from the perspective of the lessor, C & P Inc., calculate the finance income and prepare the journal entries for the years ended 31 December 2008 and 2009. (Assume the effect between 2 January 2008 and 10 January 2008 as being insignificant.)

Answers

The finance income of the finance lease of AJS is calculated as follows:

Receipt schedule	Net investment in finance lease \$	Finance income (8%) \$	Annual payment \$	Ending liabilities \$
2008	500,000	40,000	(100,000)	440,000
2009	440,000	35,200	(100,000)	375,200
2010	375,200	30,016	(100,000)	305,216
2011	305,216	24,417	(100,000)	229,633
2012	229,633	18,731	(100,000)	148,004

The net investment in finance lease at the end of 2012 (\$148,004) approximates the total amounts of guaranteed and unguaranteed residual value of the asset to C & P (\$148,000).

At the end of 2008, C & P received the annual payment for 2008 and had the following entries:

Dr Cash	\$100,000	
Cr Net investment in finance lease.....		\$60,000
Finance income		40,000
Being the lease payment apportioned between finance income and repayment of principal in net investment in finance lease for 2008.		

At the end of 2009, AJS paid the annual payment for 2009 and had the following entries:

Dr Cash	\$100,000	
Cr Net investment in finance lease.....		\$64,800
Finance income		35,200
Being the lease payment apportioned between finance income and repayment of principal in net investment in finance lease for 2009.		

Estimated unguaranteed residual values used in computing the lessor's gross investment in a lease are reviewed regularly. If there has been a reduction in the estimated unguaranteed residual value, the income allocation over the lease term is revised and any reduction in respect of amounts accrued is recognised immediately.

Any assets under a finance lease that are classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are accounted for in accordance with IFRS 5 (see Chapter 22).

4.5.1.3 Leases for Manufacturer or Dealer Lessors

Manufacturers or dealers often offer to customers the choice of either buying or leasing an asset. They may earn not only finance income but also selling profit or loss from the finance lease and outright sales. A finance lease of an asset by a manufacturer or dealer lessor gives rise to two types of income:

1. Profit or loss equivalent to the profit or loss resulting from an outright sale of the asset being leased, at normal selling prices, reflecting any applicable volume or trade discounts; and
2. Finance income over the lease term.

1. Sales Revenue and Selling Profit

Manufacturer or dealer lessors are required to recognise sales revenue and selling profit or loss in the period, in accordance with their usual policy for outright sales (IAS 17.42).

The sales revenue recognised at the commencement of the lease term by a manufacturer or dealer lessor is

1. the fair value of the asset; or
2. if lower, the present value of the minimum lease payments accruing to the lessor, computed at a market rate of interest.

The cost of sale recognised at the commencement of the lease term is the cost, or carrying amount if different, of the leased property less the present value of the unguaranteed residual value. The difference between the sales revenue and the cost of sale is the selling profit, which is recognised in accordance with the entity's policy for outright sales.

2. Artificially Low Rates of Interest Quoted

In finance lease transactions, manufacturer or dealer lessors may quote an artificially low interest rate to attract customers or to simulate the sales or finance leases. The use of such a rate would result in an excessive portion of the total income from the transaction being recognised at the time of sale. Then, selling profit of those finance leases should be restricted to that which would apply if a market interest rate were charged (IAS 17.42).

Example 4.15 THMS Motor Group used to sell its self-manufactured motor car at the cash price of \$500,000, while the cost of the car is about \$280,000. In order to boost its sales, THMS offers two instalment plans to its customers:

1. Customers can buy the car at \$550,000 and repay the consideration in 12 equal instalments over a year at zero interest.
2. Customers can buy the car at \$500,000 and then arrange a 48-month instalment plan with the subsidiary of C & P Inc., and be charged the interest rate of 10% per annum on the outstanding balance.

Discuss the implication on the selling profit to THMS.

Answers

The outright profit on the sale on both plans is still \$220,000 (\$500,000 – \$280,000).

For plan 1, the selling profit should still be restricted to \$220,000. Since no interest (i.e., an artificially low interest rate) is quoted, selling profit should be restricted to that which would apply if a market interest rate were charged (or in accordance with

the entity's own policy for outright sales, i.e., profit of \$220,000). The excess of selling profit is compensation on the loss of interest.

For plan 2, as an interest rate of 10% per annum is charged, it may not be considered as an artificially low interest rate. The selling profit is still \$220,000, and the interest charged will be recognised as finance income.

3. Cost Incurred in Negotiation and Arrangement

Costs incurred by manufacturer or dealer lessors in connection with negotiating and arranging a lease are excluded from the definition of initial direct costs because they are mainly related to earning the manufacturer's or dealer's selling profit. In consequence, such costs are excluded from the net investment in the lease and are recognised as an expense when the selling profit is recognised, which for a finance lease is normally at the commencement of the lease term.

4.5.1.4 Lessors' Disclosure on Finance Leases

Lessors are required, in addition to meeting the requirements in IFRS 7, to disclose the following for finance leases:

1. A reconciliation between the gross investment in the lease at the balance sheet date, and the present value of minimum lease payments receivable at the balance sheet date. In addition, an entity shall disclose the gross investment in the lease and the present value of minimum lease payments receivable at the balance sheet date, for each of the following periods:
 - a. Not later than one year;
 - b. Later than one year and not later than five years; and
 - c. Later than five years.
2. Unearned finance income;
3. The unguaranteed residual values accruing to the benefit of the lessor;
4. The accumulated allowance for uncollectable minimum lease payments receivable;
5. Contingent rents recognised as income in the period;
6. A general description of the lessor's material leasing arrangements (IAS 17.47).

As an indicator of growth, it is often useful also to disclose the gross investment less unearned income in new business added during the period, after deducting the relevant amounts for cancelled leases.

**Real-life
Case 4.14**
BMW Group

BMW Group disclosed its receivables (in million euro) from financial leases in its annual report of 2007 as follows:

	31 December 2007 € million	31 December 2006 € million
Gross investment in finance leases:		
Due within one year	3,215	3,029
Due between one and five years	6,013	5,192
Due later than five years	1	6
	<u>9,229</u>	<u>8,227</u>
Present value of future minimum lease payments:		
Due within one year	2,886	2,758
Due between one and five years	5,176	4,567
Due later than five years	1	5
	<u>8,063</u>	<u>7,330</u>
Unrealised interest income	<u>1,166</u>	<u>897</u>

4.5.2 Operating Leases in the Financial Statements of Lessors

Lessors are required to present assets subject to operating leases in their balance sheets according to the nature of the asset (IAS 17.49). It implies that the leased assets are presented in accordance with the applicable accounting standards, for example, motor vehicles held for rental purpose are classified as property, plant and equipment.

Lease income from operating leases (excluding receipts for services provided such as insurance and maintenance) are recognised in the income statement on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished (IAS 17.50).

A manufacturer or dealer lessor does not recognise any selling profit on entering into an operating lease because it is not the equivalent of a sale.

**Real-life
Case 4.15**
HSBC Holdings plc

HSBC Holdings plc acting as lessor and lessee on operating leases contrasted with its respective accounting policies in its annual report of 2006 as follows:

- When acting as lessor, HSBC includes the assets subject to operating leases in “Property, plant and equipment” and accounts for them accordingly. Impairment losses are recognised to the extent that residual values are not fully recoverable and the carrying value of the equipment is thereby impaired.

**Real-life
Case 4.15**
(cont'd)

- When HSBC is the lessee, leased assets are not recognised on the balance sheet. Rentals payable and receivable under operating leases are accounted for on a straight-line basis over the periods of the leases and are included in “General and administrative expenses” and “Other operating income” respectively.

4.5.2.1 Costs and Incentive for Operating Leases

Costs, including depreciation, incurred in earning the lease income are recognised as expense. Initial direct costs incurred by lessors in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income (IAS 17.52).

The depreciation policy for depreciable leased assets should be consistent with the lessor’s normal depreciation policy for similar assets, and depreciation is calculated in accordance with IAS 16 *Property, Plant and Equipment* (see Chapter 3) and IAS 38 *Intangible Assets* (see Chapter 6) (IAS 17.53).

SIC Interpretation 15 *Operating Leases – Incentives* also applies to lessors and requires that the incentives are recognised as an integral part of the net consideration agreed for the use of the leased asset. Lessors are required to recognise the aggregate cost of incentives as a reduction of rental income over the lease term, on a straight-line basis unless another systematic basis is representative of the time pattern over which the benefit of the leased asset is diminished.

Example 4.16 Lease Professional Group (LPG) has signed a 5-year contract to lease a new office from 2008 to 2012 with a monthly rental payment of \$20,000 to AccoTechnology Honest Knowledge Limited (see Example 4.12). LPG grants a rent-free period of 6 months to the lessee in 2008. For the year ended 31 December 2008, LPG received rental of only \$120,000 and recognised it to income.

Discuss and suggest the proper accounting entries.

Answers

Lease income under an operating lease after deducting the incentives is recognised as income on a straight-line basis over the lease term.

The rental received by LPG in 2008 only represents the cash flow (\$120,000), and the rental income for 2008 should be:

$$\$20,000 \times (60 \text{ months} - 6 \text{ months}) \div 5 \text{ years} = \$216,000.$$

In other words, a receivable should be accounted for in the financial statements of 2008 as follows:

Dr Cash	\$120,000	
Cr Rental receivables		\$120,000
Being cash rental received during 2008.		
Dr Rental receivables	\$216,000	
Cr Income statement		\$216,000
Being the rental income recognised for 2008.		

4.5.2.2 Lessors' Disclosure on Operating Leases

Lessors are required to, in addition to meeting the requirements of IFRS 7, disclose the following for operating leases:

1. The future minimum lease payments under non-cancellable operating leases in the aggregate and for each of the following periods:
 - a. Not later than one year;
 - b. Later than one year and not later than five years;
 - c. Later than five years.
2. Total contingent rents recognised as income in the period.
3. A general description of the lessor's leasing arrangements (IAS 17.56).

In addition, the disclosure requirements in IAS 16, IAS 36, IAS 38, IAS 40 and IAS 41 apply to lessors for assets provided under operating leases.

4.6 Sale and Leaseback Transactions

When an entity makes a sale of an asset and leases back the same asset, it is regarded as a sale and leaseback transaction. As the two transactions are often negotiated together or as a single package, the sale price and the lease payments of the asset may be interdependent.

Real-life Case 4.16

HSBC Holdings plc

HSBC Holdings plc is not only engaged in finance and operating leases but also involved in sale and leaseback transactions. It announced the following on 30 April 2007:

- HSBC has agreed to the sale and leaseback of its head office building in Canary Wharf, London, for £1.09 billion, the largest single property deal in UK history.
- A wholly owned subsidiary of Metrovacesa, S.A., one of Europe's most respected property companies, and HSBC have exchanged contracts on

Real-life
Case 4.16
(cont'd)

the deal, which sees the bank retain full control of occupancy while Metrovacesa takes a 998-year lease. HSBC has leased the building back for 20 years at an annual rent of £43.5 million with an option to extend for a further 5 years.

The accounting treatment of a sale and leaseback transaction depends upon the substance of the transactions and largely on the classification of the leaseback transaction, i.e., whether the lease is a finance lease or an operating lease.

4.6.1 Leaseback in Finance Lease

If a sale and leaseback transaction results in a finance lease, it implies that the seller has not transferred to the buyer substantially all the risks and rewards incidental to ownership of the asset. The transaction is a means whereby the lessor provides finance to the lessee, with the asset involved as security, and is in substance a secured loan.

In consequence, in a sale and leaseback transaction resulting in a finance lease, it is not appropriate to recognise the profit on the sale from the transaction. Any profit, i.e., excess of sales proceeds over the carrying amount, should not be immediately recognised as income by the seller. Instead, any profit should be deferred and amortised over the lease term (IAS 17.59). The lease should be accounted for in accordance with the usual finance lease accounting for the lessees and lessors.

Real-life
Case 4.17
Air France – KLM Group

Air France – KLM Group explained the following sales and finance leaseback policy in its annual report of 2007:

- In the context of sale and finance leaseback transactions, any gain on the sale is deferred and recognised as finance income over the lease term.
- No loss is recognised unless the asset is impaired.

4.6.2 Leaseback in Operating Lease

If a sale and leaseback transaction results in an operating lease, the buyer has retained substantially all the risks and rewards incidental to ownership of the asset. The substance of the transaction should be evaluated by comparing the sale price of the asset in the transaction with the fair value of the asset.

1. Sale Price at Fair Value

If it is clear that the transaction is established at fair value, i.e., the sale price and the fair value of the asset are the same, it should be an arm's length negotiated transaction. The profit or loss from the sale is recognised immediately, and the lease is accounted for in accordance with the usual accounting for lessees and lessors.

2. Sale Price below Fair Value

If the sale price of the asset is below its fair value, the selling profit is lower than an arm's length selling profit. The profit or loss resulting from the transaction should be recognised immediately. However, the seller has to evaluate whether a loss resulting from the sale price below fair value is compensated for by future lease payments below the market rental.

- If the loss is compensated for by future lease payments at below market rental, the loss should be deferred and amortised in proportion to the lease payments over the period for which the asset is expected to be used.
- If the loss is not compensated for in the above manner, the loss is recognised immediately.

Example 4.17 At 6 February 2008, Sugar Howan Limited disposed of its manufacturing plant at \$2 million but leased back under an operating lease at \$500,000 per annum for 5 years. The plant's carrying amount to Sugar was \$3 million and its fair value was \$3.5 million.

Discuss the implication of the transactions.

Answers

The loss on disposal of the plant to Sugar was \$1 million (\$2 million – \$3 million). In a normal case, the loss should be recognised immediately. However, if the loss is compensated for by future lease payments at below market rental, the loss should be deferred and amortised in proportion to the lease payments over the period for which the asset is expected to be used. For Sugar, the period for which the asset is expected to be used would be 5 years.

3. Sale Price above Fair Value

If the sale price of the asset is above its fair value, it is also a means whereby the buyer provides finance to the seller and the seller repays by future lease payments at above market rental. In consequence, the excess of the asset's sale price over its fair value should be deferred and amortised over the period for which the asset is expected to be used (IAS 17.61).

Example 4.18 At 1 January 2008, Celia Technology Group sold its freehold head office at \$20 million to a third party and then leased back the office for 10 years at an annual lease payment of \$1.5 million payable at year-end. The lease was an operating lease. The carrying value of the office was \$12 million and its fair value was \$15 million.

Discuss the implication of the transactions and state the journal entries for the year ended 31 December 2008.

Answers

Celia sold its head office at a price higher than the office's carrying amount and fair value. Part of the profit relating to the excess of sale price over fair value is in substance a loan to Celia, which it would repay by future lease payments. Thus, the excess of the sale price of \$20 million over the fair value of \$15 million should be deferred and amortised over the period for which the asset would be expected to be used, i.e., 10 years. The excess of fair value over carrying amount should be recognised immediately. The journal entries for 2008 are set out below:

Dr Cash.....	\$20,000,000	
Cr Property, plant and equipment.....		\$12,000,000
Profit on disposal of property.....		3,000,000
Deferred gain (\$20 million – \$15 million).....		5,000,000
To recognise the disposal of the head office and defer the excess of sale price over fair value.		

Dr Rental expenses.....	\$1,500,000	
Deferred gain (\$5 million ÷ 10 years).....	500,000	
Cr Cash.....		\$1,500,000
Amortisation of deferred gain (in income statement).....		500,000
To recognise the rental payment at year-end and the amortisation of the deferred gain on disposal of the head office.		

4. Fair Value below Carrying Amount

If the fair value at the time of a sale and leaseback transaction resulting in operating lease is less than the carrying amount of the asset, the difference between the fair value and carrying amount should be recognised immediately as a loss (IAS 17.63). Such adjustment is not necessary for finance leaseback unless there has been an impairment in value in accordance with IAS 36.

Real-life

Case 4.18

Air France – KLM Group

Air France – KLM Group also explained the following sales and operating leaseback policy in its annual report of 2007:

- In the context of sale and operating leaseback transactions, the related profit and losses are accounted for as follows:
 - They are recognised immediately when it is clear that the transaction is established at fair value.
 - If the sale price is below fair value, any profit or loss is recognised immediately except when, if the loss is compensated for by future lease payments at below market price, it is deferred and amortised in proportion to the lease payments over the period for which the asset is expected to be used.
 - If the sale price is above fair value, the excess over fair value is deferred and amortised over the period for which the asset is expected to be used.

4.6.3 Disclosure on Sale and Leaseback

Disclosure requirements for lessees and lessors apply equally to sale and leaseback transactions. The required description of material leasing arrangements leads to disclosure of unique or unusual provisions of the agreement or terms of the sale and leaseback transactions.

Sale and leaseback transactions may trigger the separate disclosure criteria in IAS 1 *Presentation of Financial Statements*.

4.7 Summary

A lease is an agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time. IAS 17 *Leases* classifies leases into finance lease and operating lease and addresses their accounting from the perspective of lessees and lessors.

Lease classification depends on the substance of the lease or the transactions, rather than their form. Indicators or situations of a finance lease should be examined to determine a classification. A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset (even though title may not be transferred), and all other leases are operating leases.

The classification of a lease of land and building is the same as other leases, but the land element and the building element of a lease should be considered separately in determining the lease classification. If the land title is not expected to pass to the lessee by the end of the lease term, the land element is an operating lease as a characteristic of land is an indefinite economic life. If the land and building elements cannot be reliably allocated, the entire lease is classified as a finance lease, unless it is clear that both elements are operating leases.

Lessees are required to recognise finance leases at the commencement of the lease as assets and liabilities at amounts equal to the fair value of lease property or, if lower, the present value of the minimum lease payments at the inception of the lease. Subsequently, the minimum lease payments should be apportioned into the finance charges and the reduction of the outstanding liabilities. The lessees should adopt the same depreciation policy for their owned and leased assets.

Lessors are required to recognise assets held under a finance lease and present them as a receivable at an amount equal to the net investment in the lease. The finance income is recognised based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the lease.

For both lessees and lessors, the lease payments under an operating lease are recognised in the income statement as an expense or income on a straight-line basis over the lease term.

Specific types of lease transactions, including transactions of manufacturers or dealer lessors and sale and leaseback transactions, should be carefully examined. The profit or loss to be recognised should reflect the substance of the transactions and may not be recognised immediately. Instead, they may be recognised over the lease term in order to reflect the substance.

Review Questions

1. What is a lease?
2. Which kinds of leases are not accounted for under IAS 17 *Leases*?
3. What are a finance lease and an operating lease?
4. What are the differences between the inception and commencement of a lease?
5. List some indicators of a finance lease.
6. Discuss how to determine a major part of the economic life of the leased asset.
7. Discuss how to determine substantially all of the fair value of the leased asset.
8. What are the minimum lease payments for the lessee and the lessor?
9. How is a lease of land and building classified?
10. Discuss the implication when the land and building elements of a lease of land and building cannot be reliably allocated.
11. When does a lessee choose not to separate the land and building elements of a lease?
12. How does a lessee account for a finance lease initially?
13. How does a lessee account for a finance lease after initial recognition?
14. How does a lessee account for an operating lease?
15. What are the disclosure requirements for lessees on a finance lease and operating lease?
16. How does a lessor account for a finance lease initially?
17. How does a lessor account for a finance lease after initial recognition?
18. What should a manufacturer or dealer lessor take care of in accounting for a finance lease?
19. How does a lessor account for an operating lease?

20. What are the disclosure requirements for lessors on a finance lease and operating lease?
21. What is the implication of a sale and leaseback transaction that results in a finance lease?
22. What is the implication of a sale and leaseback transaction that results in a sale with sale price being lower than the fair value of the asset involved and results in an operating lease?

Exercises

Exercise 4.1 Based on Real-life Case 4.6, discuss and comment on the explanation of BOC Hong Kong (Holdings) Limited and Founder Holdings Limited.

Exercise 4.2 In January 2007, Tony HS Company purchased a property at \$20 million. The property comprised three buildings and a piece of land on which the buildings were built. The right to use the land is granted by the government up to 2060. Tony found that each building has a fair value of \$5 million and the right to use a similar piece of land is around \$10 million in the market.

Discuss the case and suggest accounting treatment with appropriate journal entries.

Exercise 4.3 In February 2007, Tony HS Company purchased another property at \$10 million and the property also comprised three buildings and a piece of land on which the buildings were built. The right to use the land is granted by the government up to 2050. While Tony found that each building had a fair value of \$3 million, it could not find a fair value on the right to use a similar land. A surveyor also certified that no fair value on the land could be ascertained.

Discuss the case and suggest accounting treatment with appropriate journal entries.

Problems

Problem 4.1 Deutsche Telekom AG, Bonn, a German telecommunications group, explained its lease accounting in its annual report of 2007 as follows:

At the commencement of the lease term, the leased asset is measured at the lower of fair value or present value of the future minimum lease payments and is depreciated over the shorter of the estimated useful life or the lease term. Depreciation is recognised as expense. The lessee recognises a lease liability equal to the carrying amount of the leased asset at the commencement of the lease term. In subsequent periods, the lease liability is reduced using the effective interest method and the carrying amount is adjusted accordingly.

Evaluate and comment on Deutsche Telekom's accounting policy in respect of leases.

Problem 4.2 On 1 April 2008, Inventure paid an initial payment of \$200,000 as a deposit under an operating lease. The payment has been capitalised as a non-current tangible asset and is to be amortised over the 5-year life of the operating lease. The initial payment has substantially reduced the annual rental expense to \$100,000 per annum.

Discuss the nature and acceptability of the above accounting practice, advising the directors on the correct accounting treatment or actions that they should take.

(ACCA 3.6 December 2002, adapted)

Problem 4.3 CPL has estimated that a machine with a market value of \$5 million will be required, and it is expected to have a resale value of \$1 million. This represents a fair estimate of the market value of the machine at the end of the project's 5-year life. This machine is popular in Taiwan, and it has a normal useful life of 6 years.

Alternatively, CPL could lease the machine for five equal annual payments of \$1,050,000 commencing immediately and payable at the beginning of each year. The machine has to be returned to the lessor at the end of the lease period.

As the financial consultant, advise CPL on the proper accounting treatment for the lease.

(HKICPA FE December 2002, adapted)

Case Studies

Case Study 4.1 Router has a number of film studios and office buildings. One of the film studios has been converted to a theme park. In this case only, the land and buildings on the park are leased on a single lease from a third party. The lease term was 30 years in 1990. The lease of the land and buildings was classified as a finance lease even though the financial statements purport to comply with IAS 17 *Leases*. The terms of the lease were changed on 31 May 2007. Router is now going to terminate the lease early in 2015 in exchange for a payment of \$10 million on 31 May 2007 and a reduction in the monthly lease payments. Router intends to move from the site in 2015. The revised lease terms have not resulted in a change of classification of the lease in the financial statements of Router.

Discuss how the above item should be dealt with in Router's financial statements for the year ended 31 May 2007.

(ACCA 3.6 June 2007, adapted)

Case Study 4.2 Seejoy is a famous football club but has significant cash flow problems. The directors and shareholders wish to take steps to improve the club's financial position. The following proposal had been drafted in an attempt to improve the cash flow of the club. However, the directors need advice upon their implications.

Sale and leaseback of football stadium (excluding the land element): The football stadium is currently accounted for using the cost model in IAS 16 *Property, Plant and Equipment*. The carrying value of the stadium will be \$12 million at 31 December 2006. The stadium will have a remaining life of 20 years at 31 December 2006,

and the club uses straight-line depreciation. It is proposed to sell the stadium to a third party institution on 1 January 2007 and lease it back under a 20-year finance lease. The sale price and fair value are \$15 million, which is the present value of the minimum lease payments. The agreement transfers the title of the stadium back to the football club at the end of the lease at nil cost. The rental is \$1.2 million per annum in advance commencing on 1 January 2007. The directors do not wish to treat this transaction as the raising of a secured loan. The implicit interest rate on the finance in the lease is 5.6%.

Discuss how the above proposal would be dealt with in the financial statements of Seejoy for the year ending 31 December 2007, setting out their accounting treatment and appropriateness in helping the football club's cash flow problems.

(ACCA 3.6 December 2006, adapted)

Case
Study 4.3

Very Wealthy acquired a shopping mall on 1 April 2005 at \$450 million, partly financed by a \$400 million loan. The shopping mall is now 80% occupied, and all the leases started on 1 April 2004. The tenancy agreements are summarised below:

Nature of tenants	Rental arrangements	Rental for the year ended 31 March 2005
A supermarket by a large private entity	Under a 30-year lease with fixed monthly rental plus a percentage of the tenant's annual turnover. A rent-free period for the first 5 years was granted.	N/A Annual fixed rental of \$15 million payable from 1 April 2009 to 1 April 2033. Based on 2005 figures, the share of the turnover of the supermarket should have been \$3 million.

For Very Wealthy's consolidated financial statements for the year ended 31 March 2006, determine how the lease payments should be recognised, measured and disclosed.

(HKICPA FE June 2006, adapted)

Case
Study 4.4

Local GAAP does not require property leases to be separated into land and building components. Long-term property leases are accounted for as operating leases in the financial statements of Handrew under local GAAP. Under the terms of the contract, the title to the land does not pass to Handrew but the title to the building passes to the company.

The company has produced a schedule of future minimum operating lease rentals and allocated these rentals between land and buildings based on their relative fair value at the start of the lease period. The operating leases commenced on 1 June 2008 when the value of the land was \$270 million and the building was \$90 million. Annual operating lease rentals paid in arrears commencing on 31 May 2009 are land \$30 million and buildings \$10 million. These amounts are payable for the first 5 years of the lease term, after which the payments diminish. The minimum lease term is 40 years.

The net present value of the future minimum operating lease payments as at 1 June 2008 was land \$198 million and buildings \$86 million. The interest rate used for discounting cash flows is 6%. Buildings are depreciated on a straight-line basis over 20 years, and at the end of this period the building's economic life will be over. The lessee intends to redevelop the land at some stage in the future. Assume that the tax allowances on buildings are given to the lessee on the same basis as the depreciation charge based on the net present value at the start of the lease, and that operating lease payments are fully allowable for taxation.

Write a report to the directors of Handrew discussing the impact of the change to IFRS on the reported profit and balance sheet of Handrew at 31 May 2009.

(ACCA 3.6 June 2005, adapted)

Case
Study 4.5

Pohler Speed leased electronic sorting systems to other companies on 30 November 2007. The beneficial and legal ownership remains with Pohler Speed, and the assets remain available to Pohler Speed for its operating activities. The leased assets have been treated as operating leases with the net present value of the income stream of \$100 million (including the deposit) being recognised in the income statement.

Pohler Speed estimates that the fair value of the assets leased was \$140 million at the inception of the leases. Deposits of \$20 million were received by Pohler Speed on 30 November 2007. No depreciation is to be charged on the leased assets for the current year.

Draft a report explaining recommended accounting practice in each of the above areas and discussing whether the accounting practices used by the company are acceptable, and the issues involved.

(ACCA 3.6 December 2004, adapted)

5

Investment Property

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of investment property (the definition)
- 2 The differences between investment property, owner-occupied property and property, plant and equipment
- 3 The timing in recognising property (the recognition criteria)
- 4 The amount to be recognised and measured on investment property (the initial and subsequent measurement)
- 5 The practices and differences between cost model and fair value model in subsequently measuring investment property
- 6 The issues in transferring to and from the investment property and its derecognition

Real-life

Case 5.1

The Hong Kong and Shanghai Hotels, Limited

Listed companies seldom state that they have insisted on a particular accounting policy, which is a clear departure from the accounting standards. The Hong Kong and Shanghai Hotels, Limited, a listed group of quality hotels under the core Peninsula brand, however, clearly stated two departures in its interim report of 2005:

- The directors consider it inappropriate for the company to adopt two particular aspects of the new/revised HKFRSs as these would result in the financial statements, in the view of the directors, either not reflecting the commercial substance of the business or being subject to significant potential short-term volatility ...

The group had a further clarification on one of the departures:

- HKAS 40 *Investment Property* requires an assessment of the fair value of investment properties. The group intends to follow the same accounting treatment as adopted in 2004, which is to value such investment properties on an annual basis. Accordingly, the investment properties were not revalued at 30 June 2005, since the directors consider that such change of practice could introduce a significant element of short-term volatility into the income statement in respect of assets that are being held on a long-term basis by the group. They intend to conduct an independent assessment of the fair value of the investment properties at 31 December 2005 and at each subsequent year-end.

Because of this departure, the group's auditors modified the independent review report on this interim report and deemed the departure as "non-compliance with accounting standard".

Traditionally, there is an argument that a different treatment is required for a property of an entity that is held not for usage in the business operation but for investment, since the information relevant for the users should be the changes in value of the property, rather than its systematic periodic depreciation. In consequence, the accounting treatments on investment property used to require revaluation without any depreciation. However, how would such revaluation of an investment property on a more frequent basis "introduce a significant element of short-term volatility into the income statement"?

This chapter aims at introducing the new accounting practices and recognition and measurement issues on investment property.

5.1 Applicable Standard and Scope

Investment property should be accounted for by using IAS 40 *Investment Property*, which is applicable in the recognition, measurement and disclosure of investment property. A lessee may also be required to measure its leases by using IAS 40 for

1. investment property interests held under a lease accounted for as a finance lease; and
2. investment property provided to a lessee under an operating lease.

An entity should be careful in applying IAS 40 together with IAS 17 and their interaction and when and how a lease should be accounted for by using IAS 40 and IAS 17. Further details are discussed in Section 5.2.

However, it is worth noting that IAS 40 does not deal with matters covered in IAS 17 *Leases* (see Chapter 4), including the following:

1. Classification of leases as finance leases or operating leases;
2. Recognition of lease income from investment property (see also IAS 18 *Revenue*);
3. Measurement in a lessee's financial statements of property interests held under a lease accounted for as an operating lease;
4. Measurement in a lessor's financial statements of its net investment in a finance lease;
5. Accounting for sale and leaseback transactions; and
6. Disclosure about finance leases and operating leases.

IAS 40 also does not apply to

1. biological assets related to agricultural activity (see IAS 41 *Agriculture*); and
2. mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

5.2 Property Classified As Investment Property

Investment property, as its name suggests, is held as an investment while IAS 40 has adopted a clearer definition of it.

Investment property is defined as property (land or a building – or part of a building – or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for

- use in the production or supply of goods or services or for administrative purposes; or
- sale in the ordinary course of business (IAS 40.5).

Real-life

Case 5.2

Carrefour S.A. (Carrefour Group)

Carrefour Group, the world's second-largest retailer and the largest in Europe, explained its reasons for classifying a property as an investment property in its annual report of 2006 as follows:

- With regard to IAS 40, investment properties are tangible asset items (buildings or land) owned for leasing or capital valuation. As for the criteria that apply to this standard, those assets not used for operational purposes are generally shopping malls within the group.

**Real-life
Case 5.2**
(cont'd)

- The group considers that shopping malls (i.e., all the businesses and services established behind the stores' cash registers) in full ownership or co-ownership are investment properties.

In order to classify a property as investment property, an entity has to ensure that the property can fulfil both

1. the mode of usage (either to earn rental and/or for capital appreciation), and
2. the mode of ownership (either owned or held under a finance lease).

Example 5.1 Examples of investment property include the following:

1. Land held for long-term capital appreciation rather than for short-term sale in the ordinary course of business.
2. Land held for a currently undetermined future use:
 - If an entity has not determined that it will use the land as owner-occupied property or for short-term sale in the ordinary course of business, the land is regarded as held for capital appreciation.
3. A building owned by the entity (or held by the entity under a finance lease) and leased out under one or more operating leases.
4. A building that is vacant but is held to be leased out under one or more operating leases.

5.2.1 Mode of Usage

IAS 40 has contrasted an investment property with an owner-occupied property. It clearly states that an owner-occupied property is not an investment property, but should be a property under IAS 16 *Property, Plant and Equipment* (see Chapter 3).

Owner-occupied property is defined as property held (by the owner or by the lessee under a finance lease) for use in the production or supply of goods or services or for administrative purposes (IAS 40.5).

Comparing with the definition of investment property, which contains the term “to earn rental”, the definition of property, plant and equipment also contains a similar term, “held ... for rental to others”. In order to distinguish them, an entity can consider a property from two correlated aspects:

1. The generation of cash flows; and
2. The significance of ancillary services.

5.2.1.1 Generation of Cash Flows

IAS 40 first argues that to earn rentals and/or for capital appreciation or both implies that an investment property generates cash flows largely independently of the other assets held by an entity. However, the production or supply of goods or services (or the use of property for administrative purposes) generates cash flows that are attributable not only to property, but also to other assets used in the production or supply process.

In other words, even when two identical properties are held for rental purposes, an entity can still have different classifications for these two identical properties. One property may be classified as investment property if it can generate cash flows largely independently from other assets of the entity. The other property may be classified as property, plant and equipment if it can only generate cash flows together with other assets of an entity.

For example, investment in a hotel can be classified as either a property under property, plant and equipment or investment property. Historically, most hotel groups might have classified their hotel properties as investment property, just as Shangri-La Asia Limited in Real-life Case 5.3.

Real-life Case 5.3

Shangri-La Asia Limited

The 2004 annual report of Shangri-La Asia Limited states the following:

- Investment properties include both hotel properties and other investment properties.
- Investment properties are stated at annual professional valuations at the balance sheet date. Changes in the value of investment properties are dealt with as movements in the investment properties revaluation reserve. If the total of this reserve is insufficient to cover a deficit on a portfolio basis, the excess of the deficit is charged to the profit and loss account.
- Investment properties are not depreciated except where the unexpired term of the lease is 20 years or less, in which case depreciation is provided on a straight-line basis over the unexpired period of the leases.

IAS 40 clearly states that an owner-managed hotel is an owner-occupied property, rather than investment property, since the management of a hotel requires not only the building itself but also support by other assets, for example, furniture and fixtures. In addition, an owner-managed hotel should have a significant extent of ancillary services provided to the guests of the hotel. It is another reason not to classify an owner-occupied property, no matter whether it is a hotel or not, as an investment property.

5.2.1.2 Significance of Ancillary Services

To derive rental from a property, an entity may provide ancillary services to the occupants of its property. In order to make a proper classification of a property, the entity can consider whether the ancillary services provided are significant. The entity

should treat a property as investment property if the services provided to the occupants of its property are insignificant to the arrangement as a whole. In other cases, if the services provided to the occupants of its property are significant to the arrangement as a whole, an entity should classify the property as owner-occupied property.

Example 5.2 Melody Limited is the owner of a building that is held to earn rental. The building is divided into two blocks, an office block and a serviced apartment block.

The lower block is an office block, and Melody provides security and maintenance services to the whole block. The lessees usually have a 1-year or 2-year contract with Melody. At their own cost, the lessees can employ their own security guards and are allowed to decorate their offices. In case decoration or other changes have been made to the office, the lessees are required to restore the original condition of the offices when the contracts expire.

The upper block is a serviced apartment, and most occupants have a weekly or monthly contract with Melody. The occupants are not allowed to cook in the apartment, but Melody provides standard services, including daily cleaning, laundry and other room services, packaged in its contracts with the occupants. Some services are provided for a fee.

Melody is evaluating whether the building should be an investment property or an owner-occupied property. Advise her on how to classify the building.

Answers

With the assumption that the two blocks can be separated in accordance with IAS 40, Melody should consider the following classification:

1. The office block is classified as investment property because the ancillary services provided are not significant, as only security and maintenance services are provided to the whole block.
2. The serviced apartment block is classified as owner-occupied property under IAS 16 because the ancillary services provided to the occupants as specified in the contract as a whole are significant, as Melody provides standard services packaged in its contracts with the occupants.

In some cases, it may be difficult to determine whether ancillary services are so significant that a property does not qualify as investment property. An entity is then required to exercise its own judgement to determine whether a property qualifies as investment property. It should develop criteria so that it can exercise that judgement consistently in accordance with the definition of investment property and with the related guidance as discussed above. Such criteria should be properly disclosed in the financial statements.

Example 5.3 Melody Limited is considering whether the management of its wholly owned serviced apartment block can be outsourced to a management company or several management companies. Different management companies require different extents of Melody's involvement in the operations and provide different patterns of return to Melody. Melody can receive a fixed monthly rental or a rental based on the revenue derived from the occupants.

Melody enquires about the financial reporting implications of these arrangements.

Answers

While Melody transfers some responsibilities to the management companies under management contracts, the terms of such contracts vary widely.

At one end of the spectrum, Melody's position may, in substance, be that of a passive investor receiving only a fixed fee or rental monthly or annually. At the other end of the spectrum, Melody may have simply outsourced day-to-day functions while retaining significant exposure to variation in the cash flows generated by the operations of the serviced apartments.

Melody should use its own judgement to determine whether a block or part of a block under different management contracts may qualify as investment property. It should also develop criteria so that it can exercise that judgement consistently in accordance with the definition of investment property and the related guidance.

Before the introduction of IAS 40, the criteria for distinguishing a property from an investment property may not have been that clear. As a result, some owner-occupied properties, for example, owner-managed hotels, might have been classified as investment properties. However, now, all such properties should have been reclassified.

Real-life Case 5.4

Shangri-La Asia Limited

Refer back to Real-life Case 5.3. Shangri-La Asia Limited accounted for hotel properties as investment property, but it had to change this after the implementation of HKAS 40 (equivalent to IAS 40) in 2005. It made the following clarifications in its annual report of 2005:

- As specified by HKAS 40, hotel properties were no longer to be accounted for as investment properties but should adopt HKAS 16.
- The adoption of HKAS 16 has resulted in a change in accounting policy relating to hotel properties, and retrospective application is required.

Example 5.4 Items that are not investment property and are therefore outside the scope of IAS 40 include the following:

1. Property intended for sale in the ordinary course of business or in the process of construction or development for such sale (see IAS 2 *Inventories*), for example, property acquired exclusively with a view to subsequent disposal in the near future or for development and resale.
2. Property being constructed or developed on behalf of third parties (see IAS 11 *Construction Contracts*).
3. Owner-occupied property (see IAS 16), including, among others:
 - a. Property held for future use as owner-occupied property;
 - b. Property held for future development and subsequent use as owner-occupied property;
 - c. Property occupied by employees, whether or not the employees pay rent at market rates;
 - d. Owner-occupied property awaiting disposal.
4. Property that is being constructed or developed for future use as investment property.
 - a. IAS 16 applies to such property until construction or development is complete, at which time the property becomes investment property and IAS 40 applies.
 - b. However, IAS 40 applies to existing investment property that is being redeveloped for continued future use as investment property.
5. Property that is leased to another entity under a finance lease.

5.2.2 Mode of Ownership

In addition to meeting the mode of usage incorporated in the definition of an investment property, a property must be owned by an entity or held by an entity under a finance lease before it can be classified as investment property. This mode of ownership requirement implies that a property interest held by a lessee under an operating lease cannot be classified as investment property since such property interest is neither owned nor held by a lessee under a finance lease.

This mode of ownership requirement would create certain problems in some places, including the United Kingdom, Mainland China and Hong Kong. For example, in Hong Kong, the de facto owner of all pieces of land, except for one piece, is the government, and all the “owners” of land in Hong Kong are only lessees having a right to use the land under an operating lease granted by the government. In consequence, prima facie, no land in Hong Kong can be classified as investment property even if the land meets the mode of usage requirement in the definition.

In view of the above application problem in some regions around the world, IAS 40 was amended in December 2003 with a classification alternative to an entity to

choose to classify its property interest held under an operating lease as investment property. A property interest that is held by a lessee under an operating lease may be classified and accounted for as investment property if, and only if:

1. The property would otherwise meet the definition of an investment property; and
2. The lessee uses the fair value model in accordance with IAS 40 for the asset recognised (IAS 40.6).

The details of the fair value model are set out in Section 5.5.3, while the requirements to meet the definition of an investment property imply that the mode of usage should be met, since an operating lease should never be able to meet the mode of ownership requirement in the definition.

This classification alternative is available on a property-by-property basis. However, once this classification alternative is selected for one such property interest held under an operating lease, all property classified as investment property should be accounted for using the fair value model. When this classification alternative is selected, certain disclosure requirements are designated for any interest so classified (IAS 40.6).

Example 5.5 GV Inc. has three properties in Hong Kong and overseas and uses them to earn rental. Except for Property C, which is owned by GV, the other two properties, Properties A and B, are held by GV under operating leases.

Evaluate the accounting implication of IAS 40 on GV's properties.

Answers

Property C meets the definition of investment property under IAS 40, and GV must use IAS 40 to account for it. Properties A and B do not meet such a definition since they are neither owned nor held by GV under a finance lease. However, GV has a classification alternative under IAS 40 to choose to account for either Property A or B (or both) as investment property. In consequence, GV can consider the following alternatives:

1. If either Property A or B (or both) is not accounted for under IAS 40 as investment property, GV will be required to use the fair value model in accordance with IAS 40 to account for all properties classified as investment property, including Property C and Property A and/or B. The property not classified as investment property should be accounted for by using IAS 17 *Leases*.
2. If both Properties A and B are not classified as investment property, GV will be required to account for Properties A and B as a lease under IAS 17 and will choose between cost model and fair value model in accordance with IAS 40 to account for Property C.

Real-life

Case 5.5

Recruit Holdings Limited

Recruit Holdings Limited, a listed recruitment advertising company, chooses to account for its property interest under an operating lease as investment property. Its annual report of 2006 stated the following:

- When the group holds a property interest under an operating lease to earn rental income and/or for capital appreciation, the interest is classified and accounted for as an investment property on a property-by-property basis.
- Any such property interest that has been classified as an investment property is accounted for as if it were held under a finance lease.

5.2.3 Portion of Property Not Held As Investment Property

When a property comprises (1) a portion that is held to earn rentals and/or for capital appreciation and (2) another portion that is held for use in the production or supply of goods or services or for administrative purposes, the entity holding that property should ascertain whether these two portions can be sold separately or leased out separately under a finance lease.

If these portions can be sold separately or leased out separately under a finance lease, an entity should account for the portions separately in accordance with their mode of usage.

However, if these two portions cannot be sold separately or leased out separately under a finance lease, the property is investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes. In other words, in that situation, if the portion held for use other than investment property purposes is not insignificant, the whole property cannot be classified as investment property.

5.2.4 Property Leased or Occupied by Group Companies

An entity may lease its property to its parent or another subsidiary, or may allow its parent or subsidiary to occupy its property.

From the perspective of the group, the property does not qualify as investment property in the consolidated financial statements. However, from the perspective of the entity that owns the property, the property is investment property if it meets the definition of an investment property. Therefore, the entity or the lessor should treat the property as investment property in its individual financial statements.

5.3 Recognition

The recognition criteria for investment property are the standard recognition criteria similar to the criteria for property, plant and equipment. An entity is required to recognise investment property as an asset when, and only when:

1. It is probable that the future economic benefits that are associated with the investment property will flow to the entity; and
2. The cost of the investment property can be measured reliably (IAS 40.16).

The costs under the above recognition criteria include the initial costs and subsequent costs or expenditure in adding, replacing and servicing a property.

Similar to the costs incurred for property, plant and equipment, an entity does not recognise in the carrying amount of an investment property the costs of the day-to-day servicing of such a property. These expenditures may be described as repairs and maintenance and charged to the income statement as they are incurred.

Parts of investment properties may have been acquired through replacement. For example, the interior walls may be replacements of original walls. An entity recognises in the carrying amount of an investment property the cost of replacing part of an existing investment property at the time that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognised in accordance with IAS 40.

5.4 Measurement at Recognition

An entity is required to initially recognise and measure an investment property at its cost, including transaction costs. This requirement together with the definition of the cost is similar to that of property, plant and equipment (see Chapter 3).

Example 5.6 Similar to the costs discussed in property, plant and equipment, the cost of an investment property may be evaluated as follows:

1. The cost of purchased investment property comprises its purchase price and any directly attributable expenditure, including, for example, professional fees for legal services, property transfer taxes and other transaction costs.
2. The cost of a self-constructed investment property is its cost at the date when the construction or development is complete. Until that completion date, an entity applies IAS 16. At that completion date, the property becomes investment property and IAS 40 applies.
3. If payment for an investment property is deferred, its cost is the cash price equivalent. The difference between this amount and the total payments is recognised as interest expense over the period of credit.
4. The cost of an investment property acquired from an exchange of non-monetary asset (or a combination with monetary asset) is measured at fair value unless:
 - a. The exchange transaction lacks commercial substance; or
 - b. The fair value of neither the asset received nor the asset given up is reliably measurable.

If the acquired asset is not measured at fair value, its cost is measured at the carrying amount of the asset given up.

5.4.1 Initial Cost of Property Interest Held under a Lease

Since property interest under a lease, including an operating lease, can be classified as investment property, IAS 40 specifically requires that the initial cost of such property interest classified as an investment property should be as prescribed for a finance lease by IAS 17 *Leases*. It implies that the property interest under an operating lease should be recognised at the lower of

1. the fair value of the property; and
2. the present value of the minimum lease payments.

An equivalent amount should be recognised as a liability in accordance with IAS 17 (IAS 40.25). The liability recognised should include the premium paid, but such premium paid should still be treated as part of the minimum lease payments and therefore part of the cost of the property interest.

If a property interest held under a lease is classified as investment property, the item accounted for at fair value is that interest and not the underlying property. Guidance on determining the fair value of a property interest is set out for the fair value model of IAS 40 (see Section 5.5.3). That guidance is also relevant to the determination of fair value when that value is used as cost for initial recognition purposes.

5.5 Measurement after Recognition

After the initial recognition, an entity should choose either of the following two models as its accounting policy in subsequently measuring its investment property:

1. The cost model, and
2. The fair value model.

An entity should apply its selected model to all of its investment property (IAS 40.30). However, in some specific situations, an entity may have some exemptions or may be restricted.

5.5.1 Exemptions and Restrictions

In the situations discussed in this section, an entity is either allowed to choose a subsequent measurement model different from its accounting policy or is restricted to selecting a particular model.

5.5.1.1 Liability-linked Investment Property

When an entity has investment property backing liabilities that pay a return linked directly to the fair value of, or returns from, specified assets including that investment property (so-called liability-linked investment property), the entity is allowed to

1. choose either the fair value model or the cost model for all such liability-linked investment property; and
2. choose either the fair value model or the cost model for all other investment property, regardless of the choice made in (1) above (IAS 40.32A).

If an entity chooses different models for the two categories described above, sales of investment property between pools of assets measured using different models should be recognised at fair value and the cumulative change in fair value should be recognised in profit or loss. Accordingly, if an investment property is sold from a pool in which the fair value model is used into a pool in which the cost model is used, the property's fair value at the date of the sale becomes its deemed cost.

5.5.1.2 Property Interest Held under Operating Lease as Investment Property

An entity can classify its property interest held under an operating lease as an investment property if the mode of usage in the definition of an investment property is met and the fair value model is used in accounting for this interest. It implies that when there is such property interest classified as investment property, an entity should have no choice but to use the fair value model to account for all its investment property. In consequence, the choice between the cost model and fair value model is not elective (IAS 40.34).

Real-life Case 5.6

The Bank of East Asia, Limited

The Bank of East Asia, Limited has chosen to account for certain of its property interests under an operating lease as investment property, and its 2006 annual report stated the following:

- A property interest under an operating lease is classified and accounted for as an investment property when the group holds it to earn rentals or for capital appreciation or both.
- Any such property interest under an operating lease classified as investment property is carried at fair value.

5.5.1.3 Investment Property without a Reliable Fair Value

There is a rebuttable presumption in IAS 40 that an entity can reliably determine the fair value of an investment property on a continuing basis. In case an entity attempts to argue that the fair value of an investment property cannot be determined reliably, the entity should meet two sets of conditions, namely, the timing conditions and the market conditions.

In order to meet the timing conditions, an entity should argue during either of the following two times:

1. When an entity first acquires an investment property; or
2. When an existing property first becomes investment property following the completion of construction or development, or after a change in use.

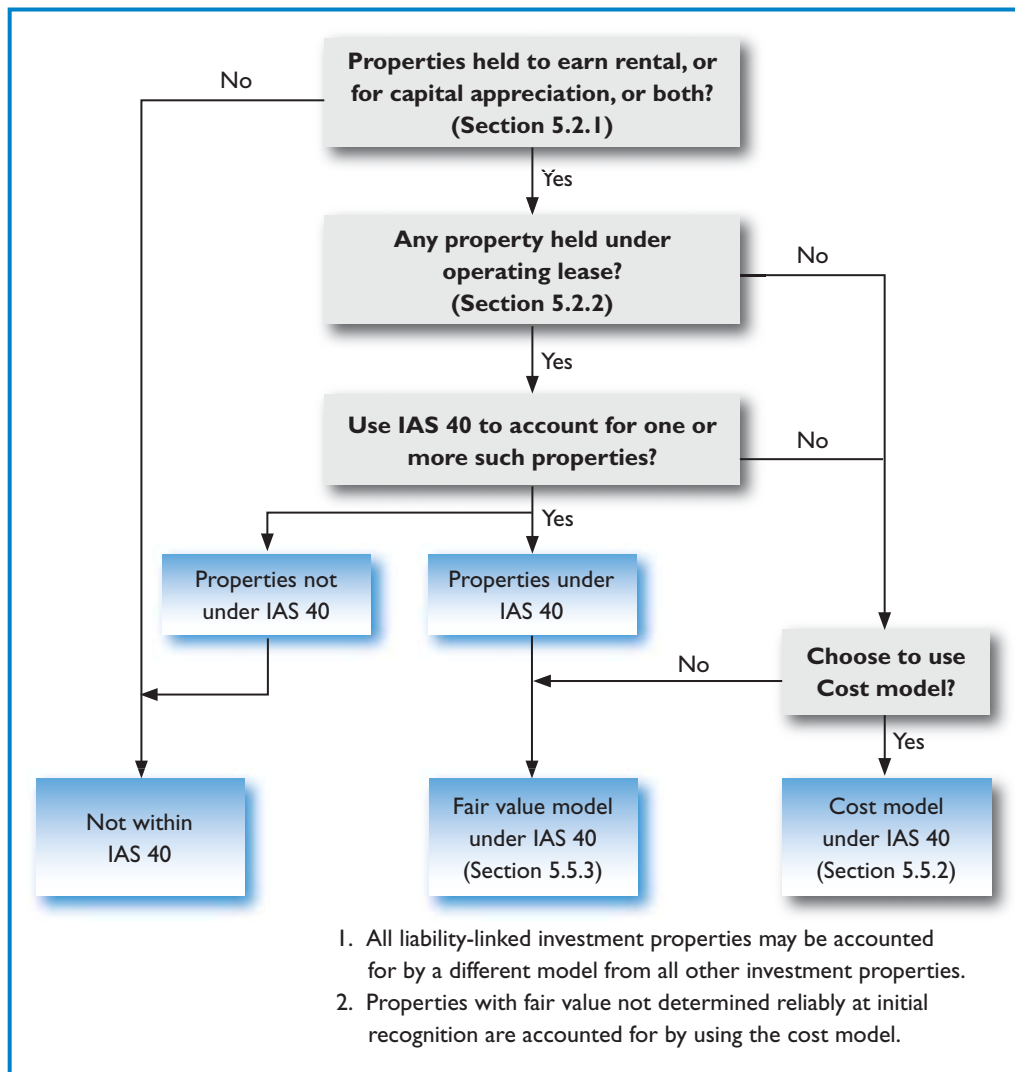
In order to meet the market conditions, the entity should demonstrate, in exceptional cases, that there is clear evidence the fair value of the investment property is not reliably determinable on a continuing basis. IAS 40 places the further restriction that such an argument can arise when, and only when,

1. Comparable market transactions are infrequent, and
2. Alternative reliable estimates of fair value (for example, based on discounted cash flow projections) are not available.

When an entity has met the above conditions and concluded that the fair value of an investment property cannot be determined reliably, the entity should measure that investment property using the cost model in IAS 16. The entity should also assume the residual value of the investment property to be zero and apply IAS 16 until disposal of the investment property (IAS 40.53).

In view of the definition of investment property and those exemptions and restrictions, Figure 5.1 summarises the decision to use the cost model or fair value model in subsequently measuring the investment property.

FIGURE 5.1 Subsequent measurement of investment property



5.5.2 Cost Model

When an entity chooses the cost model, the entity should measure all of its investment property in accordance with the cost model in IAS 16, except for the following:

1. The case described in Section 5.5.1.1 (i.e. different models being adopted in accounting for liability-linked investment property and other investment property); and
2. Those investment properties that meet the criteria to be classified as held for sale (or are included in a disposal group that is classified as held for sale) in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* (see Chapter 22).

Real-life Case 5.7

Tesco plc

Tesco plc, one of the world's leading international retailers, with its head office in the United Kingdom, adopted the cost model in measuring its investment property and made the following explanation in its annual report of 2007:

- Investment property is property held to earn rental income and/or for capital appreciation rather than for the purpose of group operating activities.
- Investment property assets are carried at cost less accumulated depreciation and any recognised impairment in value.
- The depreciation policies for investment property are consistent with those described for owner-occupied property.

Investment properties that meet the criteria to be classified as held for sale (or are included in a disposal group that is classified as held for sale) should be measured in accordance with IFRS 5 (IAS 40.56).

An entity that adopts the cost model should still determine the fair value of its investment property since the entity is required to disclose the fair value of its investment property in the notes to the financial statements. In substance, IAS 40 requires all entities to determine the fair value of investment property either for disclosure under the cost model, or for subsequent measurement under the fair value model. However, an entity is encouraged, but not required, to determine the fair value of investment property by using an independent professional valuation (IAS 40.32).

Real-life Case 5.8

Tesco plc and Marks and Spencer Group plc

Tesco plc is one of the entities that adopted the cost model but disclosed fair value without independent valuation. It stated the following in its annual report of 2007:

**Real-life
Case 5.8**

(cont'd)

- The estimated fair value of the group's investment property is £1,522 million (2006: £1,373 million). This value has been determined by applying an appropriate rental yield to the rentals earned by the investment property. A valuation has not been performed by an independent valuer.

In contrast, Marks and Spencer Group plc is the entity that adopted the cost model but disclosed fair value with independent valuation. It stated the following in its annual report of 2007:

- The investment properties were valued at £34.3 million as at 31 March 2007 by qualified professional valuers working for CB Richard Ellis, Chartered Surveyors, acting in the capacity of external valuers. Last year the investment properties were valued at £55.5 million by qualified professional valuers working for DTZ Debenham Tie Leung, Chartered Surveyors, acting in the capacity of external valuers.
- All such valuers are Chartered Surveyors, being members of the Royal Institution of Chartered Surveyors (RICS). The properties were valued on the basis of market value. All valuations were carried out in accordance with the RICS Appraisal and Valuation Standards. As the investment properties are held at depreciated historical cost, this valuation has not been reflected in the carrying value of the assets.

5.5.3 Fair Value Model

When an entity chooses the fair value model, the entity should measure all of its investment property at fair value, except in the cases described in Section 5.5.1 (IAS 40.33). The entity is required to recognise a gain or loss arising from a change in the fair value of investment property in profit or loss for the period in which it arises (IAS 40.35).

**Real-life
Case 5.9**
MTR Corporation Limited

MTR Corporation Limited, a privatised and listed public transportation company in Hong Kong, commented in its annual report of 2004 as follows:

- The adoption of HKAS 40 would require all revaluation gains or losses of investment properties to be taken directly to the profit and loss account.
- The volatility of property prices therefore could have a significant impact on the level and consistency of the company's future operating profits.

5.5.3.1 Fair Value of Investment Property

The fair value of investment property in IAS 40 shares the same definition as other accounting standards.

Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction (IAS 40.5).

IAS 40 specifically sets out certain distinguishing characteristics of fair value for investment property.

1. Being Time-specific

The fair value of investment property should reflect market conditions at the balance sheet date (IAS 40.38). It implies that an entity should revalue an investment property at each balance sheet date. IAS 40 states that fair value is time-specific as of a given date; otherwise, it cannot reflect the related market changes.

Real-life Case 5.10

The Hong Kong and Shanghai Hotels, Limited

Real-life Case 5.1 sets out that The Hong Kong and Shanghai Hotels, Limited did not revalue its investment properties at the interim date of 30 June 2005, since its directors consider that such change of practice could introduce a significant element of short-term volatility into the income statement in respect of assets that are being held on a long-term basis by the group. However, in its interim report of 2006, it changed its practice and stated there that:

- With effect from 1 January 2006, in order to comply with HKAS 40 *Investment Property*, the group states its investment properties at fair value, based on independent third party valuation, at both the interim and year-end balance sheet dates. This has resulted in an increase in the fair value of investment properties ...

2. Reflecting Current Conditions

The fair value of investment property reflects, among other things, rental income from current leases and reasonable and supportable assumptions that represent what knowledgeable, willing parties would assume about rental income from future leases in the light of current conditions.

3. Equal to Initial Cost of a Lease

In a lease negotiated at market rates, the fair value of an interest in a leased property at acquisition, net of all expected lease payments (including those relating to recognised liabilities), should be zero. This fair value does not change regardless of whether, for

accounting purposes, a leased asset and liability are recognised at fair value or at the present value of minimum lease payments.

4. Current Prices in an Active Market Being the Best Evidence

The best evidence of fair value is given by current prices in an active market for similar property in the same location and condition and subject to similar lease and other contracts.

5. Absence of Current Prices in an Active Market

In the absence of current prices in an active market, an entity considers information from a variety of sources, including the following:

- Current prices in an active market for properties of different nature, condition or location, adjusted to reflect those differences;
- Recent prices of similar properties in less active markets, with necessary adjustments to reflect any relevant changes; and
- Discounted cash flow projections based on reliable estimates of future cash flows, supported by relevant information and evidence and using appropriate discount rates.

6. Difference from Value in Use

Fair value is not the same as value in use, as defined in IAS 36 *Impairment of Assets* (see Chapter 8). Fair value reflects the knowledge and estimates of knowledgeable, willing buyers and sellers. In contrast, value in use reflects the entity's estimates, including the effects of factors that may be specific to the entity and not applicable to entities in general.

Example 5.7 Fair value differs from value in use, which may reflect any of the following factors that cannot be found in fair value:

1. Additional value derived from the creation of a portfolio of properties in different locations;
2. Synergies between investment property and other assets;
3. Legal rights or legal restrictions that are specific only to the current owner; and
4. Tax benefits or tax burdens that are specific to the current owner.

7. Avoiding Double-count Assets or Liabilities Separately Recognised

In determining the fair value of investment property, an entity does not double-count assets or liabilities that are recognised as separate assets or liabilities.

Example 5.8 The following are examples of assets or liabilities included in the fair value of investment property:

1. Equipment, such as lifts or air-conditioning units, which is often an integral part of a building:
 - It is generally included in the fair value of the investment property, rather than recognised separately as property, plant and equipment.
2. The furniture in an office leased on a furnished basis:
 - Because rental income is related to the furnished office with the furniture, an entity should not recognise that furniture as a separate asset.

The following are examples of assets or liabilities not included in the fair value of investment property:

1. Prepaid or accrued operating lease income is excluded from the fair value of investment property as an entity should recognise it as a separate liability or asset.
2. Recognised lease liability for investment property held under a lease may be excluded from a valuation obtained for a property, since such valuation might have been net of all payments expected to be made. In consequence, it is necessary to add back any such recognised lease liability to arrive at the fair value of the investment property for accounting purposes.

8. Not Reflecting Future Capital Expenditure

The fair value of investment property does not reflect future capital expenditure that will improve or enhance the property and does not reflect the related future benefits from this future expenditure.

Real-life Case 5.11

The Bank of East Asia, Limited

The annual report of The Bank of East Asia, Limited in 2006 summarised the determination of fair value for its investment property as follows:

- Investment properties are stated at fair value.
- Investment properties are valued annually by external independent valuation companies, having an appropriate recognised professional qualification and recent experience in the location and category of property being valued.
- The fair values are based on market values, being the estimated amount for which a property could be exchanged on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.
- No allowance has been made in the valuations for any charges, mortgages or amounts owing on the properties nor any expenses or taxation that may be incurred in effecting a sale.

FIGURE 5.2 Comparison of fair value model and revaluation model

Fair value model (e.g., IAS 40)	Revaluation model (e.g., IAS 16)
<ul style="list-style-type: none"> • Refers to fair value • Change in fair value recognised in profit or loss for the period in which it arises • No depreciation or amortisation is required • Reflects market conditions at the end of reporting period (i.e., revalued at each balance sheet date) • NA 	<ul style="list-style-type: none"> • Refers to fair value • Change in fair value recognised directly in equity (or other comprehensive income) • Depreciation or amortisation is required • Not clearly defined, only requires regular revaluation without material difference from fair value • Deficit of fair value below depreciated or amortised cost is recognised in profit or loss

The fair value model in IAS 40 has its specific requirements, which are not the same as the requirements under the revaluation model in other accounting standards, for example in IAS 16 and IAS 38 *Intangible Assets* (see Chapters 3 and 6). Even though both models are based on a fair value of an asset and share the same definition of fair value, they have both similarities and differences, as summarised in Figure 5.2.

5.5.4 Particular Cases in Fair Value Model

An entity may estimate that there is a “negative” fair value for its investment property, as it may estimate that the present value of its payments relating to an investment property (other than payments relating to recognised liabilities) will exceed the present value of the related cash receipts. In such a case, the entity should apply IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (see Chapter 14) to determine whether to recognise this “negative” fair value as a liability and, if so, how to measure it.

Example 5.9 Aberdeen Company Limited owns a property in ABD Building to earn rental, and it has not properly maintained this property for a while. Aberdeen applies the fair value model for its investment property by relying on independent professional valuation.

An independent professional valuation estimates that the fair value of the property in ABD Building is negative at \$1 million; this estimate includes the present value of

a possible negligence claim from a pedestrian who was hurt by a broken window of its property. The present value of the negligence claim is \$3 million.

Without the present value of the negligence claim, the fair value of the property should be \$2 million. Aberdeen should carry its investment property at its fair value of \$2 million and apply IAS 37 in accounting for the negligence claim. Since the claim is only a possible claim, i.e., a contingent liability, it should not be recognised as a liability but should be disclosed in the financial statements in accordance with IAS 37.

If an entity has previously measured an investment property at fair value, it should continue to measure the property at fair value until disposal or transfer (i.e., the property becomes owner-occupied property or the property is being developed for subsequent sale in the ordinary course of business; see Section 5.6) even if comparable market transactions become less frequent or market prices become less readily available (IAS 40.55).

This implies that the inability to determine the fair value of an investment property can only be argued when the property has been measured by the cost model or at the time the property is initially recognised and measured. Once an investment property is accounted for by using the fair value model, an entity can never argue that the fair value of the investment property cannot be reliably measured.

5.5.5 Change in Accounting Policy

IAS 40 has specifically stated that the choice between the cost model and fair value model is a choice of an accounting policy. It implies that all changes from the cost model to the fair value model and from the fair value model to the cost model constitute voluntary changes in an entity's accounting policy. Such changes should be restricted and accounted for by using IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (see Chapter 20).

A voluntary change in accounting policy in accordance with IAS 8 can be made only if the change will result in a more appropriate presentation of transactions, other events or conditions in the entity's financial statements. IAS 40 clearly states that "it is highly unlikely that a change from the fair value model to the cost model will result in a more appropriate presentation" and implies that such a change may not comply with the requirements of IAS 8.

5.6 Transfers

The transfer of a property to or from the classification of investment property is restricted by IAS 40. IAS 40 specifically requires that such transfer should be made when, and only when, there is a change in use and the change can be evidenced by individual fact.

Change in use evidenced by	Resulting transfers
• Commencement of owner occupation	• Transfer from investment property to owner-occupied property
• Commencement of development with a view to sale	• Transfer from investment property to inventories
• End of owner occupation	• Transfer from owner-occupied property to investment property
• Commencement of an operating lease to another party	• Transfer from inventories to investment property
• End of construction or development	• Transfer from property in the course of construction or development (covered by IAS 16) to investment property

The requirement implies that if there is no change in use or the change in use is not evidenced by the relevant fact, a transfer to and from investment property for financial reporting purposes is not allowed.

Example 5.10 Honey Limited has several properties for its own use and to earn rental. In view of the market sentiment, it considers a plan to change the usage of the properties at year-end of 2008 as follows:

- The lessee of Investment Property A sent a letter to Honey expressing its intent to cease its operating lease in mid-2009.
- Honey decides to redevelop Investment Properties B and C with a view to sale. Development work has been commenced on B but not on C.
- Honey decides to dispose of Investment Property D in its existing condition without any development.
- Property E, used by Honey for its general office, has been quoted to derive rental income. An operating lease with a potential tenant is still under negotiation, but Honey has vacated the property before year-end of 2008.
- Investment Property F used to earn rental before but is under redevelopment and Honey plans to hold it for capital appreciation in future.

Evaluate Honey's proper classification on the properties at year-end of 2008.

Answers

At year-end of 2008, Honey should have the following classifications for its properties:

- Investment Property A should still be investment property as the usage is still to earn rental and the operating lease has not been ended.
- Investment Property B can be transferred from investment property to inventories as there is a change in use, evidenced by commencement of development with a view to sale.

- Investment Property C cannot be transferred from investment property to inventories as the change in use has not been evidenced by commencement of development, i.e., the development has not been commenced.
- Investment Property D is still investment property continuously until it is derecognised, since there is no development with a view to sale.
- Property E should be transferred to investment property since the change in use has been evidenced by Honey's end of owner occupation.
- Investment Property F is still investment property as it remains investment property after the redevelopment and there is no change in use.

If there is a transfer to or from investment property for an entity, the accounting treatments on the transfer should be first determined by the entity's accounting policy in measuring the property, i.e., whether the entity has used the cost model or fair value model to measure the property.

5.6.1 Transfers under Cost Model

In cases where the entity uses the cost model, the accounting treatments for the transfers are relatively simple.

IAS 40 requires that when an entity uses the cost model, transfers between investment property, owner-occupied property and inventories do not change the carrying amount of the property transferred. They also do not change the cost of that property for measurement or disclosure purposes.

5.6.2 Transfers under Fair Value Model

When an entity uses the fair value model for investment property, different recognition and measurement issues should result from different kinds of transfers.

5.6.2.1 Transfer to Owner-occupied Property or Inventories

If an entity transfers an investment property carried at fair value to either owner-occupied property or inventories, the investment property should be revalued up to the date of change in use. The changes in fair value should be recognised in profit or loss. Then, the fair value of the investment property at the date of change in use is recognised as the deemed cost of the owner-occupied property or the inventories.

5.6.2.2 Transfer from Owner-occupied Property

If an owner-occupied property becomes an investment property, which will be carried at fair value, the entity should

1. apply IAS 16 *Property, Plant and Equipment* up to the date of change in use; and

2. treat any difference at the date of change in use between the carrying amount of the property in accordance with IAS 16 and its fair value in the same way as a revaluation in accordance with IAS 16 (IAS 40.61).

Revaluation in accordance with IAS 16 requirements implies that:

1. Any resulting increase in the carrying amount is treated as follows:
 - a. To the extent that the increase reverses a previous impairment loss for that property, the increase is recognised in profit or loss.
 - b. Any remaining part of the increase is credited directly to equity in revaluation surplus. On subsequent disposal of the investment property, the revaluation surplus included in equity may be transferred to retained earnings. The transfer from revaluation surplus to retained earnings is not made through profit or loss.
2. Any resulting decrease in the carrying amount of the owner-occupied property is recognised in profit or loss. However, to the extent that an amount is included in revaluation surplus for that property, the decrease is charged against that revaluation surplus.

Example 5.11 GV has adopted IAS 40 and stated its investment properties at fair value even though the properties are held under operating leases.

On 1 March 2008, Freehold Property B, stated at a revalued amount of \$1,000,000 (originally used as its own office), was leased out to derive rental income. Revaluation surplus recognised for B was \$300,000, while B's fair value at the date of lease commencement is \$1,200,000.

Advise GV on the accounting treatments on Freehold Property B.

Answers

Property B should have been accounted for by using the revaluation model in accordance with IAS 16. It should be transferred from owner-occupied property to investment property at the date of the lease commencement as there is a change in use evidenced by the lease commencement.

In accordance with IAS 40, GV should apply IAS 16 on B up to the date of change in use and treat any difference at that date between its carrying amount under IAS 16 and its fair value in the same way as a revaluation under IAS 16.

In consequence, a revaluation surplus of \$200,000 should be further recognised. Total revaluation reserves become \$500,000 (\$200,000 + \$300,000). The reserves should be frozen and accounted for in accordance with IAS 16 subsequently.

Dr Property, plant and equipment	\$200,000	
Cr Revaluation reserves		\$200,000
To recognise the additional revaluation surplus.		

Dr Investment property	\$1,200,000	
Cr Property, plant and equipment.....		\$1,200,000
To reclassify the property from property, plant and equipment to investment property.		

5.6.2.3 Transfer from Inventories

If an entity transfers a property from inventories to investment property, which will be carried at fair value, the entity should revalue the property up to the date of change in use and recognise the fair value of the property in excess of its previous carrying amount in profit or loss (IAS 40.63). The treatment is consistent with the treatment of sales of inventories, which are transferred to investment property at fair value.

5.6.2.4 Completion of Self-constructed Investment Property Carried at Fair Value

When an entity completes the construction or development of a self-constructed investment property and the investment property will be carried at fair value, the entity should revalue the investment property up to the date of change and recognise any difference between the fair value of the property at that date and its previous carrying amount in profit or loss (IAS 40.65).

The treatment implies the completion of construction or development of a self-constructed investment property to be initially recognised (or transferred to investment property) at fair value.

5.7 Derecognition

An entity is required to derecognise or eliminate from the balance sheet an investment property

1. on disposal; or
2. when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal (IAS 40.66).

5.7.1 Disposal by Sale or by Entering into Finance Lease

An entity may dispose of an investment property in the following ways:

1. By sale; or
2. By entering into a finance lease.

In determining the date of disposal for investment property, an entity applies the criteria in IAS 18 for recognising revenue from the sale of goods and considers the related guidance in IAS 18. IAS 17 applies to a disposal effected by entering into a finance lease and to a sale and leaseback.

5.7.2 Derecognition by Replacement

When the recognition criteria for a replacement are met, an entity recognises in the carrying amount of an asset the cost of a replacement for part of an investment property and derecognises the carrying amount of the replaced part.

It may not be practicable for an entity to determine the carrying amount of the replaced part. In the cost model, an entity may use the cost of the replacement as an indication of what the cost of the replaced part was at the time it was acquired or constructed. In the fair value model, an entity may include the cost of the replacement in the carrying amount of the property and then reassess the fair value of the property as a whole.

5.7.3 Gains or Losses

An entity should determine the gains or losses arising from the derecognition of investment property as the difference between

1. the net disposal proceeds; and
2. the carrying amount of the asset.

Unless IAS 17 requires otherwise on a sale and leaseback, the above difference should be recognised in profit or loss in the period of the derecognition (IAS 40.69). An entity can apply IAS 18 *Revenue* (see Chapter 11) in accounting for the consideration receivable on disposal of an investment property and apply IAS 37 *Provision, Contingent Liabilities and Contingent Assets* (see Chapter 14) or other accounting standards, as appropriate, to any liabilities that it retains after disposal of an investment property.

5.7.4 Compensation from Third Parties

Compensation from third parties for investment property that was impaired, lost or given up should be recognised in profit or loss when the compensation becomes receivable (IAS 40.72). Impairments or losses of investment property should instead be accounted for in accordance with IAS 36 *Impairment of Assets* (see Chapter 8).

5.8 Disclosure

5.8.1 Applicable to Both Fair Value and Cost Model

An investment property may be leased out for rental purposes. In consequence, the disclosure requirements in IAS 17 should be complied with and, in addition, an entity is required in accordance with IAS 40 to disclose

1. whether it applies the fair value model or the cost model;
2. if it applies the fair value model, whether, and in what circumstances, property interests held under operating leases are classified and accounted for as investment property;
3. when classification is difficult (for example, the ancillary services provided are neither significant nor insignificant), the criteria it uses to distinguish investment property from owner-occupied property and from property held for sale in the ordinary course of business;

4. the methods and significant assumptions applied in determining the fair value of investment property, including a statement whether the determination of fair value was supported by market evidence or was more heavily based on other factors (which the entity shall disclose) because of the nature of the property and lack of comparable market data;
5. the extent to which the fair value of investment property (as measured or disclosed in the financial statements) is based on a valuation by an independent valuer who holds a recognised and relevant professional qualification and has recent experience in the location and category of the investment property being valued. If there has been no such valuation, that fact should be disclosed;
6. the amounts recognised in profit or loss for
 - a. rental income from investment property;
 - b. direct operating expenses (including repairs and maintenance) arising from investment property that generated rental income during the period;
 - c. direct operating expenses (including repairs and maintenance) arising from investment property that did not generate rental income during the period; and
 - d. the cumulative change in fair value recognised in profit or loss on a sale of investment property from a pool of assets in which the cost model is used into a pool in which the fair value model is used;
7. the existence and amounts of restrictions on the realisability of investment property or the remittance of income and proceeds of disposal;
8. contractual obligations to purchase, construct or develop investment property or for repairs, maintenance or enhancements (IAS 40.75).

5.8.2 Fair Value Model

In addition to the above disclosures, an entity that applies the fair value model should disclose a reconciliation between the carrying amounts of investment property at the beginning and end of the period, showing the following:

1. Additions, disclosing separately those additions resulting from acquisitions and those resulting from subsequent expenditure recognised in the carrying amount of an asset;
2. Additions resulting from acquisitions through business combinations;
3. Assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
4. Net gains or losses from fair value adjustments;
5. The net exchange differences arising on the translation of the financial statements into a different presentation currency, and on translation of a foreign operation into the presentation currency of the reporting entity;
6. Transfers to and from inventories and owner-occupied property; and
7. Other changes (IAS 40.76).

When a valuation obtained for investment property is adjusted significantly for the purpose of the financial statements, for example to avoid double-counting of assets or liabilities that are recognised as separate assets and liabilities, the entity should disclose

a reconciliation between the valuation obtained and the adjusted valuation included in the financial statements, showing separately the aggregate amount of any recognised lease obligations that have been added back, and any other significant adjustments (IAS 40.77).

In the exceptional cases where an entity is unable to determine fair value reliably and measures investment property using the cost model in IAS 16, the above reconciliation is required to disclose amounts relating to that investment property separately from amounts relating to other investment property. In addition, an entity is required to disclose

1. a description of the investment property;
2. an explanation of why fair value cannot be determined reliably;
3. if possible, the range of estimates within which fair value is highly likely to lie; and
4. on disposal of investment property not carried at fair value
 - a. the fact that the entity has disposed of investment property not carried at fair value;
 - b. the carrying amount of that investment property at the time of sale; and
 - c. the amount of gain or loss recognised (IAS 40.78).

5.8.3 Cost Model

In addition to the above disclosures, an entity that applies the cost model should disclose the following:

1. The depreciation methods used;
2. The useful lives or the depreciation rates used;
3. The gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period;
4. A reconciliation of the carrying amount of investment property at the beginning and end of the period, showing the following:
 - a. Additions, disclosing separately those additions resulting from acquisitions and those resulting from subsequent expenditure recognised as an asset;
 - b. Additions resulting from acquisitions through business combinations;
 - c. Assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
 - d. Depreciation;
 - e. The amount of impairment losses recognised, and the amount of impairment losses reversed, during the period in accordance with IAS 36;
 - f. The net exchange differences arising on the translation of the financial statements into a different presentation currency, and on translation of a foreign operation into the presentation currency of the reporting entity;
 - g. Transfers to and from inventories and owner-occupied property; and
 - h. Other changes; and
5. The fair value of investment property. In the exceptional cases where an entity is unable to determine fair value reliably and determine the fair value of the investment property reliably, it should disclose the following:

- a. A description of the investment property;
- b. An explanation of why fair value cannot be determined reliably; and
- c. If possible, the range of estimates within which fair value is highly likely to lie (IAS 40.79).

5.9 Summary

Investment property is a property held (by the owner or by the lessee under a finance lease) to earn rentals and/or for capital appreciation. There is a classification alternative that an entity can choose to account for the property held under an operating lease as investment property if the property is held to earn rentals and/or for capital appreciation and the fair value model in accounting for the property is adopted.

Owner-occupied property is property held for use in the production of goods or services or for administrative purposes. It may also be held for rental purposes; it generates cash flow together with other assets of an entity and with significant ancillary services provided to the occupants. Investment property, on the other hand, can generate cash flows largely independently of the other assets of an entity and does not have significant ancillary services provided.

Investment property is initially recognised at cost, while an entity has a choice to select the cost model or fair value model in subsequently measuring an investment property. Except for liability-linked investment property and investment property without reliable fair value from initial recognition, all investment property should be accounted for by using the selected model.

The fair value model in accounting for an investment property requires the changes in fair value to be recognised in profit or loss and the fair value reflecting market conditions at each balance sheet date. In substance, an investment property carried at fair value should be revalued at each balance sheet date and no depreciation charge is required. The cost model also requires the determination of fair value of investment property, as a disclosure of such fair value is required in the notes to the financial statements.

Transfers to or from investment property are restricted and can only be made when, and only when, there is a change in use evidenced by relevant facts. The accounting treatments depend on the types of transfers effected. Derecognition of investment is effected when the investment property is disposed of or withdrawn from use with no future economic benefits expected.

Review Questions

1. What is the argument for a separate accounting treatment for investment property?
2. Define investment property.
3. Under what conditions can an entity's property interest held under an operating lease be classified and accounted for as investment property?
4. What are the differences between investment property and property held for rental classified as property, plant and equipment?

5. How does an entity classify a property that is held to earn rentals but the ancillary services provided to the occupants are neither significant nor insignificant?
6. What is the accounting treatment for a property that a parent leases to a subsidiary?
7. How does an entity subsequently measure an investment property?
8. How does an entity determine the fair value for an investment property under IAS 40?
9. What is liability-linked investment property? Explain its financial reporting issues under IAS 40.
10. How does an entity argue not to account for a particular property without fair value?
11. When is a property transferred to or from investment property?
12. What is the accounting treatment for an owner-occupied property transferred to investment property carried at fair value?
13. When does an entity derecognise an investment property?

Exercises

Exercise 5.1 Carrefour Group stated in its annual report for investment property, that “an assessment of the fair value of investment properties is performed on an annual basis. This assessment is performed by applying a multiple that is a function of the calculated profitability of each shopping mall and a capitalisation rate based on the country to the annualised gross rents generated by each investment property.”

1. Why can Carrefour Group assess the fair value of its investment property on an annual basis, instead of assess it at each balance sheet date to reflect the market conditions at that date?
2. How does an entity determine the fair value of investment property?

Exercise 5.2 Melody Property Limited owns a right to use land together with a building from 2000 to 2046, and the carrying amount of the property was \$5 million with a revaluation surplus of \$2 million at the end of 2006. No revaluation was made in 2007. On 2 May 2008, when the fair value of the property increased to \$5.5 million, Melody signed a lease to rent out the property for rental purposes.

Discuss the accounting treatment for this transfer and suggest journal entries.

Exercise 5.3 In 2007, Tony Investment Property Group purchased a freehold property in Country A at a cost of \$10 million. It has not determined the usage of the property but considers that the value of the property will increase. However, due to the sub-prime loan crisis in the United States and worldwide, the fair value of the property decreases to \$7.5 million on 31 March 2008. Tony Ton, the chairman of the group, proposes to use the cost model to avoid any fair value recognised in profit or loss.

Evaluate and discuss the proposed accounting treatment of Tony Ton.

Problems

Problem 5.1 Bonnie Fantastic Inc. owns freehold land for its operation of an entertainment park. Because of the change in strategic focus, Bonnie has decided to cease to operate the entertainment park itself, but seek to rent out the whole park to another operator. Bonnie will only charge rent on the park and royalty fee on the use of its park name and brand. The managing director, Bonnie Hung, is drafting a proposal to cease and solicit tender offers for the park operation. Bonnie Hung considers that the company has changed the usage of the land and the land should be transferred as an investment property and marked up to the fair value, around 50% higher than the current carrying amount.

Discuss the arguments of Bonnie Hung and suggest the proper accounting treatment on the land and the park.

Problem 5.2 Before 2005, the hotel properties of Shangri-La Asia Limited were classified as investment properties, which are stated at annual professional valuations at the balance sheet date. After the introduction of IAS 40 as HKAS 40 in Hong Kong, Shangri-La Asia Limited announced on 17 December 2004 that its hotel properties “will no longer be accounted for as investment properties” from 2005. It would adopt the following accounting policies retroactively:

- The underlying buildings and integral plant and machinery will be stated at cost less accumulated depreciation and impairment;
- The underlying freehold land will be stated at cost less impairment; and
- The underlying leasehold land will be stated at cost and subject to annual operating lease rental charge (amortisation of land cost).

Evaluate the financial reporting implication on these changes in the accounting policy.

Problem 5.3 Handrew, a listed company, is adopting IFRS in its financial statements for the year ended 31 May 2005. The directors have highlighted some “headline” differences between IFRS and their current local equivalent standards and require a report on the impact of a move to IFRS on the key financial ratios for the current period.

Local GAAP requires investment property to be measured at market value and gains and losses reported in equity. The company owns a hotel that consists of land and buildings, and it has been designated as an investment property. The property was purchased on 1 June 2004. The hotel has been included in the balance sheet at 31 May 2005 at its market value on an existing use basis at \$40 million (land valuation \$30 million, building \$10 million). A revaluation gain of \$5 million has been recognised in equity. The company could sell the land for redevelopment for \$50 million, although it has no intention of doing so at the present time. The company wants to recognise holding gains/losses in profit and loss. Local GAAP does not require deferred tax to be provided on revaluation gains and losses.

Write a report to the directors of Handrew discussing the impact of the change to IFRS on the reported profit and balance sheet of Handrew at 31 May 2005.

(ACCA 3.6 June 2005, adapted)

Case Studies

Case Study 5.1

Before the comments of The Hong Kong and Shanghai Hotels, Limited (see Real-life Case 5.1), Robert Gazzi and Ming Tse of PricewaterhouseCoopers had commented on the potential application of IAS 40 *Investment Property* in Hong Kong in 2002 as follows:

In regions such as Hong Kong, where the property cycle is typically characterised by substantial peak to trough swings, taking all fair value changes through the profit and loss account as an operating item would result in substantial volatility of reported profit year on year ... Once year on year changes in asset values of investment properties are included in the profit and loss account, using reported profit as a yardstick to measure a company's performance would be simplistic and possibly misleading.

The Hong Kong Accountant, January 2002

However, when the revised IAS 40 was finally adopted in Hong Kong as HKAS 40 *Investment Property* in 2005, HKAS 40 seemed to be the “most well-received” converged IAS in terms of the number of companies that had adopted it early, before the effective date (excluding those that had fully adopted all new HKFRSs). The following list sets out certain listed companies that selectively adopted HKAS 40 early:

- The Bank of East Asia, Limited
- CATIC International Holdings Limited
- Cheung Kong (Holdings) Limited
- Gold Peak Industries (Holdings) Limited
- Hanison Construction Holdings Limited
- Hutchison Whampoa Limited
- IDT International Limited
- Junefield Department Store Group Limited
- Omnicorp Limited
- Pak Fah Yeow International Limited
- Recruit Holdings Limited
- South China Holdings Limited

These include large and small companies, property developers and banks, and Hong Kong and Mainland China companies.

Discuss the possible rationale why those listed companies might have adopted IAS 40 earlier, but there were negative comments from The Hong Kong and Shanghai Hotels, Limited and Robert Gazzi and Ming Tse of PricewaterhouseCoopers.

Case Study 5.2

Very Wealthy Ltd. has investment property that is stated in its balance sheet at a valuation of \$1.8 million, and the company is planning to acquire a shopping mall.

The shopping mall is situated on land that Shanghai Property has a right to use until 31 March 2050 (i.e., 45 years remaining from 1 April 2005). The company estimates that the current market value of the existing land use right is approximately

\$250 million. The shopping mall is estimated to have a useful life of 45 years.

After the existing land use right expires, Shanghai Property has a right to continue to use the land for another 50 years, provided that it pays a lump sum based on the market value at 31 March 2050 for a 50-year land use right.

The shopping mall is now 80% occupied, and all the leases started on 1 April 2004. The shopping mall is currently managed by the property management arm of the property owner on a 10-year contract.

The owner agreed to continue the contract at an annual fee of 10% of the annual rental income receivable by Shanghai Property from the tenants. Although management and operational staff of Very Wealthy will be heavily involved in the operation of the shopping mall, additional administrative expenses to Very Wealthy are not material.

Required:

Assuming that the shopping mall is acquired on 1 April 2005 at \$450 million and partly financed by the \$400 million loan, you should, for Very Wealthy's consolidated financial statements for the year ended 31 March 2006:

1. Determine the classification and measurement of the shopping mall in Very Wealthy's balance sheet.

(HKICPA FE June 2006, adapted)

**Case
Study 5.3**

The Atlantic Centre comprises a shopping mall from ground level to the second floor and offices from the third floor to the 29th floor. All the units have been leased to parties not related to its holding company, Prime View Properties Limited (PVL) under short-term leases, ranging from 1 year to 3 years.

Atlantic Centre Limited (ACL), a 100% owned subsidiary of PVL, was incorporated in 1990 to hold the Atlantic Centre, which had been purchased at \$240 million. The purchase was wholly financed by internal capital, and ACL has always been a debt-free company. Having regard for the Atlantic Centre's prime location, PVL considered that converting the Atlantic Centre into a mid-range hotel would be the preferred option to launch the new investment strategy.

On 1 April 2006, PVL would embark on an 18-month project which would include upgrading the shopping mall from the ground level to the second floor of the Atlantic Centre, rebranded as Atlantic Place, and making necessary alterations to the offices from the third floor to the 29th floor to convert them into a five-star 350-room mid-range hotel to be named the Atlantic Hotel.

PVL has obtained legal advice that it does not need to pay any additional land premium to the government since the existing land lease agreement, which will expire in 2047 and renewable for another 50 years at the discretion of the government, allows for the change from office building to hotel.

Regarding the financial reporting implications of the transaction, determine whether, after renovation, Atlantic Place and the Atlantic Hotel should still be classified as an investment property in PVL's consolidated financial statements.

(HKICPA FE June 2006, adapted)

Case
Study 5.4

Phoenix Real Estate Limited (Phoenix) is a property developer in China. In 2003, Phoenix acquired the land use rights of two pieces of land in Beijing for hotel development.

Property 1: Since the date of the acquisition of the land, the board of Phoenix has decided to run the hotel on its own and commenced the pre-operating activities of the hotel on 1 January 2005, when the development was completed and the hotel was available for its intended use. The hotel's grand opening took place on 1 July 2005.

Property 2: Since the date of acquisition of the land, the board of Phoenix decided to lease the whole property to earn rental. A lease agreement was entered into to lease the whole property to its holding company (the Tenant) for a period of 18 years for the operation of a hotel. According to the lease agreement, in addition to the minimum annual rental, Phoenix is entitled to receive a turnover rent that represents the excess of 5% annual revenue of the hotel operation over the minimum rental. The monthly revenue amount of the hotel operation is provided by the Tenant at the close of business of each month-end date.

Other information on these two properties:

	Property 1 RMB '000	Property 2 RMB '000
Cost of land use right.....	45,000	48,000
Cost of construction (excluding the amortisation of land use right).....	303,000	267,000
Fair value of the land use right as at 31 December 2005	60,000	100,000
Fair value of the building at existing status as at 31 December 2005	560,000	340,000
Date of purchase of land use right	1 July 2003	1 October 2003
Term of land use right (from date of purchase by Phoenix)	75 years	60 years
Estimated useful life of the property.....	50 years	40 years
Completion of construction of the building	December 2004	June 2005

Phoenix has adopted the cost model under IAS 16 for property, plant and equipment and the fair value model under IAS 40 for investment property (buildings only). Depreciation is provided to write off the cost of property, plant and equipment using the straight-line method. The land use right is considered as a lease and accounted for in accordance with the requirements under IAS 17. Amortisation of the cost of the land during the construction period is capitalised as part of the development cost of the property.

Required:

1. Calculate the amount of (a) land use right and (b) carrying amount of the building for each property to be reflected in Phoenix's balance sheet as at 31 December 2005.
2. Explain the accounting treatment for the turnover rent under the lease agreement entered into with the Tenant for Property 2 in Phoenix's financial statements.

(HKICPA QP A September 2006, adapted)

6

Intangible Assets

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of intangible assets (the definition)
- 2 The timing in recognising intangible assets acquired in different ways (the recognition criteria)
- 3 The amount to be recognised and measured on intangible assets (the initial and subsequent measurements)
- 4 The difference between the cost model and revaluation model for intangible assets
- 5 The restrictions in adopting the revaluation model for intangible assets
- 6 The issues in determining the useful life of intangible assets

**Real-life
Case 6.1**
Newcastle United plc

It is not easy to value intangible assets, for example, the value of LV brand or Adidas or the value of a soccer's right acquired by a football club. Newcastle United plc, one of the well-known football clubs in England, has adopted IFRSs in preparing its financial statements and clarified the accounting treatment for its acquired players' registration as follows:

- Under IAS 38 *Intangible Assets*, players acquired on deferred terms are recorded at the fair value at the date of acquisition.
- The costs associated with the acquisition of players' registrations are initially recorded at their fair value at the date of acquisition as intangible fixed assets. These costs are fully amortised, on a straight-line basis, over the period of the respective players' contracts.
- Players' registrations are written down for impairment when the carrying amount exceeds the amount recoverable through use or sale.

IAS 38 *Intangible Assets* not only specifies how to measure intangible assets but also prescribes the accounting treatment for intangible assets that are not dealt with specifically in another accounting standard, including the issues in defining, recognising and measuring of intangible assets. This chapter aims at explaining and illustrating those practices on accounting intangible assets.

6.1 Applicable Standard and Scope

An entity is required to apply IAS 38 in accounting for all its intangible assets, except for the following:

1. Intangible assets that are within the scope of another accounting standard, for example, intangible assets held for trading accounted for under IAS 2 *Inventories* (see Chapter 9);
2. Financial assets, as defined in IAS 39 *Financial Instruments – Recognition and Measurement* (see Chapter 15);
3. The recognition and measurement of exploration and evaluation assets under IFRS 6 *Exploration for and Evaluation of Mineral Resources*; and
4. Expenditure on the development and extraction of minerals, oil, natural gas and similar non-regenerative resources (IAS 38.2).

Some intangible assets may be contained in or attached with a physical substance. In determining whether these assets with both intangible and tangible elements should be accounted for under IAS 38 or under IAS 16 *Property, Plant and Equipment* (Chapter 3), an entity uses judgement to assess and determine which element is more significant.

Example 6.1 Celia Limited plans to purchase an enterprise management system with accounting software and sign a contract to license with the supplier to have a regular update and maintenance for 5 years. The total purchase cost is \$500,000 for the system and \$100,000 for the licence. The system is installed in a set of server and user computers that should be purchased by Celia at a separate cost, and the cost should be based on the configuration demanded by Celia.

Discuss the accounting implication in purchasing the system and licence.

Answers

Although the enterprise management system and software are installed in a tangible item, i.e., the server and the computers, the system and software would still be regarded as intangible assets. The costs of the server and user computers are also separately quoted and charged. When the system and software are not an integral part of the related hardware, the system and software should be treated as intangible assets. Although the legal contract is a tangible item, the licence itself is an intangible asset.

In consequence, the system and licence should be, subject to other requirements of IAS 38, regarded as intangible assets under IAS 38.

6.2 Meaning of Intangible Asset

IAS 38 has clearly defined intangible assets, but in view of the effect of its scope, not all intangible assets within the following definition of intangible assets can be accounted for under IAS 38 or can be capitalised. For example, goodwill acquired in a business combination is one kind of intangible asset, but it is accounted for under IFRS 3 *Business Combinations*.

An **intangible asset** is an identifiable non-monetary asset without physical substance.

An **asset** is a resource

- controlled by an entity as a result of past events; and
- from which future economic benefits are expected to flow to the entity.

Monetary assets are money held and assets to be received in fixed or determinable amounts of money (IAS 38.8).

Based on the above definition, the following three elements must be demonstrated before an item can meet the definition of an intangible asset:

1. Identifiability;
2. Control over a resource; and
3. Existence of future economic benefits.

If an item does not meet the definition of an intangible asset, expenditure for this item should be charged to the income statement, except for items acquired in a business combination that should be formed as part of the goodwill recognised at the acquisition date.

6.2.1 Identifiability

The definition of an intangible asset requires an intangible asset to be identifiable to distinguish it from goodwill. An asset meets the identifiability criterion in the definition of an intangible asset when:

1. It is separable, i.e., it is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability; or
2. It arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations (IAS 38.12).

6.2.2 Control

Determining whether an entity can control an intangible asset can refer to

1. the power to obtain the future economic benefits flowing from the underlying resource; and
2. the power to restrict the access of others to those benefits.

An entity's capacity to control an asset's future economic benefits would normally depend on its legal rights. However, some other factors, for example, market and technical knowledge, can also be relied on to demonstrate a control of the future economic benefits of an asset.

Example 6.2 After the installation of the enterprise management system, Celia Limited has invested around \$200,000 to train all its employees and to enhance its corporate image. The CEO of Celia argues that the expenditure can be capitalised as intangible assets. Can Celia do that?

Answers

In a normal situation, in the absence of legal rights to protect, an entity usually has insufficient control over the expected future economic benefits arising from training cost, a team of skilled staff, or corporate image in order to meet the definition of an intangible asset.

6.2.3 Future Economic Benefits

An entity can evaluate whether there is revenue from the sale of products or services, cost savings, or other benefits resulting from the use of an intangible asset to

demonstrate its future economic benefits. For example, the use of intellectual property in a production process to reduce future production costs can be demonstrated as the existence of future economic benefits.

6.3 Recognition and Measurement

The recognition of an item as an intangible asset requires an entity to demonstrate that the item meets

1. the definition of an intangible asset; and
2. the recognition criteria.

This requirement applies equally to initial cost and subsequent expenditure of intangible assets, including the following:

- Costs incurred initially to acquire the intangible asset;
- Costs incurred initially to internally generate an intangible asset; and
- Costs incurred subsequently to add to, replace part of, or service the intangible asset.

Expenditure not fulfilling the recognition requirements will be charged to profit or loss.

6.3.1 Recognition Criteria and Initial Measurement

Similar to property, plant and equipment (see Chapter 3), the recognition criteria for an intangible asset require an entity to recognise an intangible asset if, and only if:

1. It is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
2. The cost of the asset can be measured reliably (IAS 38.21).

In assessing the probability of expected future economic benefits, an entity is required to use reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the intangible asset (IAS 38.22).

An entity is required to recognise an intangible asset initially at cost (IAS 38.24).

Similar to property, plant and equipment (see Chapter 3), **cost** is defined as

- the amount of cash or cash equivalents paid or the fair value of other considerations given to acquire an asset at the time of its acquisition or construction; or
- when applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other IFRSs, e.g., IFRS 2 *Share-based Payment* (IAS 38.8).

Intangible assets can be acquired or generated in different ways, which affects the manner in which the recognition criteria are evaluated. IAS 38 addresses the following different ways of acquiring and generating intangible assets:

1. Separate acquisition;
2. Acquisition as part of a business combination;
3. Acquisition by way of a government grant;
4. Exchange of assets;
5. Internally generated goodwill; and
6. Internally generated intangible assets.

6.3.2 Separate Acquisition

When an intangible asset is acquired separately, particularly in the form of cash or other monetary assets, the recognition criteria can be considered to be satisfied, since the price paid by the entity normally implies that the criterion to have probable inflow of future economic benefits can be fulfilled and the cost can also be measured reliably.

The cost element of a separately acquired intangible asset comprises

1. its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates; and
2. any directly attributable cost of preparing the asset for its intended use.

All the costs recognised in the carrying amount of an intangible asset cease when the asset is in the condition necessary for it to be capable of operating in the manner intended by management.

Example 6.3 Celia Limited has incurred the following expenditures in acquiring an enterprise management system from an external supplier for its intended use. Identify which of the following expenditures can be capitalised as the cost of the intangible asset:

1. Direct employee costs to install and bring the system to its working condition;
2. Additional professional fees paid to the supplier to customise the system for Celia's intended use;
3. Costs of testing to ascertain whether the asset is functioning properly;
4. Costs of introducing a new service to its customers, including advertising fee;
5. Costs of launching the new service for a new segment of customers;
6. Administration and general overhead costs allocated to the system acquisition;
7. Costs incurred to maintain the system in its working condition during the period the system can be used but has not been used (since not all the colleagues have been trained to use the system); and
8. Initial operating loss incurred in introducing the system and the new services.

Answers

Items (1) to (3) are directly attributable costs to prepare the system for its intended use. They can be capitalised as the cost of the intangible asset.

Items (4) to (6) cannot be regarded as part of the cost of the intangible asset. They are not directly attributable to the acquisition of the system.

Items (7) and (8) cannot be capitalised either, since costs accumulated in the carrying amount of an intangible asset cease when the asset is in its working condition intended by management. Hence, costs incurred in using or redeploying an intangible asset and operating losses are not included in the carrying amount of the system.

6.3.3 Acquisition As Part of a Business Combination

When an intangible asset is acquired in a business combination, the cost of the intangible asset is its fair value at the acquisition date as required by IFRS 3 *Business Combinations*. A reliable measurement of the fair value of an intangible asset acquired in a business combination becomes the most critical criterion in recognising the intangible asset separately.

If the fair value of the intangible asset can be measured reliably in a business combination, it implies that the probability of having future economic benefits from the asset can be satisfied. In consequence, even when the intangible asset has not been recognised by the acquiree, the acquirer has to recognise the intangible asset separately from goodwill.

Real-life Case 6.2

BP plc

BP plc, one of the largest integrated oil companies in the world, incorporated in England and having adopted IFRS since 2005, explained its capitalisation of intangible assets in its 2007 annual report as follows:

- Intangible assets acquired separately from a business are carried initially at cost. The initial cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.
- An intangible asset acquired as part of a business combination is measured at fair value at the date of acquisition and is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights and its fair value can be measured reliably.

6.3.3.1 In-process Research and Development Project Acquired in Business Combination

The same approach is also applicable on an in-process research and development project acquired in a business combination. An acquirer is required to initially and separately recognise such a project from goodwill if:

1. The project meets the definition of an intangible asset; and
2. Its fair value can be measured reliably.

In consequence, the requirements on initial recognition of an in-process research and development project resulting from a separate acquisition and business combination would be distinguished from similar projects generated internally.

1. When an in-process research and development project is acquired separately, its acquisition cost is recognised since the recognition criteria are considered to be satisfied.
2. When an in-process research and development is acquired in a business combination, its cost being the fair value at the acquisition date is also recognised if the fair value can be reliably measured.
3. However, the initial recognition and capitalisation of an internally generated in-process research and development project in the balance sheet is subject to the demonstration of all the six specific criteria discussed in Section 6.4.2.

The critical cause of such differences in initial recognition is the existence of a purchase consideration paid by the entity that can reflect the probability of future economic benefits associated with the project. In the absence of such consideration for an internally generated project, such a project should be considered in the same manner as other internally generated intangible assets.

6.3.3.2 Subsequent Expenditure on In-process Research and Development Project

In respect of an in-process research and development project separately acquired or in a business combination, the subsequent expenditure incurred after the acquisition of such a capitalised project should be regarded as expenditure on internally generated intangible assets. The recognition of such expenditure should comply with the requirements for internally generated intangible assets as discussed in Section 6.4.2 (IAS 38.42).

Example 6.4 JCY Limited acquired Kwong Tech Limited during 2007. The assets of Kwong were minimal but it had a research and development project with a fair value of \$1.2 million. Before JCY's acquisition, Kwong incurred around \$2 million on this in-process research and development project but the cost had not been recognised in Kwong's balance sheet since the project had not met the recognition criteria for an intangible asset in accordance with IAS 38.

Subsequent to JCY's acquisition, Kwong had additional funds to continue its in-process research and development project and incurred \$1 million in the year 2008. The project was still far from meeting the recognition criteria for intangible assets in accordance with IAS 38.

Discuss the accounting implication to Kwong and JCY in respect of this in-process research and development project for 2007 and 2008.

Answers

For Kwong, as the in-process research and development project had not met the recognition criteria, the costs incurred should be charged to the income statements for both 2007 and 2008.

For JCY, the fair value of the project can be recognised as an intangible asset as the project was acquired in the business combination of Kwong. In consequence, \$1.2 million (so long as it was reliably measured) would be recognised as an intangible asset in 2007 (in JCY's consolidated balance sheet).

In 2008, as the project had still not met the recognition criteria, the cost incurred of \$1 million would still be charged to JCY's (consolidated) income statement.

6.3.4 Acquisition by Way of a Government Grant

An entity may acquire intangible assets, for example, radio stations or import quotas, by way of a government grant free of charge or for a nominal consideration. As permitted under IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*, an entity may choose to recognise both the intangible asset and the grant initially

1. at fair value; or
2. at a nominal amount plus any expenditure that is directly attributable to preparing the asset for its intended use.

6.3.5 Exchange of Assets

One or more intangible assets may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. The following discussion refers simply to an exchange of one non-monetary asset for another, but it also applies to all exchanges described in the preceding sentence.

An intangible asset acquired from an exchange of non-monetary asset, or a combination of monetary and non-monetary assets, is recognised at fair value unless:

1. The exchange transaction lacks commercial substance; or
2. The fair value of neither the asset received nor the asset given up is reliably measurable.

If the acquired intangible asset is not recognised at fair value, its cost is measured at the carrying amount of the asset given up.

The acquired intangible asset is recognised and measured by using this approach even though an entity cannot immediately derecognise the asset given up. This recognition approach on exchange of asset is similar to the one in IAS 16 *Property, Plant and Equipment* (see Chapter 3).

6.3.6 Internally Generated Goodwill

In accordance with IAS 38, an entity is not allowed to recognise internally generated goodwill as an asset (IAS 38.48) because it is not an identifiable resource (i.e., it is not separable, nor does it arise from contractual or other legal rights) controlled by the entity that can be measured reliably at cost.

6.3.7 Internally Generated Intangible Assets

When an entity applies the recognition criteria to evaluate whether an internally generated intangible asset qualifies for recognition, there are problems in

1. identifying whether and when there is an identifiable asset that will generate expected future economic benefits; and
2. determining the cost of the asset reliably.

In consequence, in order to recognise an internally generated intangible asset as an asset, IAS 38 requires the asset to satisfy not only the general recognition criteria for an intangible asset, but also additional requirements and guidance imposed on it. Section 6.4 explains these additional requirements and guidance.

6.4 Recognition of Internally Generated Intangible Assets

In order to determine whether an internally generated intangible asset can be recognised in accordance with IAS 38, an entity classifies the generation process of the asset into

1. a research phase; and
2. a development phase.

Research is defined as original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding (IAS 38.8).

Development is defined as the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use (IAS 38.8).

The research and development phases should have a broader meaning than the above definitions for research and development. In case an entity cannot distinguish the research phase from the development phase for any internally general intangible asset, all expenditures incurred on the assets are designated as incurred for the research phase only.

6.4.1 Research Phase

IAS 38 requires an entity to expense the expenditure on research or on the research phase of an internal project when it is incurred. An entity cannot recognise nor capitalise

any such expenditure or any intangible asset arising from research or from the research phase of an internal project as an intangible asset in the balance sheet (IAS 38.54), because it is not possible for an entity to demonstrate that such expenditure or such an intangible asset will generate probable future economic benefits.

Example 6.5 Examples of research activities include the following:

1. Activities aimed at obtaining new knowledge;
2. The search for, evaluation and final selection of, and applications of research findings;
3. The search for alternatives for materials, devices, products, systems or services; and
4. The formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, processes, systems or services.

6.4.2 Development Phase

IAS 38 specifically requires that an entity should recognise an intangible asset arising from development or from the development phase of an internal project if, and only if, the entity can demonstrate all the following six specific recognition criteria:

1. The technical feasibility of completing the intangible asset for use or sale.
2. Its intention to complete the intangible asset and use or sell it.
3. Its ability to use or sell the intangible asset.
4. How the intangible asset will generate probable future economic benefits, for example, the existence of a market for the output of the intangible asset, or the usefulness of the intangible asset for internal purposes.
5. The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset.
6. Its ability to measure reliably the expenditure attributable to the intangible asset during its development (IAS 38.57).

Example 6.6 Examples of development activities include the following:

1. The design, construction and testing of pre-production or prototypes and models;
2. The design of tools, moulds and dies involving new technology;
3. The design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production; and
4. The design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

Real-life
Case 6.3
France Telecom Group

France Telecom Group, one of the composite stocks of France's CAC 40 index, has adopted IFRSs in preparing its financial statements and summarised its capitalisation policy of software and research and development costs in 2007 as follows:

- Development costs are recognised as an intangible asset when the following conditions are met:
 - The intention to complete the intangible asset and use or sell it and the availability of adequate technical and financial resources for this purpose;
 - The probability that the intangible asset will generate probable future economic benefits for the group; and
 - The reliable measurement of the expenditure attributable to the intangible asset during its development.
- Research costs, and development costs not fulfilling the above criteria, are expensed as incurred. The group's research and development projects mainly concern
 - upgrading the network architecture or functionality; and
 - developing service platforms aimed at offering new services to the group's customers.
- These projects generally give rise to the development of software that does not form an integral part of the network's tangible assets within the meaning of IAS 38. Development costs recognised as an intangible asset and software are recorded under "other intangible assets".

An entity can assess the probability of future economic benefits from an internally generated intangible asset by using the principles in IAS 36 *Impairment of Assets* and demonstrate the availability of resources to complete the development by using a business plan or external financing.

Example 6.7 Melo Corporation is a newly incorporated company and is developing its resources planning system for its internal use and its customers.

Advise Melo on how it can demonstrate that it can have adequate resources to complete the development.

Answers

Melo can demonstrate its availability of resources to complete the development by a business plan showing the technical, financial and other resources needed and the entity's ability to secure those resources.

Melo can also demonstrate the availability of external finance by obtaining a bank or lender's indication of its willingness to fund its development plan.

6.4.3 Cost of an Internally Generated Intangible Asset

The cost of an internally generated intangible asset for initial recognition is the sum of expenditure incurred from the date when the intangible asset first meets both the general recognition criteria and the six specific recognition criteria during the development phase. Expenditure incurred but previously recognised as an expense cannot be reinstated and capitalised as an asset again (see Section 6.5). Figure 6.1 summarises when the relevant expenditure on an intangible asset can be capitalised.

Example 6.8 Melo Corporation incurred a total of \$2 million in researching and \$10 million in developing a new resource planning system in 2007. Melo demonstrated that the general recognition criteria and six specific recognition criteria were met from 1 November 2007. The expenditure incurred on the system after 1 November 2007 was \$3 million.

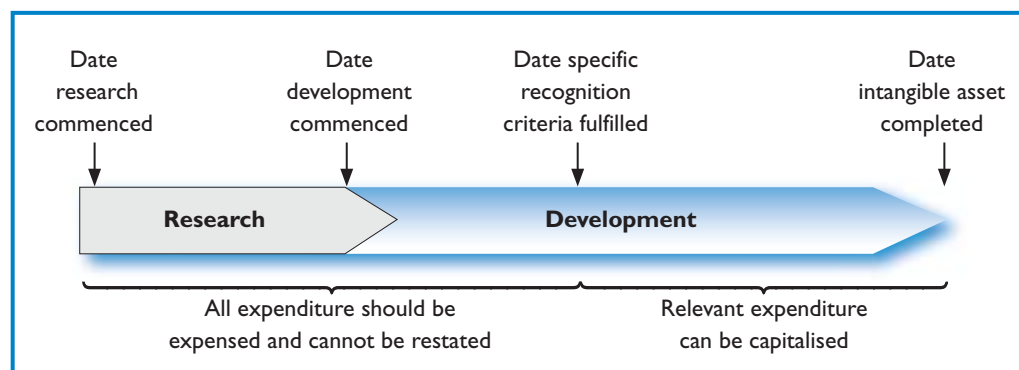
Melo expected that the development should be completed within 2008 and the estimated expenditure to complete the system in 2008 should be \$5 million.

While the general and specific recognition criteria were met from 1 November 2007, Melo should charge a total of \$9 million (\$2 million + \$7 million) to income statement and capitalise \$3 million as an internally generated intangible asset in 2007.

In 2008, while expenditure has been incurred, further cost would be added to the carrying amount of the internally generated intangible asset.

The cost of an internally generated intangible asset comprises all directly attributable costs necessary to create, produce and prepare the asset to be capable of operating in the manner intended by management.

FIGURE 6.1 Capitalisation of development expenditure



Example 6.9 Melo Corporation reviewed its costs incurred attributable to its development of a new resources planning system. The costs include the following:

1. Costs of materials and services used in generating and developing the system;
2. Costs of employee benefits arising from the development of the system;
3. Fees to register a legal right of the system;
4. Amortisation of patents that are used to develop the system;
5. Borrowing costs satisfying the criteria set out in IAS 23 *Borrowing Costs* for capitalising as an element of the cost of the system;
6. Selling, administrative and other general overhead expenditure;
7. Identified inefficiencies and initial operating losses incurred before the system achieves planned performance; and
8. Expenditure on training staff to operate the system.

Determine which costs can be recognised as Melo's internally generated intangible asset.

Answers

Items (1) to (5) can be regarded as directly attributable costs that can be recognised as an internally generated intangible asset.

Items (6) to (8) are not directly attributable costs and are not components of the costs of an internally generated intangible asset.

Real-life Case 6.4

Solomon Systech (International) Limited

Solomon Systech (International) Limited, a semiconductor company providing display IC products under its brand name, briefly summarised its accounting policy on research and development expenditure in accordance with HKAS 38 (equivalent to IAS 38) in its 2006 annual report as follows:

- Research expenditure is expensed as incurred.
- Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets when it is probable that the project will be a success considering its commercial and technological feasibility, and costs can be measured reliably.
- Other development expenditures are expensed as incurred.

6.4.4 Internally Generated Intangible Assets Cannot Be Capitalised

Certain items are specifically listed as not qualified for recognition as internally generated intangible assets. They are internally generated brands, mastheads, publishing titles, customer lists and items similar in substance (IAS 38.63). The expenditure on

such items cannot normally be distinguished from the cost of developing the business as a whole, and it is difficult to demonstrate the identifiability criterion. Therefore, such items are not recognised as intangible assets.

6.5 Recognition of an Expense

An entity is required to expense the expenditure on an intangible item to the income statement when it is incurred unless:

1. It forms part of the cost of an intangible asset that meets the general recognition criteria (Section 6.2.1) and six specific recognition criteria (Section 6.4.2); or
2. The item is acquired in a business combination and cannot be recognised as an intangible asset, since such expenditure forms part of the amount attributed to goodwill at the acquisition date (see IFRS 3 *Business Combinations*) (IAS 38.68).

Even if the above conditions can be fulfilled later, expenditure on an intangible item that was initially recognised as an expense cannot be recognised as part of the cost of an intangible asset at a later date (IAS 38.71).

Example 6.10 Examples of expenditure that is recognised as an expense when it is incurred include the following:

1. Expenditure on start-up activities (i.e., start-up costs), unless this expenditure is included in the cost of an item of property, plant and equipment in accordance with IAS 16 *Property, Plant and Equipment*;
2. Expenditure on training activities;
3. Expenditure on advertising and promotional activities;
4. Expenditure on relocating or reorganising part or all of an entity.

6.6 Measurement after Recognition

After initial recognition, an entity is required to choose either of the following models as its accounting policy to an entire class of intangible assets:

1. The cost model;
2. The revaluation model.

6.6.1 Cost Model

If an entity chooses the cost model as its accounting policy in subsequently measuring its intangible assets, an intangible asset is carried at

- its cost;
- less any accumulated amortisation; and
- less any accumulated impairment losses (IAS 38.74).

6.6.2 Revaluation Model

If an entity chooses the revaluation model as its policy in subsequently measuring its intangible assets, an intangible asset is carried at

- a revalued amount, being its fair value at the date of the revaluation;
- less any subsequent accumulated amortisation; and
- less any subsequent accumulated impairment losses (IAS 39.75).

Fair value is defined as the amount for which that asset could be exchanged between knowledgeable, willing parties in an arm's length transaction (IAS 38.8).

No matter whether the cost model or the revaluation model is chosen for subsequent measurement of intangible assets, an entity is still required to provide amortisation for intangible assets unless the useful life of an asset is determined to be indefinite, and to provide the impairment losses on the intangible assets if criteria are met.

As with property, plant and equipment, no specific revaluation frequency or interval is imposed on intangible assets. An entity is only required to have revaluations with such regularity that at the balance sheet date the carrying amount of the asset does not differ materially from its fair value (IAS 38.75). The frequency of revaluations may depend on the volatility of the fair values of the intangible assets being revalued. Some intangible assets experiencing significant and volatile movements in fair value may require annual revaluation. It is not necessary for frequent revaluations if there are only insignificant movements in fair value.

6.6.2.1 Restrictions of Revaluation Model

Although the revaluation model may be adopted by an entity, the model does not allow the following:

1. The revaluation of intangible assets that have not previously been recognised as assets; or
2. The initial recognition of intangible assets at amounts other than cost.

The revaluation model is applied after an asset has been initially recognised at cost and it should not affect the measurement basis in initial recognition.

6.6.2.2 Determination of Fair Value by Reference to an Active Market

In applying the revaluation model, IAS 38 specifically requires the determination of fair value by reference to an active market.

An **active market** is defined as a market in which all the following conditions exist:

- The items traded in the market are homogeneous;
- Willing buyers and sellers can normally be found at any time; and
- Prices are available to the public (IAS 38.8).

Although it is not common to have an active market for an intangible asset, some intangible assets may have an active market in some countries or places, for example, taxi licences or production quotas.

If there is no active market for a particular intangible asset, the revaluation model cannot be used for that asset. Without an active market for an intangible asset, the transactions on buying and selling the asset are relatively infrequent and the price paid for the asset may not provide sufficient evidence of its fair value. In particular, an active market cannot exist for brands, newspaper mastheads, music and film publishing rights, patents or trademarks, because each such asset is unique.

6.6.2.3 Revaluation of Entire Class

If an intangible asset is accounted for using the revaluation model, the same model is required to apply to all the other assets in its same class, unless there is no active market for those assets (IAS 38.72). This requirement is to avoid selective revaluation of assets and the reporting of amounts in the financial statements representing a mixture of costs and values as at different dates.

A class of intangible assets is a grouping of assets of a similar nature and use in an entity's operations.

Example 6.11 Examples of separate classes include the following:

1. Brand names;
2. Mastheads and publishing titles;
3. Computer software;
4. Licences and franchises;
5. Copyrights, patents and other industrial property rights, service and operating rights;
6. Recipes, formulae, models, designs and prototypes; and
7. Intangible assets under development.

The above classes may be disaggregated or aggregated into smaller or larger classes if this results in more relevant information for the users of the financial statements.

6.6.2.4 No Active Market

If an intangible asset in a class of revalued intangible assets cannot be revalued because, as explained above, there is no active market for this asset, the asset is carried at its cost less any accumulated amortisation and impairment losses (IAS 38.81).

If the fair value of a revalued intangible asset can no longer be determined by reference to an active market, the carrying amount of the asset is its revalued amount at the date of the last revaluation by reference to the active market less any subsequent accumulated amortisation and any subsequent accumulated impairment

losses (IAS 38.82). If the fair value of the asset can be determined by reference to an active market at a subsequent measurement date, the revaluation model is applied from that date.

The disappearing of an active market for an intangible asset is an indication of asset impairment, and the entity is required to assess whether there is any impairment loss on the asset in accordance with IAS 36.

Example 6.12 Export-Expert Limited (EE) is experienced in the import and export business for different customers in Madagascar, Africa. Its intangible assets in the balance sheet represent the export quota granted by the government and acquired in the open market. All such assets are carried at a fair value of \$10 million (revaluation surplus of \$8 million) at 31 December 2006, the balance sheet date, by using the revaluation model. The quota market is regarded as an active market.

On 5 January 2007, Madagascar declared that the export quota system would be abolished and amended with immediate effect. Quotas in certain export areas were no longer required, and quotas in the remaining areas would have a 2-year standstill period, after which the quota would probably not be required. During the standstill period, quotas were not allowed for transfer unless government approval was granted.

EE estimated that half of its intangible assets, amounting to \$5 million, should be written off and the fair value of the remaining intangible assets subject to standstill should be \$4 million at 31 December 2007.

In respect of the intangible assets subject to standstill, EE proposed to offset the decrease of fair value of \$1 million to revaluation surplus and carry the assets at \$4 million in the balance sheet.

Discuss the proposed accounting treatment on the fair value of the intangible assets subject to standstill.

Answers

IAS 38 specifies that if the fair value of a revalued intangible asset can no longer be determined by reference to an active market, the carrying amount of the asset is its revalued amount at the date of the last revaluation by reference to the active market less any subsequent accumulated amortisation and any subsequent accumulated impairment losses.

EE's intangible assets subject to standstill are not allowed for free transfer. In consequence, the market for the assets cannot be deemed as an active market and the intangible assets should not be stated at their revalued amount, but should be stated on the above basis.

The revalued amount at 31 December 2006 for the assets was \$5 million. As there is a 2-year standstill period, the estimated useful lives can be deemed to be 2 years. The carrying amount at 31 December 2007 should be \$2.5 million ($\$5 \text{ million} \div 2 \text{ years}$), instead of the fair value of \$4 million. While the fair value is higher than the carrying amount calculated, no impairment loss will result.

6.6.2.5 Revaluation Surplus and Deficit

If an intangible asset is revalued, any accumulated amortisation at the date of the revaluation is either

1. restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount; or
2. eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

The above treatment on accumulated amortisation is similar to that for property, plant and equipment in Chapter 3. Example 3.5 can be taken as a reference.

If an intangible asset's carrying amount is increased as a result of a revaluation, the entity is required to credit the increase directly to equity under the heading of revaluation surplus. However, if there is a revaluation decrease of the same asset already recognised in profit or loss previously, the entity is required to recognise the increase in profit or loss to the extent that it reverses the previous revaluation decrease (IAS 38.85).

If an intangible asset's carrying amount is decreased as a result of a revaluation (i.e., revaluation deficit), the entity is required to recognise the decrease in profit or loss. However, if there is a revaluation surplus already recognised in respect of that asset, the entity is required to debit the decrease directly to the revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset. An accumulated revaluation surplus of an asset cannot be offset with the accumulated revaluation deficit of another asset.

Example 6.13 Based on Example 6.12, Export-Expert Limited (EE) further proposed to fully write off the intangible assets of \$5 million in respect of the quota not yet required for export in Madagascar.

In order to better reflect the sudden change in 2007, EE feels that it should charge the write-off to the income statement of 2007 directly.

Discuss the proposal.

Answers

As stated in Example 6.12, EE had a revaluation surplus of \$8 million at 31 December 2006. By assuming that it is related to all intangible assets equally, the revaluation surplus related to the intangible assets written off should be \$4 million.

Based on the requirements of IAS 38, the decrease of fair value should first be debited to the revaluation surplus before it is required to recognise the decrease in profit or loss. In consequence, the revaluation surplus of \$4 million should be written off first and the remaining \$1 million is charged to the income statement. The entries can be summarised as follows:

Dr Revaluation surplus	\$4,000,000	
Profit and loss – Intangible asset written off	1,000,000	
Cr Intangible assets		\$5,000,000
To recognise the intangible assets written off during the year.		

6.6.2.6 Transfer of Revaluation Surplus

The revaluation surplus included in equity in respect of intangible assets may be transferred directly to retained earnings when the surplus is realised on the retirement or disposal of the asset.

However, some of the surplus may be realised as the asset is used by the entity. In such a case, the amount of the surplus realised is the difference between amortisation based on the revalued carrying amount of the asset and amortisation that would have been recognised based on the asset's historical cost. The transfer from revaluation surplus to retained earnings is not made through the income statement. It implies that no revaluation surplus can be recycled to the income statement and revaluation surplus can only be transferred to retained earnings through reserve movements or changes in equity.

Example 6.14 Based on Example 6.12, suggest accounting entries on recognising the amortisation of the intangible assets subject to standstill to Export-Expert Limited (EE) and discuss the implication of the revaluation surplus in respect of these intangible assets.

Answers

The amortisation charge as calculated is \$2.5 million and EE has to make the following entry for the amortisation:

Dr Profit and loss – amortisation charge	\$2,500,000	
Cr Accumulated amortisation (\$5 million ÷ 2 years)		\$2,500,000
To recognise the amortisation made on the intangible assets subject to standstill.		

EE has a revaluation surplus of \$8 million for all of its intangible assets. Assuming that it is related to all intangible assets equally, the revaluation surplus related to the intangible assets subject to standstill should be \$4 million (with a cost of \$1 million). Then, in accordance with IAS 38, this surplus may be realised as the asset is used by EE.

The amount of the surplus realised is the difference between amortisation based on the revalued carrying amount of the asset and amortisation that would have been recognised based on the asset's historical cost. The realisation of the surplus would be:

Dr Revaluation surplus ((\$5 – \$1) million ÷ 2).....	\$2,000,000	
Cr Retained earnings		\$2,000,000
To recognise the realisation of revaluation surplus by direct transfer from revaluation surplus to retained earnings.		

6.7 Useful Life

The measurement after initial recognition for an intangible asset is based on its useful life. For subsequent measurement, an entity has to assess whether the useful life of an intangible asset is

1. finite; or
2. indefinite (IAS 38.88).

Useful life is

- the period over which an asset is expected to be available for use by an entity; or
- the number of production or similar units expected to be obtained from the asset by an entity (IAS 38.8).

If the useful life of an intangible asset is finite, an entity has to assess the length of that useful life, or number of production or similar units constituting that useful life (IAS 38.88). An intangible asset with a finite useful life is amortised.

When an entity's analysis of all relevant factors demonstrates no foreseeable limit to the period over which an intangible asset is expected to generate net cash inflows, that intangible asset is regarded as having an indefinite useful life (IAS 38.88). The term "indefinite" does not mean "infinite". An intangible asset with an indefinite useful life is not subject to amortisation.

Real-life Case 6.5

Next Media Limited

Next Media Limited, a Chinese-language print media conglomerate in Hong Kong, reported its profit for the year ended 31 March 2006 as \$104 million, which had been charged with an amortisation charge on intangible assets of \$92 million, about 88% of the profit.

However, in 2006, such an amortisation charge was no longer required. Instead of charging an amortisation charge, an impairment loss of \$45 million on intangible assets was incurred in that year. Next Media Limited explained that this change resulted from the implementation of HKAS 38 *Intangible Assets* (equivalent to IAS 38) and further clarified that:

**Real-life
Case 6.5**
(cont'd)

- In accordance with the transitional provisions in HKAS 38, the group reassessed the useful lives of its intangible assets on 1 April 2005 and concluded that all intangible assets with a total carrying amount of \$1,345,881,000 recognised under the predecessor accounting standard have indefinite useful lives.
- The group has applied the revised useful lives prospectively and discontinued amortising intangible assets with indefinite useful lives from 1 April 2005. No amortisation has been charged in relation to intangible assets with indefinite useful lives for the year ended 31 March 2006.

6.7.1 Determination of Useful Life

In determining the useful life of an intangible asset, an entity can consider the following factors:

1. The expected usage of the asset by the entity;
2. Typical product life cycles for the asset and public information on estimates of the useful lives of similar assets that are used in a similar way;
3. Technical, technological, commercial or other types of obsolescence;
4. The stability of the industry in which the asset operates, and market demand for its output;
5. Expected actions by competitors or potential competitors;
6. The level of maintenance expenditure required to maintain the status of the asset;
7. The period of control over the asset and legal or similar limits on the use of the asset; and
8. Whether the useful life of the asset is dependent on the useful life of other assets.

Example 6.15 Bonnie Technology Group is reviewing the useful lives of its intangible assets, including computer systems and patents on some technology products. In view of the technological obsolescence and uncertainty, the CFO, Tony Lam, proposes using a more prudent approach in determining the useful lives and believes the lives should be very short. Discuss.

Answers

Given the history of rapid changes in technology, computer software and many other intangible assets are susceptible to technological obsolescence. In consequence, it is likely that their useful lives are short. However, uncertainty only justifies estimating the useful life of an intangible asset on a prudent basis, but it does not justify choosing a life that is unrealistically short.

Real-life

Case 6.6

LVMH Moët Hennessy – Louis Vuitton (LVMH Group)

LVMH Group, a group with some worldwide prestige brands, gave the following explanation in its financial statements of 2007:

- Only brands, trade names and other intangible assets with finite useful lives are amortized over their useful lives.
- The classification of a brand or trade name as an asset of definite or indefinite useful life is generally based on the following criteria:
 - The brand or trade name's positioning in its market expressed in terms of volume of activity, international presence and notoriety;
 - Its expected long-term profitability;
 - Its degree of exposure to changes in the economic environment;
 - Any major event within its business segment liable to compromise its future development; and
 - Its age.

6.7.1.1 Planned Future Expenditure

Planned future expenditure in excess of that required to maintain the asset at that standard of performance should not be considered in concluding that the useful life of an intangible asset is indefinite. The useful life of an intangible asset can only reflect the following:

1. The level of future maintenance expenditure required to maintain the asset at its standard of performance assessed at the time of estimating the asset's useful life; and
2. The entity's ability and intention to reach such a level.

6.7.1.2 Contractual or Other Legal Rights

For an intangible asset arising from contractual or other legal rights, an entity cannot determine that its useful life is longer than the period of the contractual or other legal right, but may determine a shorter useful life over which the entity expects to use the asset (IAS 38.94).

The useful life of an intangible asset is the shorter of the periods determined by both economic and legal factors.

1. Economic factors determine the period over which future economic benefits will be received by the entity.
2. Legal factors may restrict the period over which the entity controls access to these benefits.

6.7.1.3 Renewal Periods

The renewal periods for contractual or other legal rights can be regarded as part of the useful life of an intangible asset only if no significant cost is required on the renewal (IAS 38.94).

Example 6.16 Existence of the following factors, among others, indicates that an entity would be able to renew the contractual or other legal rights without significant cost:

1. There is evidence, possibly based on experience, that the contractual or other legal rights will be renewed. If renewal is contingent upon the consent of a third party, this includes evidence that the third party will give its consent.
2. There is evidence that any conditions necessary to obtain renewal will be satisfied.
3. The cost to the entity of renewal is not significant when compared with the future economic benefits expected to flow to the entity from renewal.

If the cost of renewal is significant when compared with the future economic benefits expected to flow to the entity from renewal, the renewal cost represents, in substance, the cost to acquire a new intangible asset at the renewal date. Thus, such renewal period should not be considered as part of the useful life of the original cost of the intangible asset.

Example 6.17 After the implementation of the new quota system, Export-Expert Limited (EE) signed a 3-year agreement with the Madagascar government to manage all the facilities in its cargo terminals on 1 April 2007. EE provides all human resources and logistic planning and administrative support, and the government is responsible for all the maintenance and renewal of the facilities.

EE and the Madagascar government agreed that if EE meets the expected level of performance, the agreement will be renewed for another 3 years at no cost. EE is required to make a deposit of \$12 million to the customer department. The deposit will be refunded only when the agreement is terminated by the Madagascar government.

EE would initially charge a fee of \$100 per cargo. Increase or decrease of the fee is subject to mutual agreement between EE and the Madagascar customs department. EE has agreed with its auditor that the expenditure on the agreement is an intangible asset. EE has confidence that the deposit can be recovered from the net cash inflow in the first year. Because of the uncertainty on the inflation rate, EE is not certain whether the cash flow can still be positive in the renewal term of the agreement.

Discuss the accounting implication of this agreement.

Answers

The deposit made in the agreement is, in substance, an expenditure on the agreement as the chance of refund is low (only when the Madagascar government ceases the agreement itself). Thus, the deposit of \$12 million is an intangible asset that can be capitalised at cost when the recognition criteria are met. The agreement seems to be based on an arm's length negotiation with the government; it may not be regarded as a government grant.

Since there is no active market on the agreement, EE can only use the cost model to subsequently measure the asset and has to assess its useful life to measure at each reporting date. The intangible asset is carried at cost less accumulated amortisation and any accumulated impairment losses.

According to the agreement, the initial term is 3 years with a renewal term for another 3 years at no cost. From a contractual or legal perspective, the asset's useful life is 6 years in total. However, EE is not certain whether the cash flow can still be positive in the renewal term of the agreement. Even though the legal term is 6 years, EE's economic factors on hand may support only 3 years over which future economic benefits can be received by EE. It may also explain why EE has signed an initial term of only 3 years, not 6 years.

In consequence, the useful life of this intangible asset would be only 3 years.

6.8 Intangible Assets with Finite Useful Lives

The subsequent measurement of intangible assets with finite useful lives is similar to that of property, plant and equipment (see Chapter 3). IAS 38 requires amortisation on this type of intangible asset and specifies that the depreciable amount of an intangible asset with a finite useful life is allocated on a systematic basis over its useful life (IAS 38.97).

Amortisation is the systematic allocation of the depreciable amount of an intangible asset over its useful life (IAS 38.8).

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value (IAS 38.8).

The amortisation charge for each period is recognised in profit or loss unless another accounting standard permits or requires the amortisation charge to be included in the carrying amount of another asset (IAS 38.97).

Example 6.18 Amortisation of intangible assets may be absorbed in producing other assets in the following situations:

- The amortisation of intangible assets used in a production process is included in the carrying amount of inventories under IAS 2 *Inventories* (see Chapter 9).
- The amortisation of intangible assets used in developing an entity's own property is included in the carrying amount of property, plant and equipment or investment property under IAS 16 *Property, Plant and Equipment* or IAS 40 *Investment Property* depending on the usage of the property (see Chapters 3 and 5).

- The amortisation of intangible assets used in construction contract work is one of the costs incurred to be included in gross amount due to or from the customers under IAS 11 *Construction Contracts* (see Chapter 10).

6.8.1 Amortisation Period

Amortisation begins when the asset is available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. In contrast, amortisation ceases at the earlier of

1. the date that the asset is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* (see Chapter 22); and
2. the date that the asset is derecognised (IAS 38.97).

Even if an intangible asset with a finite useful life may be no longer used, its amortisation does not cease, unless it has been fully depreciated or is classified as held for sale as discussed above.

6.8.2 Amortisation Method

An entity is required to ensure that the amortisation method used reflects the pattern in which the intangible asset's future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method is used (IAS 38.97).

A variety of amortisation methods, including the straight-line method, the diminishing balance method and the unit of production method, can be used.

6.8.3 Residual Value

An entity is required to assume the residual value of an intangible asset with a finite useful life to be zero unless:

1. There is a commitment by a third party to purchase the asset at the end of its useful life; or
2. There is an active market for the asset; and
 - a. Residual value can be determined by reference to that market; and
 - b. It is probable that such a market will exist at the end of the asset's useful life (IAS 38.100).

The **residual value** of an intangible asset is defined as the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life (IAS 38.8).

The depreciable amount of an asset with a finite useful life is determined after deducting its residual value. A residual value other than zero implies the expectation of the entity to dispose of the intangible asset before the end of its economic life.

In case the residual value of an intangible asset increases to an amount equal to or greater than its carrying amount, the amortisation charge is zero unless its residual value subsequently decreases to an amount below its carrying amount.

6.8.4 Review at Least at Each Financial Year-end

At least at each financial year-end, an entity is required to review the amortisation period, the amortisation method and the residual value for an intangible asset with a finite useful life (IAS 38.104).

If the expected useful life of the asset is different from previous estimates, the entity is required to change the amortisation period accordingly. If there has been a change in the expected pattern of consumption of the future economic benefits embodied in the asset, the entity is required to change the amortisation method to reflect the changed pattern (IAS 38.104). The entity is also required to update any change in the estimated residual value.

All these changes in an intangible asset are accounted for as changes in accounting estimates in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. It requires a prospective recognition of the effect of a change in an accounting estimate, and the change is applied to transactions, other events and conditions from the date of the change in estimate (see Chapter 20).

Real-life

Case 6.7

Beijing Enterprises Holdings Limited

In reviewing its amortisation period and amortisation method for an intangible asset, Beijing Enterprises Holdings Limited made the following clarification in its annual report of 2006:

- Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired.
- The amortisation period and the amortisation method for an intangible asset with indefinite useful life are reviewed at least at each balance sheet date.

IAS 38 requires the review at least at each financial year-end, but Beijing Enterprises Holdings Limited even requires the review at least at each balance sheet date.

Example 6.19 Based on Example 6.17:

1. Calculate the carrying amount of the intangible asset in the balance sheet of Export-Expert Limited (EE) for the year ended 31 December 2007 (without considering the information in Part (2) below).
2. EE has received a proposal from a third party to buy its rights under the agreement with the Madagascar government at the beginning of 2008. The third party proposes to buy up its right at \$20 million at the end of 2008 or at \$6 million at the end of 2010.
Discuss the accounting implication of this proposal.

Answers

1.	Initial cost of the intangible asset at 1 April 2007.....	\$12 million
	Amortisation for 2007 ($\$12 \text{ million} \div 36 \text{ months} \times 9 \text{ months}$).....	(3 million)
	Carrying amount at 31 December 2007.....	<u>9 million</u>

2. The proposal if signed can serve as a commitment by a third party to purchase the asset at the end of its useful life to EE, and the consideration can be regarded as a residual value of this intangible asset. IAS 38 requires EE to review not only the residual value but also the amortisation period at least at each financial year-end.

In consequence, if the proposal is finalised with a consideration of \$20 million at the end of 2008, the remaining useful life of the asset will be one year with a residual value of \$20 million and no amortisation will be required accordingly.

If the proposal is finalised with a consideration of \$6 million at the end of 2010, the remaining useful life of the asset will be 3 years with a residual value of \$6 million. Then, the amortisation for 2008 and carrying amount at the end of 2008 would be as shown:

	Carrying amount at 31 December 2007.....	\$9 million
	Amortisation for 2008 ($(\$9 \text{ million} - \$6 \text{ million}) \div 3 \text{ years}$).....	(1 million)
	Carrying amount at 31 December 2008.....	<u>8 million</u>

Even though the proposal may not be finalised ultimately, the proposal is an indication that the estimated useful life of the intangible asset may well extend beyond 2010, since the third party has already expressed its intention to buy the rights even after the renewal. It implies that EE's original assessed uncertainty on the future economic benefits during the renewal term may not be valid in 2008. In accordance with IAS 38, EE is required to review the amortisation period and, if it is revised, account for the amendment prospectively.

6.9 Intangible Assets with Indefinite Useful Lives

An intangible asset with an indefinite useful life is not subject to amortisation (IAS 38.107). Instead, it is subject to at least an annual impairment testing. In accordance with IAS 36 *Impairment of Assets*, an entity is required to test an intangible asset with an indefinite useful life for impairment by comparing its recoverable amount with its carrying amount

1. annually; and
2. whenever there is an indication that the intangible asset may be impaired.

Example 6.20 Based on Examples 6.17 and 6.19, Export-Expert Limited has finally reached an agreement with Madagascar Vision Inc. (MV), which would take up EE's rights in the agreement with the Madagascar government at a consideration of \$20 million from 1 January 2009.

MV, leveraged with its relationship and experience with the government, has negotiated with the Madagascar government to amend the renewal term. MV will pay \$20 million to the government on 1 January 2009 and, in return, the expiry date of agreement will be extended from 31 March 2010 to 31 December 2011. MV can also renew the agreement term without limited frequency at minimal cost only if MV complies with the government's expected level of performance.

An international independent valuer has tendered a report to MV that, based on its estimate, the cash flow from this amended agreement would still be positive within the estimation horizon.

Discuss the accounting implication to MV.

Answers

The intangible asset of MV will be carried at a cost of \$40 million if the amendment is finalised with the government.

Since the renewal can be made indefinitely at minimal cost, and the analysis of all relevant factors (supported by the valuer) demonstrates no foreseeable limit to the period over which the asset is expected to generate net cash inflows, the asset can be regarded as having an indefinite useful life.

In consequence, the intangible asset would not be amortised until its useful life is determined to be finite and it would only be tested for impairment in accordance with IAS 36 annually and whenever there is an indication that it may be impaired.

Real-life Case 6.8

Air France – KLM Group

Air France – KLM Group, like other European listed entities, adopted IFRSs in preparing its financial statements and summarised its accounting policy on intangible assets with definite and indefinite useful life as follows:

**Real-life
Case 6.8**
(cont'd)

- Intangible assets are recorded at initial cost less accumulated amortisation and any accumulated impairment losses.
- Identifiable intangible assets acquired with a finite useful life are amortised over their useful life from the date they are available for use.
- Identifiable intangible assets acquired with an indefinite useful life are not amortised but tested annually for impairment or whenever there is an indication that the intangible asset may be impaired.

6.9.1 Review of Useful Life Assessment

Each period, an entity is required to review the useful life of an intangible asset that is not being amortised to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If the events and circumstances do not continue to support the indefinite useful life assessment, the entity is required to account for the effect of the change from indefinite to finite useful life as a change in an accounting estimate in accordance with IAS 8 (IAS 38.109).

A change from indefinite to finite useful life for an intangible asset is an indicator that the asset may be impaired. In accordance with IAS 36, the asset should be tested for impairment by comparing its recoverable amount with its carrying amount, and any excess of the carrying amount over the recoverable amount should be recognised as an impairment loss.

**Real-life
Case 6.9**
Esprit Holdings Limited

Esprit Holdings Limited, an international fashion company that has adopted IFRS since 2004, judged that its acquired Esprit trademarks (near 40% of its non-current assets, or HK\$2 billion) were “indefinite-lived”. In respect of its indefinite-lived Esprit trademarks, Esprit Holdings Limited explained its accounting policy and annual assessment respectively in its annual report of 2007 as follows:

- Trademarks are shown at historical cost. Trademarks with indefinite useful lives are carried at cost less accumulated impairment losses, if any.
- Trademarks with indefinite useful lives are not amortised but are tested for impairment.
- Under IAS 38, the group re-evaluates the useful life of Esprit trademarks each year to determine whether events and circumstances continue to support the view of indefinite useful life for this asset.

6.10 Impairment Losses

In addition to the annual impairment assessment requirement applied to intangible assets with an indefinite useful life, an entity is also required to apply IAS 36

Impairment of Assets to determine whether an intangible asset is impaired. Chapter 8 further explains the requirements of impairment in accordance with IAS 36.

An **impairment loss** is the amount by which the carrying amount of an asset exceeds its recoverable amount (IAS 38.8).

6.11 Retirements and Disposals

An entity derecognises an intangible asset

1. on disposal; or
2. when no future economic benefits are expected from its use or disposal (IAS 38.112).

The gain or loss arising from the derecognition of an intangible asset is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the asset, and is recognised in profit and loss when the asset is derecognised. Gains shall not be classified as revenue (IAS 38.113).

6.11.1 Disposal

The disposal of an intangible asset may occur in a variety of ways, e.g., by sale, by entering into a finance lease or by donation. An entity applies the criteria in IAS 18 *Revenue* for recognising revenue from the sale of goods in order to determine the date of disposal of such an asset. An entity applies IAS 17 *Leases* to disposal by a sale and leaseback.

The consideration receivable on disposal of an intangible asset is initially recognised at its fair value. If payment is deferred, the consideration receivable is initially recognised at the cash price equivalent. The difference between the nominal amount of the consideration and the cash price equivalent is recognised as interest revenue in accordance with IAS 18 reflecting the effective yield on the receivable.

6.11.2 Replacement

If an entity recognises the cost of a replacement for part of an intangible asset, it is required to derecognise the carrying amount of the replaced part. If it is not practicable to determine the carrying amount of the replaced part, the entity may use the cost of the replacement as an indication of the original cost of the replaced part at its initial recognition.

6.12 Disclosure

6.12.1 General Disclosure

For each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets, an entity is required to disclose the following:

1. Whether the useful lives are indefinite or finite, and, if finite, the useful lives or the amortisation rates used;

2. The amortisation methods used for intangible assets with finite useful lives;
3. The gross carrying amount and any accumulated amortisation (aggregated with accumulated impairment losses) at the beginning and end of the period;
4. The line item(s) of the income statement in which any amortisation of intangible assets is included;
5. A reconciliation of the carrying amount at the beginning and end of the period showing
 - a. additions, indicating separately those from internal development, those acquired separately, and those acquired through business combinations;
 - b. assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
 - c. increases or decreases during the period resulting from revaluations (i.e., the requirements under the revaluation model) and from impairment losses recognised or reversed directly in equity in accordance with IAS 36 *Impairment of Assets* (if any);
 - d. impairment losses recognised in profit or loss during the period in accordance with IAS 36 (if any);
 - e. impairment losses reversed in profit or loss during the period in accordance with IAS 36 (if any);
 - f. any amortisation recognised during the period;
 - g. net exchange differences arising on the translation of the financial statements into the presentation currency, and on the translation of a foreign operation into the presentation currency of the entity; and
 - h. other changes in the carrying amount during the period (IAS 38.118).

In addition to the above information required by IAS 38, an entity is required to disclose information on impaired intangible assets in accordance with IAS 36.

IAS 8 requires an entity to disclose the nature and amount of a change in an accounting estimate that has a material effect in the current period or is expected to have a material effect in subsequent periods. Such disclosure may arise from changes in

1. the assessment of an intangible asset's useful life (i.e., amortisation period);
2. the amortisation method; or
3. residual values.

An entity is also required to disclose the following:

1. For an intangible asset assessed as having an indefinite useful life, the carrying amount of that asset and the reasons supporting the assessment of an indefinite useful life. In giving these reasons, the entity is required to describe the factor(s) that played a significant role in determining that the asset has an indefinite useful life (a list of factors can be found in Section 6.7.1);
2. A description, the carrying amount and remaining amortisation period of any individual intangible asset that is material to the entity's financial statements;
3. For intangible assets acquired by way of a government grant and initially recognised at fair value:
 - a. The fair value initially recognised for these assets;

- b. Their carrying amount; and
- c. Whether they are measured after recognition under the cost model or the revaluation model;
4. The existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities;
5. The amount of contractual commitments for the acquisition of intangible assets (IAS 38.122).

Real-life**Case 6.10****Esprit Holdings Limited**

To support its assessment of indefinite-lived intangible assets, Esprit Holdings Limited made the following disclosure in its 2007 annual report:

- The group's acquired Esprit trademarks are classified as an indefinite-lived intangible asset in accordance with IAS 38 *Intangible Assets*. This conclusion is supported by the fact that Esprit trademark legal rights are capable of being renewed indefinitely at insignificant cost and therefore are perpetual in duration, relate to a well-known and long-established fashion brand since 1968, and based on future financial performance of the group, are expected to generate positive cash flows indefinitely.
- This view is supported by an independent professional appraiser, who was appointed by the group to perform an assessment of the useful life of Esprit trademarks in accordance with the requirements set out in IAS 38 as at 30 June 2004. Having considered the factors specific to the group, the appraiser opined that Esprit trademarks should be regarded as an intangible asset with an indefinite useful life.
- Under IAS 38, the group re-evaluates the useful life of Esprit trademarks each year to determine whether events and circumstances continue to support the view of indefinite useful life for this asset.

6.12.2 Intangible Assets under the Revaluation Model

If intangible assets are accounted for at revalued amounts (i.e., by using the revaluation model), an entity is required to disclose the following:

1. By class of intangible assets:
 - a. The effective date of the revaluation;
 - b. The carrying amount of revalued intangible assets; and
 - c. The carrying amount that would have been recognised had the revalued class of intangible assets been measured after recognition using the cost model;
2. The amount of the revaluation surplus that relates to intangible assets at the beginning and end of the period, indicating the changes during the period and any restrictions on the distribution of the balance to shareholders; and
3. The methods and significant assumptions applied in estimating the assets' fair values (IAS 38.124).

It may be necessary to aggregate the classes of revalued assets into larger classes for disclosure purposes. However, classes are not aggregated if this would result in the combination of a class of intangible assets that includes amounts measured under both the cost and revaluation models.

6.12.3 Research and Development Expenditure

An entity is required to disclose the aggregate amount of research and development expenditure recognised as an expense during the period (IAS 38.126). Research and development expenditure comprises all expenditure that is directly attributable to research or development activities.

6.12.4 Other Information

An entity is encouraged, but not required, to disclose the following information:

1. A description of any fully amortised intangible asset that is still in use; and
2. A brief description of significant intangible assets controlled by the entity but not recognised as assets because they did not meet the recognition criteria in IAS 38.

6.13 Summary

An intangible asset is an identifiable non-monetary asset without physical substance. IAS 38 *Intangible Assets* prescribes the accounting treatment on those intangible assets within the scope of IAS 38. To meet the definition, IAS 38 further requires that a non-monetary item without physical substance is identifiable, is controlled by the entity and has future economic benefits.

The recognition of an item as an intangible asset under IAS 38 requires an entity to demonstrate that the item not only meets the definition of an intangible asset, but also fulfils the recognition criteria, which include that it is probable for the asset to generate future economic benefits, and its cost can be measured reliably. Then, the intangible asset is initially recognised at cost. Different considerations have to be made when the intangible asset is acquired from different sources, including separate acquisition, acquisition in a business combination, acquisition by way of a government grant, exchange of assets, and goodwill and intangible assets generated internally.

Expenditure on an internally generated intangible asset, or research and development, can be recognised only when the additional six specific recognition criteria are fulfilled. Expenditure not fulfilling the general and specific recognition criteria can only be charged to profit or loss and cannot be reinstated even if the recognition criteria are met later.

After initial recognition, an entity can choose either the cost model or the revaluation model to subsequently measure an intangible asset, unless there is no active market for the asset. An intangible asset without an active market can be accounted for by using the cost model. Both models require the determination of amortisation and impairment (if criteria are met) in order to derive the carrying amount of an intangible, except for those classified as having indefinite useful life.

The useful life of an intangible asset determines the asset's measurement after recognition. An entity is also required to assess whether it has a finite or an indefinite useful life. Amortisation is required on an intangible asset with a finite useful life but is not required for an intangible asset with an indefinite useful life. Annual impairment testing, instead, is required on those intangible assets not subject to amortisation.

An intangible asset is derecognised when it is on disposal or when no future economic benefits are expected from its use or disposal.

Review Questions

1. List the accounting standards that prescribe the accounting for a specific type of intangible asset.
2. What is an intangible asset?
3. When does an entity recognise an intangible asset?
4. What is the initial measurement basis in the recognition of an intangible asset acquired separately, in a business combination, by way of a government grant and through exchange of assets?
5. What kinds of difficulties may be encountered in recognising intangible assets generated internally?
6. When can an intangible asset generated internally be recognised?
7. How can an entity distinguish research from development?
8. What is the consequence if an entity cannot recognise the expenditure on an intangible asset generated internally?
9. How can an entity determine the cost of an internally generated intangible asset?
10. State the measurement basis after an intangible asset has been recognised.
11. Why is an entity required to assess whether an intangible asset has an active market before it can be measured at a revalued amount?
12. How does an entity account for the revaluation surplus and deficit under the revaluation model?
13. Why is the determination of the useful life of an intangible asset critical in subsequently measuring the asset?
14. What is the accounting treatment for an intangible asset with a finite useful life?
15. What should be considered when an entity determines the amortisation period, amortisation method and residual value of an intangible asset?
16. What is the accounting treatment for intangible assets with a definite useful life?
17. When does an entity derecognise an intangible asset?

Exercises

- Exercise 6.1** Advance-Pioneer Engineering Limited develops a new production process in manufacturing its products. It has registered this process and obtained a patent on the process. Part of the cost in developing the process has been capitalised as intangible assets in accordance with IAS 38. An unrelated engineering company approached

Advance-Pioneer to license the process for a 20-year period at \$20 million. Before deciding whether the process should be licensed to this unrelated party, Advance-Pioneer proposes to revalue the process and use the revaluation model to account for the process in accordance with IAS 38.

Discuss the proposal to use the revaluation model to account for the process recognised as intangible assets in the balance sheet.

Exercise 6.2 The intangible assets of Issue are the data purchase and data capture costs of internally developed databases and are capitalised as development expenditure and written off over 4 years.

Evaluate and comment on the accounting treatment of Issue.

(ACCA 3.6 June 2003, adapted)

Problems

Problem 6.1 BA trademark has a remaining legal life of 5 years but is renewable every 10 years at little cost. FTHS Limited has acquired this trademark and intends to renew the trademark continuously, and evidence supports its ability to do so.

An analysis of (1) product life cycle studies, (2) market, competitive and environmental trends, and (3) brand extension opportunities provides evidence that the trademarked product will generate net cash inflows for the acquiring entity for an indefinite period.

How should FTHS account for the transactions?

Problem 6.2 Pohler Speed was fined on 10 October 2006 for the receipt of government subsidies that were contrary to a supranational trade agreement. The subsidies were used to offset trade losses in previous years. Pohler Speed has to repay the government \$300 million plus interest of \$160 million. The total repayment has been treated as an intangible asset that is being amortised over 20 years with a full year's charge in the year.

Comment on the accounting treatment of Pohler Speed.

(ACCA 3.6 December 2004, adapted)

Problem 6.3 Airline Express Inc. obtains a route permit from the route authority, and it may be renewed every 5 years. Airline Express intends to comply with the applicable rules and regulations surrounding renewal. Route permits are routinely granted at minimal cost and historically have been renewed when the airline has complied with the applicable rules and regulations.

Airline Express expects to provide service indefinitely between the two cities from its hub airports and expects that the related supporting infrastructure (airport gates, slots and terminal facility leases) will remain in place at those airports for as long as it has the route permit. An analysis of demand and cash flows supports those assumptions.

Discuss the implication of the transactions and propose the useful life of the permit obtained.

Case Studies

Case Study 6.1

HSBC Holdings plc recognised intangible assets in its balance sheet and clarified in its 2006 annual report that “intangible assets include the value of in-force long-term insurance business, computer software, trade names, mortgage servicing rights, customer lists, core deposit relationships, credit card customer relationships and merchant or other loan relationships”.

IAS 38 requires that internally generated brands, mastheads, publishing titles, customer lists and items similar in substance are not recognised as intangible assets.

Discuss the case of HSBC and evaluate the accounting treatment of intangible assets.

Case Study 6.2

Perfect Industry Company Limited (PI) is an experienced original equipment manufacturer (OEM) in cameras. However, it focuses on film camera production while its production of compact digital cameras (CDC) accounts for only 10% of its production. PI realises that the market for traditional film cameras is declining in terms of demand and profit margin because customers are shifting to digital cameras.

In view of the market sentiment, PI is considering becoming an original brand manufacturer (OBM) for budget CDCs, CDCs with lower pixels, using its “Perfection” brand. Following this strategy, PI can retain its manufacturing facilities with minimal modification at a cost of approximately \$10 million. However, substantial expenditure would be needed to develop the company’s brand name “Perfection” in the PRC market over the next few years. In the long run, PI may need to outsource its manufacturing activities and form joint ventures with PRC manufacturers. Following this option, PI would need to reposition itself as a market-oriented organisation rather than a manufacturing organisation.

Discuss the key financial reporting issues in relation to the development costs of the brand name “Perfection” in the PRC.

(HKICPA FE June 2004, adapted)

Case Study 6.3

PA Group operates in the pharmaceutical industry and incurs a significant amount of expenditure on the development of products. These costs were formerly written off to the income statement as incurred but then reinstated when the related products were brought into commercial use. The reinstated costs are shown as “Development Inventory”. The costs do not meet the criteria in IAS 38 *Intangible Assets* for classification as intangibles, and it is unlikely that the net cash inflows from these products will be in excess of the development costs. In the current year, PA has included \$20 million of these costs in inventory. Of these costs, \$5 million relates to expenditure on a product written off in periods prior to 1 December 1999. Commercial sales of this product had commenced during the current period.

The accountant now wishes to ensure that the financial statements comply strictly with IAS as regards this matter. Advise the accountant.

(ACCA 3.6 December 2002, adapted)

**Case
Study 6.4**

Seejoy is a famous football club but has significant cash flow problems. The directors and shareholders wish to take steps to improve the club's financial position. The following proposal was drafted in an attempt to improve the cash flow of the club. However, the directors need advice about its implications.

Player registrations

The club capitalises the unconditional amounts (transfer fees) paid to acquire players.

The club proposes to amortise the cost of the transfer fees over 10 years instead of the current practice, which is to amortise the cost over the duration of the player's contract. The club has sold most of its valuable players during the current financial year but still has two valuable players under contract.

Player	Transfer fee capitalised \$ million	Amortisation to 31 December 2006 \$ million	Contract commenced	Contract expires
A. Steel	20	4	1 January 2006	31 December 2010
R. Aldo	15	10	1 January 2005	31 December 2007

If Seejoy wins the national football league, then a further \$5 million will be payable to the two players' former clubs. Seejoy is currently performing very poorly in the league.

Required:

Discuss how the above proposal would be dealt with in the financial statements of Seejoy for the year ending 31 December 2007, setting out their accounting treatment and appropriateness in helping the football club's cash flow problems.

(No knowledge of the football finance sector is required to answer this case study.)

(ACCA 3.6 December 2006, adapted)

7

Borrowing Costs

Learning Outcomes

This chapter enables you to understand the following:

- 1 How to determine which expenses constitute borrowing costs
- 2 The determining criteria for qualified assets
- 3 Which borrowing costs are eligible for capitalisation
- 4 The timing in commencing capitalisation of borrowing costs
- 5 The issues relating to suspension and cessation of capitalisation of borrowing costs
- 6 Appropriate disclosures in respect of borrowing costs

**Real-life
Case 7.1**
Cheung Kong (Holdings) Limited and Sino Gas Group Limited

Cheung Kong (Holdings) Limited is a property development and strategic investment company. It is one of the largest developers in Hong Kong of residential, commercial and industrial properties. The company also has substantial interests in hotel and serviced suite operation, property and project management, investment in securities, operations in life sciences and other businesses in Hong Kong, Mainland China, Singapore and the United Kingdom. The group stated the following accounting policy for borrowing costs in its annual report of 2006:

- Borrowing costs are charged to the profit and loss account in the year in which they are incurred unless they are capitalised as being directly attributable to the acquisition and development of properties which necessarily take a substantial period of time to complete.

On the other hand, the 2006 annual report of Sino Gas Group Limited (a company principally engaged in the operation of petroleum, CNG and LPG refuelling stations, trading of gas-related products, and securities trading and investment holding in Hong Kong and Mainland China) stated the following accounting policy for borrowing costs:

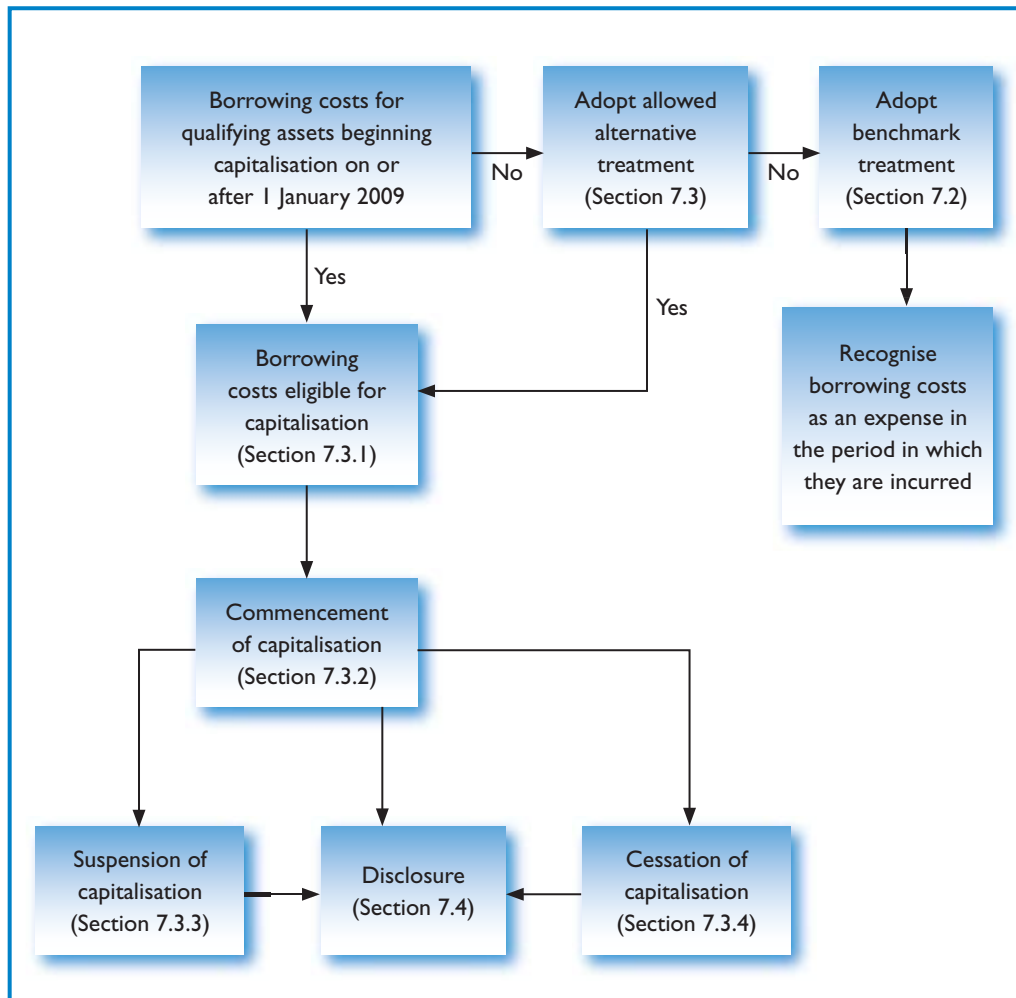
- Borrowing costs are recognised as expenses in the income statement in the period which they are incurred.

After reading the above accounting policies for borrowing costs in the annual reports of Cheung Kong (Holdings) Limited (Cheung Kong) and Sino Gas Group Limited (Sino Gas), you may be interested to find out that different companies have different accounting policies for borrowing costs. If the amount of borrowing costs to be capitalised is immaterial, whether to expense or capitalise it does not make much difference. But what if the amount is material? For example, for the year ended 31 December 2006, Cheung Kong capitalised HK\$803 million borrowing costs, which represented 4.12% of its profit before taxation (HK\$19,492 million) for the same period. This chapter will discuss the benchmark treatment (the one adopted by Sino Gas) and the allowed alternative treatment (the one adopted by Cheung Kong) for borrowing costs. You will also learn about the revised IAS 23 *Borrowing Costs* issued by the International Accounting Standards Board (IASB) in March 2007, which essentially removes the benchmark treatment and specifies the use of the allowed alternative treatment in all cases to enhance comparability.

7.1 Applicable Standard and Scope

IASB issued revised IAS 23 *Borrowing Costs* in March 2007 as part of its short-term convergence project to reduce differences between IFRSs and US generally accepted accounting principles (GAAP). The amendments apply to borrowing costs relating to qualifying assets for which an entity begins capitalisation on or after 1 January 2009 (see Figure 7.1).

FIGURE 7.1 Accounting treatment for borrowing costs



IAS 23 specifies the accounting treatment for borrowing costs. An entity is required to apply IAS 23 in accounting for borrowing costs. However, IAS 23 does not deal with the actual or imputed cost of equity, including preferred capital not classified as a liability. An entity is also not required to apply IAS 23 to borrowing costs directly attributable to the acquisition, construction and production of qualifying assets measured at fair value, say a biological asset, or to inventories that are manufactured, or otherwise produced, in large quantities on a repetitive basis.

Borrowing costs are interest and other costs an entity incurs in connection with the borrowing of funds.

Borrowing costs may include

1. interest on bank overdrafts and short-term and long-term borrowings;
2. amortisation of discounts or premiums relating to borrowings;
3. amortisation of ancillary costs incurred in connection with the arrangement of borrowings;
4. finance charges in respect of finance leases recognised under IAS 17 *Leases* (see Chapter 4); and
5. exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

7.2 Transitional Arrangement

The revised IAS 23 is applicable for annual periods beginning on or after 1 January 2009, but earlier application is permitted. If an entity applies the revised IAS 23 from a date before 1 January 2009, the early adoption is to be disclosed in the notes to the financial statements. For borrowing costs relating to qualifying assets for which it begins capitalisation before 1 January 2009, an entity is allowed to adopt either the benchmark treatment or the allowed alternative treatment (see Table 7.1). Under the benchmark treatment, borrowing costs are recognised as an expense in the period in which they are incurred regardless of how the borrowings are applied, and the financial statements disclose the accounting policy adopted for borrowing costs. Sino Gas adopts this accounting treatment (see Real-life Case 7.1).

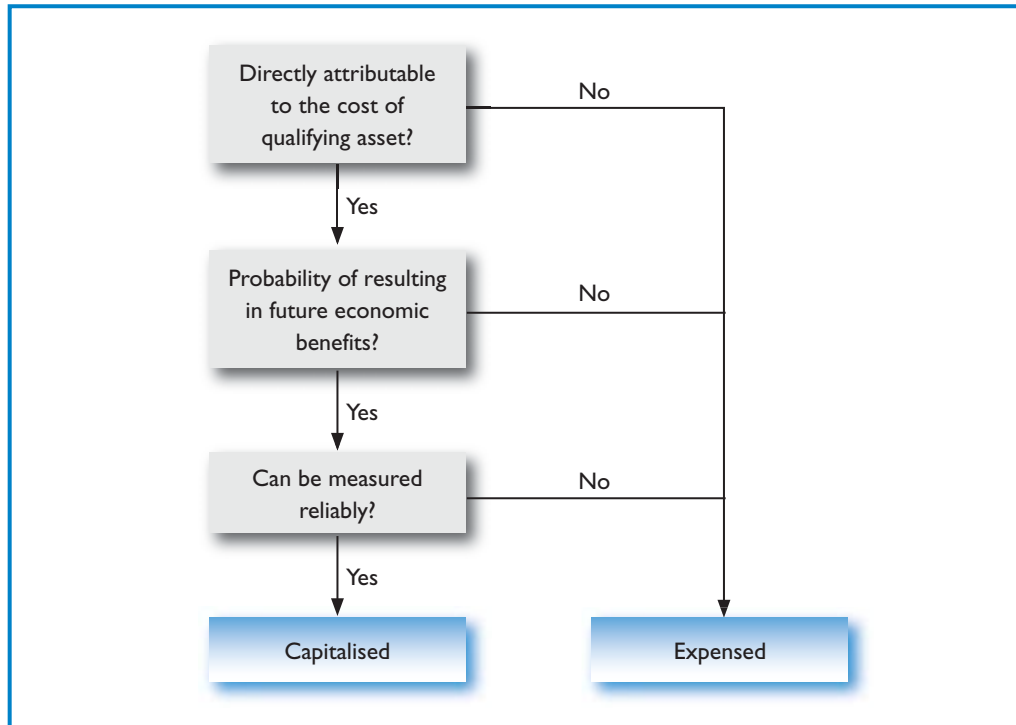
Under the revised IAS 23, the benchmark treatment for immediately recognising borrowing costs as expenses is no longer allowed and an entity can only use the allowed alternative treatment. IASB concluded that the cost of the asset should include all costs necessarily incurred to get the asset ready for its intended use or sale, including the cost incurred in financing the expenditures as part of the asset's acquisition cost (IAS 23 BC9). They also concluded that the removal of a choice of accounting treatment and convergence in principle with US GAAP will enhance comparability (IAS 23 BC10). IASB acknowledges, "capitalising borrowing costs does not achieve comparability between assets that are financed with borrowings and those financed with equity. However, it achieves comparability among all non-equity financed assets, which is an improvement" (IAS 23 BC10). The remaining part of the chapter discusses comprehensively the allowed alternative treatment.

TABLE 7.1

Capitalisation of borrowing costs

Benchmark treatment	Allowed alternative treatment
Borrowing costs are recognised as expense when incurred.	Borrowing costs are recognised as expense to the extent not capitalised (see Figure 7.2).

FIGURE 7.2 Recognition of borrowing costs



7.3 Recognition

An entity recognises borrowing costs as an expense in the period in which they are incurred, except to the extent that they are capitalised in accordance with IAS 23. An entity capitalises borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. The amount of borrowing costs eligible for capitalisation is determined in accordance with IAS 23. In particular, borrowing costs are capitalised as part of the cost of the asset when:

1. It is probable that they will result in future economic benefits to the entity; and
2. The costs can be measured reliably (see Figure 7.2).

Other borrowing costs are recognised as an expense in the period in which they are incurred. Cheung Kong adopts this accounting treatment (see Real-life Case 7.1).

A **qualifying asset** is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Example 7.1 Examples of qualifying assets:

- Inventories that require a substantial period of time to bring them to a saleable condition;
- Manufacturing plants;
- Power generation facilities;
- Intangible assets;
- Investment properties.

Examples of items that cannot be qualifying assets:

- Financial assets, and inventories that are manufactured, or otherwise produced, over a short period of time;
- Assets that are ready for their intended use or sale when acquired.

Example 7.1 gives some examples of qualified assets and examples of items that cannot be treated as qualified assets. An entity also recognises the impact of inflation in borrowing costs. In accordance with IAS 29 *Financial Reporting in Hyperinflationary Economies*, an entity recognises as an expense the part of borrowing costs that compensates for inflation during the same period.

7.3.1 Borrowing Costs Eligible for Capitalisation

What are borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset? They are borrowing costs that would have been avoided if the expenditure on the qualifying asset had not been made. When an entity borrows funds specifically for the purpose of obtaining a particular qualifying asset, the borrowing costs that directly relate to that qualifying asset can be readily identified.

When the financing activity of an entity is coordinated centrally, it may be difficult to

1. identify a direct relationship between particular borrowings and a qualifying asset; and
2. determine the borrowings that could otherwise have been avoided.

Difficulties also arise when a group uses a range of debt instruments to borrow funds at varying rates of interest, and lends those funds on various bases to other entities in the group. Other complications arise through the use of loans denominated in or linked to foreign currencies, when the group operates in highly inflationary economies and from fluctuations in exchange rates. As a result, the determination of the amount of borrowing costs that are directly attributable to the acquisition of a qualifying asset is difficult and the exercise of judgement is required.

Borrowing costs may be incurred from two sources in obtaining a qualifying asset. Funds could be borrowed generally and used for obtaining a qualifying asset. On the other hand, funds could be borrowed specifically for obtaining a qualifying asset (see Table 7.2).

TABLE 7.2 Sources of funds for borrowing costs

Funds borrowed generally	Funds borrowed specifically
<ul style="list-style-type: none"> • Capitalise Weighted average borrowing costs multiplied by capitalisation rate <p style="text-align: right;">(Section 7.3.1.1)</p>	<ul style="list-style-type: none"> • Capitalise Actual borrowing costs incurred less investment income on temporary investment <p style="text-align: right;">(Section 7.3.1.2)</p>

7.3.1.1 Borrowed Generally and Used for Obtaining a Qualifying Asset

To the extent that an entity borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the entity determines the amount of borrowing costs eligible for capitalisation by applying a capitalisation rate to the expenditures on that asset.

The capitalisation rate is the weighted average of the borrowing costs applicable to the borrowings of the entity that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that an entity capitalises during a period should not exceed the amount of borrowing costs it incurred during that period.

In some circumstances, it is appropriate to include all borrowings of the parent and its subsidiaries when computing a weighted average of the borrowing costs. In other circumstances, it is appropriate for each subsidiary to use a weighted average of the borrowing costs applicable to its own borrowings. Example 7.2 illustrates how to determine the borrowing costs to be capitalised when an entity borrows funds generally for the purpose of obtaining a particular qualifying asset.

Example 7.2 Entity B constructs scientific medical equipment for its own use.

On 1 January 2009, the carrying amount of the equipment, including borrowing costs capitalised previously, is \$60 million. Expenditures incurred for the construction of the equipment during 2009 are as follows:

	\$ million
1 April 2009.....	40
1 July 2009.....	100

Entity B borrows funds generally and uses them for the purpose of constructing the equipment. Its outstanding borrowings on 31 December 2009 and the related interest expenses for the year then ended are as follows:

	Outstanding borrowings (weighted average) \$ million	Interest expenses \$ million
Bank overdrafts (10% per annum)	100.0	10.0
Short-term bank loan (8% per annum)	300.0	24.0
Long-term bank loan (7% per annum)	600.0	42.0
	1,000.0	76.0

Determine the carrying amount of the scientific medical equipment as at 31 December 2009 and prepare the journal entry to account for the borrowing costs capitalised in 2009.

Answers

The appropriate capitalisation rate for interest on general borrowing:

$$\begin{aligned}
 \text{Capitalisation rate} &= \frac{\text{Total borrowing costs for 2009}}{\text{Weighted average total borrowings}} \\
 &= \$76 \text{ m} / \$1,000 \text{ m} \\
 &= 7.6\%
 \end{aligned}$$

Expenditures incurred during 2009

	\$ million	Weighting	\$ million
1 January 2009	60.0	1	60.0
1 April 2009	40.0	9/12	30.0
1 July 2009	100.0	6/12	50.0
	200.0		140.0

$$\begin{aligned}
 \text{Borrowing costs to be capitalised for 2009} &= \text{Weighted average borrowing costs} \times 7.6\% \\
 &= \$140 \text{ m} \times 7.6\% \\
 &= \$10.64 \text{ m}
 \end{aligned}$$

$$\begin{aligned}
 \text{Carrying amount of the equipment as at 31 December 2009} &= \$200 \text{ m} + \$10.64 \text{ m} \\
 &= \$210.64 \text{ m}
 \end{aligned}$$

Journal entry to account for the borrowing costs capitalised in 2009:

Dr Equipment under construction	\$10.64 million	
Cr Interest expenses		\$10.64 million

7.3.1.2 Borrowed Specifically for Obtaining a Qualifying Asset

To the extent that an entity borrows funds specifically for the purpose of obtaining a qualifying asset, the entity determines the amount of borrowing costs eligible for capitalisation as

- the actual borrowing costs incurred on that borrowing during the period;
- less any investment income on the temporary investment of those borrowings.

Example 7.3 illustrates how to determine the borrowing costs to be capitalised when an entity borrows funds specifically for the purpose of obtaining a particular qualifying asset.

Example 7.3 On 1 January 2009, Lam Limited (Lam) borrowed \$150 million to finance the construction of a property, which was expected to take two years to build. Construction work of this qualifying asset was commenced on 1 January 2009.

Lam drew down the loan facilities in two parts in the amounts of \$50 million and \$100 million on 1 January 2009 and 1 July 2009 respectively. Funds used for expenditures on the construction of the property were as follows:

	\$ million
1 January 2009	50
1 July 2009	100

Interest on the loan was fixed at 10% per annum.

Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Answers

	\$ million
Borrowing costs:	
1 January to 30 June 2009 ($\$50 \text{ m} \times 10\% \times \frac{1}{2}$)	2.5
1 July to 31 December 2009 ($\$150 \text{ m} \times 10\% \times \frac{1}{2}$)	7.5
	<u>10.0</u>
Cost of assets:	
Expenditure incurred	150.0
Borrowing costs capitalised	10.0
Carrying amount as at 31 December 2009	<u><u>160.0</u></u>

Journal entry to account for the borrowing costs capitalised in 2009:

Dr Property under construction	\$10.0 million	
Cr Interest expenses		\$10.0 million

The financing arrangements for a qualifying asset may result in an entity obtaining borrowed funds and incurring associated borrowing costs before some or all of the funds are used for expenditures on the qualifying asset. In such circumstances, the funds are often temporarily invested pending their expenditure on the qualifying asset. In determining the amount of borrowing costs eligible for capitalisation during a period, any investment income earned on such funds is deducted from the borrowing costs incurred. Real-life Case 7.2 shows a sample accounting policy relating to the investment income earned on the temporary investment of specific borrowings.

Real-life Case 7.2

Beijing Enterprises Holdings Limited

Beijing Enterprises Holdings Limited is principally engaged in brewery, water treatment and expressway and toll road operations in China. It stated the following accounting policy for borrowing costs in its annual report of 2006:

- Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the costs of those assets.
- Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised.

In Example 7.3, since the amount and timing of funds drawn were the same as the funds used for expenditures on the qualifying asset, there were no surplus funds to invest temporarily and consequently there was no investment income to reduce the gross borrowing costs. Example 7.4 illustrates the situation in which the financing arrangements for constructing the property results in Lam obtaining borrowed funds and incurring associated borrowing costs before some or all of the funds are used for expenditures on the qualifying asset (i.e., the property to be built). The surplus funds were temporarily invested pending their expenditure on the construction of the property, and the investment income earned on such funds is deducted from the borrowing costs incurred.

Example 7.4 Same information as in Example 7.3, except that Lam drew down the loan facilities of \$150 million on 1 January 2009.

Recall that in Example 7.3:

1. On 1 January 2009, Lam borrowed \$150 million to finance the construction of a property which was expected to take 2 years to build. Interest on the loan was fixed at 10% per annum.
2. Construction work on this qualifying asset was commenced on 1 January 2009. Funds used for expenditures on the construction of the property were \$50 million on 1 January 2009 and \$100 million on 1 July 2009.

Assuming the unutilised funds were temporarily invested with a return of 6% per annum, determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Answers

	\$ million
Borrowing costs:	
1 January to 31 December 2009 ($\$150 \text{ m} \times 10\%$).....	15.0
Less: Investment income	
1 January to 30 June 2009 ($\$100 \text{ m} \times 6\% \times \frac{1}{2}$)	(3.0)
	<u>12.0</u>
Cost of assets:	
Expenditure incurred	150.0
Borrowing costs capitalised	<u>12.0</u>
Carrying amount as at 31 December 2009	<u><u>162.0</u></u>

Journal entry to account for the borrowing costs capitalised in 2009:

Dr Property under construction	\$12.0 million	
Cr Interest expenses		\$12.0 million

The amount of borrowing costs shown in Example 7.4 is based on the amount of loan fund drawn. However, there may be uncomfortable situations. For example, assume an asset takes 4 years to build and each year the entity incurs \$150 million expenditure. The entity may draw down \$600 million at the beginning of the first year. Using the approach presented in Example 7.4, if the surplus funds (\$450 million, \$300 million and \$150 million in the first, second, and third years respectively) are

used temporarily for other purposes, the total borrowing costs after deducting the investment income from temporary investment may still be capitalised to that asset (see Example 7.5). Also, Example 7.5 indicates that a total of \$300 million and \$150 million out of the \$600 million drawn down on 1 January 2009 will be invested for 2 years (from 1 January 2009 to 31 December 2010) and 3 years (from 1 January 2009 to 31 December 2011) before it is used to pay for the expenditures on the qualifying asset on 1 January 2011 and 2012 respectively. Are investments for “3 years” and “2 years” still considered to be temporary?

Example 7.5 On 1 January 2009, Lam Limited (Lam) borrowed \$600 million to finance the construction of a property, which was expected to take 4 years to build. Construction work on this qualifying asset was commenced on 1 January 2009. Interest on the loan was fixed at 10% per annum.

The total expenditure incurred was \$600 million, to be paid out at \$150 million per year on 1 January 2009, 2010, 2011 and 2012, and Lam drew down loan facilities of \$600 million on 1 January 2009. The unutilised funds were temporarily invested with a return of 6% per annum.

Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009, 2010, 2011 and 2012 and consequently the cost of the property at 31 December 2009, 2010, 2011 and 2012.

Answers

	\$ million			
	2009	2010	2011	2012
Gross borrowing costs:				
1 January to 31 December 2009 (\$600 m × 10%)	60.0			
1 January to 31 December 2010 (\$600 m × 10%)		60.0		
1 January to 31 December 2011 (\$600 m × 10%)			60.0	
1 January to 31 December 2012 (\$600 m × 10%)				60.0
Less: Investment income				
1 January 2009 to 31 December 2009 (\$450 m × 6%)	(27.0)			
1 January 2010 to 31 December 2010 (\$300 m × 6%)		(18.0)		
1 January 2011 to 31 December 2011 (\$150 m × 6%)			(9.0)	
1 January 2012 to 31 December 2012 (\$0 × 6%)				0.0
	33.0	42.0	51.0	60.0
Cost of assets:				
Opening balance	0.0	183.0	375.0	576.0
Expenditure incurred	150.0	150.0	150.0	150.0
Borrowing costs capitalised	33.0	42.0	51.0	60.0
Ending balance	183.0	375.0	576.0	786.0

An alternative way of thinking is that “borrowing cost eligible” can be ascertained first and then capitalised “to the extent” the asset expenditure commences (e.g., only one-third of \$150 million commences on 1 January 2009 in Example 7.4). As shown in Example 7.6, since Lam drew down \$150 million on 1 January 2009 and expensed \$50 million for the construction of the property during the first half-year of 2009 (i.e., one-third of the asset expenditure commences), only one-third of the borrowing costs would be capitalised (i.e., divide “borrowing cost eligible” by 3) for the first half-year. This approach thus implies that the capitalisation is based on the asset expenditure, not on the drawn-down amount. Even though borrowing costs are “eligible” for capitalisation, they cannot be capitalised as part of the asset expenditure because expenditure has not been commenced.

In other words, only one-third of the \$150 million borrowing costs (interest expenses less the investment income) in Example 7.6 can be capitalised during the first half-year of 2009. After that period, no more surplus funds are available and no more investment income will be earned because all asset expenditure has been incurred. Thus, the whole amount of interest expenses in the second half-year of 2009 can be capitalised as cost of the property.

Under this alternative approach, IAS 23.14 (general capitalisation) may also be observed. In other words, the “weighted” element can also be considered. On one hand, such a drawn-down pattern may be regarded as “general borrowing”, not “specific”. On the other hand, the “to the extent” approach may reflect the “weighted” concept. Nevertheless, the “non-weighting” approach presented in Example 7.4 is still fine because IAS 23.17 (commencement of capitalisation) has not used the term “to the extent”.

Example 7.6 Same information as in Example 7.4.

1. On 1 January 2009 Lam borrowed \$150 million to finance the construction of a property which was expected to take 2 years to build. Lam drew down the loan facilities of \$150 million on 1 January 2009. Interest on the loan was fixed at 10% per annum.
2. Construction work on this qualifying asset was commenced on 1 January 2009. Funds used for expenditures on the construction of the property were \$50 million on 1 January 2009 and \$100 million on 1 July 2009. The unutilised funds were temporarily invested with a return of 6% per annum.

Assuming Lam adopts the “to the extent” approach of asset expenditure commencement, determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Answers

	\$ million
Borrowing costs for the first half-year:	
1 January to 30 June 2009 ($\$150 \text{ m} \times 10\% \times \frac{1}{2}$)	7.5
Less: investment income	
1 January to 30 June 2009 ($\$100 \text{ m} \times 6\% \times \frac{1}{2}$)	(3.0)
	<u>4.5</u>
Portion qualified for capitalisation ($\$50 \text{ m}/\150 m)	+ 3
Qualified for capitalisation	1.5
Borrowing costs for the second half-year:	
1 July to 31 December 2009 ($\$150 \text{ m} \times 10\% \times \frac{1}{2}$)	7.5
	<u>9.0</u>
Cost of assets:	
Expenditure incurred	150.0
Borrowing costs capitalised	9.0
Carrying amount as at 31 December 2009	<u><u>159.0</u></u>

Journal entry to account for the borrowing costs capitalised in 2009:

Dr Property under construction	9.0 million	
Cr Interest expenses		9.0 million

7.3.2 Commencement of Capitalisation

An entity begins capitalising borrowing costs as part of the cost of a qualifying asset when the entity

1. incurs expenditures for the asset;
2. incurs borrowing costs; and
3. undertakes activities that are necessary to prepare the asset for its intended use or sale (see Figure 7.3 and Real-life Case 7.3).

Real-life Case 7.3

Sun Hung Kai Properties Limited

Sun Hung Kai Properties Limited is principally engaged in the development of and investment in properties for sale and rent in Hong Kong and Mainland China. Its annual report of 2006–07 stated the following commencement of capitalisation policy for borrowing costs:

**Real-life
Case 7.3**

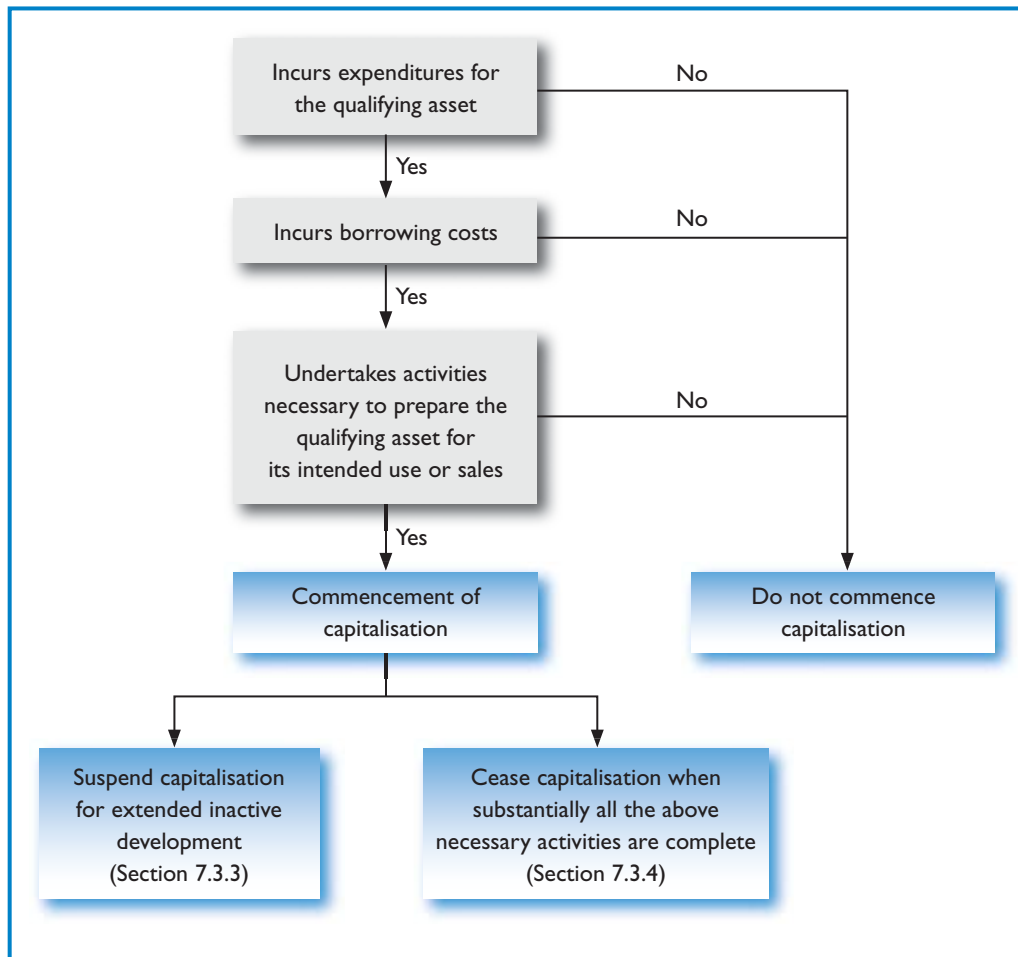
(cont'd)

- Borrowing costs are expensed as incurred, except to the extent that they are capitalised ... Capitalisation of such borrowing costs begins when construction or production activities commence.

Expenditures on a qualifying asset include only those expenditures that have resulted in payments of cash, transfers of other assets or the assumption of interest-bearing liabilities. Expenditures are reduced by any progress payments received and grants received in connection with the asset (see Example 7.7). The average carrying amount of the asset during a period, including borrowing costs previously capitalised, is normally a reasonable approximation of the expenditures to which the capitalisation rate is applied in that period.

FIGURE 7.3

Commencement, suspension, and cessation of capitalisation



Example 7.7 Entity A constructs scientific medical equipment for its own use, at a cost of \$50 million, and considers it as a qualified asset. Borrowing costs capitalised under IAS 23 amount to \$6 million. It also receives a government grant of \$5 million on that asset.

Can the government grant received be recognised as part of the expenditure on a qualified asset?

Answers

Yes, in accordance with IAS 23, expenditures on a qualifying asset

- include only those expenditures that have resulted in payments of cash, transfers of other assets or the assumption of interest-bearing liabilities; and
- are reduced by any progress payments received and grants received in connection with the asset (see IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*).

The activities necessary to prepare the asset for its intended use or sale include

1. the physical construction of the asset; and
2. technical and administrative work prior to the commencement of physical construction.

However, such activities exclude the holding of an asset when no production or development that changes the asset's condition is taking place (see Example 7.8).

Example 7.8 Before the construction of a property on a land, Entity ABC has to prepare the construction plan and get government approval. Borrowing costs have been incurred during the above period.

Are these borrowing costs eligible for capitalisation under IAS 23?

Answers

Yes, in accordance with IAS 23:

- The activities necessary to prepare the asset for its intended use or sale encompass more than the physical construction of the asset.
- They include technical and administrative work prior to the commencement of physical construction, such as the activities associated with obtaining permits prior to the commencement of the physical construction.

7.3.3 Suspension of Capitalisation

An entity suspends capitalisation of borrowing costs during extended periods in which it suspends active development (IAS 23.20). An entity may incur borrowing costs during an extended period in which it suspends the activities necessary to prepare an asset for its intended use or sale. Such costs are costs of holding partially completed assets and do not qualify for capitalisation (see Real-life Case 7.4 and Example 7.9).

Real-life Case 7.4

Henderson Land Development Company Limited

Henderson Land Development Company Limited's principal activities are property development and investment, finance, construction, infrastructure, hotel operation, department store operation, project management, investment holding and property management in Hong Kong and Mainland China. Its annual report of 2007 stated the following suspension of capitalisation policy for borrowing costs:

- Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

Example 7.9

Same information as in Example 7.3, except that construction work was stopped for 3 months from 1 September to 30 November 2009 due to damage caused by a typhoon on 1 September 2009.

Recall that in Example 7.3:

1. On 1 January 2009, Lam borrowed \$150 million to finance the construction of a property which was expected to take 2 years to build. Interest on the loan was fixed at 10% per annum.
2. Construction work on this qualifying asset was commenced on 1 January 2009. Funds used for expenditures on the construction of the property were \$50 million on 1 January 2009 and \$100 million on 1 July 2009.

Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs.

Answers

	\$ million
Borrowing costs:	
1 January to 30 June 2009 ($\$50 \text{ m} \times 10\% \times \frac{1}{2}$)	2.50
1 July to 31 August 2009 ($\$150 \text{ m} \times 10\% \times \frac{1}{2}$)	2.50
1 December to 31 December 2009 ($\$150 \text{ m} \times 10\% \times \frac{1}{2}$)	1.25
	<u>6.25</u>
Cost of assets:	
Expenditure incurred	150.00
Borrowing costs capitalised	<u>6.25</u>
Carrying amount as at 31 December 2009	<u><u>156.25</u></u>

Lam suspended capitalisation of borrowing costs from 1 September to 30 November 2009, during which time it suspended active development (i.e., construction of the property) due to damage caused by a typhoon on 1 September 2009. In this case, the suspension of work would be unlikely to be considered a necessary part of the process of getting the property ready for its intended use.

Journal entry to account for the borrowing costs capitalised in 2009:

Dr Property under construction	\$6.25 million
Cr Interest expenses	\$6.25 million

Capitalisation of borrowing costs is not normally suspended

1. during a period when substantial technical and administrative work is being carried out; or
2. when a temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale (see Example 7.10).

Example 7.10 A temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale in the following cases:

- During the extended period needed for inventories to mature;
- The extended period during which high water levels delay construction of a bridge, if such high water levels are common during the construction period in the geographic region involved.

7.3.4 Cessation of Capitalisation

An entity ceases capitalising borrowing costs when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete (see Real-life Case 7.5).

Real-life Case 7.5

EZRA Holdings Limited

EZRA Holdings Limited is principally engaged in investment holding and provision of management services, and operates in Singapore, Southeast Asia, Australia, India and West Africa. Its annual report of 2007 stated the following cessation of capitalisation and write-down policies for borrowing costs:

- Borrowing costs are capitalised if they are directly attributable to the acquisition, construction or production of a qualifying asset.
- Borrowing costs are capitalised until the assets are ready for their intended use.
- If the resulting carrying amount of the asset exceeds its recoverable amount, an impairment loss is recorded.

An asset is normally ready for its intended use or sale when the physical construction of the asset is complete even though routine administrative work might still continue. If minor modifications, such as the decoration of a property to the purchaser's or user's specifications, are all that are outstanding, this indicates that substantially all the activities are complete (see Example 7.11).

Example 7.11 Entity A has finished the physical construction of a building for Miss Lee, subject to certain modifications according to her specifications after her inspection. Borrowing costs are incurred during the modification period. Can these borrowing costs be capitalised?

Answers

No. If minor modifications, such as the decoration of a property to the purchaser's or user's specifications (modification of Miss Lee's building), are all that are outstanding, this indicates that substantially all the activities of the property construction are complete.

When an entity completes the construction of a qualifying asset in parts and each part is capable of being used while construction continues on other parts, the entity ceases capitalising borrowing costs when it completes substantially all the activities necessary to prepare that part for its intended use or sale (see Example 7.12).

Example 7.12 Example of a qualifying asset for which each part is capable of being usable while construction continues on other parts:

- A business park comprising several buildings, each of which can be used individually.

Example of a qualifying asset that needs to be completed before any part can be used:

- An industrial plant involving several processes that are carried out in sequence at different parts of the plant within the same site, such as a steel mill.

7.3.5 Excess of the Carrying Amount of the Qualifying Asset over Recoverable Amount

When the carrying amount or the expected ultimate cost of the qualifying asset exceeds its recoverable amount or net realisable value, the carrying amount is written down or written off in accordance with the requirements of other IASs (see Real-life Case 7.5). In certain circumstances, the amount of the write-down or write-off is written back in accordance with those other IASs.

7.4 Disclosure

In its financial statements, IAS 23 requires an entity to disclose

1. the amount of borrowing costs capitalised during the period; and
2. the capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation (IAS 23.26).

An example can be found in the 2006 annual report of The Hong Kong and China Gas Company Limited (see Real-life Case 7.6).

Real-life Case 7.6

The Hong Kong and China Gas Company Limited

The Hong Kong and China Gas Company Limited is principally engaged in the production, distribution and marketing of gas, water and related activities in Hong Kong and Mainland China. Its 2006 annual report disclosed the amount of borrowing costs capitalised and the capitalisation rate as follows:

**Real-life
Case 7.6**
(cont'd)

	2006	2005
	HK\$ million	HK\$ million
Interest on bank loans and overdrafts	345.9	150.9
Interests on customers' deposits	7.3	4.7
	<u>353.2</u>	<u>155.6</u>
Less: Amount capitalised	<u>(43.0)</u>	<u>(41.0)</u>
	<u><u>310.2</u></u>	<u><u>114.6</u></u>

The interest expense is capitalised at an average rate of 4.37% (2005: 2.72%) per annum.

It should be noted that the revised IAS 23 does not require disclosing the accounting policy adopted for borrowing costs. The application of only one method will enhance comparability (IAS 23 BC2).

7.5 Summary

An entity capitalises borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Borrowing costs are capitalised when it is probable that they will result in future economic benefits to the entity and the costs can be measured reliably.

To the extent that an entity borrows funds specifically for the purpose of obtaining a qualifying asset, the entity determines the amount of borrowing costs eligible for capitalisation as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.

To the extent that an entity borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the entity determines the amount of borrowing costs eligible for capitalisation by applying a capitalisation rate to the expenditures on that asset.

An entity begins capitalising borrowing costs as part of the cost of a qualifying asset when the entity incurs expenditures for the asset, incurs borrowing costs, and undertakes activities that are necessary to prepare the asset for its intended use or sale.

An entity suspends capitalisation of borrowing costs during extended periods in which it suspends active development. An entity ceases capitalising borrowing costs when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete. When the carrying amount or the expected ultimate cost of the qualifying asset exceeds its recoverable amount or net realisable value, the carrying amount is written down or written off.

An entity discloses the amount of borrowing costs capitalised during the period, and the capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation.

Review Questions

1. Define borrowing costs.
2. What are the requirements of the benchmark treatment for borrowing costs?
3. Can an entity choose to adopt the benchmark treatment for borrowing costs?
4. Define a qualifying asset.
5. Give some examples of qualifying assets.
6. How should the capitalisation rate be determined under general borrowing situations?
7. When does an entity suspend capitalisation of borrowing costs?
8. What is the consequence of suspending capitalisation of borrowing costs?
9. When does an entity cease capitalisation of borrowing costs?
10. Why does an entity write down the carrying amount of a qualified asset?
11. What are the disclosure requirements of borrowing costs?

Exercises

- Exercise 7.1** Determine which of the following items could be treated as qualifying assets under IAS 23 *Borrowing Costs*. Explain why.
1. Biological asset
 2. Financial assets and inventories that are manufactured, or otherwise produced, over a short period of time
 3. Inventories that require a substantial period of time to bring them to a saleable condition
 4. Consignment goods holding on behalf of vendors
 5. Investment properties
- Exercise 7.2** What are the differences in accounting treatment for costs borrowed specifically and costs borrowed generally for obtaining a qualifying asset?
- Exercise 7.3** How should the commencement of capitalisation of borrowing costs be determined? What are the three required criteria for commencing capitalisation?
- Exercise 7.4** ABC Company borrows funds generally and uses them for the purpose of constructing a qualifying asset. Its outstanding borrowings on 31 December 2009 and the related interest expenses for the year then ended are as follows:

	Outstanding borrowings (weighted average) \$ million	Interest expenses \$ million
Bank overdrafts (10% per annum)	400.0	40.0
Long-term bank loan (8% per annum)	600.0	48.0
	1,000.0	88.0

Required:

Determine the appropriate capitalisation rate for interest on general borrowing.

- Exercise 7.5** DEF Company borrows funds generally and uses them for the purpose of constructing a qualifying asset. On 1 January 2009, the carrying amount of the qualifying asset, including borrowing costs capitalised previously, is nil. Expenditures incurred for the construction of the qualifying asset during 2009 are as follows:

	\$ million
1 April 2009	40
1 October 2009	60

Required:

Assuming the appropriate capitalisation rate for interest on general borrowing is 10%, determine the carrying amount of the qualifying asset as at 31 December 2009.

Problems

- Problem 7.1** What are borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset? Explain why it is straightforward in some circumstances to determine the amount of borrowing costs that are directly attributable to the acquisition of a qualifying asset, but in some other circumstances it may be difficult to identify a direct relationship between particular borrowings and a qualifying asset and determine the borrowings that could otherwise have been avoided.
- Problem 7.2** On 1 January 2009, Lee Limited (Lee) borrowed \$400 million to finance the construction work on a property, which was expected to take 2 years to build. Construction work on this qualifying asset was commenced on 1 January 2009.
- Lee drew down the loan facilities in two parts in the amounts of \$100 million and \$300 million on 1 January 2009 and 1 July 2009 respectively. Funds used for expenditures on the construction of the property were as follows:

	\$ million
1 January 2009.....	100
1 July 2009.....	300

Interest on the loan was fixed at 10% per annum.

Required:

1. Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009.
2. Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Problem 7.3 Same information as in Problem 7.2, except that Lee drew down the loan facilities of \$400 million on 1 January 2009. The unutilised funds were temporarily invested with a return of 5% per annum.

Required:

1. Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009.
2. Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Problem 7.4 On 1 January 2009, Tang Limited (Tang) borrowed \$600 million to finance the construction work on a property, which was expected to take 2 years to build. Construction work on this qualifying asset was commenced on 1 January 2009. Interest on the loan was fixed at 10% per annum.

The total expenditures incurred were \$600 million, to be paid out at \$400 million on 1 January 2009 and \$200 million on 1 January 2010, and Tang drew down loan facilities of \$600 million on 1 January 2009. The unutilised funds were temporarily invested with a return of 5% per annum.

Required:

Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and 2010, and consequently the cost of the property at 31 December 2009 and 2010.

Problem 7.5 On 1 January 2009, XYZ Limited (XYZ) borrowed \$800 million to finance the construction work on a property, which was expected to take 2 years to build. Construction work on this qualifying asset was commenced on 1 January 2009.

XYZ drew down the loan facilities in the amounts of \$800 million on 1 January 2009. Funds used for expenditures on the construction of the property were as follows:

	\$ million
1 January 2009	200
1 July 2009	600

Interest on the loan was fixed at 10% per annum. Unutilised funds were temporarily invested with a return of 6% per annum.

Required:

Assuming XYZ adopts the “to the extent” approach of asset expenditure commencement, determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property at 31 December 2009. Prepare the journal entry to account for the borrowing costs.

Case Studies

Case Study 7.1

Prime View Properties (Holdings) Limited (PVL) is a company incorporated in Hong Kong. PVL holds a portfolio of commercial buildings for rental income. It is PVL's accounting policy to use the cost model to account for property, plant and equipment and the valuation model to account for investment properties.

The company's Atlantic Centre, a 30-storey commercial building located in Wanchai (a traditional business district), was identified as a potential candidate for conversion into a hotel. In the last few years, major tenants have moved out of the premises and been replaced by smaller companies on shorter lease terms. This is mainly because a few newer office towers have opened in the vicinity.

The Atlantic Centre comprises a shopping mall from ground level to the second floor and offices from the third floor to the 29th floor. All the units have been leased to parties not related to PVL under short-term leases, ranging from 1 year to 3 years. Atlantic Centre Limited (ACL), a 100% owned subsidiary of PVL, was incorporated in 1990 to hold the Atlantic Centre, which had been purchased at \$240 million. The purchase was wholly financed by internal capital, and ACL has always been a debt-free company. Having regard to the Atlantic Centre's prime location, PVL considered that converting the Atlantic Centre into a mid-range hotel would be the preferred option.

On 1 April 2006, PVL would embark on an 18-month project which would include upgrading the shopping mall from the ground level to the second floor of the Atlantic Centre, rebranded as Atlantic Place, and making necessary alterations to the offices from the third floor to the 29th floor to convert them into a five-star 350-room mid-range hotel to be named the Atlantic Hotel.

Through professional surveyors, PVL obtained the following information on the Atlantic Centre and the upcoming project:

The Atlantic Centre	Estimated valuation as at 1 April 2006 \$ million	Renovation costs to be incurred \$ million	Estimated valuation as at 1 October 2007 \$ million
Ground Level to 2/F [Atlantic Place].	60	30	100
3/F to 29/F [The Atlantic Hotel].	400	200	800

After completion of the project, PVL would arrange for Atlantic Place to be held by ACL and the Atlantic Hotel in a newly incorporated 100% owned subsidiary, Atlantic Hotel Limited (AHL).

PVL had two options in implementing the renovation plan:

Option A

Dates	Event
1 April 2006 to 30 September 2007	Renovation work undertaken by ACL to convert the Atlantic Centre into Atlantic Place and the Atlantic Hotel. (Renovation costs to be financed by bank loans borrowed specifically for the renovation at an interest rate of 5% per annum.)
1 October 2007	ACL transfers the Atlantic Hotel to AHL at a consideration of \$700 million.

Option B

Dates	Event
1 April 2006	ACL transfers the Atlantic Centre to AHL at a consideration of \$240 million.
1 April 2006 to 30 September 2007	Renovation work undertaken by AHL to convert the Atlantic Centre into Atlantic Place and the Atlantic Hotel. (Renovation costs to be financed by bank loans borrowed specifically for the renovation at an interest rate of 5% per annum.)
1 October 2007	AHL transfers Atlantic Place to ACL at a consideration of \$80 million.

Required:

- Determine whether PVL (through ACL or AHL) can capitalise the borrowing cost to finance the renovation work as cost of Atlantic Place and the Atlantic Hotel
- Calculate the amount that may be so capitalised in its consolidated financial statements.

(HKICPA FE June 2006, adapted)

**Case
Study 7.2**

Entity C constructs special equipment for its own use. On 1 January 2009, the carrying amount of the equipment, including borrowing costs capitalised previously, is \$80 million. Expenditures incurred for the construction of the equipment during 2009 are as follows:

	\$ million
1 June 2009	30
1 September 2009	21

Entity C borrows funds generally and uses them for the purpose of constructing the equipment. Its outstanding borrowings on 31 December 2009 and the related interest expenses for the year then ended are as follows:

	Outstanding borrowings (weighted average) \$ million	Interest expenses \$ million
Bank overdrafts (10% per annum)	300.0	30.0
Short-term bank loan (8% per annum)	200.0	16.0
Long-term bank loan (7% per annum)	500.0	35.0
	<u>1,000.0</u>	<u>81.0</u>

Required:

Determine the carrying amount of the special equipment as at 31 December 2009 and prepare the journal entries to account for the borrowing costs capitalised in 2009.

**Case
Study 7.3**

On 1 January 2009, Lau Limited (Lau) borrowed \$200 million to finance the construction of a property, which was expected to take 2 years to build. Construction work on this qualifying asset was commenced on 1 January 2009.

Lau drew down the loan facilities in three parts in the amounts of \$60 million, \$80 million and \$60 million on 1 January 2009, 1 April 2009 and 1 July 2009 respectively. Funds used for expenditures on the construction of the property were as follows:

	\$ million
1 January 2009	60
1 April 2009	80
1 July 2009	60

Interest on the loan was fixed at 8% per annum. The unutilised funds were temporarily invested with a return of 4% per annum.

Required:

1. Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs capitalised in 2009.
2. Will your answer in (1) be different if Lau draws down the loan facilities of \$200 million on 1 January 2009 instead of in three parts during 2009? Particularly, what will be the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009? Prepare the journal entry to account for the borrowing costs capitalised in 2009.

Case Study 7.4

Same information as in Case Study 7.3, except that the total expenditures incurred were \$600 million to be paid out at \$200 million per year on 1 January 2009, 2010 and 2011, and Lau drew down loan facilities of \$600 million on 1 January 2009.

Required:

1. Determine the borrowing costs eligible for capitalisation for the years ended 31 December 2009, 2010 and 2011 and consequently the cost of the property at 31 December 2009, 2010 and 2011.
2. Will your answer in (1) be different if Lau adopts the “to the extent” approach of asset expenditure commencement? In particular, what will be the borrowing costs eligible for capitalisation for the years ended 31 December 2009, 2010 and 2011 and consequently the cost of the property at 31 December 2009, 2010 and 2011?

Case Study 7.5

On 1 January 2009, Chan Limited (Chan) borrowed \$200 million to finance the construction of special medical equipment, which was expected to take 2 years to build. Construction work on this qualifying asset was commenced on 1 January 2009.

Chan drew down the loan facilities in three parts in the amounts of \$90 million, \$70 million and \$40 million on 1 January 2009, 1 March 2009 and 1 June 2009 respectively. Funds used for expenditures on the construction of the property were as follows:

	\$ million
1 January 2009.....	90
1 March 2009.....	70
1 June 2009	40

Interest on the loan was fixed at 10% per annum. The unutilised funds were temporarily invested with a return of 6% per annum.

Required:

1. Determine the borrowing costs eligible for capitalisation for the year ended 31 December 2009 and consequently the cost of the property as at 31 December 2009. Prepare the journal entry to account for the borrowing costs capitalised in 2009.
2. Will your answer in (1) be different if construction work is stopped for 3 months from 1 September to 30 November 2009 due to damage caused by an earthquake on 1 September 2009? Prepare the journal entry to account for the borrowing costs capitalised in 2009.

8

Impairment of Assets

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of impairment loss and recoverable amount (the definition)
- 2 The identification of impairment indicators
- 3 The determination of recoverable amount
- 4 The recognition of impairment loss
- 5 The importance and determination of a cash-generating unit
- 6 The recognition of a reversal of impairment loss

Real-life

Case 8.1

France Telecom Group and Vodafone Group Plc

France Telecom Group, a telecommunications company holding the brand “Orange” and a composite stock of France’s CAC 40 Index, described its impairment policy in its financial statements of 2007 as follows:

- In the case of a decline in the recoverable amount of an item of property, plant and equipment or an intangible asset to below its net book value, due to events or circumstances occurring during the period (such as obsolescence, physical damage, significant changes to the manner in which the asset is used, worse than expected economic performance, a drop in revenues or other external indicators), an impairment loss is recognised.
- The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use, assessed by the discounted cash flows method, based on management’s best estimate of the set of economic conditions.
- The impairment loss recognised is equal to the difference between net book value and recoverable amount.

Based on these simple requirements, France Telecom recognised impairment losses on its non-current assets of €568 million, €105 million and €107 million in 2005, 2006 and 2007 respectively. These figures might not be considered significant, if they are compared with France Telecom’s impairment loss on goodwill of €2.8 billion in 2006.

When France Telecom’s figures are compared with the impairment losses incurred by Vodafone Group plc on its operations, including those in Germany and Italy, they may still not be considered significant, since Vodafone, which described itself as the world’s leading mobile telecommunications company with a head office in England, had made impairment losses of £23.5 billion for 2006 and £11.6 billion for 2007. During 2006 and 2007, Vodafone’s annual revenue was only £29.3 billion and £33.1 billion respectively. Finally, of course, Vodafone had sustained a loss in these two years.

Accounting practice used to have an assessment of “diminution in value” on assets, for example, investment was carried at cost less permanent diminution in value, and inventory was carried at lower of cost and net realisable value. However, the definitions of “value” were not consistent and no official requirements were imposed on some assets, for example, property, plant and equipment and intangible assets, until the introduction of IAS 36 *Impairment of Assets*.

This chapter illustrates the concept and requirements of impairment assessment on assets and introduces the basis and procedures of impairment assessments, particularly the definition and determination of the recoverable amount.

8.1 Applicable Standard and Scope

The requirements of asset impairment are set out in IAS 36 *Impairment of Assets*, which aims at prescribing the procedures for an entity to apply to ensure that the entity's assets are carried at no more than their recoverable amount.

IAS 36 requires an entity to apply accounting for the impairment on all assets, except for the following:

1. Inventories (see IAS 2 *Inventories*, Chapter 9);
2. Assets arising from construction contracts (see IAS 11 *Construction Contracts*, Chapter 10);
3. Deferred tax assets (see IAS 12 *Income Taxes*, Chapter 13);
4. Assets arising from employee benefits (see IAS 19 *Employee Benefits*, Chapter 12);
5. Financial assets that are within the scope of IAS 39 *Financial Instruments: Recognition and Measurement* (see Chapters 15 and 16);
6. Investment property that is measured at fair value (see IAS 40 *Investment Property*, Chapter 5);
7. Biological assets related to agricultural activity that are measured at fair value less estimated point-of-sale costs (see IAS 41 *Agriculture*);
8. Deferred acquisition costs, and intangible assets, arising from an insurer's contractual rights under insurance contracts within the scope of IFRS 4 *Insurance Contracts*; and
9. Non-current assets (or disposal groups) classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* (see Chapter 22) (IAS 36.2).

Specifically, IAS 36 does not apply to financial assets within IAS 39; instead, the impairment of such other financial assets is referred to IAS 39. However, IAS 36 still applies to financial assets classified as

1. subsidiaries, as defined in IAS 27 *Consolidated and Separate Financial Statements*;
2. associates, as defined in IAS 28 *Investments in Associates*; and
3. joint ventures, as defined in IAS 31 *Interests in Joint Ventures*.

8.2 General Approach in Assessing Impairment

IAS 36 requires that impairment loss is recognised when an asset's carrying amount is higher than its recoverable amount.

An **impairment loss** is the amount by which the carrying amount of an asset (or a cash-generating unit) exceeds its recoverable amount.

Carrying amount is the amount at which an asset is recognised after deducting any accumulated depreciation (amortisation) and accumulated impairment losses thereon.

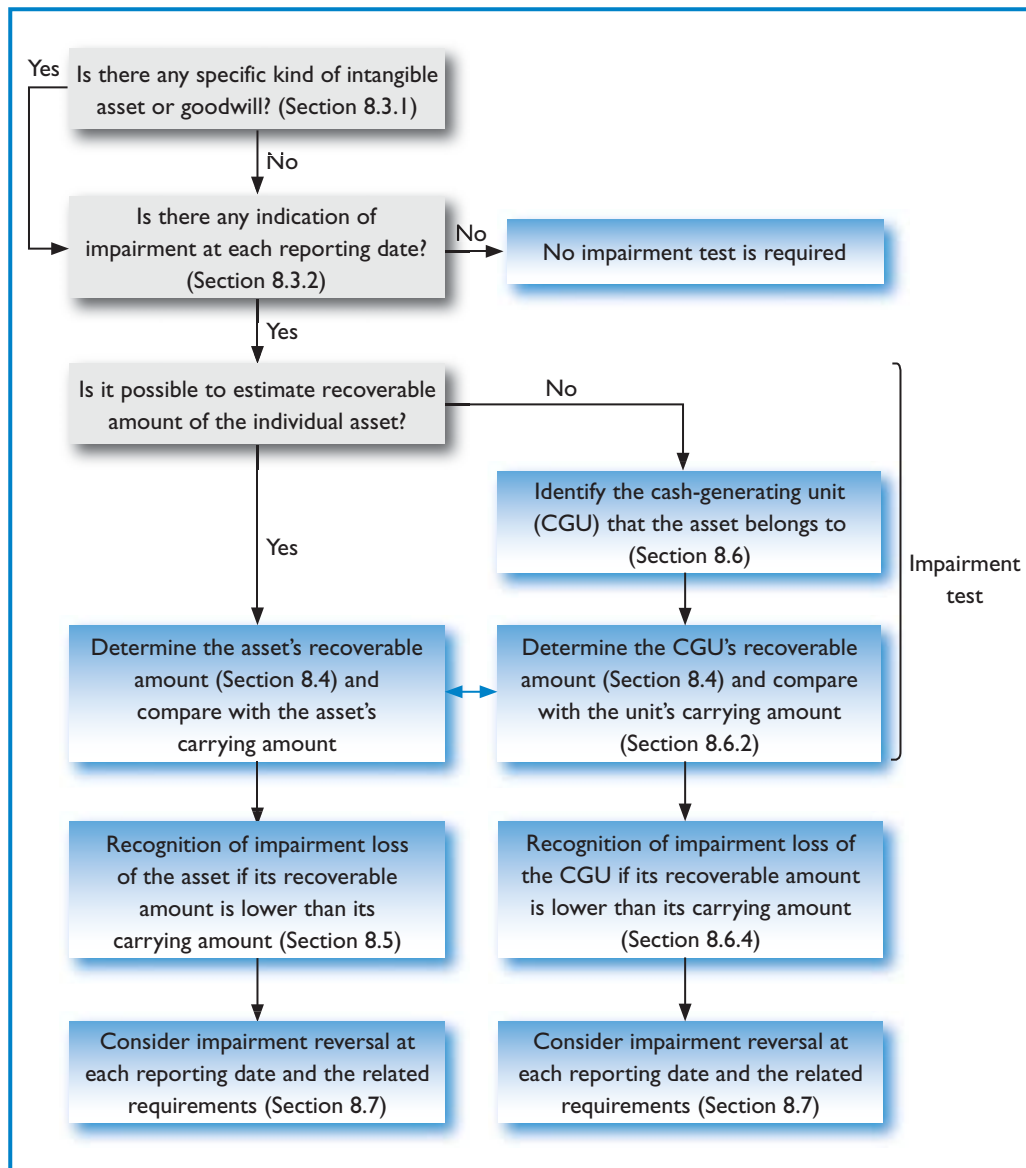
The **recoverable amount** of an asset is the higher of its fair value less costs to sell and its value in use (IAS 36.6).

It implies that impairment loss is recognised when the carrying amount of an asset exceeds both of the following amounts:

- The amount to be recovered through use (“value in use”); and
- The amount to be recovered through sale of the asset (“fair value less costs to sell”).

The general approach in assessing and recognising impairment loss in accordance with IAS 36 is described in Figure 8.1.

FIGURE 8.1 Approach in assessing and recognising impairment loss



Assessment is performed on an individual asset by identifying an indication of impairment (Section 8.3). If there is such an indication for an asset, or an asset is a specific kind of asset, an impairment test is performed by determining the recoverable amount of the asset (Section 8.4) and comparing that amount with the asset's carrying amount. Impairment loss on the asset will be recognised when its recoverable amount is lower than its carrying amount (Section 8.5).

In case it is not possible for an entity to ascertain the recoverable amount of an individual asset, an estimate by grouping assets together as a cash-generating unit will be used for impairment assessment (Section 8.6). The reversal of impairment loss is simultaneously ascertained in an approach similar to the recognition of impairment loss (Section 8.7).

Real-life Case 8.2

Nokia Corporation

Nokia Corporation, one of the largest mobile device manufacturers in the world, briefly described its impairment policy on assets in 2007 as follows:

- The group conducts its impairment testing by determining the recoverable amount for the asset or cash-generating unit.
- The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.
- The recoverable amount is then compared to its carrying amount, and an impairment loss is recognised if the recoverable amount is less than the carrying amount.
- Impairment losses are recognised immediately in the profit and loss account.

8.3 Identifying Any Indication of Impairment

At each reporting date, an entity is required to assess whether there is any indication that an asset may be impaired. If any such indication exists, the entity will then estimate the recoverable amount of the asset (IAS 36.9).

8.3.1 Impairment Test for Specific Intangible Assets and Goodwill

For specific kinds of intangible assets and goodwill, no matter whether there is any indication of impairment, an entity is still required to estimate their recoverable amounts and compare the amounts with their carrying amounts. The comparison of an asset's recoverable amount with its carrying amount is termed as an impairment test. Such an annual impairment test is required for the following assets:

1. An intangible asset not yet available for use;
2. An intangible asset with an indefinite useful life; and
3. Goodwill acquired in a business combination (IAS 36.10).

The impairment test for the above intangible assets (with indefinite useful life or not yet available for use) and goodwill may be performed at any time during an annual period, provided it is performed at the same time every year. Different intangible assets may be tested for impairment at different times. However, if such an intangible asset was initially recognised during the current annual period, that intangible asset must be tested for impairment before the end of that annual period (IAS 36.10).

Real-life**Case 8.3****HSBC Holdings plc**

In its annual report of 2007, HSBC Holdings plc clearly explained its annual impairment test on intangible assets as follows:

- Intangible assets that have an indefinite useful life, or are not yet ready for use, are tested for impairment annually.
- This impairment test may be performed at any time during the year, provided it is performed at the same time every year.
- An intangible asset recognised during the current period is tested before the end of the current year.

When an intangible asset is not available for use, its ability to generate sufficient future economic benefits to recover its carrying amount is usually subject to greater uncertainty. Simultaneously, amortisation is not required on an intangible asset (see Chapter 6) and goodwill. In consequence, IAS 36 requires an entity to test for impairment, at least annually, the carrying amount of such assets.

8.3.2 Indications of Impairment

IAS 36 specifically requires an entity, in assessing whether there is any indication that an asset may be impaired, to consider at least a set of external sources of information and internal sources of information as follows:

1. External sources of information
 - a. During the period, an asset's market value has declined significantly more than would be expected as a result of the passage of time or normal use.
 - b. Significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated.
 - c. Market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially.
 - d. The carrying amount of the net assets of the entity is more than its market capitalisation.

2. Internal sources of information
 - a. Evidence is available of obsolescence or physical damage of an asset.
 - b. Significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite.
 - c. Evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected (IAS 36.12).

The above list is not exhaustive, and an entity may identify other indications of impairment.

Example 8.1 At the year-end of 2007, Croco Panda Limited owns a property in Eastern District with a cost less accumulated depreciation of \$1.5 million for rental purposes. The market for properties in Eastern District is still prosperous, since the property owners keep on asking a good price for sale, for example, a property similar to Croco Panda's in the market would normally have an asking price of \$2.5 million, and normally a sale may be made if the price could be bargained for a 10% to 15% discount.

While Croco Panda does not want to dispose of the property, it has an intention to own it for a longer period for rental purposes. However, by requesting a premium rental of \$10,000 per month, 20% higher than the market rate, Croco Panda cannot locate a tenant to lease out the property for 3 months. A property agent is discussing with Croco Panda that it should lower its requested rental.

In accordance with IAS 36, what should Croco Panda perform for the property?

Answers

In accordance with IAS 36, Croco Panda has to assess at each reporting date whether there is any indication of impairment on its asset, including its investment property not measured at fair value. While no further information is available, a property held for rental purposes is regarded as an investment property, which is measured at fair value in that case.

Based on the information available, the property market in Eastern District is still prosperous, and the asking price of a similar property is higher than Croco Panda's cost less accumulated depreciation. No indications of impairment have been found, except for the vacant situation of the property. However, since Croco Panda is requesting a higher than market rate, it may not be an indication of impairment.

In consequence, no estimation of the recoverable amount is required in accordance with IAS 36.

Real-life

Case 8.4

France Telecom Group

From Real-life Case 8.1, France Telecom Group gave a summary of impairment indicators used in identifying a decline in the recoverable amount of an asset, including the following:

- Obsolescence;
- Physical damage;
- Significant changes to the manner in which the asset is used;
- Worse than expected economic performance;
- A drop in revenues or other external indicators.

8.4 Measuring Recoverable Amount

When there is any indication that an asset may be impaired at each reporting date, or when there is an intangible asset or goodwill that is subject to an annual impairment test, an entity is required to measure the recoverable amount of the asset. As explained in Section 8.2, IAS 36 defines an asset's recoverable amount as the higher of

- its fair value less costs to sell; and
- its value in use.

The definition of recoverable amount implies that an entity may either dispose of an asset or continuously keep and use it. The entity should normally choose the best way to maximise the return from the asset, and it would choose the higher value from either disposing of the asset or using it.

IAS 36 requires a recoverable amount to be determined for an individual asset. However, when an asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, the asset's recoverable amount is determined for the cash-generating unit to which the asset belongs (see Section 8.6).

8.4.1 Fair Value Less Costs to Sell

Fair value less costs to sell was originally termed as “net selling price”, and it represents the amount of the asset that can be recovered through its sale.

Fair value less costs to sell is defined as

- the amount obtainable from the sale of an asset (or cash-generating unit) in an arm's length transaction between knowledgeable, willing parties;
- less the costs of disposal (IAS 36.6).

Costs of disposal are incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense (IAS 36.6).

In order to ascertain the fair value less costs to sell of an asset, an entity should check whether there is a binding sale agreement and an active market for the asset in the following hierarchy:

1. If there is a binding sale agreement in an arm's length transaction, the best evidence of an asset's fair value less costs to sell is a price in the agreement adjusted for incremental costs that would be directly attributable to the disposal of the asset.
2. If there is no binding sale agreement but an asset is traded in an active market, fair value less costs to sell is the asset's market price, usually the current bid price, less the costs of disposal.
3. If there is no binding sale agreement and active market for an asset, fair value less costs to sell is based on the best information available to reflect the amount that an entity could obtain, at the reporting date, from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

Example 8.2 Based on the information in Example 8.1, the controller of Croco Panda Limited, even if there is no indication of impairment, still prefers to perform an estimate of the property's recoverable amount or an impairment test, because the property has been left vacant for 3 months.

How does Croco Panda ascertain the recoverable amount or impairment testing?

Answers

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. It is used to compare with the carrying amount to ascertain whether there is any impairment loss for an individual asset.

In Croco Panda's case, no exact information is available to ascertain the fair value less costs to sell and value in use of the property. On one hand, the market price available is a current ask price, but fair value less costs to sell should make reference to a current bid price. On the other hand, except for the rental price being asked, no other information is available to calculate the value in use.

However, the current ask price of \$2.5 million in the market is substantially higher than the cost. If it is adjusted with the bargain discount of 10% to 15% to make a normal deal, an estimated bid price will be around \$2.13 million to \$2.25 million, which can serve as an estimated fair value less costs to sell.

When a fair value less costs to sell of the property can be ascertained, it is not necessary to determine the property's value in use if the fair value less costs to sell has already exceeded the property's carrying amount, since no impairment on the property has been demonstrated.

Costs of disposal, other than those that have been recognised as liabilities, are deducted in determining fair value less costs to sell. Sometimes the disposal of an asset requires the buyer to assume a liability, and only a single fair value less costs to sell is available for both the asset and the liability. In such cases, the fair value less costs to sell of the asset is the estimated selling price of the asset and the liability together, less the costs of disposal.

Example 8.3 Disposal costs include, but are not limited to, the following:

- Legal costs;
- Stamp duty and similar transaction taxes;
- Costs of removing the asset; and
- Direct incremental costs to bring an asset into condition for its sale.

However, termination benefits (as defined in IAS 19 *Employee Benefits*) and costs associated with reducing or reorganising a business following the disposal of an asset are not direct incremental costs to dispose of the asset.

8.4.2 Value in Use

Value in use represents the amount of an asset to be recovered through use, and it is also termed as “discounted cash flow” by some entities because of its definition in IAS 36.

Value in use is defined in IAS 36 as the present value of the future cash flows expected to be derived from an asset or cash-generating unit (IAS 36.6).

In calculating an asset’s value in use, IAS 36 specifically requires the following elements to be reflected in the calculation:

1. An estimate of the future cash flows the entity expects to derive from the asset;
2. Expectations about possible variations in the amount or timing of the estimated future cash flows;
3. The time value of money, represented by the current market risk-free rate of interest;
4. The price for bearing the uncertainty inherent in the asset; and
5. Other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset (IAS 36.30).

Expectations about possible variations in the amount or timing of future cash flows, the price for bearing the uncertainty inherent in the asset and other factors can be reflected by adjusting the following steps in estimating the value in use of an asset:

1. Estimating the future cash inflows and outflows to be derived from both continuing use of the asset and ultimate disposal of the asset; and
2. Applying the appropriate discount rate to those future cash flows.

Based on the requirements in IAS 36, the steps in estimating an asset's value in use can be summarised as follows:

1. Ascertaining the basis for estimates of future cash flows;
2. Ascertaining the composition of estimates of future cash flows;
3. Estimating relevant foreign currency future cash flows; and
4. Applying the appropriate discount rate to those future cash flows.

8.4.2.1 Basis for Estimates of Future Cash Flows

In estimating or projecting future cash flows for the measurement of an asset's value in use, IAS 36 imposes some restrictions on the basis for cash flow projections:

1. The projections should be based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset. Greater weight is given to external evidence.
2. The projections should be based on the most recent financial budgets/forecasts approved by management.
3. Any estimated future cash flows expected to arise from future restructurings or from improving or enhancing the asset's performance should not be included.
4. The projections based on these budgets/forecasts can cover a maximum period of five years, unless a longer period can be justified.
5. The projections beyond the period covered by the most recent budgets/forecasts by extrapolating the projections based on the budgets/forecasts (or the extrapolated projections) can use only a steady or declining growth rate for subsequent years, unless an increasing rate can be justified.
6. The growth rate used for the extrapolated projections cannot exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified (IAS 36.33).

Example 8.4 At the end of 2007, Lionel King Manufacturing Limited (LKM) determined that its manufacturing plant might have been impaired. In order to estimate the value in use of the plant, LKM's accountant prepared an 8-year projection to estimate the cash inflows and outflows (in millions of dollars) for the plant as follows:

	Cash inflows \$ million	Cash outflows \$ million
2007 (historical figures of the year)	40.0	30.0
2008	44.0	31.8
2009	48.4	33.7
2010	53.2	35.6
2011	58.6	37.9
2012	64.4	40.1
2013	70.9	42.6
2014	77.9	45.1
2015	85.7	47.8

The 8-year projection was prepared by LKM's accountant with the following assumptions:

- The growth rate of the cash inflows was based on the observed historical growth rate of the plant, 10%, which included the increase in product price and product volume.
- The growth rate for the cash outflows was based on the observed historical inflation rate of the economy of 6%.
- The long-term growth rates of the products and the economy were around 4% to 6%.
- Based on the latest governmental research, the local economy should still be stable in the next 3 to 5 years.

Comment on the above 8-year cash flow projection.

Answers

A projection for value in use calculation should be based on reasonable and supportable assumptions. The following further improvements may be required on the above 8-year projection:

- The projection should be based on the most recent financial budget or forecast approved by management. No information is available on whether the 8-year projection prepared has been based on such a budget or forecast.
- Cash inflows from 2008 to 2012 are projected using the 10% historical growth rate of the plant. The use of this growth rate should be reasonable and supportable.
- However, if the cash inflows after 2012 (i.e., the period of extrapolated projection after 5 years) are still based on the 10% historical growth rate, it may not align with the requirement that the extrapolated projection cannot exceed the long-term average growth rate for the products, industries or country. The long-term growth rates for the products and the economy in this case are

only 4% to 6%. LKM should consider adjusting this growth rate to align with the long-term growth rates for the products and the economy.

- Cash outflows are projected using the historical inflation rate of 6%. As the external information forecasts the economy to be stable, the projection in terms of price change is reasonable and supportable. However, the volume change, i.e., the increase in product volume, has not been considered. The increase in cash inflows of 10% implies not only a price change, but also a volume change. Further consideration and adjustment may be required.
- Residual value of the plant after the project (i.e., net cash flows to be received or paid for the disposal of the asset at the end of its useful life or at the end of the projection period) has not been considered in the projection. Further details are explained in Section 8.4.2.2.

Real-life Case 8.5

Qantas Airways Limited

Qantas Airways Limited, an Australian airline, explained its “value in use calculation” in estimating the recoverable amount of its cash-generating units (CGU) in its annual report of 2007 as follows:

- The recoverable amount of Jetstar CGU is based on value in use calculations.
- Those calculations use cash flow projections based on the 3-year plan approved by management and endorsed by the board.
- Cash flows for a further 6 years have been extrapolated using an average 6.2% per annum growth rate up to 2016. This growth rate reflects the planned expansion of Jetstar both domestically and internationally and is appropriate given the actual growth achieved since establishment and the Qantas Group’s committed B787 order.
- For the further 7 years, a 2.5% per annum growth rate has been assumed, reflecting long-term inflation, when extrapolating cash flows.
- The 3-year plan, coupled with a 13-year extrapolation, is believed appropriate, as it represents the capital-intensive long-term nature of the aviation industry and the estimated useful life of the assets employed in this CGU.

8.4.2.2 Composition of Estimates of Future Cash Flows

In addition to the requirements imposed on the basis for cash flow projections, IAS 36 requires estimates of future cash flows to include the following:

1. Projections of cash inflows from the continuing use of the asset;

2. Projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and can be directly attributed, or allocated on a reasonable and consistent basis, to the asset; and
3. Net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life (IAS 36.39).

An entity is required to estimate future cash flows for the asset in its current condition. The estimates of future cash flows cannot include the following:

1. Estimated future cash inflows or outflows that are expected to arise from
 - a. a future restructuring to which an entity is not yet committed; or
 - b. improving or enhancing the asset's performance (IAS 36.44);
2. Cash inflows or outflows from financing activities; and
3. Income tax receipts or payments (IAS 36.50).

Example 8.5 In order to adjust the projection for the value in use calculation, LKM's accountant in Example 8.4 estimated that the residual of the plant at the end of 2015 would be around \$100 million. This was based on the price of a similar plant in similar condition, around \$63 million in 2007, and the residual value was estimated by applying an annual inflation of 6% as the annual increment on the current price.

Comment on the accountant's projection on the residual value of the plant.

Answers

The residual value of the plant was estimated by just multiplying the current price with the observed annual inflation rate. However, at the end of the projection, the implication is that the plant should have been operated for 8 years. After 8 years of operation, the plant should not be priced as such without considering the obsolescence during those 8 years. For example, if the plant can be used for 10 years, a depreciated replacement cost for the plant after 8 years may be only \$20 million ($\$100 \text{ million} - \$100 \text{ million} \div 10 \text{ years} \times 8 \text{ years}$) or even lower.

The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life is the amount that an entity expects to obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal (IAS 36.52).

8.4.2.3 Foreign Currency Future Cash Flows

Future cash flows are estimated in the currency in which they will be generated and then discounted using a discount rate appropriate for that currency. An entity translates the present value using the spot exchange rate at the date of the value in use calculation.

8.4.2.4 Discount Rate

In calculating the present value of estimated future cash flows, a pre-tax discount rate should be used and it should reflect current market assessments of

1. the time value of money; and
2. the risks specific to the asset for which the future cash flow estimates have not been adjusted (IAS 36.55).

Such a discount rate required by IAS 36 is the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those that the entity expects to derive from the asset. This rate is estimated from either

- the rate implicit in current market transactions for similar assets; or
- the weighted average cost of capital of a listed entity that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review.

However, the discount rate used to measure an asset's value in use should not reflect risks for which the future cash flow estimates have been adjusted. Otherwise, the effect of some assumptions will be double-counted.

Real-life Case 8.6

Qantas Airways Limited

Qantas Airways Limited explained in its 2007 annual report how it determines the discount rate used in “value in use calculation” for its cash-generating units (CGU) and, additionally, it also illustrated the sensitivity of the discount rate as follows:

- A pre-tax discount rate of 10.5% per annum (2006: 10.5% per annum) has been used in discounting the projected cash flows of all CGUs, reflecting a market estimate of the weighted average cost of capital of the Qantas Group.
- This discount would need to exceed 14.1% per annum (2006: 13.2% per annum) before the carrying amount of any of the CGUs of the Qantas Group would exceed their recoverable amount.

When an asset-specific rate is not directly available from the market, an entity uses surrogates to estimate the discount rate. As a starting point in making such an estimate, the entity might take into account the following rates:

1. The entity's weighted average cost of capital determined using techniques such as the Capital Asset Pricing Model;
2. The entity's incremental borrowing rate; and
3. Other market borrowing rates.

However, these rates must be adjusted to reflect the way that the market would assess the specific risks associated with the asset's estimated cash flows, and to exclude

risks that are not relevant to the asset's estimated cash flows or for which the estimated cash flows have been adjusted. Consideration should be given to risks such as country risk, currency risk and price risk.

Example 8.6 In order to complete the value in use calculation, the LKM accountant in Examples 8.4 and 8.5 also considered determining the appropriate discount rate. The accountant found that the following rates of return were observed:

1. The historical cost of debt of LKM was 5%, while the current interest rate on incremental debt would be 7%.
2. The market's required return rate on a similar plant was 6%.
3. The weighted average cost of capital of LKM ascertained by using a pricing model was 8%.

Evaluate the above rate of return and suggest the appropriate discount rate for LKM.

Answers

In calculating the present value of estimated future cash flows, a pre-tax discount rate should be used, and it should reflect current market assessments of the time value of money as well as the risks specific to the asset for which the future cash flow estimates have not been adjusted. The pre-tax discount rate can also be estimated from the rate implicit in current market transactions for similar assets. In consequence, the market's required return rate on a similar plant of 6% may be used in completing the value in use calculation.

The other rates may be used as a surrogate to estimate the discount rate when an asset-specific rate is not directly available from the market. Since the market's required return can be found, those other rates should not be used.

The discount rate is independent of the entity's capital structure and the way the entity financed the purchase of the asset, because the future cash flows expected to arise from an asset do not depend on the way in which the entity financed the purchase of the asset. Moreover, when the basis used to estimate the discount rate is post-tax, that basis is adjusted to reflect a pre-tax rate in order to align the requirement of a pre-tax rate.

An entity normally uses a single discount rate for the estimate of an asset's value in use. However, an entity uses separate discount rates for different future periods when value in use is sensitive to a difference in risks for different periods or to the term structure of interest rates.

8.4.3 Intangible Asset with Indefinite Useful Life

IAS 36 requires, as explained in Section 8.3.1, an intangible asset with an indefinite useful life to be tested for impairment annually by comparing its carrying amount

with its recoverable amount, irrespective of whether there is any indication that it may be impaired. However, IAS 36 offers an alternative to the entity holding such an intangible asset.

In the current period's impairment test for a particular intangible asset, an entity may use the most recent detailed calculation of that asset's recoverable amount made in a preceding period for the testing so long as all the following criteria are met (since the most recent recoverable amount calculation):

1. The assets and liabilities making up the cash-generating unit (see Section 8.6) that involves the intangible asset (if it is tested for impairment as part of that cash-generating unit) have not changed significantly;
2. The most recent recoverable amount calculation resulted in an amount that exceeded the asset's carrying amount by a substantial margin; and
3. An analysis of events and circumstances demonstrates that the likelihood that a current recoverable amount determination would be less than the asset's carrying amount is remote.

8.4.4 Fair Value Less Costs to Sell vs. Value in Use

No matter whether the amount of an asset is its fair value less costs to sell or its value in use, all these amounts reflect a present value calculation (implicit or explicit) of estimated net future cash flows expected from an asset. However, there are differences on these estimated net future cash flows as follows:

1. Fair value less costs to sell reflects the market's expectation of the present value of the future cash flows to be derived from the asset, less the direct incremental costs to dispose of the asset; and
2. Value in use is the entity's estimate of the present value of the future cash flows to be derived from continuing use and disposal of the asset.

These bases all consider the time value of money and the risk that the amount and timing of the actual cash flows to be received from an asset might differ from estimates. However, the fair value less costs to sell is based on the market's assumptions and expectations while the value in use is based on those entity-specific assumptions and expectations. In consequence, fair value less costs to sell may differ from value in use because the market may not use the same assumptions and expectations as an individual entity.

In certain cases, an entity may also use external appraisal to estimate the recoverable amount of an asset or of a cash-generating unit (cash-generating units are discussed in Section 8.6). However, IAS 36 clarifies that external appraisal is not a separate technique in its own right. An entity may still be required to verify the external appraisal and ensure that it is in accordance with IAS 36 when the external appraisal is used to estimate the recoverable amount of an asset.

Real-life

Case 8.7

LVMH Moët Hennessy – Louis Vuitton (LVMH Group)

In its financial statements of 2007, LVMH Group explained its approach in estimating value in use and also its complementary methods used as follows:

- Value in use is based on the present value of the cash flows expected to be generated by these assets.
- Cash flows are forecast for each business segment defined as one or several brands or trade names under the responsibility of a specific management team. Smaller-scale cash-generating units, e.g., a group of stores, may be distinguished within a particular business segment.
- Brands and goodwill are valued chiefly on the basis of the present value of forecast cash flows, or of comparable transactions (i.e., using the revenue and net profit coefficients employed for recent transactions involving similar brands), or of stock market multiples observed for related businesses.
- Other complementary methods may also be employed:
 - The royalty method, involving equating a brand's value with the present value of the royalties required to be paid for its use;
 - The margin differential method, applicable when a measurable difference can be identified between the amount of revenue generated by a branded product in comparison with an unbranded product; and
 - The equivalent brand reconstitution method, involving, in particular, estimation of the amount of advertising required to generate a similar brand.

No matter which method is employed, the method should still be verified and follow the requirements of IAS 36.

8.5 Recognising an Impairment Loss

When an entity is required to ascertain and has already ascertained the recoverable amount of an asset, it will compare the recoverable amount with the carrying amount of the asset. If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset must be reduced to its recoverable amount. That reduction is an impairment loss (IAS 36.59).

An impairment loss is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with an accounting standard, for example, in accordance with the revaluation model in IAS 16 *Property, Plant and Equipment*. Any impairment loss of a revalued asset is treated as a revaluation decrease in accordance with that accounting standard (IAS 36.60).

Real-life
Case 8.8 Singapore Airlines Limited

Singapore Airlines Limited had the following explanation on the recognition of impairment losses in its annual report of 2007:

- The carrying amounts of the group's non-financial assets are reviewed at each balance sheet date to determine whether there is any indication of impairment.
- An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. The impairment loss is charged to the profit and loss account unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.
- An impairment loss is reversed if there has been a change in estimates used to determine the recoverable amount.

Example 8.7 Melody Beauty Shop performed an impairment review on some assets on 31 March 2008. While the freehold land was stated at fair value with a revaluation surplus of \$5,000, other assets were stated at cost less accumulated depreciation or amortisation. The result of the impairment review is summarised below:

	Fair value less costs to sell \$	Value in use \$	Carrying amount \$
Freehold land, at fair value.	21,200	22,000	30,000
Intangible asset, at amortised cost . . .	820	650	800
Machinery, at depreciated cost	2,100	1,800	3,000

Ascertain the impairment loss and prepare the required journal entries.

Answers

Using the information on hand, the assets of Melody Beauty Shop should have the following impairment losses:

	Recoverable amount \$	Carrying amount \$	Impairment loss \$
Freehold land, at fair value.	22,000	30,000	8,000
Intangible asset, at amortised cost	820	800	N/A
Machinery, at depreciated cost	2,100	3,000	900

While there was a revaluation surplus of \$5,000 for freehold land, part of the impairment loss for the freehold land can be recognised in the revaluation surplus. The journal entries for the recognition of impairment losses should be as follows:

Dr Revaluation surplus.....	\$5,000	
Profit or loss (\$8,000 – \$5,000).....	3,000	
Cr Freehold land.....		\$8,000
To recognise the impairment loss on freehold land.		
<hr/>		
Dr Profit or loss.....	\$900	
Cr Machinery.....		\$900
To recognise the impairment loss on machinery.		

When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an entity recognises a liability if, and only if, that is required by another accounting standard (IAS 36.62).

After the recognition of an impairment loss, the depreciation or amortisation charge for the asset is adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life (IAS 36.63).

If an impairment loss is recognised, any related deferred tax assets or liabilities are determined in accordance with IAS 12 *Income Taxes* by comparing the revised carrying amount of the asset with its tax base.

8.6 Cash-generating Units

IAS 36 requires that if there is any indication that an asset may be impaired, recoverable amount should be estimated for that individual asset alone for comparison with its carrying amount. However, there may be circumstances when it is not possible to estimate a recoverable amount of an individual asset alone; the entity will then be required to estimate the recoverable amount of the cash-generating unit to which the asset belongs, i.e., the asset's cash-generating unit (IAS 36.66).

A **cash-generating unit** is defined as the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets (IAS 36.6).

**Real-life
Case 8.9**
France Telecom Group

France Telecom Group gave the following explanation in its annual report of 2007 in respect of its cash-generating units (CGUs):

- Given the nature of its assets and activities, most of France Telecom's individual assets do not generate cash flows that are independent of those from CGUs. The recoverable amount is then determined at the level of the CGU to which the asset belongs, except when:
 - The fair value less costs to sell of the individual asset is higher than its book value; or
 - The value in use of the asset can be estimated as being close to its fair value less costs to sell, where fair value can be reliably determined.

The recoverable amount of an individual asset cannot be determined if:

1. The asset's value in use cannot be estimated to be close to its fair value less costs to sell; and
2. The asset does not generate cash inflows that are largely independent of those from other assets.

In such cases, value in use and, therefore, recoverable amount, can be determined only for the asset's cash-generating unit.

Example 8.8

Fifth-Level Telecom Work Limited (Fifth-Level) owns a number of satellites and other satellite facilities together with its on-ground and underground fibre optic networks and other communication assets to provide satellite and mobile communication services. Because of the rapid development of advanced technology on satellite communication, Fifth-Level considered that its own satellites might be impaired on 30 June 2008.

The satellites, however, cannot be disposed of in the open market and can only be sold to the government at scrap value pursuant to the agreement with the local telecommunications authority. They are also unable to generate cash inflows that are largely independent of the cash inflows from the other assets since they require the supporting infrastructure and other facilities, for example, the on-ground receiver and fibre optic networks, to offer services and derive cash inflows. In other words, it may not be possible to determine the value in use of a satellite.

In consequence, Fifth-Level estimates the recoverable amount of the cash-generating unit to which the satellite belongs, i.e., the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The cash-generating unit may be one of the operating segments of Fifth-Level, including satellite receivers, switching facilities and at least one of the fibre optic networks.

Real-life

Case 8.10

Air-France – KLM Group

Air-France – KLM Group explained in its impairment policy and use of cash-generating units in its annual report of 2007 as follows:

- In accordance with IAS 36 *Impairment of Assets*, the group reviews at each balance sheet date whether there is any indication of impairment of tangible and intangible assets.
- When it is not possible to estimate the recoverable value for an individual asset, this asset is grouped together with other assets which form a cash-generating unit (CGU).
- Therefore, the group has determined that the lowest level at which assets shall be tested are CGU, which correspond to groups' operating segments (see segment information).

In IAS 36, the requirements for measuring recoverable amount use the term “an asset”, but they apply equally to an individual asset or a cash-generating unit. In addition, the use of a cash-generating unit is particularly relevant and crucial in assessing the impairment of goodwill since goodwill (even as an individual asset recognised in the balance sheet) is seldom able to generate cash flows largely independent of the cash inflows from other assets or groups of assets or can be disposed of independently. The relevant discussion and requirements on the topics relating to goodwill, however, will not be discussed in this book.

8.6.1 Lowest Aggregation of Assets

Identification of an asset's cash-generating unit involves judgement. If recoverable amount cannot be determined for an individual asset, an entity identifies the lowest aggregation of assets (i.e., smallest identifiable group of assets) that generates largely independent cash inflows.

Example 8.9

In addition to the satellite communication, Fifth-Level Telecom Work Limited (Fifth-Level) also offers second-generation (or 2G) GSM mobile communication services together with more advanced generation GSM mobile communication services, including 3G and 3.5G, and CDMA mobile communication services. The assets devoted to each mode of communication and cash flows from each mode can be identified separately. Since the customer base is not well established on CDMA mode, this mode operates at a significant loss. Fifth-Level is required to perform an impairment test on this mode of communication.

Fifth-Level's licence with the telecommunications authority requires it to offer a full range of mobile communication services, and it cannot suspend or curtail any one mode unless it obtains approval from the authority. In consequence, the lowest level

of identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets is the cash inflows generated by all the modes of mobile communication. The cash-generating unit for each mode is all the four modes as a whole.

Cash inflows are inflows of cash and cash equivalents received from parties external to the entity. In identifying whether cash inflows from an asset (or group of assets) are largely independent of the cash inflows from other assets (or groups of assets), an entity considers various factors, including the following:

- How management monitors the entity's operations (such as by products or locations); and
- How management makes decisions about continuing or disposing of the entity's assets and operations.

If an active market exists for the output produced by an asset or group of assets, that asset or group of assets must be identified as a cash-generating unit, even if some or all of the output is used internally. If the cash inflows generated by any asset or cash-generating unit are affected by internal transfer pricing, an entity is required to use management's best estimate of future prices that could be achieved in arm's length transactions in estimating the following:

1. The future cash inflows used to determine the asset's or cash-generating unit's value in use; and
2. The future cash outflows used to determine the value in use of any other assets or cash-generating units that are affected by the internal transfer pricing (IAS 36.70).

An **active market** is a market in which all the following conditions exist:

- The items traded within the market are homogeneous;
- Willing buyers and sellers can normally be found at any time; and
- Prices are available to the public (IAS 36.6).

Even if part or all of the output produced by an asset or a group of assets is used by other units of the entity (e.g., products at an intermediate stage of a production process), this asset or group of assets forms a separate cash-generating unit if the entity could sell the output on an active market. This is because the asset or group of assets could generate cash inflows that would be largely independent of the cash inflows from other assets or groups of assets.

When cash-generating units are identified and assets are grouped in such cash-generating units, their groupings should be consistent from period to period for the same asset or types of assets, unless a change is justified (IAS 36.72). If there is any necessary change on the grouping of assets, IAS 36 requires disclosures about the cash-generating unit (if an impairment loss is recognised or reversed for that unit).

8.6.2 Recoverable Amount and Carrying Amount of a Cash-generating Unit

In an impairment test, the recoverable amount of a cash-generating unit is compared with the carrying amount of that unit. The recoverable amount of a cash-generating unit is also the higher of fair value less costs to sell and value in use of the unit. The carrying amount of a cash-generating unit is determined on a basis consistent with the way the recoverable amount of the cash-generating unit is determined (IAS 36.75).

The carrying amount of a cash-generating unit

1. includes the carrying amount of only those assets that can be attributed directly, or allocated on a reasonable and consistent basis, to the cash-generating unit and will generate the future cash inflows used in determining the cash-generating unit's value in use; and
2. does not include the carrying amount of any recognised liability, unless the recoverable amount of the cash-generating unit cannot be determined without consideration of this liability.

This is because fair value less costs to sell and value in use of a cash-generating unit are determined excluding cash flows that relate to assets that are not part of the cash-generating unit and liabilities that have been recognised.

When assets are grouped for recoverability assessments, it is important to include in the cash-generating unit all assets that generate or are used to generate the relevant stream of cash inflows. Otherwise, the cash-generating unit may appear to be fully recoverable when in fact an impairment loss has occurred.

It may be necessary to consider some recognised liabilities to determine the recoverable amount of a cash-generating unit. This may occur if the disposal of a cash-generating unit would require the buyer to assume the liability. To perform a meaningful comparison between the carrying amount of the cash-generating unit and its recoverable amount, the carrying amount of the liability is deducted in determining both the cash-generating unit's value in use and its carrying amount.

Example 8.10 Ocean Care Entertainment Park has leased a site from the government to establish an entertainment park since 1980 and has agreed to restore the site and remove all the facilities before it vacates and returns the site to the government. An unamortised provision for the restoration costs is \$200 million.

Since the opening of a similar new park in the region in 2007, Ocean Care has operated the park at a loss. It has to test impairment of the park. A proposal from a potential buyer offers \$900 million to purchase the park. The park as a cash-generating unit should have a value in use excluding restoration costs of \$900 million.

Given that the carrying amount of the park's assets is \$1 billion at the end of 2007, should Ocean Care recognise any impairment loss?

Answers

To determine whether any impairment loss should be recognised, the recoverable amount of the park, i.e., the higher of its fair value less costs to sell and value in use should be compared with its carrying amount. The following calculations can be made from the information:

- The park's fair value less costs to sell is \$900 million, and the restoration costs can be considered as inclusive.
- The value in use for the park as a cash-generating unit should be determined by including the restoration costs of \$200 million, and it would be \$700 million (\$900 million – \$200 million).
- The carrying amount of the park as a cash-generating unit should have a carrying amount of \$800 million (\$1 billion – \$200 million) after reduction by the restoration cost of \$200 million.

In consequence, the recoverable amount of the cash-generating unit should be \$900 million (i.e., the fair value less costs to sell, which is higher) and it should exceed the unit's carrying amount of \$800 million. No impairment loss should be recognised.

8.6.3 Corporate Assets

In testing impairment for a cash-generating unit, corporate assets may be neglected and a lower carrying amount of the cash-generating unit may result. The impairment loss may thus be underestimated. Corporate assets include group or divisional assets, such as the headquarter office or EDP equipment, and IAS 36 has the following definition for corporate assets.

Corporate assets are assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units (IAS 36.6).

On one hand, as corporate assets do not generate separate cash inflows, the recoverable amount of an individual corporate asset cannot be determined unless management has decided to dispose of the asset. In consequence, if there is an indication that a corporate asset may be impaired, its recoverable amount is determined for the cash-generating unit or group of cash-generating units to which the corporate asset belongs. The recoverable amount will then be compared with the carrying amount of this unit or group of units.

On the other hand, in testing a cash-generating unit for impairment, an entity is required to identify all the corporate assets that relate to the cash-generating unit under review. After the identification of such corporate assets, an entity is required to consider the following two possibilities:

1. If a portion of the carrying amount of a corporate asset can be allocated on a reasonable and consistent basis to the related cash-generating unit, the entity should compare the carrying amount of the unit, including the portion of the carrying amount of the corporate asset allocated to the unit, with its recoverable amount. Any impairment loss is recognised in accordance with IAS 36 (see Section 8.6.4).
2. If a portion of the carrying amount of a corporate asset cannot be allocated on a reasonable and consistent basis to the related cash-generating unit, the entity is required to
 - a. first, compare the carrying amount of the unit, excluding the corporate asset, with its recoverable amount and recognise any impairment loss in accordance with IAS 36 (see Section 8.6.4);
 - b. second, identify the smallest group of cash-generating units that includes the cash-generating unit under review and to which a portion of the carrying amount of the corporate asset can be allocated on a reasonable and consistent basis (i.e., combining the unit with one or more other cash-generating units to ensure that the corporate asset is included for review, or termed as a larger cash-generating unit); and
 - c. finally, compare the carrying amount of that group of cash-generating units (the larger cash-generating unit), including the portion of the carrying amount of the corporate asset allocated to that group of units, with the recoverable amount of the group of units. Any impairment loss will be recognised in accordance with IAS 36 (see Section 8.6.4) (IAS 36.102).

Example 8.11 To test for impairment for its satellite communication operations, Fifth-Level Telecom Work Limited (Fifth-Level) divides the operations into three cash-generating units and estimates the value in use as follows:

	Unit 1	Unit 2	Unit 3
Carrying amount of the unit	\$500 million	\$1,000 million	\$2,000 million
Estimated remaining useful life	20 years	10 years	15 years
Value in use	\$600 million	\$2,500 million	\$2,400 million

Fifth-Level has not included the head office, with a carrying amount of \$1 billion, and the central equipment, with a carrying amount of \$800 million, in the above calculation.

With the assumption that only the head office can be allocated to the units on a reasonable and consistent basis, comment on the impairment test made by Fifth-Level.

Answers

Head office and central equipment are the corporate assets of Fifth-Level, and they should be related and allocated to the cash-generating unit under impairment test.

First, since the head office is assumed to have an allocation with a reasonable and consistent basis, the carrying amount of the head office can be allocated to each unit first. IAS 36 suggests a weighted allocation basis by considering the estimated remaining useful life of each cash-generating unit, and the calculation after the weighted allocation is set out as follows:

	Unit 1	Unit 2	Unit 3	Total
Carrying amount	\$ 500 million	\$1,000 million	\$2,000 million	\$3,500 million
Estimated remaining useful life	20 years	10 years	15 years	
Weighted based on useful life	2	1	1.5	
Carrying amount after weighting	\$1,000 million	\$1,000 million	\$3,000 million	
Pro rata allocation of the head office.	20%	20%	60%	
Allocation of the carrying amount of head office	\$200 million	\$200 million	\$ 600 million	\$1,000 million
Carrying amount of the unit with head office	\$700 million	\$1,200 million	\$2,600 million	\$4,500 million
Recoverable amount	\$600 million	\$2,500 million	\$2,400 million	
Impairment loss as calculated	(\$100) million	0	(\$200) million	

Then, the impairment loss as calculated should be allocated between the units and the head office pro rata on the basis of the carrying amount (see Section 8.6.4) as follows:

	Allocation of impairment loss		Allocation of impairment loss	
	Unit 1 \$ million	for Unit 1 \$ million	Unit 3 \$ million	for Unit 3 \$ million
Carrying amount of the unit	500	71	2,000	154
Carrying amount of head office	200	29	600	46
Total amount	700	100	2,600	200

Based on the above calculation, the carrying amount of the central equipment should also be considered. IAS 36 requires Fifth-Level to identify the smallest group of cash-generating units that includes the cash-generating unit under review and to which a portion of the carrying amount of the corporate asset can be allocated on a reasonable and consistent basis. In this case, it would be all three units to which central equipment can be allocated.

	Unit 1 \$ million	Unit 2 \$ million	Unit 3 \$ million	Head office \$ million	Central equipment \$ million	Total \$ million
Carrying amount	500	1,000	2,000	1,000	800	5,300
Impairment loss allocated above	(71)		(154)	(75)		(300)
Carrying amount after the allocation	429	1,000	1,846	925	800	5,000
Recoverable amount	600	2,500	2,400			5,500
Impairment loss on the larger unit						0

Since the recoverable amount of the group of units (i.e., the three units or the larger cash-generating unit) is higher than its carrying amount, no additional impairment loss should be recognised.

8.6.4 Impairment Loss for a Cash-generating Unit

An impairment loss is recognised for a cash-generating unit if, and only if, the recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss is allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

1. First, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and
2. Then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units).

These reductions in carrying amounts shall be treated as impairment losses on individual assets and recognised in the same manner as the impairment loss on individual assets (see Section 8.5) (IAS 36.104).

In allocating an impairment loss for a cash-generating unit, an entity is required not to reduce the carrying amount of an asset below the highest of

1. its fair value less costs to sell (if determinable);
2. its value in use (if determinable); and
3. zero.

The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit (group of units) (IAS 36.105).

Example 8.12 Bear Bull Inc. is performing an impairment test on its property operation, which has operated at a significant loss in the first quarter of 2008. It has ascertained that the property operation as a cash-generating unit sustains a value in use of \$8,000 million, and a proposed acquisition offers a purchase consideration of \$7,500 million. The assets of the property operation include:

	Carrying amount \$ million
Goodwill.....	1,000
Property, plant and equipment, at depreciated cost	3,000
Intangible assets, at amortised cost.....	2,000
Investment property, at depreciated cost.....	2,500
Financial assets, at fair value	1,070
Inventories, at cost.....	500
Trade receivables, at amortised cost.....	1,300
Carrying amount of property operation.....	<u>11,370</u>

Bear Bull can also determine the fair value less costs to sell of investment property, and it is \$2,000 million.

Determine the impairment loss of the property operation and allocate the impairment loss to individual assets.

Answers

Impairment loss should be recognised on the investment property and property operation as a cash-generating unit.

First, an impairment loss of \$500 million (\$2,500 million – \$2,000 million) should be recognised on the investment property of Bear Bull. Investment property measured at fair value is out of the scope of IAS 36, but investment property measured at cost is within the scope of IAS 36 (see Section 8.1). The journal entries for the impairment loss on the investment property should be:

Dr Profit or loss — impairment loss	\$500 million
Cr Investment property	\$500 million

Second, the carrying amount of the property operation should become \$10,870 million (\$11,370 million – \$500 million impairment loss on investment property). The amount should then be compared with the higher of the fair value less costs to sell of the operation and the value in use of the operation, i.e., \$8,000 million for the operation of Bear Bull. Thus, an impairment loss of \$2,870 million (\$10,870 million – \$8,000 million)

should be recognised and allocated between the assets within the scope of IAS 36 and in accordance with the allocation requirements of IAS 36.

	Carrying amount \$ million	Allocation of impairment loss \$ million	Carrying amount after impairment loss \$ million
Goodwill.....	1,000	(1,000)	–
Property, plant and equipment.....	3,000	(1,122)	1,878
Intangible assets.....	2,000	(748)	1,252
Investment property (\$2,500 – \$500).....	2,000	–	2,000
Financial assets.....	1,070	–	1,070
Inventories.....	500	–	500
Trade receivables.....	1,300	–	1,300
	<u>10,870</u>	<u>(2,870)</u>	<u>8,000</u>

The impairment loss of \$2,870 million should first be allocated to reduce the carrying amount of goodwill, i.e., \$1,000 million in this case.

Then, the remaining impairment loss of \$1,870 million should be allocated to other assets (within the scope of IAS 36) of the cash-generating units. Since investment property has already been reduced to the recoverable amount and the assets other than property, plant and equipment and intangible assets are not within the scope of IAS 36, no impairment loss should be allocated to investment property and assets other than property, plant and equipment and intangible assets.

The remaining impairment loss of \$1,870 million should be allocated to property, plant and equipment and intangible assets pro rata on the basis of their carrying amount. The impairment loss allocated to property, plant and equipment amounts to \$1,122 ($\$1,870 \times 3,000 \div (3,000 + 2,000)$) million, and the impairment loss allocated to intangible assets amounts to \$748 ($\$1,870 \times 2,000 \div (3,000 + 2,000)$) million. The journal entries for the impairment loss of the property operation should be:

Dr Profit or loss – impairment loss.....	\$2,870 million	
Cr Goodwill.....		\$1,000 million
Property, plant and equipment.....		1,122 million
Intangible assets.....		748 million

Given that it is not practicable to estimate the recoverable amount of each individual asset of a cash-generating unit, IAS 36 still requires an arbitrary allocation of an impairment loss between the assets of that unit (other than goodwill), because all assets of a cash-generating unit work together.

However, the operation of a cash-generating unit may result in an interesting situation – even if an asset's fair value less costs to sell is less than its carrying amount, no impairment loss on that asset is recognised, because the recoverable amount (in particular the value in use) of that individual asset cannot be determined, and the asset's cash-generating unit used for impairment review is not impaired.

If the impairment loss is higher than the impairment loss allocated to the assets of the cash-generating unit in accordance with the above requirements, a liability is recognised for any remaining amount of an impairment loss for a cash-generating unit if, and only if, that is required by another accounting standard (IAS 36.108).

8.7 Reversing an Impairment Loss

At each reporting date, an entity is required to assess whether there is any indication that an impairment loss recognised in prior periods for an asset (other than goodwill) may no longer exist or may have decreased. If any such indication exists, the entity will be required to estimate the recoverable amount of that asset (IAS 36.110). The impairment losses for all assets can be reversed, but no reversal is allowed on impairment loss for goodwill.

8.7.1 Identifying any Indications of Impairment Reversal

IAS 36 requires an entity to consider at least the following external and internal sources of information in assessing whether there is any indication that an impairment loss recognised in prior periods for an asset (other than goodwill) or cash-generating unit may no longer exist or may have decreased.

1. External sources of information:
 - a. The asset's market value has increased significantly during the period.
 - b. Significant changes with a favourable effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which the asset is dedicated.
 - c. Market interest rates or other market rates of return on investments have decreased during the period, and those decreases are likely to affect the discount rate used in calculating the asset's value in use and increase the asset's recoverable amount materially.
2. Internal sources of information:
 - a. Significant changes with a favourable effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, the asset is used or is expected to be used. These changes include costs incurred during the period to improve or enhance the asset's performance or restructure the operation to which the asset belongs.
 - b. Evidence is available from internal reporting that indicates that the economic performance of the asset is, or will be, better than expected (IAS 36.111).

Indications of a potential decrease in an impairment loss mainly mirror the indications of a potential impairment loss set out in Section 8.3. If there is an indication that an impairment loss recognised for an asset may no longer exist or may have decreased, this may indicate that an entity may be required to review and adjust the remaining useful life, the depreciation, the amortisation method or the residual value applicable to the asset, even if no impairment loss is reversed for the asset.

8.7.2 Ascertaining the Sources of Change

An impairment loss recognised in prior periods for an asset (other than goodwill) can be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised (IAS 36.114). In other words, if there is no such change, no recognised impairment loss can be reversed. If there is such a change, the carrying amount of the asset will be increased to its recoverable amount, subject to a limitation (see Section 8.7.3). That increase is a reversal of an impairment loss (IAS 36.114).

Real-life

Case 8.11

Singapore Telecommunications Limited

Singapore Telecommunications Limited explained its reversal of impairment losses in its annual report of 2007 as follows:

- An impairment loss for an asset, other than goodwill, is reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised.
- Impairment loss on goodwill is not reversed in a subsequent period.

A reversal of an impairment loss reflects an increase in the estimated service potential of an asset, either from use or from sale, since the date when an entity last recognised an impairment loss for that asset. IAS 36 requires an entity to identify the change in estimates that causes the increase in estimated service potential.

Example 8.13 Examples of estimate changes that cause an increase in estimated service potential include the following:

1. A change in the basis for recoverable amount, i.e., whether recoverable amount is based on fair value less costs to sell or value in use, e.g., an internally used production process can be marketed externally with a higher price;
2. If recoverable amount was based on value in use, a change in the amount or timing of estimated future cash flows or in the discount rate, e.g., the revenue generated by the asset, increases; or

3. If recoverable amount was based on fair value less costs to sell, a change in estimate of the components of fair value less costs to sell, e.g., an active market for an asset without active market previously is now established, or an asset's estimated selling price increases due to a shortage of the asset in the market.

Some changes in an asset's recoverable amount do not result from a change in the estimates used to determine the asset's recoverable amount. For example, an asset's value in use may become greater than the asset's carrying amount simply because the present value of future cash inflows increases as they become closer (i.e., passage of time). However, the service potential of the asset has not increased. Therefore, an impairment loss is not reversed just because of the passage of time (sometimes called the "unwinding" of the discount), even if the recoverable amount of the asset becomes higher than its carrying amount.

8.7.3 Reversing an Impairment Loss for an Individual Asset

The increased carrying amount of an asset (other than goodwill) attributable to a reversal of an impairment loss cannot exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years (IAS 36.117).

A reversal of an impairment loss for an asset (other than goodwill) is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with another accounting standard (for example, the revaluation model in IAS 16 *Property, Plant and Equipment*). Any reversal of an impairment loss of a revalued asset is treated as a revaluation increase in accordance with that other accounting standard (IAS 36.119).

Example 8.14 As at 31 December 2005, Lionel King Manufacturing Limited (LKM) recognised an impairment loss of \$400,000 on its delivery trucks with a cost of \$1 million and an accumulated depreciation of \$200,000 up to that date. The original estimated useful lives of the trucks were 10 years, and no revision on the useful lives was made at the end of 2005. Straight-line depreciation basis was adopted.

As at 31 December 2007, LKM forecasted that the cash inflows from the delivery trucks would increase significantly. The value in use of the trucks would be \$700,000 at that date.

Determine whether a reversal of impairment loss can be recognised, and the amount of reversal.

Answers

As at 31 December 2005, based on the original estimated useful lives of 10 years and an accumulated depreciation of \$200,000, the trucks should have been used for 2 years ($\$200,000 \div (\$1 \text{ million} \div 10 \text{ years})$) up to that date and the remaining useful lives should be 8 years. At that date, after the impairment loss of \$400,000, the cost less accumulated depreciation and accumulated impairment loss should be \$400,000.

Cost	\$1,000,000
Less: Accumulated depreciation	(200,000)
Carrying amount as at 31 December 2005, before impairment loss	\$ 800,000
Less: Accumulated impairment loss	(400,000)
Carrying amount as at 31 December 2005, after impairment loss	\$ 400,000
Remaining useful lives	8 years
Annual depreciation after impairment loss recognised	\$ 50,000

As at 31 December 2007, before the reversal of impairment loss, the carrying amount of the trucks should be:

Carrying amount as at 31 December 2005	\$ 400,000
Less: Depreciation for 2006 and 2007 ($\$50,000 \times 2 \text{ years}$)	(100,000)
Carrying amount as at 31 December 2007, before impairment reversal	\$ 300,000

There has been a change in the estimates used to determine the trucks' value in use as the estimated cash inflows would become significantly higher, and a reversal of impairment loss should be recognised. However, even though the value in use of the trucks should be \$700,000, the increased carrying amount of the trucks attributable to a reversal of an impairment loss cannot exceed the carrying amount that would have been determined (net of depreciation) had no impairment loss been recognised for the trucks in prior years. In other words, the carrying amount of the trucks should not exceed \$600,000:

Carrying amount as at 31 December 2005, before impairment loss	\$ 800,000
Less: Depreciation of 2006 and 2007, had no impairment loss been recognised (Original annual depreciation of $\$100,000 \times 2 \text{ years}$)	(200,000)
Carrying amount as at 31 December 2007, had no impairment loss been recognised	\$ 600,000

The reversal of the impairment loss should not be \$400,000 and should be limited to \$300,000 ($\$600,000 - \$300,000$), and the journal entries should be as follows:

Dr Property, plant and equipment (trucks)	\$300,000	
Cr Profit or loss – reversal of impairment loss		\$300,000

After a reversal of an impairment loss is recognised, the depreciation (amortisation) charge for the asset is adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life (IAS 36.121).

8.7.4 Reversing an Impairment Loss for a Cash-generating Unit

A reversal of an impairment loss for a cash-generating unit is allocated to the assets of the unit, except for goodwill, pro rata with the carrying amounts of those assets. These increases in carrying amounts are treated as reversals of impairment losses for individual assets and recognised (see Section 8.7.3) (IAS 36.122).

In allocating such reversal of an impairment loss for a cash-generating unit, the carrying amount of an asset cannot be increased above the lower of

1. its recoverable amount (if determinable); and
2. the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior periods.

The amount of the reversal of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit, except for goodwill (IAS 36.123).

8.8 Disclosure

IAS 36 requires an entity to disclose the following for each class of assets:

1. The amount of impairment losses recognised in profit or loss during the period and the line items of the income statement in which those impairment losses are included;
2. The amount of reversals of impairment losses recognised in profit or loss during the period and the line items of the income statement in which those impairment losses are reversed;
3. The amount of impairment losses on revalued assets recognised directly in equity during the period;
4. The amount of reversals of impairment losses on revalued assets recognised directly in equity during the period (IAS 36.126).

An entity that reports segment information in accordance with IFRS 8 *Operating Segments* is required to disclose the following for each reportable segment:

1. The amount of impairment losses recognised in profit or loss and directly in equity during the period;

2. The amount of reversals of impairment losses recognised in profit or loss and directly in equity during the period (IAS 36.129).

An entity is also required to disclose the following for each material impairment loss recognised or reversed during the period for an individual asset, including goodwill, or a cash-generating unit:

1. The events and circumstances that led to the recognition or reversal of the impairment loss;
2. The amount of the impairment loss recognised or reversed;
3. For an individual asset:
 - a. The nature of the asset; and
 - b. If the entity reports segment information in accordance with IFRS 8, the reportable segment to which the asset belongs.
4. For a cash-generating unit:
 - a. A description of the cash-generating unit (such as whether it is a product line, a plant, a business operation, a geographical area or a reportable segment as defined in IFRS 8);
 - b. The amount of the impairment loss recognised or reversed by class of assets and, if the entity reports segment information in accordance with IFRS 8, by reportable segment; and
 - c. If the aggregation of assets for identifying the cash-generating unit has changed since the previous estimate of the cash-generating unit's recoverable amount (if any), a description of the current and former way of aggregating assets and the reasons for changing the way the cash-generating unit is identified.
5. Whether the recoverable amount of the asset (cash-generating unit) is its fair value less costs to sell or its value in use;
6. If recoverable amount is fair value less costs to sell, the basis used to determine fair value less costs to sell (such as whether fair value was determined by reference to an active market);
7. If recoverable amount is value in use, the discount rate used in the current estimate and previous estimate (if any) of value in use (IAS 36.130).

An entity is required to disclose the following information for the aggregate impairment losses and the aggregate reversals of impairment losses recognised during the period for which no information is disclosed in accordance with the above paragraph:

1. The main classes of assets affected by impairment losses and the main classes of assets affected by reversals of impairment losses.
2. The main events and circumstances that led to the recognition of these impairment losses and reversals of impairment losses (IAS 36.131).

8.8.1 Disclosure for Specific Cash-generating Units

An entity is required to disclose the following information for each cash-generating unit (group of units) for which the carrying amount of intangible assets with indefinite useful lives (or goodwill) allocated to that unit (or group of units) is significant in

comparison with the entity's total carrying amount of intangible assets with indefinite useful lives (or goodwill):

1. The carrying amount of intangible assets with indefinite useful lives (or goodwill) allocated to the unit (group of units);
2. The basis on which the unit's (group of units') recoverable amount has been determined (i.e., value in use or fair value less costs to sell);
3. If the unit's (group of units') recoverable amount is based on value in use:
 - a. A description of each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit's (group of units') recoverable amount is most sensitive;
 - b. A description of management's approach to determining the value assigned to each key assumption, whether those values reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information;
 - c. The period over which management has projected cash flows based on financial budgets/forecasts approved by management and, when a period greater than five years is used for a cash-generating unit (group of units), an explanation of why that longer period is justified;
 - d. The growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts, and the justification for using any growth rate that exceeds the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market to which the unit (group of units) is dedicated;
 - e. The discount rate applied to the cash flow projections.
4. If the unit's (group of units') recoverable amount is based on fair value less costs to sell, the methodology used to determine fair value less costs to sell. If fair value less costs to sell is not determined using an observable market price for the unit (group of units), the following information shall also be disclosed:
 - a. A description of each key assumption on which management has based its determination of fair value less costs to sell. Key assumptions are those to which the unit's (group of units') recoverable amount is most sensitive.
 - b. A description of management's approach to determining the value assigned to each key assumption, whether the values reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information.
5. If a reasonably possible change in a key assumption on which management has based its determination of the unit's (group of units') recoverable amount would cause the unit's (group of units') carrying amount to exceed its recoverable amount:
 - a. The amount by which the unit's (group of units') recoverable amount exceeds its carrying amount;

- b. The value assigned to the key assumption;
- c. The amount by which the value assigned to the key assumption must change, after incorporating any consequential effects of that change on the other variables used to measure recoverable amount, in order for the unit's (group of units') recoverable amount to be equal to its carrying amount (IAS 36.134).

If some or all of the carrying amount of intangible assets with indefinite useful lives (or goodwill) is allocated across multiple cash-generating units (groups of units), and the amount so allocated to each unit (group of units) is not significant in comparison with the entity's total carrying amount of intangible assets with indefinite useful lives (or goodwill), that fact is disclosed, together with the aggregate carrying amount of intangible assets with indefinite useful lives (or goodwill) allocated to those units (groups of units).

In addition, if the recoverable amounts of any of those units (groups of units) are based on the same key assumptions and the aggregate carrying amount of intangible assets with indefinite useful lives (or goodwill) allocated to them is significant in comparison with the entity's total carrying amount of goodwill or intangible assets with indefinite useful lives, an entity is required to disclose that fact, together with the following:

1. The aggregate carrying amount of intangible assets with indefinite useful lives (or goodwill) allocated to those units (groups of units);
2. A description of the key assumptions;
3. A description of management's approach to determining the value assigned to the key assumptions, whether the values reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information;
4. If a reasonably possible change in the key assumptions would cause the aggregate of the units' (groups of units') carrying amounts to exceed the aggregate of their recoverable amounts:
 - a. The amount by which the aggregate of the units' (groups of units') recoverable amounts exceeds the aggregate of their carrying amounts;
 - b. The value assigned to the key assumptions;
 - c. The amount by which the value assigned to the key assumptions must change, after incorporating any consequential effects of the change on the other variables used to measure recoverable amount, in order for the aggregate of the units' (groups of units') recoverable amounts to be equal to the aggregate of their carrying amounts (IAS 36.135).

Real-life**Case 8.12****Esprit Holdings Limited**

To support its assessment of indefinite-lived intangible assets, Esprit Holdings Limited disclosed in its 2007 annual report that:

**Real-life
Case 8.12**
(cont'd)

- In accordance with IAS 36 *Impairment of Assets*, the group completed its annual impairment test for Esprit trademarks by comparing their recoverable amount to their carrying amount as at 30 June 2007.
- The group has conducted a valuation of the Esprit trademarks as one corporate asset based on a value-in-use calculation. The resulting value of the Esprit trademarks as at 30 June 2007 was significantly higher than their carrying amount.
- This valuation uses cash flow projections based on financial estimates covering a 3-year period, expected royalty rates deriving from the Esprit trademarks in the range of 3% to 6% and a discount rate of 10%.
- The cash flows beyond the 3-year period are extrapolated using a steady 3% growth rate. This growth rate does not exceed the long-term average growth rate for apparel markets in which the group operates.
- Management has considered the above assumptions and valuation and has also taken into account the business expansion plan going forward, the current wholesale order books and the strategic retail expansion worldwide and believes that there is no impairment in the Esprit trademarks.
- Management believes that any reasonably foreseeable change in any of the above key assumptions would not cause the aggregate carrying amount of trademarks to exceed the aggregate recoverable amount.

8.9 Summary

The requirements of asset impairment are set out in IAS 36 *Impairment of Assets* with the objective to carry an asset at an amount not higher than its recoverable amounts.

IAS 36 requires an entity to identify any indication of asset impairment at each reporting date by considering at least a set of internal and external sources of information. If such indication exists on an individual asset, an impairment test will be required by comparing the carrying amount of the asset with its recoverable amount. Even if no indication of impairment exists for intangible assets with an indefinite useful life, intangible assets not yet available for use and goodwill, such an impairment test will be required on these assets annually.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Fair value less costs to sell may refer to a binding sale agreement for an asset and its price in an active market. Value in use is the present value of the future cash flows expected to be derived from an asset. If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset must be reduced to this recoverable amount and the reduction is an impairment loss.

If the recoverable amount of an individual asset cannot be ascertained, a cash-generating unit to which an asset should be tested for impairment will be identified. A cash-generating unit is the smallest identifiable group of assets that generates cash

inflows that are largely independent of the cash inflows from other assets or groups of assets. The impairment loss of the unit is recognised when the recoverable amount of the cash-generating unit is less than the unit's carrying amount. The impairment loss should also be allocated to reduce the carrying amount of the assets within the unit first to the goodwill and then to other assets on a pro rata basis.

At each reporting date, an entity is also required to assess whether there is any indication that an impairment loss recognised for an asset may no longer exist or may have decreased. If such indication exists, the entity will be required to estimate the recoverable amount of the asset. A decrease in recognised impairment loss should be recognised as a reversal of impairment loss only if there is a change in the estimates used to determine the asset's recoverable amount.

Review Questions

1. What is an impairment of an asset?
2. Define impairment loss and recoverable amount.
3. What is the general approach adopted in IAS 36 in assessing asset impairment?
4. What is an impairment test?
5. What kinds of assets require an annual impairment test?
6. How does an entity assess the indications that an asset may be impaired?
7. Define fair value less costs to sell and value in use.
8. How does an entity estimate future cash flows for the measurement of an asset's value in use?
9. How does an entity estimate a discount rate used to ascertain an asset's value in use?
10. What is the alternative way of testing the impairment of an intangible asset with indefinite useful life?
11. When does an entity recognise an impairment loss?
12. When does an entity identify a cash-generating unit?
13. Define a cash-generating unit.
14. How does an entity allocate corporate assets in testing impairment for a cash-generating unit?
15. How does an entity recognise impairment loss for a cash-generating unit?
16. When does an entity recognise a reversal of impairment loss?
17. How does an entity recognise a reversal of impairment loss?

Exercises

Exercise 8.1 Cheer and Beer Limited has a machine with a carrying amount of \$750,000. While Cheer and Beer proposes to scale down its operation, it is required to review the impairment of its assets, including the machine. A director of Cheer and Beer operating a similar operation offers to buy the machine at \$1 million. Simultaneously, Cheer and Beer estimates that the net cash inflow generated from the operation of the machine will be \$300,000 in the next year, and then the machine can be returned to the machine

suppliers at \$500,000. Cheer and Beer thus concludes that no impairment loss should be required on the machine.

Discuss and comment on the impairment of Cheer and Beer's machine.

Exercise 8.2 Due to the market downturn and drop in retail sales, Thinking Right Corporation Limited is reviewing the impairment of its properties held as an office and retail shops. The carrying amount of the properties is \$20 million. The fair value less costs to sell of the retail shops can be obtained, and it amounts to \$25 million. However, Thinking Right cannot obtain the fair value less costs to sell off the office, as its office and similar property are not actively traded in the market. In addition, Thinking Right considered that if the fair value less costs to sell of the retail shops is higher than the carrying amount of the retail shops together with the office, then no impairment loss will be required on both retail shops and office.

Comment on the arguments of Thinking Right and suggest alternatives to them.

Exercise 8.3 Desolve committed to close one of its subsidiaries by the year-end, 31 July 2007. An equipment of the subsidiary was carried at a value of \$10 million at 31 July 2007. It was anticipated that the equipment would generate cash flows of \$7 million up to 30 November 2007 and that its fair value less costs to sell at 31 July 2007 was \$8 million. The equipment was sold on 30 November 2007 for \$6 million.

Discuss the implication of the closure of the subsidiary and ascertain any impairment loss involved.

(ACCA 3.6 December 2001, adapted)

Problems

Problem 8.1 SingKong Electricity Limited was granted land to build an electricity plant, which is carried in the balance sheet at \$3 billion. However, the government has required SingKong to remove the plant if it ceases operation or returns the land together with the electricity plant as a whole to the government. The estimated removal cost of the plant is around \$200 million.

Due to the demand for electricity dropping a lot in the region, SingKong forecasts that the net cash inflows in the next 5 years should be revised to \$300 million per year. After 5 years, the plant should still have a value of \$2 billion. A similar plant was disposed of last month in another place with net proceeds of \$2 billion. The pre-tax discount rate of SingKong is around 5%.

Justify and calculate whether any impairment loss should be recognised by SingKong on the electricity plant.

Problem 8.2 Advanced Institute Limited operates several external degree programs and has conducted an impairment test on its cash-generating unit in respect of its advanced degree program session. While Advanced Institute Limited estimates that the recoverable amount of the session is around \$1,500 million, the carrying amounts of the session's assets are as follows:

	Carrying amount \$ million
Goodwill	200
Property, plant and equipment, at depreciated cost	550
Intangible assets, at amortised cost	400
Investment property, at fair value	300
Financial assets, at fair value	170
Trade receivables, at amortised cost	300

Calculate and allocate the impairment loss to individual assets and suggest journal entries for Advanced Institute Limited.

Problem 8.3 Barking, an unlisted company, operates in the house building and commercial property investment development sector. The sector has seen an upturn in activity during recent years, and the directors have been considering future plans with a view to determining their impact on the financial statements for the financial year to 30 November 2007. The directors intend to carry out an impairment review as at 30 November 2007 in order to ascertain whether the carrying amount of a group of assets can be supported by their value in use. The plan is to produce cash flow projections up to 2014 with an average discount rate of 15% being used in the calculations. The 10-year period is to be used as it reflects fairly the long-term nature of the assets being assessed. Any subsequent impairment loss is to be charged against the income statement.

Comment on the impairment review to be performed.

(ACCA 3.6 December 2003, adapted)

Case Studies

Case Study 8.1 Based on Examples 8.4 and 8.5, discuss and suggest an amended calculation of value in use for Lionel King Manufacturing Limited on its manufacturing plant at the end of 2007.

Case Study 8.2 Modern Shipping and Transportation Limited divides its operations into four kinds, and its headquarters in Singapore is not allocated to the four kinds of operations with a carrying amount of \$2 billion.

Modern Shipping is reviewing the impairment of each operation due to the keen competition in the shipping and transportation industries. It considers that each operation is a cash-generating unit. The carrying amount of each operation and its estimated value in use are set out as follows:

	Shipping operation	Terminal operation	Bus operation	Other operation
Carrying amount of the unit	\$1,000 million	\$2,500 million	\$2,000 million	\$800 million
Estimated remaining useful life.....	10 years	20 years	10 years	15 years
Value in use	\$2,500 million	\$2,000 million	\$2,200 million	\$500 million

The back-office operation and related assets are carried at \$1 billion. However, Modern Shipping considers that only headquarters can be allocated on a reasonable and consistent basis and no allocation of the back-office operation and related assets should be reasonable and consistent. During the impairment review, a proposal of a potential buyer to buy out the whole company has just been received at \$7.5 billion.

Determine the impairment loss and suggest journal entries.

Case Study 8.3

Perfect Industry Company Limited (PI) is an experienced original equipment manufacturer (OEM) in cameras. However, it focuses on film camera production while its production of compact digital cameras (CDCs) accounts for only 10% of its production. PI realises that the market for traditional film cameras is declining in terms of demand and profit margin because customers are shifting to digital cameras. In view of the market sentiment, PI is considering the following three options:

Option 1: Upgrading as an OEM manufacturer for consumer CDCs

Following this option, Perfect Industry would need to invest at least \$40 million to replace its existing production facilities to meet customer requirements. Perfect Industry would remain principally an OEM manufacturer for consumer CDCs of major brands.

Option 2: Becoming an original brand manufacturer (OBM) for budget CDCs for the PRC using the “Perfection” brand

Following this option, Perfect Industry could retain its manufacturing facilities with minimum modification at a cost of approximately \$10 million. However, substantial expenditure would be needed to develop the company’s brand name “Perfection” in the PRC market over the next few years. In the long run, Perfect Industry may need to outsource its manufacturing activities and form joint ventures with PRC manufacturers. Following this option, the company would need to reposition itself as a market-oriented organisation rather than a manufacturing organisation.

Option 3: Shifting to an OEM for non-CDC products

Following this option, the company would avoid direct competition with larger CDC manufacturers and would shift to exploring something different, such as PC cameras or toy cameras. Although the sales volume would decrease, the profit margin would remain relatively high since currently not many competitors are operating in this segment. No material investment or modification in the company’s existing production facilities and no marketing expenses would be needed. However, more talented product

development staff would be required and the employment of a significant number of production workers would be terminated.

Required:

Discuss the key financial reporting issues in relation to the three options regarding the impairment of production facilities.

(HKICPA QP FE June 2004, adapted)

**Case
Study 8.4**

With the development of the new integrated platforms for material logistics, B-Group's operation of the old warehouse facilities in Gejiu and Jinghong is planned to be discontinued before the previously expected date.

Mr Leung, CEO of B-Group, suggested that an impairment review would be necessary upon doing this and that this would have a significant adverse effect on B-Group. He further suggested that reversal of impairment would be possible upon the successful launch of the new integrated logistics platform as this would be a significant change with a favourable effect on B-Group.

Required:

Assume that you are Mr Wong, the finance manager, and draft a report for Mr Chan, the chairman of B-Group. In your report, you should discuss and comment on Mr Leung's argument on the impairment review.

(HKICPA QP FE June 2007, adapted)

9

Inventories

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of inventories (the definition)
- 2 The measurement of cost of inventories, cost formulas and net realisable value
- 3 The recognition of inventory amounts as expenses
- 4 The disclosure requirements for inventories



Real-life
Case 9.1
Wing On Company International Limited

The principal activities of Wing On Company International Limited are the operation of department stores and property investment. The chairman's statement in the company's annual report of 2006 had the following business review for its department store operation:

- The group's department stores business continued to achieve steady improvement in turnover during the year under review, despite severe competition amongst retailers and the exceptional warm weather in the winter months. For the year ended 31 December 2006, the group's department stores attained a turnover of HK\$892.9 million, an increase of 10.6% when compared to HK\$807.1 million as restated in 2005. This was a result of the department store operations' continuous efforts in improving operational efficiency, better merchandise mix, friendly customer service and more aggressive sales and promotional campaigns. The inclusion of the full year revenue from our new Tsim Sha Tsui East branch store, which reopened in August 2005, also contributed to the increase in turnover. However, the group's department store business recorded a slight decrease in operating profit by 2.5% to HK\$82.3 million (2005: HK\$84.4 million), due mainly to increased occupancy costs and other related operating expenses.

The consolidated balance sheet (excerpt) of the company's 2006 annual report disclosed the following inventory figures:

	2006 HK\$'000	2005 HK\$'000
Inventories	71,877	68,594

Inventories are often significant to an entity, for both retail and manufacturing companies. Retail operations like the one run by Wing On Company International Limited (Wing On) (see Real-life Case 9.1) possess merchandise for resale purposes, while manufacturing operations like the one run by Karrie International Holdings Limited (see Real-life Case 9.4) possess raw materials, work-in-progress and finished goods. Based on the inventory, revenues and operating profit figures, we are able to compute some important financial performance indicators such as inventory turnover and gross profit margin. Take the department store operation of Wing On as an example; inventory turnover in 2006 was 12.71¹ (2005: 13.24)² and gross profit margin in 2006 was 9.22%³ (2005: 10.46%)⁴. Can we use these performance indicators to compare the

¹ \$892.9 million / [(\$71.877 million + \$68.594 million) / 2]

² \$807.1 million / [(\$68.594 million + \$53.284 million) / 2]

³ \$82.3 million / \$892.9 million

⁴ \$84.4 million / \$807.1 million

performance of different entities? One key issue is whether the entities use the same or similar definition for inventories and revenue. While Chapter 11 discusses the issue of revenue recognition, this chapter examines the accounting treatment for inventories. How do we determine costs of inventories? When should we recognise inventories as an expense to compute the costs of goods sold and thus the gross profit? When should we write down the costs of inventories to net realisable value? On the other hand, when should we reverse the write-downs of inventories recorded in prior periods?

9.1 Applicable Standard and Scope

IAS 2 *Inventories* prescribes the accounting treatment for inventories and requires that an entity apply IAS 2 in accounting for inventories. A primary issue in accounting for inventories is the amount of cost to be recognised as an asset and carried forward until the related revenues are recognised. IAS 2 provides guidance on the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

Inventories are defined as assets

- held for sale in the ordinary course of business;
- in the process of production for such sale; or
- in the form of materials or supplies to be consumed in the production process or in the rendering of services (IAS 2.6).

Example 9.1 Examples of inventories include the following:

- Goods purchased and held for resale including, for example, merchandise purchased by a retailer and held for resale;
- Land and other property held for resale;
- Finished goods produced, or work-in-progress being produced, by the entity;
- Materials and supplies awaiting use in the production process;
- In the case of a service provider, the costs of the service for which the entity has not yet recognised the related revenue under IAS 18 *Revenue* (see Chapter 11).

IAS 2 applies to all inventories, except the following:

1. Work-in-progress arising under construction contracts to be accounted for in accordance with IAS 11 *Construction Contracts* (see Chapter 10);
2. Financial instruments to be accounted for in accordance with IAS 32 *Financial Instruments – Presentation* and IAS 39 *Financial Instruments – Recognition and Measurement* (see Chapters 15–18); and

3. Biological assets related to agricultural activity and agricultural produce at the point of harvest to be accounted under IAS 41 *Agriculture*.

IAS 2 does not apply to measuring inventories held by the following:

1. Producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realisable value in accordance with well-established practices in those industries. When such inventories are measured at net realisable value, changes in that value are recognised in profit or loss in the period of the change.
2. Commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at fair value less costs to sell, changes in fair value less costs to sell are recognised in profit or loss in the period of the change (IAS 2.3).

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Net realisable value is an entity-specific value, while fair value is a market-based value.

9.2 Measurement of Inventories

Inventories are measured at the lower of cost and net realisable value. This section discusses different components of cost of inventories, the use of cost formulas to assign costs to inventories as well as write-down of inventories to their net realisable value.

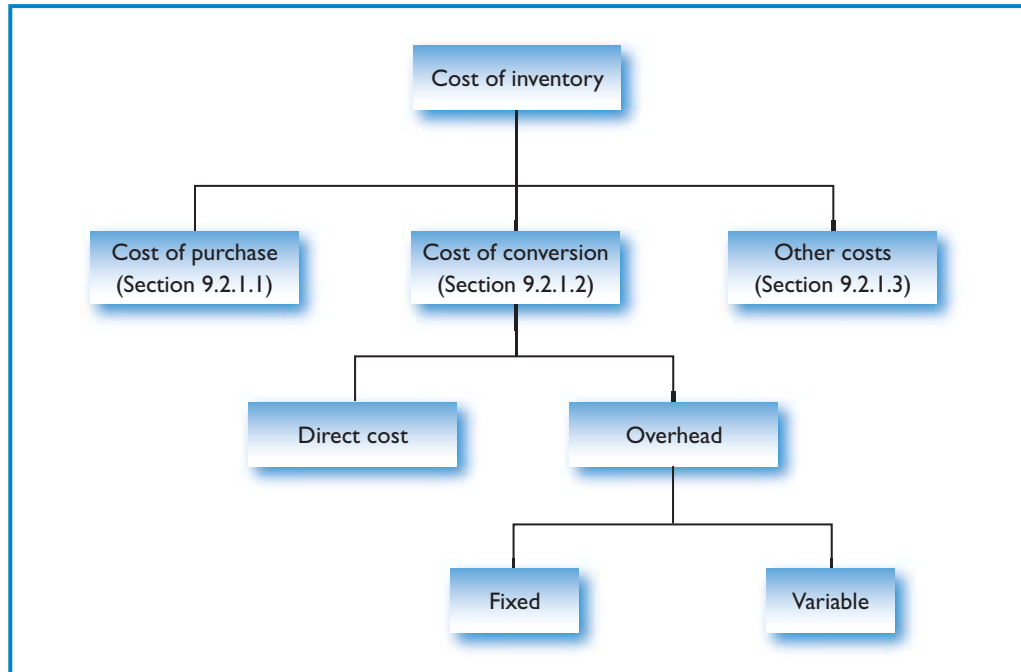
9.2.1 Cost of Inventories

The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition (see Figure 9.1).

9.2.1.1 Cost of Purchase

The cost of purchase of inventories comprises the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the cost of purchase.

FIGURE 9.1 Elements of inventory cost



9.2.1.2 Cost of Conversion

The cost of conversion of inventories includes the following:

1. Costs directly related to the units of production, such as direct labour; and
2. A systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods.
 - a. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.
 - b. The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities.
 - c. The actual level of production may be used if it approximates normal capacity.
 - d. In case of low production or idle plant, the amount of fixed overhead allocated to each unit of production is not increased. An entity recognises unallocated overheads as an expense in the period in which they are incurred.
 - e. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production is decreased so that inventories are not measured above cost (see Example 9.2).

Example 9.2 The predetermined fixed production overheads rate for Product A is \$10 per unit based on the normal production capacity of 2 million units. Due to abnormally high production of 2.5 million units during the year, the over-applied fixed production overheads for Product A amounted to \$5 million. Product A has no beginning inventory. Ending work-in-progress for the product is 500,000 equivalent units, while its ending finished goods inventory is 800,000 units.

Determine how to allocate the over-applied fixed production overheads to the costs of production of Product A.

Answers

The over-applied fixed production overheads is allocated to decrease the costs of production of Product A embodied in the work-in-progress inventory, finished goods inventory, and cost of goods sold:

- Decrease ending work-in-progress inventory by \$1 million ($\$5 \text{ million} \times 500,000 / 2,500,000$)
- Decrease ending finished goods inventory by \$1.6 million ($\$5 \text{ million} \times 800,000 / 2,500,000$)
- Decrease cost of goods sold by \$2.4 million ($\$5 \text{ million} \times 1,200,000 / 2,500,000$)

Fixed production overheads is defined as indirect costs of production that remain relatively constant regardless of the volume of production and include

- depreciation and maintenance of factory buildings and equipment;
- cost of factory management and administration.

Variable production overheads is defined as indirect costs of production that vary directly, or nearly directly, with the volume of production and include

- indirect materials;
- indirect labour.

Normal capacity refers to the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance.

A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based on the relative sales value of each product either

1. at the stage in the production process when the products become separately identifiable; or
2. at the completion of production (see Example 9.3).

Example 9.3

Cost of conversion to be allocated = \$120,000

Three products (Products A, B and C) are produced simultaneously. Units produced and their unit selling price information are as follows:

	Units produced	Unit selling price \$
Product A	1,000	10
Product B	4,000	20
Product C	5,000	30

Allocate the cost of conversion to the products based on the relative sales value of each product at the completion of production.

Answers

	Units produced	Unit selling price \$	Total sales value \$	Multiplier (Note 1)	Total \$	Per unit \$
Product A	1,000	10	10,000	0.5	5,000	5
Product B	4,000	20	80,000	0.5	40,000	10
Product C	5,000	30	150,000	0.5	75,000	15
	<u>10,000</u>		<u>240,000</u>		<u>120,000</u>	

Note 1: Multiplier = \$120,000/\$240,000 = 0.5

If the amount of a by-product is immaterial, it is often measured at net realisable value and this value is deducted from the cost of the main product. Therefore, the carrying amount of the main product is not materially different from its cost.

9.2.1.3 Other Costs

Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition (see Example 9.4).

Example 9.4 Star Group has incurred the following costs:

- The costs of designing products for specific customers;
- Abnormal amounts of wasted materials, labour or other production costs;
- Storage costs other than those that are necessary in the production process before a further production stage;
- Non-production overheads for specific customers;
- Administrative overheads that do not contribute to bringing inventories to their present location and condition;
- Selling costs.

Determine which of the above costs can be included in the cost of inventories and which costs should be excluded from the cost of inventories and recognised as expenses in the period in which they are incurred.

Answers

Costs that *can* be included in the cost of inventories include the following:

- Non-production overheads for specific customers;
- The costs of designing products for specific customers.

Costs that *should* be excluded from the cost of inventories and recognised as expenses in the period in which they are incurred include the following:

- Abnormal amounts of wasted materials, labour or other production costs;
- Storage costs other than those that are necessary in the production process before a further production stage;
- Administrative overheads that do not contribute to bringing inventories to their present location and condition;
- Selling costs.

IAS 23 *Borrowing Costs* identifies limited circumstances where borrowing costs are included in the cost of inventories (see Chapter 7).

An entity may purchase inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example, a difference between the purchase price for normal credit terms and the amount paid, is recognised as interest expense over the period of the financing (see Example 9.5).

Example 9.5 Star Group purchased 1 million units of Product A at \$10 per unit from Sun Group for resale purposes. The normal credit term is 30 days after the date of delivery. Star

Group has made a special arrangement with Sun Group such that Star Group can defer the settlement date to 210 days after the date of delivery of Product A. In return for this special arrangement, Star Group has agreed to pay \$10.5 million to settle the purchase of these 1 million units of Product A.

Determine the cost of inventories of Product A and compute the interest expense over the period of the financing related to the purchase.

Answers

The cost of inventories of Product A should be \$10 million ($\$10 \times 1,000,000$).

The interest expense over the period of the financing related to the purchase of Product A is the difference between the purchase price of Product A for normal credit term and the amount paid, that is, \$500,000 ($\$10.5 \text{ million} - \10 million).

9.2.1.4 Cost of Inventories of a Service Provider

To the extent that service providers have inventories, they measure them at the costs of their production. These costs consist primarily of the labour and other costs of personnel directly engaged in providing the service, which include supervisory personnel and attributable overheads. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non-attributable overheads that are often factored into prices charged by service providers.

9.2.1.5 Cost of Agricultural Produce Harvested from Biological Assets

In accordance with IAS 41 *Agriculture*, inventories comprising agricultural produce that an entity has harvested from its biological assets are measured on initial recognition at their fair value less estimated point-of-sale costs at the point of harvest. This is the cost of the inventories at that date for application of IAS 2.

9.2.1.6 Techniques for the Measurement of Cost

Techniques for measuring the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate cost. Standard costs take into account normal levels of materials and supplies, labour, efficiency and capacity utilisation. They are regularly reviewed and, if necessary, revised in the light of current conditions.

The retail method is often used in the retail industry for measuring inventories of large numbers of rapidly changing items with similar margins for which it is impracticable to use other costing methods (see Real-life Case 9.2). The cost of the inventory is determined by reducing the sales value of the inventory by the appropriate percentage gross margin. The percentage used takes into consideration damaged, slow-moving or obsolete inventory that has been marked down to below its original selling price. An average percentage for each retail department is often used (see Example 9.6).

**Real-life
Case 9.2**

AEON Stores (Hong Kong) Co., Limited

AEON Stores is listed in Hong Kong. Its parent and ultimate holding company is AEON Co., Ltd., which is incorporated and listed in Japan. The company is principally engaged in the operation of general merchandise stores under the brand name of “JUSCO”. The company stated the following accounting policy for inventories in its annual report of 2006:

- Inventories, which represent merchandise held for resale, are stated at the lower of cost and net realisable value and are computed using the retail price method.

Example 9.6 Super Store has the following information from its accounting records and from a physical inventory count at marked selling prices:

At cost	At cost \$'000	At retail \$'000
1 January 2008 beginning inventory	17,680	40,000
Purchases	255,400	455,500
Purchases returns	500	1,100
Additional markups		1,200
Markdowns		12,500
Sales		448,440
Sales returns		240
31 December 2008 physical inventory		34,800

Use the retail method to estimate Super Store's ending inventory at cost and to estimate the amount of inventory shortage at cost and at retail.

Answers

Goods available for sale:	At cost \$'000	At retail \$'000
1 January 2008 beginning inventory.....	17,680	40,000
Net purchases	254,900	454,400
Additional markups		1,200
Goods available for sale	<u>272,580</u>	<u>495,600</u>
Cost ratio: $\$272,580 \div \$495,600 = 55\%$		
Net sales at retail		448,200
Markdowns		12,500
Total sales and markdowns.....		<u>460,700</u>
31 December 2008 ending inventory at retail (\$495,600 – \$460,700)		<u>34,900</u>
31 December 2008 ending inventory at cost (\$34,900 × 55%)	<u>19,195</u>	
31 December 2008 physical inventory at retail		<u>34,800</u>
31 December 2008 physical inventory at cost (\$34,800 × 55%)	<u>19,140</u>	
Inventory shortage.....	<u>55</u>	<u>100</u>

Therefore, Super Store's ending inventory at cost is estimated to be \$19,195,000 and the amounts of inventory shortage are estimated to be \$55,000 and \$100,000 at cost and at retail respectively.

(Note: Additional markups refer to markups made in addition to the normal markups, while markdowns refer to a reduction in selling price below the original sales price.)

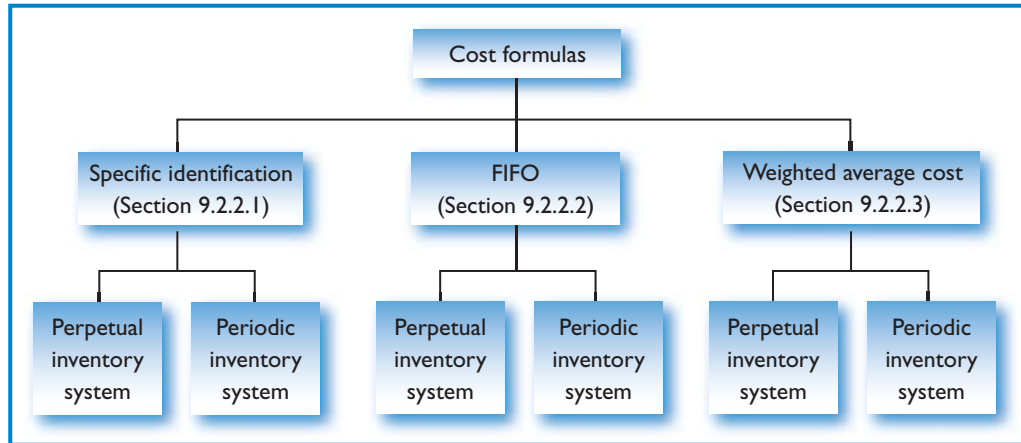
9.2.2 Cost Formulas

IAS 2 allows three types of cost formulas, namely, specific cost identification, first-in, first-out (FIFO) and weighted average cost formula (see Figure 9.2). Therefore, the last-in, first-out (LIFO), base stock method and other methods are not allowed under IAS 2.

9.2.2.1 Specific Cost Identification Method

The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using

FIGURE 9.2 Cost formulas



specific identification of their individual costs (see Example 9.7). Other than those inventories dealt with by using specific cost identification method, the cost of other inventories are assigned by using the FIFO formula (see Section 9.2.2.2) or weighted average cost formula (see Section 9.2.2.3). Specific identification of cost means that specific costs are attributed to identified items of inventory. This is the appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. An entity is more likely to apply this method to goods that are relatively large or expensive and involve small quantities. Car dealers selling automobiles is a good example.

Example 9.7 Earth Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory.....	1,000	100
3 February	Purchases.....	500	110
10 February	Sales.....	800	
5 April	Purchases.....	1,000	120
8 August	Purchases.....	300	130
9 September	Sales.....	1,000	
15 October	Purchases.....	600	140
31 December	Ending inventory.....	1,600	?

Additional information:

- 800 units of the beginning inventory were sold on 10 February 2008.
- 1,000 units purchased on 5 April 2008 were sold on 9 September 2008.

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the specific cost identification method. Assume Earth adopts a perpetual inventory system.

Will the answer be different if Earth adopts a periodic inventory system?

Answers

Under the specific cost identification method in a perpetual inventory system:

$$\begin{aligned}\text{Ending inventory} &= 200 \times \$100 + 500 \times \$110 + 300 \times \$130 + 600 \times \$140 \\ &= \$20,000 + \$55,000 + \$39,000 + \$84,000 \\ &= \$198,000\end{aligned}$$

$$\begin{aligned}\text{Cost of goods sold} &= 800 \times \$100 + 1,000 \times \$120 \\ &= \$80,000 + \$120,000 \\ &= \$200,000\end{aligned}$$

No, the answer will be the same if Earth adopts a periodic inventory system.

Specific identification of costs is inappropriate when there are large numbers of items of inventory that are ordinarily interchangeable. In such circumstances, the method of selecting those items that remain in inventories could be used to obtain predetermined effects on profit or loss.

9.2.2.2 The FIFO Formula Method

The FIFO formula makes the following assumptions:

- The items of inventory that were purchased or produced first are sold first; and
- Consequently, the items remaining in inventory at the end of the period are those most recently purchased or produced (see Example 9.8).

Example 9.8 Earth Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory	1,000	100
3 February	Purchases	500	110
10 February	Sales	800	
5 April	Purchases	1,000	120
8 August	Purchases	300	130
9 September	Sales	1,000	
15 October	Purchases	600	140
31 December	Ending inventory	1,600	?

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the FIFO method in

1. a perpetual inventory system; and
2. a periodic inventory system.

Answers

Under the FIFO method in a perpetual inventory system

$$\begin{aligned}\text{Ending inventory} &= 700 \times \$120 + 300 \times \$130 + 600 \times \$140 \\ &= \$84,000 + \$39,000 + \$84,000 \\ &= \$207,000\end{aligned}$$

$$\begin{aligned}\text{Cost of goods sold for 10 February 2008 sales} &= 800 \times \$100 \\ &= \$80,000\end{aligned}$$

$$\begin{aligned}\text{Cost of goods sold for} & \\ \text{9 September 2008 sales} &= 200 \times \$100 + 500 \times \$110 + 300 \times \$120 \\ &= \$20,000 + \$55,000 + \$36,000 \\ &= \$111,000\end{aligned}$$

$$\begin{aligned}\text{Cost of goods sold for year ended 31 December 2008} &= \$80,000 + \$111,000 \\ &= \$191,000\end{aligned}$$

Under the FIFO method in a periodic inventory system

$$\begin{aligned}\text{Ending inventory} &= 700 \times \$120 + 300 \times \$130 + 600 \times \$140 \\ &= \$84,000 + \$39,000 + \$84,000 \\ &= \$207,000\end{aligned}$$

$$\begin{aligned}\text{Cost of goods sold} &= 1,000 \times \$100 + 500 \times \$110 + 300 \times \$120 \\ &= \$100,000 + \$55,000 + \$36,000 \\ &= \$191,000\end{aligned}$$

9.2.2.3 Weighted Average Cost Method

Under the weighted average cost formula:

- The cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period;
- The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the entity.

Example 9.9 Same beginning inventory, purchases, sales and ending inventory information as in Example 9.8.

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the weighted average cost method in

1. a perpetual inventory system; and
2. a periodic inventory system.

Answers

Under the weighted average cost method in a perpetual inventory system

2008		Number of units	Unit cost \$	Total cost \$
1 January	Beginning inventory	1,000	100	100,000
3 February	Purchases	500	110	55,000
	Weighted average cost (\$155,000/1500 = \$103.3333).....	1,500		155,000
10 February	Sales (\$103.3333 × 800).....	800		82,667
		700		72,333
5 April	Purchases	1,000	120	120,000
8 August	Purchases	300	130	39,000
	Weighted average cost (\$231,333/2,000 = \$115.6665)	2,000		231,333
9 September	Sales (\$115.6665 × 1,000).....	1,000		115,666
		1,000		115,667
15 October	Purchases	600	140	84,000
	Weighted average cost (\$199,667/1,600 = \$124.7919)	1,600		199,667

$$\text{Ending inventory} = 1,600 \times \$124.7919 = \$199,667$$

$$\text{Cost of goods sold} = \$82,667 + \$115,666 = \$198,333$$

Under the weighted average cost method in a periodic inventory system

2008		Number of units	Unit cost \$	Total cost \$
1 January	Beginning inventory	1,000	100	100,000
3 February	Purchases	500	110	55,000
5 April	Purchases	1,000	120	120,000
8 August	Purchases	300	130	39,000
15 October	Purchases	600	140	84,000
	Total	3,400		398,000

$$\text{Weighted average cost per unit} = \$398,000/3,400 = \$117.0588$$

$$\text{Ending inventory} = 1,600 \times \$117.0588 = \$187,294$$

$$\text{Cost of goods sold} = 1,800 \times \$117.0588 = \$210,706$$

An entity is required to use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified. For example, inventories used in one business segment may have a use to the entity different from the same type of inventories used in another business segment. However, a difference in geographical location of inventories (or in the respective tax rules), by itself, is not sufficient to justify the use of different cost formulas.

9.2.3 Net Realisable Value

The cost of inventories may not be recoverable if

- the inventories are damaged;
- the inventories have become wholly or partially obsolete;
- their selling prices have declined; or
- the estimated costs of completion or the estimated costs to be incurred to make the sale have increased.

The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use. Estimates of net realisable value take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess is based on general selling prices (see Example 9.10).

Example 9.10 Sun Trading Group has the following inventory information at the year-end date:

Product	Units on hand	Unit cost \$	Estimated unit selling price \$	Estimated unit cost of completion and selling costs
A	1,000	100	120	10
B	500	110	110	5
C	800	120	100	6
D	1,000	120	125	10
E	300	130	150	20

Additional information:

30 units of Product B were held to satisfy a firm sales contract for selling 30 units at \$125 per unit to Customer Stanley.

Determine the carrying cost of ending inventory at the balance sheet date, and the amount of inventory write-down for the current period. Explain your answer. Assume the company adopts the weighted average cost method.

Answers

Product	Units on hand	Unit cost \$	Total cost \$	Estimated NRV \$	Lower of cost and NRV \$	Inventory write-down \$
A	1,000	100	100,000	110,000	100,000	–
B	30	110	3,300	3,750	3,300	–
B	470	110	51,700	49,350	49,350	2,350
C	800	120	96,000	75,200	75,200	20,800
D	1,000	120	120,000	115,000	115,000	5,000
E	300	130	39,000	39,000	39,000	–
Total			410,000		381,850	28,150

The carrying cost of ending inventory at the year-end date = \$381,850

The amount of inventory write-down for the current period = \$28,150

Explanatory notes:

- Product A: No write-down is necessary because estimated NRV is greater than costs.
- Product B: No write-down for the 30 units withheld for Stanley because the net realisable value of the quantity of inventory held to satisfy firm sales is based on the contract price (\$125 per unit in this case). For the remaining 470 units, they are written down to the estimated NRV of \$105 (110 – 5) per unit.
- Product C: Write-down to NRV because estimated unit NRV of \$94 (100 – 6) is less than unit cost of \$120.
- Product D: Write-down to NRV because estimated unit NRV of \$115 (125 – 10) is less than unit cost of \$120, though the estimated unit selling price of \$125 is greater than unit cost of \$120.
- Product E: No write-down is necessary because estimated unit NRV of \$130 (150 – 20) is the same as unit cost of \$130.

Inventories are usually written down to net realisable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in that product line. It is, however, not appropriate to write inventories down on the basis of a classification of inventory, for example, finished goods, or all the inventories in a particular industry or geographical segment.

Service providers generally accumulate costs in respect of each service for which a separate selling price is charged. Therefore, each such service is treated as a separate item.

Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the reporting period to the extent that such events confirm conditions existing at the end of the period.

Provisions may arise from firm sales contracts in excess of inventory quantities held or from firm purchase contracts. Such provisions are dealt with under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (see Chapter 14).

Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

A new assessment is made of net realisable value in each subsequent period. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed (i.e., the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realisable value. This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased (see Real-life Case 9.3).

Real-life**Case 9.3****AEON Stores (Hong Kong) Co., Limited**

AEON Stores disclosed the following information on the reversal of inventory write-down in its annual report of 2006:

- During the year, the directors have considered the market performance and the expected net realisable value of the inventories. As a result, a reversal of write-down of inventories of HK\$10,133,000 (2005: write-down of HK\$14,533,000) has been recognised and included in “Purchases of goods and changes in inventories” in the current year.

**Real-life
Case 9.3**
(cont'd)

- Profit for the year

	2006 HK\$'000	2005 HK\$'000
(Reversal of) write-down of inventories*	(10,133)	14,533

* Inventories written down in prior years were sold in the current year, and the write-down of inventories has been reversed due to an increase in net realisable value.

9.3 Recognition As an Expense

IAS 2.34 requires the following:

- When inventories are sold, an entity recognises the carrying amount of those inventories as an expense in the period in which the related revenue is recognised.
- The amount of any write-down of inventories to net realisable value and all losses of inventories shall be recognised as an expense in the period the write-down or loss occurs.
- The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

Some inventories may be allocated to other asset accounts, for example, inventory used as a component of self-constructed property, plant or equipment. Inventories allocated to another asset in this way are recognised as an expense during the useful life of that asset.

9.4 Disclosure

An entity is required to disclose the following items in its financial statements:

1. The accounting policies adopted in measuring inventories, including the cost formula used;
2. The total carrying amount of inventories and the carrying amount in classifications appropriate to the entity;
3. The carrying amount of inventories carried at fair value less costs to sell;
4. The amount of inventories recognised as an expense during the period;
5. The amount of any write-down of inventories recognised as an expense in the period in accordance with IAS 2.34;
6. The amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense in the period in accordance with IAS 2.34;

7. The circumstances or events that led to the reversal of a write-down of inventories in accordance with IAS 2.34; and
8. The carrying amount of inventories pledged as security for liabilities (IAS 2.36).

An illustration of the above disclosure can be found in the 2007 annual report of Karrie International Holdings Limited (see Real-life Case 9.4).

Real-life Case 9.4

Karrie International Holdings Limited

Karrie International Holdings is principally engaged in the manufacture and sale of computer castings, office automation products, moulds, plastic and metal parts and provision of electronic manufacturing services. The company stated the following accounting policy for inventories in its 2007 annual report:

- **Note 2.8 Inventories**

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in, first-out (FIFO) method. The cost of finished goods and work-in-progress comprises design costs, raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

- **Note 4(c) Write-downs of inventories**

Inventories are written down to net realisable value based on an assessment of the realisability of inventories. Write-downs on inventories are recorded where events or changes in circumstances indicate that the balances may not be realised. The identification of write-downs requires the use of judgement and estimates. Where the expectation is different from the original estimate, such difference will impact the carrying value of inventories and write-downs of inventories in the periods in which such estimate has been changed.

- **Note 11 Inventories**

	2007 HK\$'000	2006 HK\$'000
Raw materials	190,776	158,240
Work-in-progress	39,472	47,490
Finished goods	144,726	134,098

The cost of inventories recognised as expense and included in cost of sales amounted to \$2,689,656,000 (2006: \$2,951,062,000).

During the year, the group did not make any provision for slow-moving inventories. In 2006, a provision of \$18,157,000 was written back.

**Real-life
Case 9.4**
(cont'd)

- **Note 21 Expenses by nature (excerpt)**

	2007	2006
	HK\$'000	HK\$'000
Changes in inventories of finished goods and work-in-progress	(5,614)	(64,670)
Raw materials used	2,695,270	2,886,392
Write-back of provision for obsolete and slow-moving inventories (Note 11)	–	(18,157)

Information about the carrying amounts held in different classifications of inventories and the extent of the changes in these assets is useful to financial statement users. Common classifications of inventories are merchandise, production supplies, materials, work-in-progress and finished goods. The inventories of a service provider may be described as work-in-progress.

The amount of inventories recognised as an expense during the period, which is often referred to as cost of sales, consists of those costs previously included in the measurement of inventory that has now been sold and unallocated production overheads and abnormal amounts of production costs of inventories. The circumstances of the entity may also warrant the inclusion of other amounts, such as distribution costs.

Some entities adopt a format for profit or loss that results in amounts being disclosed other than the cost of inventories recognised as an expense during the period. Under this format, an entity presents an analysis of expenses using a classification based on the nature of expenses. In this case, the entity discloses the costs recognised as an expense for raw materials and consumables, labour costs and other costs together with the amount of the net change in inventories for the period.

9.5 Summary

Inventories are measured at the lower of cost and net realisable value. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The cost of purchase of inventories comprises the purchase price, taxes, transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the cost of purchase.

The cost of conversion of inventories includes costs directly related to the units of production, and a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. When the cost of conversion of each product is not separately identifiable, it should be allocated between the simultaneously produced products on a rational and consistent basis.

To the extent that service providers have inventories, they measure them at the cost of their production. The standard cost method or the retail method may be used for convenience if the results approximate cost.

The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects is assigned by using specific identification of their individual costs. The cost of inventories of other items is assigned by using the first-in, first-out or weighted average cost formula.

An entity uses the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified.

Inventories are usually written down to net realisable value item by item. When the circumstances that previously caused inventories to be written down below cost no longer exist, or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

In its financial statements, an entity discloses the accounting policies adopted in measuring inventories, the total carrying amount of inventories and the carrying amount in classifications appropriate to the entity, the amount of inventories recognised as an expense during the period, the amount of any write-down of inventories recognised as an expense in the period, the amount of any reversal of any write-down, the circumstances or events that led to the reversal of a write-down of inventories, and the carrying amount of inventories pledged as security for liabilities.

Review Questions

1. Define inventories.
2. How is the cost of inventories measured?
3. What do costs of purchase of inventories comprise?
4. What do costs of conversion of inventories include?
5. How are the costs of conversion between simultaneously produced products allocated?
6. Describe briefly the retail method.
7. Can an entity use different cost formulas for different inventories?
8. Why are inventories written down to their net realisable values?
9. Under what circumstances can an entity reverse the write-down of inventories?
10. Give some examples of the disclosure requirements for inventories.

Exercises

Exercise 9.1 Chan Supermarket has incurred the following costs:

1. Invoice costs of merchandise
2. Freight-in transportation costs of merchandise
3. Wages of accounting office staff
4. Import duties of merchandise
5. Wages of cashier

Required:

Determine which of the above costs should be included in the cost of inventories.

Exercise 9.2 Lee Supermarket has incurred the following costs:

1. Operating costs of staff canteen
2. Depreciation expense of office equipment
3. Wages of warehouse staff
4. Wages of shop manager
5. Insurance costs of the warehouse

Required:

Determine which of the above costs should be included in the cost of inventories.

Exercise 9.3 The predetermined fixed production overheads rate for Product C is \$10 per unit based on the normal production capacity of 1 million units. 980,000 units of Product C were produced during the year. Product C has no beginning inventory. Ending work-in-progress for the product is 10,000 equivalent units, while its ending finished goods inventory is 100,000 units.

Required:

Determine the accounting treatment for the under-applied fixed production overheads of production of Product C.

Exercise 9.4 The cost of conversion to be allocated is \$200,000. Two products (Products X and Y) are produced simultaneously. Units produced and their unit selling price information are as follows:

	Units produced	Unit selling price \$
Product X	6,000	20
Product Y	4,000	50

Required:

Allocate the cost of conversion to the products based on the relative sales value of each product at the completion of production.

Problems

Problem 9.1 The predetermined fixed production overheads rate for Product B is \$20 per unit based on the normal production capacity of 1 million units. Due to abnormally high production of 1.4 million units during the year, the over-applied fixed production overheads for Product B have accumulated a material amount of \$8 million. Product B has no beginning inventory. Ending work-in-progress for the product is 200,000 equivalent units, while its ending finished goods inventory is 400,000 units.

Required:

Determine how to allocate the over-applied fixed production overheads to the costs of production of Product B.

Problem 9.2 The cost of conversion to be allocated is \$150,000. Three products (Products A, B and C) are produced simultaneously. Units produced and their unit selling price information are as follows:

	Units produced	Unit selling price \$
Product A	8,000	10
Product B	2,000	30
Product C	3,000	20

Required:

Allocate the cost of conversion to the products based on the relative sales value of each product at the completion of production.

Problem 9.3 Gold Store has the following information from its accounting records and from a physical inventory count at marked selling prices:

	At cost \$'000	At retail \$'000
1 January 2008 beginning inventory	20,000	40,000
Purchases	401,700	821,200
Purchases returns	1,700	1,200
Markdowns		10,000
Sales		760,000
31 December 2008 physical inventory		89,200

Required:

Use the retail method to estimate Gold Store's ending inventory at cost and to estimate the amount of inventory shortage at cost and at retail.

Problem 9.4 Parklane A Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory	3,000	50
10 February	Purchases	700	52
10 March	Sales	1,500	
10 May	Purchases	800	55
8 September	Purchases	400	56
29 September	Sales	1,900	
15 November	Purchases	800	57
31 December	Ending inventory	2,300	?

Additional information:

- 1,000 units of the beginning inventory and 500 units of goods purchased on 10 February were sold on 10 March.
- 1,500 units of the beginning inventory and 400 units purchased on 8 September were sold on 29 September.

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the specific cost identification method when Parklane A Group adopts a perpetual inventory system.

Problem 9.5 Parklane B Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory	2,000	120
5 February	Purchases	400	125
15 February	Sales	2,100	
6 May	Purchases	1,000	130
8 August	Purchases	500	135
19 September	Sales	1,000	
10 November	Purchases	800	140
31 December	Ending inventory	1,600	?

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the weighted average cost method when Parklane B Group adopts a periodic inventory system.

Problem 9.6 Bukit Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory	20,000	20
15 February	Purchases	30,400	21
25 March	Sales	10,100	
2 April	Purchases	10,500	22
9 July	Purchases	50,000	23
25 October	Sales	53,000	
20 November	Purchases	12,200	24
31 December	Ending inventory	60,000	?

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the following methods:

- The First-in First-out (FIFO) method when Bukit Group adopts a periodic inventory system;
- The weighted average cost method when Bukit Group adopts a periodic inventory system.

Case Studies

Case Study 9.1 Metro Store has the following information from its accounting records and from a physical inventory count at marked selling prices:

	At cost \$'000	At retail \$'000
1 January 2008 beginning inventory	18,600	60,000
Purchases	240,500	801,200
Purchases returns	500	1,200
Additional markups		2,000
Markdowns		10,000
Sales		760,440
Sales returns		240
31 December 2008 physical inventory		91,600

Required:

Use the retail method to estimate Metro Store's ending inventory at cost and to estimate the amount of inventory shortage at cost and at retail.

**Case
Study 9.2**

Planet A Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory.....	2,000	120
5 February	Purchases.....	400	125
15 February	Sales.....	2,100	
6 May	Purchases.....	1,000	130
8 August	Purchases.....	500	135
19 September	Sales.....	1,000	
10 November	Purchases.....	800	140
31 December	Ending inventory.....	1,600	?

Additional information:

- 1,800 units of the beginning inventory and 300 units of goods purchased on 5 February were sold on 15 February.
- 1,000 units purchased on 6 May were sold on 19 September.

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the specific cost identification method when Planet A Group adopts:

1. A perpetual inventory system;
2. A periodic inventory system.

**Case
Study 9.3**

Planet B Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory.....	2,000	120
5 February	Purchases.....	400	125
15 February	Sales.....	2,100	
6 May	Purchases.....	1,000	130
8 August	Purchases.....	500	135
19 September	Sales.....	1,000	
10 November	Purchases.....	800	140
31 December	Ending inventory.....	1,600	?

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the First-in First-out (FIFO) method when Planet B Group adopts:

- a. A perpetual inventory system;
- b. A periodic inventory system.

Case Study 9.4

Planet C Group has the following beginning inventory, purchases, sales and ending inventory information for the year ended 31 December 2008:

2008		Number of units	Unit cost \$
1 January	Beginning inventory	2,000	120
5 February	Purchases	400	125
15 February	Sales	2,100	
6 May	Purchases	1,000	130
8 August	Purchases	500	135
19 September	Sales	1,000	
10 November	Purchases	800	140
31 December	Ending inventory	1,600	?

Required:

Determine the cost of ending inventory as at 31 December 2008, and the cost of goods sold for the year ended 31 December 2008 under the weighted average cost method when Planet C Group adopts:

- a. A perpetual inventory system;
- b. A periodic inventory system.

Case Study 9.5

Product	Units on hand	Unit cost \$	Estimated unit selling price \$	Estimated unit cost of completion and selling costs \$
A	300	120	115	5
B	1000	110	110	5
C	500	140	145	8
D	1,000	150	165	10

Additional information:

100 units of Product A were held to satisfy a firm sales contract for selling 100 units at \$135 per unit to Customer Nelson.

Required:

Determine the carrying cost of ending inventory at the balance sheet date, and the amount of inventory write-down for the current period. Explain your answer. Assume the company adopts the weighted average cost method.

**Case
Study 9.6**

You are auditing WTL's financial statements for the year ended 30 September 2007. The following is an exchange between Miss Lee, the financial controller of WTL, and your assistants during a meeting reviewing the draft financial statements prepared by Miss Lee:

Assistants: We noticed that at 30 September 2007, your company held some inventories acquired for distribution to FPI. Since the expected distribution agreement with FPI did not materialise and the goods have been made to FPI's specific requirements and US standards, you may need to write off the inventories if you are not able to sell them at a price above their cost before the approval of the financial statements. This is also consistent with your company's established policy to write off all goods with an age over six months at the balance sheet date.

Miss Lee: I am not sure I agree with you. The inventories at cost of \$7 million were purchased for FPI, and we are in the process of claiming from FPI for the losses we suffered. We are also contacting other buyers in the US to try to sell these specialised goods. Some of them may be willing to take the inventories although we don't know whether this will happen at this moment.

Required:

As the auditor of WTL, explain to Miss Lee the proper accounting treatments (other than for deferred taxation) for the inventory issues identified by your assistants.

(HKICPA FE December 2003, adapted)

10

Construction Contracts

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of construction contracts (the definition)
- 2 The criteria for determining combining and segmenting construction contracts
- 3 The recognition of contract revenue, expenses and expected losses
- 4 The disclosure requirements for construction contracts

Real-life

Case 10.1

China Communications Construction Company Limited

China Communications Construction Company is principally engaged in the construction and design of transportation infrastructure, dredging and port machinery manufacturing business. It is the largest port construction and design company in China, a leading company in road, bridge construction and design, the largest dredging company in China and the third largest in the world. The group is also the world's largest container crane manufacturer. Its annual report of 2006 stated the following accounting policy for construction contracts:

- Contract costs are recognised when incurred.
- When the outcome of a contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable.
- When the outcome of a contract can be estimated reliably and it is probable that the contract will be profitable, contract revenue is recognised over the period of the contract. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.
- The group uses the “percentage of completion method” to determine the appropriate amount to be recognised in a given period.

China Communications Construction Company Limited (CCC) is an interesting company. It was established in China on 8 October 2006 as a joint stock company with limited liability under the Company Law of China. The H shares of CCC were listed on the Hong Kong Stock Exchange on 15 December 2006, with an oversubscription of approximately 220 times of the shares initially available for subscription under the Hong Kong Public Offering. The offer price of CCC's H shares was HK\$4.06 per share, and its closing price on the first day of listing was HK\$6.33 per share, representing a 56% increase over its offer price of HK\$4.06 per share. It has become a favourite stock of institutional as well as ordinary investors. As of 20 March 2008, the stock price of CCC's H shares had gone to HK\$15.16 per share, representing a 273% increase over its original offer price. In this chapter, we discuss the accounting treatment of construction contracts. What are contract revenue, expenses and expected losses? How does an entity like CCC recognise contract revenue and contract costs associated with the construction contract? As Real-life Case 1 indicates, CCC has different accounting policies for recognition of contract revenue and costs, depending on whether the outcome of a contract can be estimated reliably. In particular, how does an entity determine the amounts of revenue, expenses and profit recognised in the profit or loss using the percentage of completion method?

10.1 Applicable Standard and Scope

IAS 11 *Construction Contracts* prescribes the accounting treatment of revenue and costs associated with construction contracts. Contractors are required to account for

their construction contracts in the financial statements in accordance with IAS 11. Because the dates of commencement and completion of the contract activity usually fall into different accounting periods, the primary issue is how to allocate contract revenue and contract costs to the accounting periods in which the construction work is performed. IAS 11 uses the recognition criteria established in the *Framework for the Preparation and Presentation of Financial Statements* to determine when contract revenue and contract costs should be recognised as revenue and expenses in the profit or loss and also provides practical guidance on the application of these criteria.

A **construction contract** is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

A **fixed price contract** is a construction contract in which the contractor agrees to a fixed contract price, or a fixed rate per unit of output, which in some cases is subject to cost escalation clauses.

A **cost plus contract** is a construction contract in which the contractor is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed fee.

A construction contract may involve the construction of

- a single asset such as a bridge, building, dam, pipeline, road, ship or tunnel; or
- a number of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use: for example, the construction of refineries and other complex pieces of plant or equipment.

Construction contracts include

- contracts for the rendering of services that are directly related to the construction of the asset: for example, the services of project managers and architects; and
- contracts for the destruction or restoration of assets, and the restoration of the environment following the demolition of assets.

Construction contracts are classified as fixed price contracts and cost plus contracts. Some construction contracts may contain characteristics of both fixed price and cost plus contracts. For example, the construction contract could be a cost plus contract with an agreed maximum price. In such circumstances, a contractor needs to consider all the conditions on the outcome of a construction contract for both fixed price and cost plus contracts in order to determine when to recognise contract revenue and expenses.

10.2 Combining and Segmenting Construction Contracts

An entity is required to apply IAS 11 to the separately identifiable components of a single contract or to a group of contracts together in order to reflect the substance of a contract or a group of contracts.

When a contract covers a number of assets, an entity will treat the construction of each asset as a separate construction contract if all the following three conditions are satisfied:

1. Separate proposals have been submitted for each asset;
2. Each asset has been subject to separate negotiation and the contractor and customer have been able to accept or reject that part of the contract relating to each asset; and
3. The costs and revenues of each asset can be identified (see Example 10.1).

Example 10.1 In Phase I of its real estate development project, ABC Group is going to build the Orchard Centre, which comprises a shopping mall from ground level to the second floor and offices from the third floor to the 30th floor. ABC Group has invited tenders for the construction of the Orchard Centre, which is expected to be built in 2 years. Robertson Limited has been awarded the construction contract to build the Orchard Centre because it submitted the lowest tender.

Required:

Determine whether the construction for the shopping mall and offices should be treated as separate construction contracts or a single construction contract.

Answers

In this case, the construction for the shopping mall and offices should be treated as a single construction contract because of the following reasons:

1. There was no separate proposal for constructing the shopping mall and offices: the shopping mall was actually situated from ground level to the second floor and offices from the third floor to the 30th floor of the Orchard Centre.
2. Construction of the shopping mall and offices were not subject to separate negotiation or tendering processes (there was only one single tender for the construction of the Orchard Centre).
3. The costs and revenues of constructing the shopping mall and offices cannot be separately identified easily because the tender is for the whole centre.

An entity treats a group of contracts, whether with a single customer or with several customers, as a single construction contract when all the following three conditions are satisfied:

1. The group of contracts is negotiated as a single package;
2. The contracts are so closely interrelated that they are, in effect, part of a single project with an overall profit margin; and
3. The contracts are performed concurrently or in a continuous sequence (see Example 10.2).

Example 10.2 Soon after the grand opening of the Orchard Centre, ABC Group makes an announcement to proceed to Phase II and Phase III of its real estate development project so as to benefit more from the recent unexpected economic boom and the success in renting out 100% of the shops and offices of the Orchard Centre.

During the past 2 years, ABC Group has been successful in either acquiring the land use rights or inviting the owners holding the land use rights of the land next to the Orchard Centre to participate in Phases II and III of ABC Group's real estate development project.

In Phase II of the development, which will commence immediately and be completed in 2 years, ABC Group is going to demolish the old buildings that are located on the left-hand side of the Orchard Centre and build a brand new centre called the Somerset Centre.

In Phase III of the development, which will commence 1 year later and be completed 3 years after its commencement, ABC Group will demolish the old buildings that are located behind the Orchard Centre and the Somerset Centre and build two brand new centres called the Exeter Centre and the Grange Centre.

In an attempt to make these four centres become a regional landmark, ABC Group determines that the design of the Somerset Centre, the Exeter Centre and the Grange Centre should be exactly the same as, or at least very similar to, that of the Orchard Centre. In order to enhance good and standardised construction quality in terms of material usage and workmanship, ABC Group has also decided to request for just one tender for the construction of the three new centres of Phases II and III development even though the commencement and completion dates for the Phase II and Phase III developments are different.

ABC Group has proceeded to invite tenders for the construction of the Somerset Centre, the Exeter Centre and the Grange Centre in one tender. Ten construction companies, including Robertson Limited, have submitted their tenders, and Robertson Limited is eventually awarded the construction contract due to offering the lowest tender.

Required:

Determine whether the construction of the Orchard Centre, the Somerset Centre, the Exeter Centre and the Grange Centre should be treated as separate construction contracts or a single construction contract.

Answers

The construction contract for the Orchard Centre should be treated as a separate construction contract from the construction contracts for the other three centres because of the following reasons:

1. There were separate proposals for Phase I development and for Phases II and III developments: the construction of the Orchard Centre in Phase I development, the construction of the Somerset Centre in Phase II development, and the construction of the Exeter Centre and the Grange Centre in Phase III development.
2. Construction of the Orchard Centre was negotiated as a single contract in a single tender, while construction of the other three centres was subject to another separate tendering process 2 years after the announcement of the results of the Orchard Centre tender. The construction of Phase I and construction of Phases II and III centres were subject to separate negotiation (tendering process), and Robertson Limited would not have been awarded the Phases II and III construction contract if it had not offered the lowest tender.
3. The costs and revenues of constructing the Orchard Centre in Phase I, and of constructing the other three centres in Phases II and III can be separately identified.

On the other hand, the construction of the Somerset Centre, the Exeter Centre and the Grange Centre should be treated as a single construction contract because of the following reasons:

1. The construction contract for the Somerset Centre, the Exeter Centre and the Grange Centre was negotiated as a single package in one tender. ABC Group requested for just one tender for the construction of these three new centres.
2. The construction contracts for the Somerset Centre, the Exeter Centre and the Grange Centre were so closely interrelated that they were, in effect, part of a single project with an overall profit margin. It should be noted that the designs of these three centres were exactly the same as, or at least very similar to, that of the Orchard Centre and were expected to have good and standardised construction quality in terms of material usage and workmanship.
3. Even though the commencement and completion dates for the construction of the Somerset Centre, the Exeter Centre and the Grange Centre were different, the contracts were performed either concurrently or in a continuous sequence. Particularly, 1 year after the construction commencement date of the Somerset Centre, the construction works for the Exeter Centre and the Grange Centre will commence (reflecting that there was a continuous sequence in building). The Exeter Centre and the Grange Centre were constructed concurrently, thus reflecting that the construction contracts for the Exeter Centre and the Grange Centre were performed concurrently.

A contract may provide for the construction of an additional asset at the option of the customer or may be amended to include the construction of an additional asset. The construction of the additional asset is treated as a separate construction contract when:

- The asset differs significantly in design, technology or function from the asset or assets covered by the original contract; or
- The price of the asset is negotiated without regard to the original contract price (IAS 11.10).

10.3 What Is Contract Revenue?

Contract revenue comprises

1. the initial amount of revenue agreed in the contract; and
2. variations in contract work, claims and incentive payments
 - a. to the extent that it is probable that they will result in revenue; and
 - b. when they are capable of being reliably measured (see Figure 10.1).

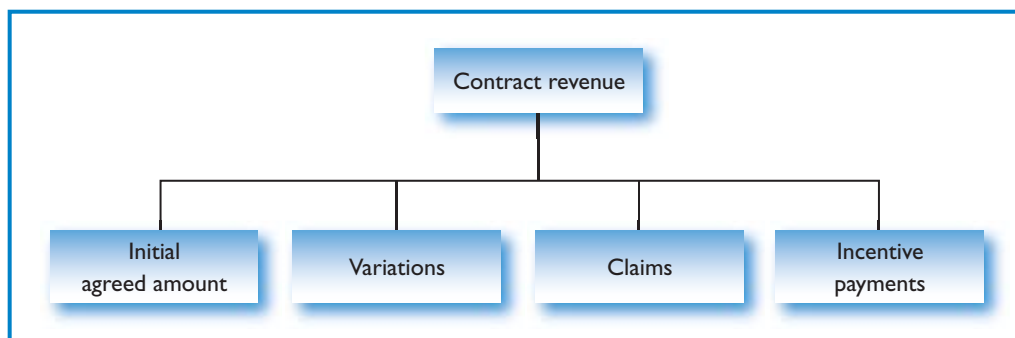
A **variation** is an instruction by the customer for a change in the scope of the work to be performed under the contract.

A **claim** is an amount that the contractor seeks to collect from the customer or another party as reimbursement for costs not included in the contract price.

An **incentive payment** is additional amounts to be paid to the contractor if specified performance standards are met or exceeded.

An entity measures contract revenue at the fair value of the consideration received or receivable. The measurement of contract revenue is affected by a variety of uncertainties that depend on the outcome of future events. An entity needs to frequently revise the estimates as events occur and uncertainties are resolved. Therefore, the amount of contract revenue may increase or decrease from one period to the next (see Example 10.3).

FIGURE 10.1 Elements of contract revenue



Example 10.3 The amount of contract revenue may increase or decrease due to the following reasons:

- A contractor and a customer agree to variations or claims that increase or decrease contract revenue in a period subsequent to that in which the contract was initially agreed;
- The amount of revenue agreed in a fixed price contract is increased as a result of cost escalation clauses;
- The amount of contract revenue is decreased as a result of penalties arising from delays caused by the contractor in the completion of the contract; or
- When a fixed price contract involves a fixed price per unit of output, contract revenue is increased as the number of units is increased.

A contractor and a customer may agree upon variations that may lead to an increase or a decrease in contract revenue. These variations include changes in the specifications or design of the asset and changes in the duration of the contract (see Example 10.4). An entity includes a variation in contract revenue when:

1. It is probable that the customer will approve the variation as well as the amount of revenue arising from the variation; and
2. The amount of revenue can be reliably measured.

Example 10.4 The contract has a cost escalation clause for adjusting the fixed contract price of \$20 million to the general inflation rate announced by the government. The government has announced the general inflation for the current period is 6%.

Determine the amount of contract revenue to be increased or decreased for the current period.

Answers

The amount of contract revenue to be increased for the current period is \$3 million (\$20 million × 6%).

Construction revenue may also be increased or decreased due to a contractor's claim. A claim may arise from, for example, customer-caused delays, errors in specifications or design, and disputed variations in contract work (see Example 10.5). The measurement of the amounts of revenue arising from claims is subject to a high level of uncertainty and often depends on the outcome of negotiations. Therefore, an entity includes a claim in contract revenue only when:

1. Negotiations have reached an advanced stage such that it is probable that the customer will accept the claim; and
2. The amount of the claim can be measured reliably.

Example 10.5 The contract has a penalty clause for delays caused by the contractor in the completion of the contract. The initial amount of revenue agreed in the contract is \$30 million. The penalty is agreed to be \$20,000 per day of delay. Due to the contractor's problem, the completion date of the contract was 10 days after the agreed deadline.

Determine the amount of contract revenue to be increased or decreased.

Answers

The amount of contract revenue to be decreased is \$200,000 ($\$20,000 \times 10$).

Incentive payments are additional amounts paid to the contractor if specified performance standards are met or exceeded. For example, a contract may allow for an incentive payment to the contractor for early completion of the contract. An entity includes an incentive payment in contract revenue when:

1. The contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded; and
2. The amount of the incentive payment can be measured reliably (see Example 10.6).

Example 10.6 Power has won a contract to construct a building for \$50 million. The contract allows for an incentive payment of \$20,000 per day up to a maximum of \$500,000 to Power for early completion of the contract. The construction of the building is at the completion stage, and it is probable that the contract will be completed 8 days before the agreed completion date.

Determine the amount of incentive payment to be included in Power's contract revenue.

Answers

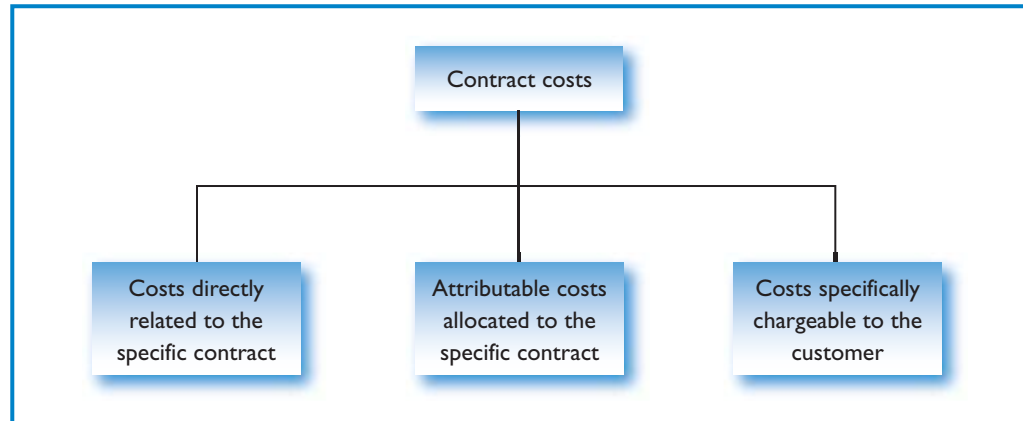
Since the construction of the building is at the completion stage, it is probable that the specified performance standards (early completion) will be met. The amount of the incentive payment can also be measured reliably to be \$20,000 per day up to a maximum of \$500,000. The amount of incentive payment to be included in Power's contract revenue is \$160,000 ($\$20,000$ per day \times 8 days).

10.4 What Are Contract Costs?

Contract costs comprise

1. costs that relate directly to the specific contract (see Example 10.7);
2. costs that are attributable to contract activity in general and can be allocated to the contract; and

FIGURE 10.2 Elements of contract costs



3. such other costs as are specifically chargeable to the customer under the terms of the contract (see Figure 10.2).

Example 10.7 Examples of costs that relate directly to the specific contract:

- Site labour costs, including site supervision;
- Costs of materials used in construction;
- Depreciation of plant and equipment used on the contract;
- Costs of moving plant, equipment and materials to and from the contract site;
- Costs of hiring plant and equipment;
- Costs of design and technical assistance that are directly related to the contract;
- The estimated costs of rectification and guarantee work, including expected warranty costs;
- Claims from third parties.

Costs that relate directly to the specific contract may be reduced by any incidental income that is not included in contract revenue. For example, contract costs may be reduced by income from the sale of surplus materials and the disposal of plant and equipment at the end of the contract.

Costs that may be attributable to contract activity in general and can be allocated to specific contracts include the following:

1. Insurance;
2. Costs of design and technical assistance that are not directly related to a specific contract; and
3. Construction overheads.

Such costs also include borrowing costs when the contractor capitalises borrowing costs under IAS 23 *Borrowing Costs* (see Chapter 7).

Based on the normal level of construction activity, an entity uses systematic and rational methods to allocate these general costs and apply the methods consistently to all costs having similar characteristics.

Costs that are specifically chargeable to the customer under the terms of the contract may include some general administration costs and development costs for which reimbursement is specified in the terms of the contract. Costs that cannot be attributed to contract activity or cannot be allocated to a contract are excluded from the costs of a construction contract (see Example 10.8).

Example 10.8 Examples of costs that cannot be attributed to contract activity or cannot be allocated to a contract:

- General administration costs for which reimbursement is not specified in the contract;
- Selling costs;
- Research and development costs for which reimbursement is not specified in the contract;
- Depreciation of idle plant and equipment that is not used on a particular contract.

Contract costs include the costs attributable to a contract for the period from the date of securing the contract to the final completion of the contract. However, an entity includes costs that relate directly to a contract and are incurred in securing the contract as part of the contract costs when:

1. The costs can be separately identified and measured reliably; and
2. It is probable that the contract will be obtained.

If costs incurred in securing a contract are recognised as an expense in the period in which they are incurred, they will not be included in contract costs when the contract is obtained in a subsequent period.

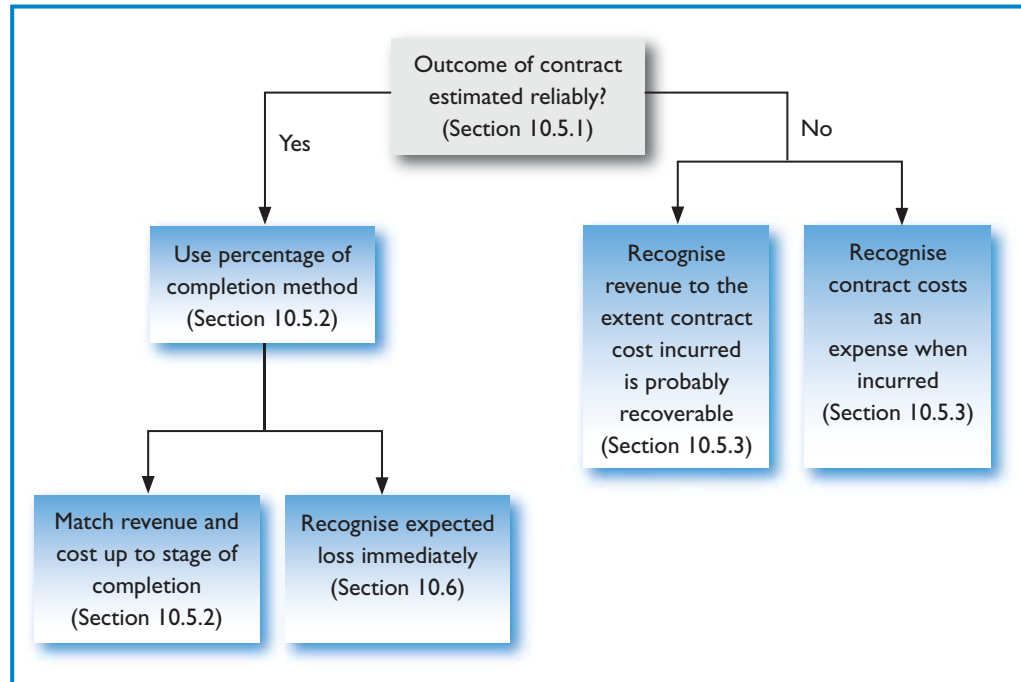
10.5 Recognition of Contract Revenue and Expenses

In determining the recognition of contract revenue and costs, the key question to ask is whether the outcome of a contract can be estimated reliably (see Figure 10.3).

10.5.1 When Outcome of Contract Can Be Estimated Reliably

When the outcome of a construction contract can be estimated reliably, an entity recognises contract revenue and contract costs associated with the construction contract as revenue and expenses respectively by reference to the stage of completion of the contract activity at the balance sheet date (i.e., at the end of the reporting period) (see Real-life Case 10.2).

FIGURE 10.3 Recognition of contract revenue and expenses



Real-life Case 10.2

Henderson Land Development Company Limited

The principal activity of the Henderson Land Development Company is investment holding, and the principal activities of its subsidiaries are property development and investment, finance, construction, infrastructure, hotel operation and management, department store operations, project management, investment holding and property management in Hong Kong and Mainland China. In its 2007 annual report, the company stated the following accounting policy for contract revenue when the outcome of a construction contract can be estimated reliably:

- Revenue from a fixed price is recognised using the percentage of completion method, measured by reference to the percentage of contract costs incurred to date to the estimated total contract costs for the contract; and
- Revenue from a cost plus contract is recognised by reference to the recoverable costs incurred during the period plus an appropriate proportion of the total fee, measured by reference to the proportion that costs incurred to date bear to the estimated total costs of the contract.

In the case of a fixed price contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

1. Total contract revenue can be measured reliably;
2. It is probable that the economic benefits associated with the contract will flow to the entity;
3. Both the contract costs to complete the contract and the stage of contract completion at the balance sheet date can be measured reliably; and
4. The contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates (IAS 11.23).

In the case of a cost plus contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

1. It is probable that the economic benefits associated with the contract will flow to the entity; and
2. The contract costs attributable to the contract, whether or not specifically reimbursable, can be clearly identified and reliably measured (IAS 11.24).

The outcome of a construction contract can be estimated reliably only when it is probable that the economic benefits associated with the contract will flow to the entity. However, when an uncertainty arises about the collectibility of an amount already included in contract revenue and recognised in the income statement (profit or loss), an entity recognises the uncollectable amount or the amount in respect of which recovery has ceased to be probable as an expense rather than as an adjustment of the amount of contract revenue.

An entity is generally able to make reliable estimates after it has agreed to a contract that establishes

1. each party's enforceable rights regarding the asset to be constructed;
2. the consideration to be exchanged; and
3. the manner and terms of settlement.

It is also usually necessary for the entity to have an effective internal financial budgeting and reporting system. The entity reviews and, when necessary, revises the estimates of contract revenue and contract costs as the contract progresses. The need for such revisions does not necessarily indicate that the outcome of the contract cannot be estimated reliably.

10.5.2 Percentage of Completion Method

The recognition of revenue and expenses by reference to the stage of completion of a contract is often referred to as the percentage of completion method. Under this method, contract revenue is matched with the contract costs incurred in reaching the stage of completion, resulting in the reporting of revenue, expenses and profit that can be attributed to the proportion of work completed. This method provides useful information on the extent of contract activity and performance during a period.

Under the percentage of completion method, an entity recognises contract revenue as revenue in the income statement in the accounting periods in which the work is performed. Contract costs are usually recognised as an expense in the income statement in the accounting periods in which the work to which they relate is performed. However,

an entity recognises any expected excess of total contract costs over total contract revenue for the contract as an expense immediately (see Section 10.6).

**Real-life
Case 10.3**

China Communications Construction Company Limited

The 2006 annual report of China Communications Construction Company stated the following accounting policy for construction contracts:

- The group uses the “percentage of completion method” to determine the appropriate amount to be recognised in a given period. Depending on the nature of contracts, the stage of completion is measured by reference to (a) the proportion of contract costs incurred for work performed to date to estimated total contract costs; (b) the amount of work certified by the site engineer; or (c) completion of physical proportion of the contract work. Costs incurred in the year in connection with future activity on a contract are excluded from contract costs in determining the stage of completion. They are presented as inventories, prepayments or other assets, depending on their nature.

The stage of completion of a contract may be determined in a variety of ways (see Real-life Case 10.3). The entity uses the method that measures reliably the work performed. Depending on the nature of the contract, the methods may include the following:

1. The proportion of contract costs incurred for work performed to date to the estimated total contract costs (see Example 10.9);
2. Surveys of work performed; or
3. Completion of a physical proportion of the contract work.

Progress payments and advances received from customers often do not reflect the work performed.

Example 10.9 A construction contractor has obtained a fixed price contract from the Hong Kong government for \$9,000 million to build a bridge between Hong Kong and City A on Mainland China. The initial amount of revenue agreed in the contract is \$9,000 million. The contractor's initial estimate of contract costs is \$8,000 million. It will take 3 years to build the bridge. By the end of Year 1, the contractor's estimate of contract costs has increased to \$8,050 million.

In Year 2, the Hong Kong government approves a variation resulting in an increase in contract revenue of \$200 million and estimated additional contract costs of \$150 million. At the end of Year 2, costs incurred include \$100 million for standard materials stored at the site to be used in Year 3 to complete the project.

The contractor determines the stage of completion of the contract by calculating the proportion that contract costs incurred for work performed to date bear to the latest estimated total contract costs. A summary of the financial data during the construction period is as follows:

	Year 1 \$ million	Year 2 \$ million	Year 3 \$ million
Initial amount of revenue agreed in contract	9,000	9,000	9,000
Variation	—	200	200
Total contract revenue	9,000	9,200	9,200
Contract costs incurred to date	2,093	6,168	8,200
Contract costs to complete	5,957	2,032	—
Total estimated contract costs	8,050	8,200	8,200
Estimated profit	950	1,000	1,000
Stage of completion	26%	74%	100%

The stage of completion for Year 2 (74%) is determined by excluding from contract costs incurred for work performed to date the \$100 million of standard materials stored at the site for use in Year 3.

Calculate the amounts of revenue, expenses and profit recognised in the income statement for each of Years 1, 2 and 3 using the percentage of completion method. Prepare journal entries to account for the contract revenues and expenses for Year 1.

Answers

The amounts of revenue, expenses and profit recognised in the income statement in the three years are as follows:

	To date \$ million	Recognised in prior years \$ million	Recognised in current year \$ million
Year 1:			
Revenue ($9,000 \times 0.26$)	2,340	—	2,340
Expenses ($8,050 \times 0.26$)	2,093	—	2,093
Profit	247	—	247
Year 2:			
Revenue ($9,200 \times 0.74$)	6,808	2,340	4,468
Expenses ($8,200 \times 0.74$)	6,068	2,093	3,975
Profit	740	247	493
Year 3:			
Revenue ($9,200 \times 1.00$)	9,200	6,808	2,392
Expenses ($8,200 \times 1.00$)	8,200	6,068	2,132
Profit	1,000	740	260

For Year 1, the following journal entries should be recorded by the contractor:

Dr Contract expenses.....	\$2,093	
Cr Cash or accounts payable		\$2,093
To recognise the contract expenses for Year 1.		
<hr/>		
Dr Cash or due from customers.....	\$2,340	
Cr Contract revenue.....		\$2,340
To recognise the contract revenue for Year 1.		

When the stage of completion is determined by reference to the contract costs incurred to date, only those contract costs that reflect work performed are included in costs incurred to date. Example 10.10 gives some examples of contract costs that are excluded from the contract costs incurred to date.

Example 10.10 Examples of costs that are excluded from the contract costs incurred to date:

- Contract costs that relate to future activity on the contract;
- Payments made to subcontractors in advance of work performed under the subcontract.

As indicated in Example 10.10, a contractor may have incurred contract costs that relate to future activity on the contract. For example, costs of materials that have been delivered to a contract site or set aside for use in a contract but not yet installed, used or applied during contract performance are excluded from the contract costs incurred to date, unless the materials have been made specially for the contract (see Example 10.9). Costs relating to future activity on the contract are recognised as an asset only if it is probable that they will be recovered. Such costs represent an amount due from the customer and are often classified as contract work-in-progress.

10.5.3 When Outcome of Contract Cannot Be Estimated Reliably

When the outcome of a construction contract cannot be estimated reliably:

1. Revenue shall be recognised only to the extent of contract costs incurred that it is probable will be recoverable (see Real-life Case 10.4); and
2. Contract costs shall be recognised as an expense in the period in which they are incurred (IAS 11.32).

Real-life

Case 10.4

Henderson Land Development Company Limited

The 2007 annual report of Henderson Land Development Company stated the following accounting policy for contract revenue when the outcome of a construction contract cannot be estimated reliably:

- When the outcome of a construction contract cannot be estimated reliably, revenue is recognised only to the extent of contract costs incurred that it is probable will be recoverable.

Although the outcome of the contract cannot often be estimated reliably during the early stages of a contract, it may be probable an entity will recover the contract costs incurred. Thus, an entity recognises contract revenue only to the extent of costs incurred that are expected to be recoverable. As the outcome of the contract cannot be estimated reliably, an entity does not recognise any profit.

However, this method, as required by IAS 11.32, is not exactly a completed contract basis. Under the completed contract basis, sales revenue earned to date is matched to the cost of sales and no profit is taken. For example, for a 3-year contract, no profits are recognised for the first 2 years, and in the year of completion the whole of the profit is recognised (assuming the contract is profitable). Why do we argue it is not exactly a completed contract basis? From a theoretical point of view, it is unreasonable to assume that the outcome of a contract can only be estimated reliably until the completion of the contract. In normal cases, when the contract is 80% or 90% completed, the contractor should have already known that they could reliably estimate the result. Otherwise, no contractor would be interested in agreeing to perform such a contract. Therefore, before completion of a construction contract, it is very likely that the contractor will change the recognition method to the percentage of completion basis in accordance with IAS 11.35, which states:

When the uncertainties that prevented the outcome of the contract being estimated reliably no longer exist, revenue and expenses associated with the construction contract shall be recognised in accordance with paragraph 22 rather than in accordance with paragraph 32.

Even though the outcome of the contract cannot be estimated reliably, it may be probable that total contract costs will exceed total contract revenues. In such cases, an entity recognises the expected loss (i.e., expected excess of total contract costs over total contract revenue) for the contract as an expense immediately (see Section 10.6).

Contract costs that are not likely to be recovered are recognised as an expense immediately. There are many circumstances in which the recoverability of contract costs incurred may not be probable and in which contract costs may need to be recognised as an expense immediately (see Example 10.11).

Example 10.11 Contract costs that are not probable of being recovered include contracts

- that are not fully enforceable, that is, their validity is seriously in question;
- the completion of which is subject to the outcome of pending litigation or legislation;
- relating to properties that are likely to be condemned or expropriated;
- where the customer is unable to meet its obligations;
- where the contractor is unable to complete the contract or otherwise meet its obligations under the contract.

10.6 Recognition of Expected Losses

When it is probable that total contract costs will exceed total contract revenue, an entity recognises the expected loss as an expense immediately. The amount of expected loss is determined irrespective of

1. whether work has commenced on the contract;
2. the stage of completion of contract activity; or
3. the amount of profits expected to arise on other contracts that are not treated as a single construction contract.

10.7 Changes in Estimates

An entity applies the percentage of completion method on a cumulative basis in each accounting period to the current estimates on contract revenue and contract costs. Therefore, an entity accounts for the effect of a change in the estimate of contract revenue or contract costs, or the effect of a change in the estimate on the outcome of a contract as a change in accounting estimate (see Chapter 20 for further discussion of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*). The changed estimates are used to determine the amount of revenue and expenses recognised in the income statement in the period in which the change is made and in subsequent periods.

10.8 Disclosure

An entity is required to disclose

1. the amount of contract revenue recognised as revenue in the period;
2. the methods used to determine the contract revenue recognised in the period; and
3. the methods used to determine the stage of completion of contracts in progress (IAS 11.39).

An entity is also required to disclose each of the following for contracts in progress at the balance sheet date:

1. The aggregate amount of costs incurred and recognised profits (less recognised losses) to date;
2. The amount of advances received; and
3. The amount of retentions.

Advances are the amounts received by the contractor before the related work is performed.

Retentions are the amounts of progress billings that are not paid until the satisfaction of conditions specified in the contract for the payment of such amounts or until defects have been rectified.

Progress billings are the amounts billed for work performed on a contract whether or not they have been paid by the customer.

IAS 11 also requires an entity to present

1. the gross amount due from customers for contract work as an asset; and
2. the gross amount due to customers for contract work as a liability (see Real-life Case 10.5).

Real-life

Case 10.5

China Communications Construction Company Limited

The 2006 annual report of China Communications Construction Company disclosed the following information on contract work-in-progress:

	Year ended 31 December		
	Group		Company
	2006 RMB million	2005 RMB million	2006 RMB million
Contract cost incurred plus recognised profit less recognised losses	171,683	145,684	3,574
Less: Progress billings	(157,123)	(136,103)	(3,166)
Contract work-in-progress.....	<u>14,560</u>	<u>9,581</u>	<u>408</u>
Representing:			
Amounts due from customers			
for contract work.....	20,903	14,001	588
Amounts due to customers			
for contract work.....	<u>(6,343)</u>	<u>(4,420)</u>	<u>(180)</u>
	<u>14,560</u>	<u>9,581</u>	<u>408</u>
	Group		Company
	2006 RMB million	2005 RMB million	2006 RMB million
Contract revenue recognised as revenue in the year.....	102,525	73,363	2,972

The gross amount due from customers for contract work is the net amount of

- costs incurred plus recognised profits, less
- the sum of recognised losses and progress billings

for all contracts in progress for which costs incurred plus recognised profits (less recognised losses) exceeds progress billings (IAS 11.42(a)).

The gross amount due to customers for contract work is the net amount of

- costs incurred plus recognised profits, less
- the sum of recognised losses and progress billings

for all contracts in progress for which progress billings exceed costs incurred plus recognised profits (less recognised losses) (IAS 11.42(b)).

Example 10.12 presents comprehensive financial statement disclosures of a contractor having five contracts in progress.

Example 10.12 A contractor has reached the end of its first year of operations. All its contract costs incurred have been paid for in cash, and all its progress billings and advances have been received in cash. Contract costs incurred for contracts B, C and E include the cost of materials that have been purchased for the contract but which have not been used in contract performance to date. For contracts B, C and E, the customers have made advances to the contractor for work not yet performed.

The status of its five contracts in progress at the end of Year 1 is as follows:

	Contract (\$ million)					Total
	A	B	C	D	E	
Contract revenue recognised						
in accordance with IAS 11.22	145	520	380	200	55	1,300
Contract expenses recognised						
in accordance with IAS 11.22	110	450	350	250	55	1,215
Expected losses recognised						
in accordance with IAS 11.36	—	—	—	40	30	70
Recognised profits less recognised losses.....	<u>35</u>	<u>70</u>	<u>30</u>	<u>(90)</u>	<u>(30)</u>	<u>15</u>
Contract costs incurred in the period.....	110	510	450	250	100	1,420
Contract costs incurred recognised						
as contract expenses in the period						
in accordance with IAS 11.22	<u>110</u>	<u>450</u>	<u>350</u>	<u>250</u>	<u>55</u>	<u>1,215</u>
Contract costs that relate to						
future activity recognised as an						
asset in accordance with IAS 11.27	<u>—</u>	<u>60</u>	<u>100</u>	<u>—</u>	<u>45</u>	<u>205</u>
Contract revenue (see above).....	145	520	380	200	55	1,300
Progress billings (IAS 11.41).....	100	520	380	180	55	1,235
Unbilled contract revenue	45	—	—	20	—	65
Advances (IAS 11.41)	—	80	20	—	25	125

Determine the amounts to be disclosed in the financial statements in accordance with IAS 11 *Construction Contracts*.

Answers

The amounts to be disclosed in accordance with IAS 11 *Construction Contracts* are as follows:

	\$ million
Contract revenue recognised as revenue in the period (IAS 11.39(a))	1,300
Contract costs incurred and recognised profits (less recognised losses) to date (IAS 11.40(a))	1,435
Advances received (IAS 11.40(b))	125
Gross amount due from customers for contract work – presented as an asset in accordance with IAS 11.42(a)	220
Gross amount due to customers for contract work – presented as a liability in accordance with IAS 11.42(b)	(20)

The amounts to be disclosed in accordance with IAS 11 paragraphs 40(a), 42(a) and 42(b) are calculated as follows:

	Contract (\$ million)					Total
	A	B	C	D	E	
Contract costs incurred	110	510	450	250	100	1,420
Recognised profits less recognised losses	35	70	30	(90)	(30)	15
Progress billings	145	580	480	160	70	1,435
	100	520	380	180	55	1,235
	45	60	100	(20)	15	200
Representing:						
Due from customers	45	60	100	–	15	220
Due to customers	–	–	–	(20)	–	(20)
	45	60	100	(20)	15	200

The amount disclosed in accordance with IAS 11.40(a) is the same as the amount for the current period because the disclosures relate to the first year of operation.

An entity discloses any contingent liabilities and contingent assets in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. Contingent liabilities and contingent assets may arise from such items as warranty costs, claims, penalties or possible losses (see Chapter 14).

10.9 Summary

An entity applies IAS 11 *Construction Contracts* in accounting for construction contracts in the financial statements of contractors. Construction contracts are classified as fixed price contracts and cost plus contracts.

An entity applies IAS 11 to the separately identifiable components of a single contract or to a group of contracts together in order to reflect the substance of a contract or a group of contracts.

Contract revenue comprises the initial amount of revenue agreed in the contract, and variations in contract work, claims and incentive payments to the extent that it is probable that they will result in revenue and are capable of being reliably measured.

Contract costs comprise costs that relate directly to the specific contract, costs that are attributable to contract activity in general and can be allocated to the contract, and such other costs as are specifically chargeable to the customer under the terms of the contract.

When the outcome of a construction contract can be estimated reliably, an entity recognises contract revenue and contract costs associated with the construction contract as revenue and expenses respectively by reference to the stage of completion of the contract activity at the balance sheet date. Under the percentage of completion method, contract revenue is matched with the contract costs incurred in reaching the stage of completion, resulting in the reporting of revenue, expenses and profit that can be attributed to the proportion of work completed.

When the outcome of a construction contract cannot be estimated reliably, an entity recognises revenue only to the extent of contract costs incurred that it is probable will be recovered, and contract costs as an expense in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue, the expected loss shall be recognised as an expense immediately. An entity accounts for the effect of a change in the estimate of contract revenue or contract costs, or the effect of a change in the estimate on the outcome of a contract as a change in accounting estimate.

An entity is required to disclose the amount of contract revenue recognised as revenue in the period, the methods used to determine the contract revenue recognised in the period, and the methods used to determine the stage of completion of contracts in progress.

For contracts in progress at the balance sheet date, an entity discloses the aggregate amount of costs incurred and recognised profits (less recognised losses) to date, the amount of advances received, and the amount of retentions. An entity also presents the gross amount due from customers for contract work as an asset, and the gross amount due to customers for contract work as a liability.

Review Questions

1. Define construction costs.
2. What are the differences between a fixed price contract and a cost plus contract?

3. If a contract covers a number of assets, does an entity treat the construction of each asset as a separate construction contract?
4. When does an entity treat a group of contracts as a single construction contract?
5. Define contract revenue.
6. Define contract expenses.
7. Under what conditions can an entity conclude that the outcome of a construction contract can be estimated reliably for a fixed price contract?
8. Under what conditions can an entity conclude that the outcome of a construction contract can be estimated reliably for a cost plus contract?
9. Briefly describe the percentage of completion method.
10. What are the accounting treatments when the outcome of a construction contract cannot be estimated reliably?
11. When does an entity recognise expected loss?
12. How should changes in accounting estimates for construction contracts be dealt with?
13. What are the disclosure requirements for construction contracts?

Exercises

Exercise 10.1 Determine the amount of contract revenue to be increased or decreased in the following independent situations:

1. The contract has a cost escalation clause for adjusting the fixed contract price of \$10 million to the general inflation rate announced by the government. The government has announced the general inflation for the year is 5%.
2. The contract has a penalty clause for delays caused by the contractor in the completion of the contract. The initial amount of revenue agreed in the contract is \$20 million. The penalty is agreed to be \$50,000 per day of delay. Due to the contractor's problem, the completion date of the contract was 2 days after the agreed deadline.

Exercise 10.2 Sunshine has won a contract to construct a building for \$100 million. The contract allows for an incentive payment of \$100,000 per day up to a maximum of \$2 million to Sunshine for early completion of the contract. Determine the amount of incentive payment to be included in contract revenue in the following independent situations:

1. The construction of the building is at the completion stage, and it is probable that the contract will be completed 10 days before the agreed completion date.
2. The construction of the building is at the completion stage, and it is probable that the contract will be completed 30 days before the agreed completion date.

Exercise 10.3 Which of the following items should be included in the contract cost of a ship built under Contract A? Explain why.

1. \$10 million worth of raw materials was acquired specifically for use in constructing the ship. Some of the raw materials were not used, and the surplus materials were eventually sold for \$300,000.
2. Costs of hiring special equipment to construct the ship were in the amount of \$1 million.
3. Costs of overseas specialists' technical assistance that was directly related to the construction of the ship were in the amount of \$500,000.

Exercise 10.4 A construction contractor has obtained a fixed price contract for \$100 million to build a pipeline. The initial amount of revenue agreed in the contract is \$100 million. The contractor's initial estimate of contract costs is \$80 million. It will take 3 years to build the pipeline.

The contractor determines the stage of completion of the contract by calculating the proportion that contract costs incurred for work performed to date bear to the latest estimated total contract costs. Contract costs incurred to date and the contract costs to complete the contract by the end of Year 1 are \$32 million and \$48 million respectively.

Required:

Determine the stage of completion of the contract by the end of Year 1 and the amounts of revenue, expenses and profit recognised in the income statement for Year 1 using the percentage of completion method.

Exercise 10.5 Same information as in Exercise 10.4, except that in Year 1, the customer approves a variation resulting in an increase in contract revenue of \$20 million and estimated additional contract costs of \$12 million. At the end of Year 1, costs incurred include \$2 million for standard materials stored at the site to be used in Year 2 to complete the project.

Required:

Determine the stage of completion of the contract by the end of Year 1 and the amounts of revenue, expenses and profit recognised in the income statement for Year 1 using the percentage of completion method.

Problems

Problem 10.1 In Phase I of its real estate development project, ABC is going to build eight identical 40-storied residential buildings. ABC has awarded Chan the construction contract to build the residential buildings because Chan submitted the lowest tender. Soon after Chan has commenced the construction work, ABC makes an announcement to proceed immediately to Phase II of its real estate development project so as to benefit from the recent unexpected economic boom.

In Phase II of the development, ABC is going to build another eight identical 40-storied residential buildings whose design is exactly the same as that for the Phase I

buildings. Six construction companies, including Chan, have submitted their tenders, and Chan is eventually awarded the construction contract due to offering the lowest tender.

Required:

Determine whether Chan should treat the construction contracts for Phase I and Phase II development as separate construction contracts or a single construction contract.

Problem 10.2 In Phase I of its real estate development project, DEF is going to build eight identical 40-storied residential buildings. DEF has awarded Chan the construction contract to build the residential buildings because Chan's tender is the lowest one. The construction agreement gives DEF an option to request Chan to build two additional identical 40-storied residential buildings at the same construction price per building as per the tender. Soon after Chan has commenced the construction work, DEF exercises the option, within the agreed time limit, requesting DEF to build the two additional 40-storied residential buildings at the same construction price per building as per the tender.

Required:

Determine whether Chan should treat the construction of the eight and additional two 40-storied residential buildings as separate construction contracts or a single construction contract.

Problem 10.3 A construction contractor has obtained a fixed price contract for \$300 million to build a dam. The initial amount of revenue agreed in the contract is \$300 million. The contractor's initial estimate of contract costs is \$240 million. It will take 4 years to build the dam.

In Year 2, the customer approves a variation resulting in an increase in contract revenue of \$30 million and estimated additional contract costs of \$24 million. At the end of Year 2, costs incurred include \$4 million payments made to a subcontractor in advance of work performed under the subcontract.

The contractor determines the stage of completion of the contract by calculating the proportion that contract costs incurred for work performed to date bear to the latest estimated total contract costs. Contract costs incurred to date and the contract costs to complete the contract by the end of Year 1 are \$60 million and \$190 million respectively. Contract costs to date and the estimated contract costs to complete the contract by the end of Year 2 are \$140 million and \$134 million respectively.

Required:

Determine the stage of completion of the contract by the end of Years 1 and 2 and the amounts of revenue, expenses and profit recognised in the income statement for each of Years 1 and 2 using the percentage of completion method.

Problem 10.4 Assume the same information from Problem 10.3 for Years 1 and 2.

In Year 3, the subcontractor completed all the construction work of the subcontract.

The contract costs incurred to date and the contract costs to complete the contract by the end of Year 3 are \$250 million and \$110 million respectively.

Required:

Determine the stage of completion of the contract by the end of Year 3 and the amounts of revenue, expenses and expected loss recognised in the income statement for Year 3 using the percentage of completion method. What is the accounting treatment for the expected loss recognised in the income statement for Year 3?

Problem 10.5 A contractor has reached the end of its first year of operations. All its contract costs incurred have been paid for in cash, and all its progress billings and advances have been received in cash. Contract costs incurred for contract B include the cost of materials that have been purchased for the contract but which have not been used in contract performance to date. For contract B, the customer has made advances to the contractor for work not yet performed.

The status of its three contracts in progress at the end of Year 1 is as follows:

	Contract (\$ million)			
	A	B	C	Total
Contract revenue recognised				
in accordance with IAS 11.22	385	600	360	1,345
Contract expenses recognised				
in accordance with IAS 11.22	330	450	400	1,180
Expected losses recognised				
in accordance with IAS 11.36	—	—	40	40
Recognised profits less recognised losses.....	<u>55</u>	<u>150</u>	<u>(80)</u>	<u>125</u>
Contract costs incurred in the period.....	330	500	400	1,230
Contract costs incurred recognised as contract expenses in the period in accordance with IAS 11.22	<u>330</u>	<u>450</u>	<u>400</u>	<u>1,180</u>
Contract costs that relate to future activity recognised as an asset in accordance with IAS 11.27	<u>—</u>	<u>50</u>	<u>—</u>	<u>50</u>
Contract revenue (see above).....	385	600	360	1,345
Progress billings (IAS 11.41).....	320	600	355	1,275
Unbilled contract revenue	65	—	5	70
Advances (IAS 11.41)	—	60	—	60

Required:

Determine the amounts to be disclosed in the financial statements in accordance with IAS 11 *Construction Contracts*.

Case Studies

Case Study 10.1 The 2005–6 annual report of Hsin Chong Construction Group Ltd. stated the following revenue recognition accounting policy for contract revenue:

Revenue from contracting work is recognised based on the stage of completion of the contracts, provided that the stage of contract completion and the gross billing value of contracting work can be measured reliably. The stage of completion of a contract is established by reference to the gross billing value of contracting work to date as compared to the total contract sum receivable under the contracts.

Required:

1. Comment on Hsin Chong Construction Group Ltd.'s accounting treatment for contract revenue from construction contracts in accordance with IAS 11 *Construction Contracts*.
2. Discuss the accounting treatment for construction contracts when the outcome of a construction contract cannot be estimated reliably.

Case Study 10.2 Linnet is part-way through a contract to build a new football stadium at a contracted price of \$300 million. Details of the progress of this contract at 1 April 2003 are shown below:

	\$ million
Cumulative sales revenue invoiced	150
Cumulative cost of sales to date	112
Profit to date	38

The following information has been extracted from the accounting records at 31 March 2004:

	\$ million
Total progress payment received for work certified at 29 February 2004	180
Total costs incurred to date (excluding rectification costs below)	195
Rectification costs	17

Linnet has received progress payments of 90% of the work certified at 29 February 2004. Linnet's surveyor has estimated the sales value of the further work completed during March 2004 was \$20 million. At 31 March 2004, the estimated remaining costs to complete the contract were \$45 million.

The rectification costs are the costs incurred in widening access roads to the stadium. This was the result of an error by Linnet's architect when he made his

initial drawings. Linnet calculates the percentage of completion of its contracts as the proportion of sales value earned to date compared to the contract price.

All estimates can be taken as being reliable.

Required:

Prepare extracts of the financial statements for Linnet for the above contract for the year to 31 March 2004.

(ACCA 2.5 June 2004, adapted)

Case Study 10.3

Entity H has obtained a fixed price contract from City B to build a dam. The initial amount of revenue agreed in the contract is \$100 million. Entity H initially estimates that the contract costs will be \$80 million. It will take 3 years to build the dam. By the end of Year 1, Entity H's estimate of contract costs has increased to \$82 million.

In Year 2, City B approves a variation resulting in an increase in contract revenue of \$10 million and estimated additional contract costs of \$6 million. At the end of Year 2, costs incurred include \$2 million for standard materials stored at the site to be used to complete the construction of the dam in Year 3.

In Year 3, City B further approves another variation resulting in an increase in contract revenue of \$6 million and estimated additional contract costs of \$4 million.

Entity H determines the stage of completion of the contract by calculating the proportion that contract costs incurred for work performed to date bear to the latest estimated total contract costs. A summary of the financial data during the construction period is as follows:

	Year 1 \$ million	Year 2 \$ million	Year 3 \$ million
Initial amount of revenue agreed in contract	100	100	100
Variation	–	10	16
Total contract revenue	100	110	116
Contract costs incurred to date	30	50	92
Contract costs to complete	52	38	–
Total estimated contract costs	82	88	92
Estimated profit	18	22	24

Required:

- Determine the stage of completion of the contract by the end of Years 1, 2 and 3.
- Determine the amounts of revenue, expenses and profit recognised in the income statement for each of Years 1, 2 and 3 using the percentage of completion method.

Case
Study 10.4

Entity A has obtained a fixed price contract from ABC Company for \$8,000 million to build a superhighway between Hong Kong and City B on Mainland China. The initial amount of revenue agreed in the contract is \$8,000 million. Entity A's initial estimate of contract costs is \$7,100 million. It will take 3 years to build the superhighway. By the end of Year 1, Entity A's estimate of contract costs has increased to \$7,200 million.

In Year 2, ABC Company approves a variation resulting in an increase in contract revenue of \$400 million and estimated additional contract costs of \$300 million. At the end of Year 2, costs incurred include \$200 million for standard materials stored at the site to be used in Year 3 to complete the project.

Entity A determines the stage of completion of the contract by calculating the proportion that contract costs incurred for work performed to date bear to the latest estimated total contract costs. A summary of the financial data during the construction period is as follows:

	Year 1 \$ million	Year 2 \$ million	Year 3 \$ million
Initial amount of revenue agreed in contract.....	8,000	8,000	8,000
Variation.....	—	400	400
Total contract revenue.....	<u>8,000</u>	<u>8,400</u>	<u>8,400</u>
Contract costs incurred to date.....	2,520	5,975	7,500
Contract costs to complete.....	4,700	1,500	—
Total estimated contract costs.....	<u>7,200</u>	<u>7,500</u>	<u>7,500</u>
Estimated profit.....	800	900	900

Required:

1. Determine the stage of completion of the contract by the end of Years 1, 2 and 3.
2. Determine the amounts of revenue, expenses and profit recognised in the income statement for each of Years 1, 2 and 3 using the percentage of completion method.
3. Prepare journal entries to account for the contract revenues and expenses for Year 1.

Case
Study 10.5

A contractor has reached the end of its first year of operations. All its contract costs incurred have been paid for in cash, and all its progress billings and advances have been received in cash. Contract costs incurred for contracts B, C and E include the cost of materials that have been purchased for the contract but which have not been used in contract performance to date. For contracts B, C and E, the customers have made advances to the contractor for work not yet performed.

The status of its five contracts in progress at the end of Year 1 is as follows:

	Contract (\$ million)					Total
	A	B	C	D	E	
Contract revenue recognised in accordance with IAS 11.22	145	580	390	300	75	1,490
Contract expenses recognised in accordance with IAS 11.22	120	440	360	350	75	1,345
Expected losses recognised in accordance with IAS 11.36	—	—	—	50	30	80
Recognised profits less recognised losses.....	25	140	30	(100)	(30)	65
Contract costs incurred in the period.....	120	560	450	350	100	1,580
Contract costs incurred recognised as contract expenses in the period in accordance with IAS 11.22	120	440	360	350	75	1,345
Contract costs that relate to future activity recognised as an asset in accordance with IAS 11.27.....	—	120	90	—	25	235
Contract revenue (see above).....	145	580	390	300	75	1,490
Progress billings (IAS 11.41).....	100	580	390	240	75	1,385
Unbilled contract revenue	45	—	—	60	—	105
Advances (IAS 11.41)	—	40	20	—	30	95

Required:

Determine the amounts to be disclosed in the financial statements in accordance with IAS 11 *Construction Contracts*.

PART
III

Elements of Financial Statements – Liabilities, Equity, Income and Expenses

- 11 Revenue
- 12 Employee Benefits
- 13 Income Taxes
- 14 Provisions and Contingencies





11

Revenue

Learning Outcomes

This chapter enables you to understand the following:

- 1 The definition of revenue
- 2 Revenue recognition for specified types of revenue items, including sales of goods, rendering of services, interest, royalties and dividends
- 3 How to measure revenue
- 4 How to identify transactions for the purposes of revenue recognition
- 5 How to deal with specific types of sales of goods situations such as bill-and-hold and advanced payment
- 6 How to deal with specific types of rendering of services situations such as franchise fees and barter transactions
- 7 The accounting treatment for customer loyalty programmes
- 8 The disclosure requirements for revenue

Real-life

Case 11.1

Cathay Pacific Airways Limited

Cathay Pacific Airways is an international airline registered and based in Hong Kong, offering scheduled passenger and cargo services to 112 destinations in 35 countries and territories. The company is also engaged in other related areas, including airline catering, aircraft handling and aircraft engineering. In its 2006 annual report, it stated the following accounting policy:

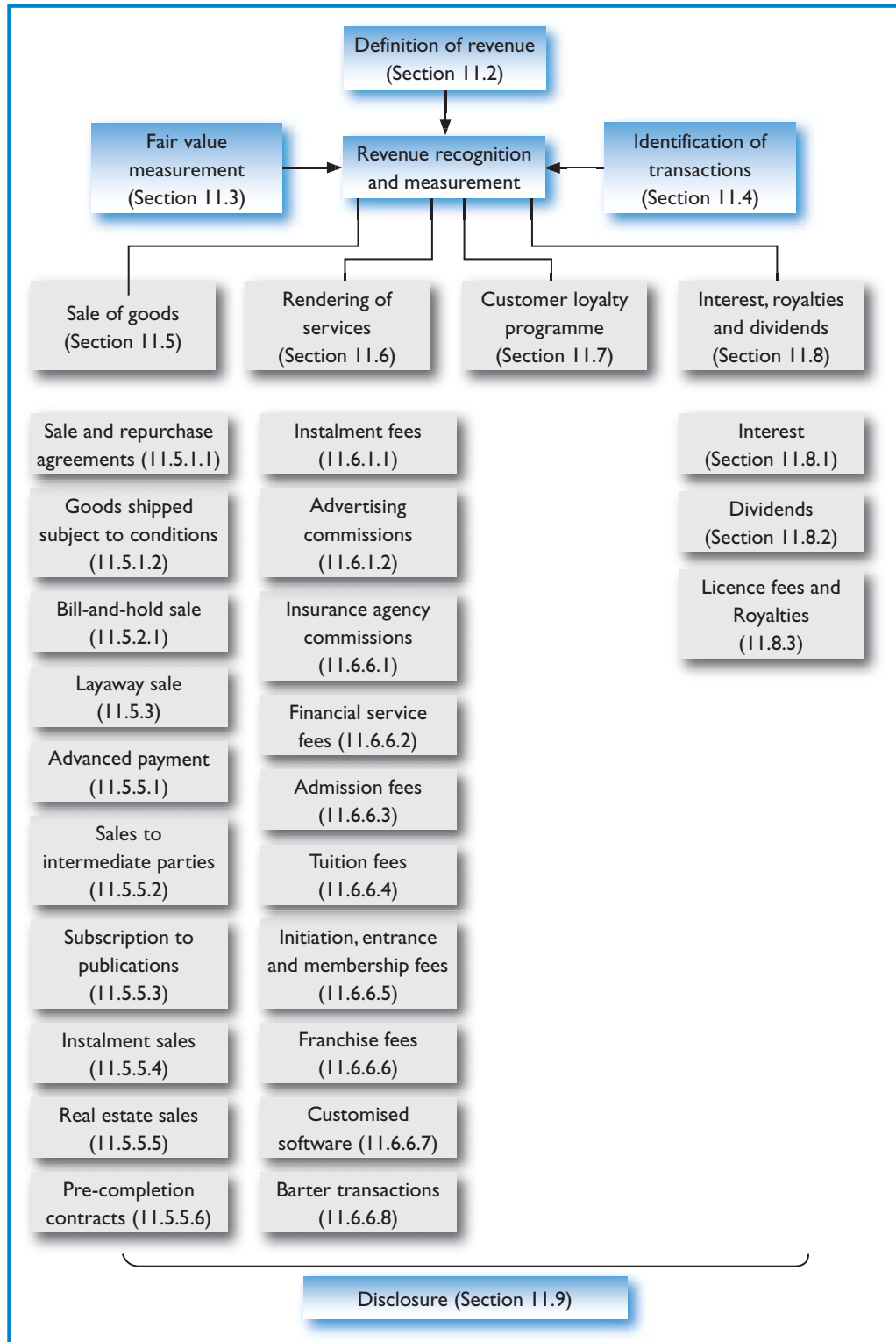
- Passenger and cargo sales are recognised as revenue when the transportation service is provided. The value of unflown passenger and cargo sales is recorded as unearned transportation revenue.
- Income from catering and other services is recognised when the services are rendered.
- The company operates a frequent-flyer programme called Asia Miles (the “programme”). The incremental cost of providing awards in exchange for redemption of miles earned by members is accrued as an operating cost and a liability after allowing for miles which are not expected to be redeemed. As members redeem their miles, the liability is reduced to reflect the reduction in the outstanding obligation. The company sells miles to participating partners in the programme. That portion of revenue earned from miles sold which is expected to be redeemed on the group’s flights is deferred and amortised to the profit and loss account over the expected redemption period.

Many readers may have the experience of having shopped diligently, but sometimes crazily, to accumulate enough credit card points, convert them into Asia Miles or KrisFlyer miles, and then redeem the earned miles for free tickets or to upgrade economy tickets to business-class tickets. Really, how do Cathay Pacific (see Real-life Case 11.1) and Singapore Airlines (see Real-life Case 11.7) account for their frequent-flyer programmes? Should the cost of providing such awards be matched to the revenue generated? How do entities like Cathay Pacific and Singapore Airlines recognise revenue arising from rendering of services such as passenger, cargo, catering and other services? How about other major types of revenue? This chapter will discuss all these issues.

11.1 Applicable Standard and Scope

The primary issue in accounting for revenue is to determine the timing of revenue recognition. Revenue is recognised when it is probable that future economic benefits will flow to the entity and these benefits can be measured reliably. IAS 18 *Revenue* identifies the circumstances in which these recognition criteria will be met and, therefore, revenue will be recognised. It also provides practical guidance on the application of these criteria. In particular, an entity applies IAS 18 in accounting for revenue arising from the following transactions and events (see Figure 11.1):

FIGURE 11.1 Categories of revenue



1. The sale of goods, including
 - a. goods produced by the entity for the purpose of sale; and
 - b. goods purchased for resale, such as merchandise purchased by a retailer or land and other property held for resale.
2. The rendering of services typically involving the performance by the entity of a contractually agreed task over an agreed period of time.
3. The use by others of entity assets yielding
 - a. interest – charges for the use of cash or cash equivalents or amounts due to the entity;
 - b. royalties – charges for the use of long-term assets of the entity, for example, patents, trademarks, copyrights and computer software; and
 - c. dividends – distributions of profits to holders of equity investments in proportion to their holdings of a particular class of capital.

IAS 18 does not deal with revenue arising from the following:

1. Lease agreements (see IAS 17 *Leases* covered by Chapter 4);
2. Dividends arising from investments that are accounted for under the equity method (see IAS 28 *Investments in Associates*);
3. Insurance contracts within the scope of IFRS 4 *Insurance Contracts*;
4. Changes in the fair value of financial assets and financial liabilities or their disposal (see IAS 39 *Financial Instruments – Recognition and Measurement* covered by Chapters 15–18);
5. Changes in the value of other current assets;
6. Initial recognition and from changes in the fair value of biological assets related to agricultural activity (see IAS 41 *Agriculture*);
7. Initial recognition of agricultural produce (see IAS 41 *Agriculture*);
8. The extraction of mineral ores; and
9. Construction contracts (see IAS 11 *Construction Contracts* covered by Chapter 10).

Besides IAS 18, SIC Interpretation 31 *Revenue – Barter Transactions Involving Advertising Services* provides guidance on situations in which an entity enters into a barter transaction to provide advertising services in exchange for receiving advertising services from its customer.

In addition, IFRIC 13 *Customer Loyalty Programmes* addresses how companies, after granting their customers loyalty award credits (often called “points”) when buying goods or services, account for their obligation to provide free or discounted goods or services if the customers redeem the points.

11.2 What Is Revenue?

What is the relationship between revenue and income? Income is defined in the *Framework for the Preparation and Presentation of Financial Statements* as increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants. Income encompasses both revenue and gains. Revenue is income that arises in the course of ordinary activities of an

entity and is referred to by a variety of names, including sales, fees, interest, dividends and royalties.

Revenue is the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity, other than increases relating to contributions from equity participants.

An entity includes in revenue only the gross inflows of economic benefits received and receivable by the entity on its own account. Amounts that are collected on behalf of third parties (e.g., sales taxes, goods and services taxes and value added taxes) are not economic benefits flowing to the entity, and so they do not result in increases in equity. Consequently, these amounts are excluded from revenue.

Similarly, in an agency relationship, the gross inflows of economic benefits include amounts collected on behalf of the principal, and so they do not result in increases in equity for the entity. The amounts collected by the entity on behalf of the principal are not revenue. Instead, revenue is the amount of commission.

11.3 Measurement of Revenue

Revenue is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts and volume rebates allowed by the entity. An entity usually determines the amount of revenue arising on a transaction by referring to the agreement between the entity and the buyer or user of the asset.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

In most cases, the consideration is in the form of cash or cash equivalents and the amount of revenue is the amount of cash or cash equivalents received or receivable. If the inflow of cash or cash equivalents is deferred, the fair value of the consideration may be less than the nominal amount of cash received or receivable. For example, an entity may provide interest-free credit to the buyer or accept a note receivable bearing a below-market interest rate from the buyer as consideration for the sale of goods. When the arrangement effectively constitutes a financing transaction, the fair value of the consideration is determined by discounting all future receipts using an imputed rate of interest, which is the more clearly determinable of the following two:

1. The prevailing rate for a similar instrument of an issuer with a similar credit rating;
2. A rate of interest that discounts the nominal amount of the instrument to the current cash sales price of the goods or services.

The difference between the fair value and the nominal amount of the consideration is recognised as interest revenue in accordance with IAS 18 as well as IAS 39 *Financial Instruments – Recognition and Measurement* (see Example 11.1 and Real-life Case 11.2).

Example 11.1 On 2 January 2008, C & S Inc. sold electricity equipment to AOB Limited for \$600,000 with six interest-free annual payments of \$100,000. AOB Limited paid the initial annual payment on 2 January 2008 to C & S Inc. Five remaining annual payments would be made at the end of each year beginning from 31 December 2008.

Assume 8% is the appropriate rate to discount the nominal amount of the annual payment to the current cash sales price of the equipment. Calculate the revenue and related interest revenue in respect of the sale of the electricity equipment to AOB Limited.

Answers

	Annual payment \$	Discount factor $1 \div (1 + 8\%)^T$	Present value of cash sales price \$	Interest revenue \$
2 January 2008 ($T = 0$)	100,000	1.000000	100,000	0
31 December 2008 ($T = 1$)	100,000	0.925926	92,593	7,407
31 December 2009 ($T = 2$)	100,000	0.857339	85,734	14,266
31 December 2010 ($T = 3$)	100,000	0.793832	79,383	20,617
31 December 2011 ($T = 4$)	100,000	0.735030	73,503	26,497
31 December 2012 ($T = 5$)	100,000	0.680583	68,058	31,942
Total	<u>600,000</u>		<u>499,271</u>	<u>100,729</u>

Therefore, the current cash sales price of the equipment is \$499,271, and this amount should be recognised as revenue.

Moreover, a total of \$100,729 should be recognised as interest revenue over the 5-year period from 2008 to 2012.

An alternate computation method is given below:

$$\begin{aligned}
 \text{PV of cash sales price} &= \text{Initial payment of } \$100,000 \\
 &\quad + \text{PV of an annuity of } \$100,000 \text{ for 5 years discounted at } 8\% \\
 &= \$100,000 + \$100,000 \times 3.99271 \\
 &= \$499,271
 \end{aligned}$$

Real-life

Case 11.2

Sino Land Company Limited

Sino Land's principal activities include property development, property investment, property trading, investment holding, financing and building management. In its 2007 annual report, the company stated the following:

- Where properties are sold under deferred terms, the difference between the sales prices with and without such terms
 - is treated as deferred interest income; and
 - is released to the income statement on a straight-line basis over the repayment period commencing from the completion of the relevant sales agreements.

When goods or services are exchanged or swapped for goods or services that are of a similar nature and value, the exchange is not regarded as a transaction that generates revenue. This is often the case with commodities such as oil or milk, where suppliers exchange or swap inventories in various locations to fulfil demand on a timely basis in a particular location.

When goods are sold or services are rendered in exchange for dissimilar goods or services, the exchange is regarded as a transaction that generates revenue. The revenue is measured at the fair value of the goods or services received, adjusted by the amount of any cash or cash equivalents transferred. When the fair value of the goods or services received cannot be measured reliably, the revenue is measured at the fair value of the goods or services given up, adjusted by the amount of any cash or cash equivalents transferred (see Section 11.6.6.8).

11.4 Identification of Transactions

The recognition criteria are usually applied separately to each transaction. In some situations, an entity applies the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognised as revenue over the period during which the service is performed (see Example 11.2).

Example 11.2 Oriental Network Limited provides network infrastructure solutions, including (i) the sale of network equipment and software and (ii) the provision of network infrastructure development services, to its customers. Historically, all costs for sale of equipment were incurred upon the completion of installation work. The workload and relevant costs of the network infrastructure development services were evenly distributed over the development period.

On 30 June 2008, the company entered into a contract with a customer in which the sale of network equipment and the provision of related infrastructure development services were bundled together. Based on historical data, the company estimated that the fair value of sale of equipment accounted for 50% while provision of development services accounted for the remaining 50% of the contract price.

Determine how the revenue recognition criteria should be applied to the sale of network equipment and software and the provision of network infrastructure development services.

Answers

In a situation where sales and services are bundled into one contract, revenue recognition criteria should be applied to the separately identifiable components of each single transaction in order to reflect the substance of the transaction.

In this case, the contract has two separately identifiable components – sale of equipment and provision of services – and each is estimated to be allocated for 50% of the fair value of the bundled contract price.

Source: HKICPA QP A September 2004, adapted

Conversely, the recognition criteria are applied to two or more transactions together when they are linked in such a way that the commercial effect cannot be understood without reference to the series of transactions as a whole. For example, an entity may sell goods and, at the same time, enter into a separate agreement to repurchase the goods at a later date, thus negating the substantive effect of the transaction; in such a case, the two transactions are dealt with together.

11.5 Sale of Goods

An entity recognises revenue from the sale of goods when all the following conditions have been satisfied:

1. The entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
2. The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
3. The amount of revenue can be measured reliably;
4. It is probable that the economic benefits associated with the transaction will flow to the entity; and
5. The costs incurred or to be incurred in respect of the transaction can be measured reliably (IAS 18.14) (see Example 11.3).

Example 11.3 Bloom Company Limited (BCL) is engaged in the business of property development and holding. During the year ending 31 December 2008, the company has completed the transaction of a sale of a house with a consideration of \$12 million. 10% of the consideration was paid at the agreement date, and the remaining 90% of the consideration was settled with nine semi-annual instalment payments of \$1.2 million each.

Determine and explain how BCL should recognise and measure the sale of the house in the financial statements for the year ending 31 December 2008 in accordance with relevant IFRSs.

Answers

Revenue from the sale of the house shall be recognised when all the following conditions have been satisfied:

1. BCL has transferred to the buyer the significant risks and rewards of ownership of the house.
2. BCL retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the house sold.
3. The amount of revenue can be measured reliably.
4. It is probable that the economic benefits associated with the transaction will flow to BCL.
5. The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Provided that all these conditions are satisfied, the revenue from the sale of the house should be recognised.

IAS 18 requires that revenue shall be measured at the fair value of the consideration received or receivable.

When the inflow of cash consideration is deferred, the fair value of the consideration may be less than the nominal value of cash received. When the arrangement effectively constitutes a financing transaction, the fair value of the consideration is determined by discounting all future receipts using an imputed rate of interest. The imputed rate of interest is the more clearly determinable of either

- the prevailing rate for a similar instrument of an issuer with a similar credit rating; or
- a rate of interest that discounts the nominal amount of the instrument to the current cash sales price of the goods or services.

The difference between the fair value and the nominal value is recognised as interest revenue.

In this case, the amount of revenue recognised in the financial year ending 31 December 2008 = \$1.2 million + Discounted future cash flows of \$10.8 million.

Source: HKICPA QP A May 2005, adapted

The assessment of when an entity has transferred the significant risks and rewards of ownership to the buyer requires an examination of the circumstances of the transaction. An entity considers the laws relating to the sale of goods in the country in which the transaction takes place because the law in different countries may determine differently the point in time at which the entity transfers the significant risks and rewards of ownership.

In most cases, as in most retail sales, the transfer of risks and rewards of ownership coincides with the transfer of the legal title or the passing of possession to the buyer. In other cases, the transfer of the risks and rewards of ownership occurs at a different time from the transfer of legal title or the passing of possession (see Real-life Case 11.3).

Real-life**Case 11.3****Esprit Holdings Limited**

Esprit Holdings is principally engaged in the wholesale and retail distribution and licensing of quality fashion and lifestyle products designed under its own internationally known Esprit brand name, together with Red Earth cosmetics, skin and body care products. In its annual report of 2006–7, the company stated the following accounting policy on revenue recognition:

- Revenue comprises the fair value for the sale of goods and services, net of value-added tax, rebates and discounts and after eliminating sales within the group.
- Revenue is recognised as follows:
 - Sales of goods – wholesale
Sales of goods are recognised on the transfer of risks and rewards of ownership, which generally coincides with the time when the goods are delivered to the customer and title has been passed.
 - Sales of goods – retail
Sales of goods are recognised on the sale of a product to the customer. Retail sales are usually in cash or by credit card.

Several situations should be given attention, including the following:

1. The entity retains significant risks of ownership.
2. The entity retains only insignificant risks of ownership.
3. Inflow of future economic benefits may not be probable.
4. Revenue and expenses relate to the same transaction.

11.5.1 Entity Retains Significant Risks of Ownership

If the entity retains significant risks of ownership, the transaction is not a sale and revenue is not recognised. An entity may retain a significant risk of ownership in a number of ways (see Example 11.4).

Example 11.4 Which of the following transactions is not a sale, and therefore its revenue should not be recognised? Explain why.

1. The seller retains an obligation for unsatisfactory performance not covered by normal warranty provisions;
2. The receipt of the revenue from a particular sale is contingent on the derivation of revenue by the buyer from its sale of the goods; and
3. The seller retains the legal title to the goods solely to protect the collectibility of the amount due.

Answers

For transactions (1) and (2), the seller retains significant risks of ownership, and consequently the transaction is not a sale and revenue should not be recognised.

11.5.1.1 Sale and Repurchase Agreements

In a sale and repurchase agreement (other than swap transactions), the seller concurrently agrees to repurchase the same goods at a later date, or when the seller has a call option to repurchase, or the buyer has a put option to require the repurchase, by the seller, of the goods.

For a sale and repurchase agreement on an asset other than a financial asset, the terms of the agreement need to be analysed to ascertain whether, in substance, the seller has transferred the risks and rewards of ownership to the buyer and hence revenue is recognised. When the seller has retained the risks and rewards of ownership, even though legal title has been transferred, the transaction is a financing arrangement and does not give rise to revenue. For a sale and repurchase agreement on a financial asset, IAS 39 *Financial Instruments – Recognition and Measurement* applies.

11.5.1.2 Goods Shipped Subject to Conditions

1. Installation and Inspection

Revenue is normally recognised when the buyer accepts delivery, and installation and inspection are complete. However, revenue is recognised immediately upon the buyer's acceptance of delivery when:

- a. The installation process is simple in nature, for example, the installation of a factory-tested television receiver that requires only unpacking and connection of power and antennae; or
- b. The inspection is performed only for purposes of final determination of contract prices, for example, shipments of iron ore, sugar or soya beans (see Example 11.5).

Example 11.5 In addition to the information as per Example 11.2, Oriental Network Limited commenced development of the network infrastructure on 1 July 2008. As at 31 December 2008, the equipment was delivered and installed. This was acknowledged by the customer on the company's delivery note.

Determine how the above sale of equipment transaction should be accounted for by Oriental Network Limited in terms of revenue recognition for the year ended 31 December 2008.

Answers

The revenue from sale of equipment should be recognised in the financial statements for the year ended 31 December 2008 because all conditions for recognition of revenue from sale of goods are met.

1. The customer acknowledged receipt on the delivery note after Oriental Network Limited delivered and installed the equipment during the year ended 31 December 2008. Oriental Network Limited had completely transferred to its customer the significant risks and rewards of ownership of the equipment.
2. Oriental Network Limited did not retain any control over the network equipment as the customer subsequently integrated the network equipment into its management information systems.
3. The fair value of the equipment sold can be estimated from the contract value based on the historical information.
4. All costs for sale of equipment, including installation costs, were incurred during the year ended 31 December 2008.

Source: HKICPA QP A September 2004, adapted

2. On Approval When the Buyer Has Negotiated a Limited Right of Return

If there is uncertainty about the possibility of return, an entity recognises revenue when the shipment has been formally accepted by the buyer or the goods have been delivered and the time period for rejection has elapsed.

3. Consignment Sales

In a consignment sale, the recipient (buyer) undertakes to sell the goods on behalf of the shipper (seller). An entity recognises revenue when the goods are sold by the recipient to a third party.

4. Cash on Delivery Sales

An entity recognises revenue when delivery is made and cash is received by the seller or its agent.

11.5.2 Entity Retains Only Insignificant Risks of Ownership

If an entity retains only an insignificant risk of ownership, the transaction is a sale and revenue is recognised (see Example 11.6).

Example 11.6 Refer to Example 11.4, (1) to (3).

Which of the transactions is a sale, and therefore its revenue should be recognised? Explain why.

Answers

For transaction (3), if the seller has transferred the significant risks and rewards of ownership to the buyer, the transaction is a sale and revenue should be recognised. In this case, retaining the legal title to the goods solely to protect the collectibility of the amount due to the seller is considered to be an insignificant risk of ownership.

11.5.2.1 Bill-and-hold Sales

In bill-and-hold sales, delivery is delayed at the buyer's request but the buyer takes title and accepts billing. Revenue is recognised when the buyer takes title, provided:

1. It is probable that delivery will be made;
2. The item is on hand, identified and ready for delivery to the buyer at the time the sale is recognised;
3. The buyer specifically acknowledges the deferred delivery instructions; and
4. The usual payment terms apply.

Revenue is not recognised when there is simply an intention to acquire or manufacture the goods in time for delivery (see Example 11.7).

Example 11.7 Just before the end of the financial year, a customer requested Company A to delay the delivery of 500,000 units of products until early the following year because at the time the customer did not have enough space to store the goods. The customer, however, indicated to Company A that it could still issue the invoice as if the goods had been delivered at the date specified in the purchase order and he agreed to settle the amount within 90 days of the invoice date under the usual credit terms granted to him. Company A invoiced the customer before the year ended 31 December 2008.

Determine how the above transaction of Company A should be accounted for in terms of the timing of recognition and the income statement presentation. You should give specific explanations by referring to relevant IFRSs.

Answers

In the case of Company A, the delivery to the customer is being delayed at the buyer's request, though the buyer has accepted billings, and implicitly the title has been passed to the customer, although the goods are kept by Company A. This is an example of "bill-and-hold" sales.

Sales revenue for the goods held should be recognised since:

1. It is probable that delivery will be made;
2. The item is on hand, identified and ready for delivery to the buyer at the time the sale is recognised;
3. The buyer specifically acknowledges the deferred delivery instructions; and
4. The usual payment terms apply.

Source: HKICPA QP A February 2004, adapted

11.5.3 Inflow of Economic Benefits to the Seller

An entity recognises revenue only when it is probable that the economic benefits associated with the transaction will flow to the entity. In some cases, this may not be probable until the consideration is received or until an uncertainty is removed. For example, it may be uncertain whether a foreign government will permit the seller to remit the consideration from a sale in a foreign country. When the permission is granted by the foreign government, the uncertainty is removed and the seller can recognise the revenue.

In layaway sales, the goods are delivered only when the buyer makes the final payment in a series of instalments. An entity recognises revenue when the goods are delivered. However, when experience indicates that most such sales are consummated, an entity may recognise revenue when a significant deposit is received provided the goods are on hand, identified and ready for delivery to the buyer.

It should be noted that if there is uncertainty about the collectibility of an amount already included in revenue, an entity should recognise the uncollectible amount or the amount in respect of which recovery has ceased to be probable as an expense, rather than as an adjustment to the revenue originally recognised.

11.5.4 Matching of Revenue and Expenses

According to the matching principle, revenue and expenses that relate to the same transaction or other event should be recognised simultaneously. Expenses, including warranties and other costs to be incurred after the shipment of the goods, can normally be measured reliably when the other conditions for the recognition of revenue have been satisfied. However, if the expenses cannot be measured reliably, an entity should recognise the consideration already received for the sale of the goods as a liability.

11.5.5 Other Specific Transactions

In addition to the above examples, the Appendix to IAS 18 provides practical guidance on the application of the revenue recognition criteria to other specific transactions involving sales of goods.

11.5.5.1 Advanced Payment

The buyer may pay advanced payment (or partial payment) in advance of delivery for goods not presently held in inventory, for example, the goods are still to be manufactured or will be delivered directly to the customer from a third party. In such cases, an entity recognises revenue when the goods are delivered to the buyer.

11.5.5.2 Sales to Intermediate Parties for Resale

Intermediate parties include distributors, dealers or others. Revenue from such sales is generally recognised when the risks and rewards of ownership have passed. However, when the buyer is acting, in substance, as an agent, the sale is treated as a consignment sale.

11.5.5.3 Subscriptions to Publications and Similar Items

When the items involved are of similar value in each time period, an entity recognises revenue on a straight-line basis over the period in which the items are despatched. However, when the items vary in value from period to period, an entity recognises revenue on the basis of the sales value of the item despatched in relation to the total estimated sales value of all items covered by the subscription.

11.5.5.4 Instalment Sales

In an instalment sale, the consideration is receivable in instalments. An entity recognises revenue attributable to the sales price, exclusive of interest, at the date of sale. The sales price is the present value of the consideration, determined by discounting the instalments receivable at the imputed rate of interest. The interest element is recognised as revenue as it is earned, using the effective interest method (see Example 11.1).

11.5.5.5 Real Estate Sales

An entity normally recognises revenue when legal title passes to the buyer. However, in some jurisdictions the equitable interest in a property may vest in the buyer before legal title passes, and therefore the risks and rewards of ownership have been transferred at that stage. In such cases, it may be appropriate for the seller to recognise revenue provided that the seller has no further substantial acts to complete under the contract. In either case, if the seller is obliged to perform any significant acts after the transfer of the equitable and/or legal title, the seller recognises revenue when the acts are performed. An example is a building or other facility on which construction has not been completed.

In some cases, real estate may be sold with a degree of continuing involvement by the seller such that the risks and rewards of ownership have not been transferred. Examples are sale and repurchase agreements that include put and call options, and agreements whereby the seller guarantees occupancy of the property for a specified period, or guarantees a return on the buyer's investment for a specified period. In such cases, the nature and extent of the seller's continuing involvement determines how the transaction is accounted for. It may be accounted for as a sale, or as a financing, leasing or some other profit-sharing arrangement. If it is accounted for as a sale, the continuing involvement of the seller may delay the recognition of revenue.

A seller also considers the means of payment and evidence of the buyer's commitment to complete payment. For example, when the aggregate of the payments received, including the buyer's initial down payment, or continuing payments by the buyer, provide insufficient evidence of the buyer's commitment to complete payment, revenue is recognised only to the extent cash is received.

11.5.5.6 Pre-completion Contracts for the Sale of Development Properties

Property development projects are usually long-term projects. Property developers often enter into contracts to sell the properties in advance of the completion of the development. These contracts usually involve the payment of a deposit by the purchaser, which may be refundable only if the developer does not complete the development in accordance with the contracted time frames and specifications, or if there is some other breach of a contractual condition or statutory obligation. The balance of the purchase price is normally paid either at contractual settlement or in stages up to contractual settlement.

Property developers used to adopt various policies for recognising revenue arising from pre-completion contracts for the sale of development properties. The stage of completion method was a commonly used policy (see Real-life Case 11.4). Full completion method was another one used by some companies (see Real-life Case 11.5). Concern has been expressed as to whether pre-completion contracts would satisfy the definition of construction contracts in IAS 11 *Construction Contracts*, and, if not, whether the stage of completion method would be acceptable under IFRS. Concern has also been expressed that, in the absence of authoritative guidance, diverse or unacceptable practices would undermine the relevance, reliability or comparability of financial statements.

Real-life

Case 11.4 Wheelock and Company Limited

Wheelock and Company's principal activities include property development, property investment, and investment. Its annual report of 2003–4 stated the following:

- Profit on pre-sale of properties under development for sale
 - is recognised over the course of the development; and

**Real-life
Case 11.4**
(cont'd)

- is calculated each year as a proportion of the total estimated profit to completion, the proportion used being the lower of
 - the proportion of construction costs incurred at the balance sheet date to estimated total construction costs; and
 - the proportion of sales proceeds received and receivable at the balance sheet date to total sales proceeds in respect of the units sold.

**Real-life
Case 11.5**
Cheung Kong (Holdings) Limited

Cheung Kong is a property development and strategic investment company. It is one of the largest developers in Hong Kong of residential, commercial and industrial properties. The company also has substantial interests and operations in life sciences and other businesses. In its annual report of 2006, the company stated the following:

- When properties under development are sold, income is recognised when the property is completed and the relevant occupation permit is issued by the authorities.

According to HK Interpretation 3 *Revenue – Pre-completion Contracts for the Sale of Development Properties* issued by the Hong Kong Institute of Certified Public Accountants, pre-completion contracts do not meet the definition of construction contracts set out in IAS 11 *Construction Contracts* if the contracts in question are not specifically negotiated for the construction of the properties. Accordingly, these contracts fall outside the scope of IAS 11 (see Chapter 10 – Construction Contracts). Consequently, property developers are required to apply IAS 18 in recognising revenue arising from pre-completion contracts for the sale of development properties and recognise revenue only when all of the criteria specified in IAS 18.14 are met (see Example 11.8).

Example 11.8 Bloom Company Limited (BCL) is engaged in the business of property development and holding. During the year ending 31 December 2008, the company has completed the following transaction: pre-sale of 50 units out of the 180 units of a self-developed residential property that was still under construction (75% completion). Total consideration for the 50 units is \$322 million, and BCL has received \$38.5 million as down payments.

Determine and explain how BCL should recognise and measure the pre-sale of house in the financial statements for the year ending 31 December 2008 in accordance with relevant IFRSs.

Answers

It is not likely that the pre-completion sale of the 50 self-developed residential properties meets the definition of construction contracts set out in IAS 11 *Construction Contracts*, since the contracts in question are not likely to have been negotiated specifically for the construction of the properties.

According to Hong Kong Interpretation No. 3, BCL shall apply IAS 18 in recognising revenue arising from pre-completion sale of the 50 residential properties. That is, revenue shall only be recognised when all of the revenue recognition conditions set out in IAS 18 are met.

\$38.5 million, being the amount received, should be recognised as a liability in the balance sheet before the revenue for the sale of properties is recognised.

Source: HKICPA QP A May 2005, adapted

11.6 Rendering of Services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised by reference to the stage of completion of the transaction at the balance sheet date (or the end of the reporting period). The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

1. The amount of revenue can be measured reliably;
2. It is probable that the economic benefits associated with the transaction will flow to the entity;
3. The stage of completion of the transaction at the balance sheet date can be measured reliably; and
4. The costs incurred for the transaction and the costs to complete the transaction can be measured reliably (IAS 18.20) (see Example 11.9).

Example 11.9 In addition to the information as per Examples 11.2 and 11.5, the infrastructure development services were 50% completed as at 31 December 2008. The network equipment was then integrated with other management information systems used by the customer. Oriental Network Limited finally completed the development services and obtained the customer's acceptance certificate on the entire project on 30 June 2009.

Determine how the above provision of development services should be accounted for by Oriental Network Limited in terms of revenue recognition for the year ended 31 December 2008.

Answers

Revenue from the provision of services can be recognised during the year ended 31 December 2008 because of the following reasons:

1. The fair value of the services can be estimated based on past experience.
2. The stage of completion at 31 December 2008 can be determined reliably.
3. Costs incurred at the year ended 31 December 2008 and total project costs can be estimated.
4. The customer can enjoy the economic benefits the system generated when it was completed on 30 June 2009.

As historical information indicated workload and relevant costs of the services were evenly spread over the development period and 50% of the work was completed as at 31 December 2008, half of the service revenue together with half of the total estimated project cost should be recognised in the profit and loss account for the year ended 31 December 2008.

Source: HKICPA QP A September 2004, adapted

11.6.1 Stage of Completion Method

Revenue recognition by reference to the stage of completion of a transaction is often referred to as the percentage of completion method. Under this method, an entity recognises revenue in the accounting periods in which the services are rendered, thus providing useful information on the extent of service activity and performance during a period. The stage of completion of a transaction may be determined by a variety of methods:

1. Surveys of work performed;
2. Services performed to date as a percentage of total services to be performed;
3. Costs incurred to date (only include costs that reflect services performed to date) as a percentage of the estimated total costs of the transaction (include only costs that reflect services performed or to be performed).

An entity uses the method that measures reliably the services performed. Progress payments and advances received from customers often do not reflect the services performed (see Real-life Case 11.6).

**Real-life
Case 11.6****Sino Land Company Limited**

The 2007 annual report of Sino Land Company Limited stated the following:

- Building management and service fee income is recognised on an appropriate basis over the relevant period in which the services are rendered.

IAS 11 *Construction Contracts* also requires the recognition of revenue on a percentage of completion basis. The requirements of IAS 11 are generally applicable to the recognition of revenue and the associated expenses for a transaction involving the rendering of services.

11.6.1.1 Installation Fees

An entity recognises installation fees as revenue by reference to the stage of completion of the installation. If they are incidental to the sale of a product, installation fees are recognised when the goods are sold.

11.6.1.2 Advertising Commissions

An entity recognises media commissions when the related advertisement or commercial appears before the public. An entity recognises production commissions by reference to the stage of completion of the project.

11.6.2 Flow of Economic Benefits to the Seller

An entity recognises revenue only when it is probable that the economic benefits associated with the transaction will flow to the entity. When an uncertainty arises about the collectibility of an amount already included in revenue, an entity recognises the uncollectible amount, or the amount in respect of which recovery has ceased to be probable, as an expense, rather than as an adjustment of the amount of revenue originally recognised.

11.6.3 Reliability of Estimates

An entity is generally able to make reliable estimates after it has agreed with the other parties to the transaction on

1. each party's enforceable rights regarding the service to be provided and received by the parties;
2. the consideration to be exchanged; and
3. the manner and terms of settlement.

An entity reviews and, when necessary, revises the estimates of revenue as the service is performed. The need for such revisions does not necessarily indicate that the outcome of the transaction cannot be estimated reliably.

11.6.4 Indeterminate Number of Acts and Significant Specific Act

For practical purposes, when services are performed by an indeterminate number of acts over a specified period of time, an entity recognises revenue on a straight-line basis over the specified period unless another method better represents the stage of completion.

When a specific act is much more significant than any other acts, revenue recognition is postponed until the significant act is executed (see Example 11.10).

Example 11.10

- When the selling price of a product includes an identifiable amount for subsequent servicing (for example, after-sales support and product enhancement on the sale of software), that amount is deferred and recognised as revenue over the period during which the service is performed.
- The amount deferred is that which will cover the expected costs of the services under the agreement, together with a reasonable profit on those services.

11.6.5 Outcome of Services Not Estimated Reliably

When the outcome of the transaction involving the rendering of services cannot be estimated reliably (e.g., during the early stages of a transaction), and:

1. It is probable that the entity will recover the transaction costs incurred:
 - a. Revenue is recognised only to the extent of costs incurred that are expected to be recoverable; and
 - b. No profit is recognised.
2. It is not probable that the costs incurred will be recovered:
 - a. Revenue is not recognised; and
 - b. The costs incurred are recognised as an expense.

When the uncertainties that prevented the outcome of the contract being estimated reliably no longer exist, revenue is recognised in accordance with the stage of completion method rather than in accordance with the above paragraph.

11.6.6 Other Specific Transactions

In addition to the above examples, the Appendix to IAS 18 provides practical guidance on the application of the revenue recognition criteria to other specific transactions involving rendering of services.

11.6.6.1 Insurance Agency Commissions

An insurance agent recognises the commissions received or receivable that do not require the agent to render further service as revenue on the effective commencement or renewal dates of the related policies. However, when it is probable that the agent will be required to render further services during the life of the policy, the commission, or part thereof, is deferred and recognised as revenue over the period during which the policy is in force.

11.6.6.2 Financial Service Fees

The description of fees for financial services may not be indicative of the nature and substance of the services provided. The recognition of revenue for financial service fees depends on the purposes for which the fees are assessed and the basis of accounting for any associated financial instrument.

1. Fees That Are an Integral Part of the Effective Interest Rate of a Financial Instrument

Fees that are an integral part of the effective interest rate of a financial instrument are generally treated as an adjustment to the effective interest rate. However, when the financial instrument is measured at fair value with the change in fair value recognised in profit or loss, the fees are recognised as revenue when the instrument is initially recognised.

- a. Origination fees received by the entity relating to the creation or acquisition of a financial asset that are outside the scope of IAS 39 is classified as a financial asset at “fair value through profit or loss”. These fees and the related direct costs are deferred and recognised as an adjustment to the effective interest rate. Such fees may include compensation for activities such as evaluating the borrower’s financial condition, evaluating and recording guarantees, collateral and other security arrangements, negotiating the terms of the instrument, preparing and processing documents and closing the transaction.
- b. Loan commitment fees that are outside the scope of IAS 39 and the related direct costs are deferred and recognised as an adjustment to the effective interest rate. If the commitment expires without the entity making the loan, the fee is recognised as revenue on expiry.
- c. Origination fees received on issuing financial liabilities measured at amortised cost are included, with the related transaction costs incurred, in the initial carrying amount of the financial liability and recognised as an adjustment to the effective yield.

2. Fees Earned As Services Are Provided

- a. Fees charged by an entity for servicing a loan are recognised as revenue as the services are provided.
- b. Loan commitment fees that are outside the scope of IAS 39 are recognised as revenue on a time proportion basis over the commitment period.
- c. Investment management fees:
 - (i) Fees charged for managing investments are recognised as revenue as the services are provided.
 - (ii) Incremental costs that are directly attributable to securing an investment management contract are recognised as an asset and are amortised as the entity recognises the related revenue. If the entity has a portfolio of investment management contracts, it may assess their recoverability on a portfolio basis.

3. Fees That Are Earned on the Execution of a Significant Act

- a. Commission on the allotment of shares to a client is recognised as revenue when the shares have been allotted.

- b. Placement fees for arranging a loan between a borrower and an investor is recognised as revenue when the loan has been arranged.
- c. Loan syndication fees is recognised as revenue when the syndication has been completed.

11.6.6.3 Admission Fees

An entity recognises revenue from artistic performances, banquets and other special events when the event takes place. When a subscription to a number of events is sold, the fee is allocated to each event on a basis that reflects the extent to which services are performed at each event.

11.6.6.4 Tuition Fees

An entity recognises revenue from tuition fees over the period of instruction.

11.6.6.5 Initiation, Entrance and Membership Fees

Revenue recognition depends on the nature of the services provided. If the fee permits only membership, or if there is a separate annual subscription, an entity recognises the fee as revenue when there is no significant uncertainty on its collectibility. If the fee entitles the member to services or publications to be provided during the membership period, or to purchase goods or services at prices lower than those charged to non-members, an entity recognises revenue on a basis that reflects the timing, nature and value of the benefits provided.

11.6.6.6 Franchise Fees

Franchise fees may cover the supply of equipment and other tangible assets, initial and subsequent services, and know-how. Accordingly, an entity recognises franchise fees as revenue on a basis that reflects the purpose for which the fees were charged. The following methods of franchise fee recognition are appropriate:

1. Supplies of Equipment and Other Tangible Assets

An entity recognises the fair value of the assets sold as revenue when the items are delivered or title passes to the franchisee.

2. Supplies of Initial and Subsequent Services

An entity recognises fees for the provision of continuing services as revenue when the services are rendered. Part of the initial fee, sufficient to cover the costs of continuing services and to provide a reasonable profit on those services, is deferred and recognised as revenue as the services are rendered (see Example 11.11).

Example 11.11 During the year ending 31 December 2008, Champion (CP) entered into a franchise agreement with Silver. CP will not keep any inventory. Any goods ordered by Silver will be shipped directly from CP's authorised suppliers to Silver. According to the franchise agreement, CP will initially provide services to assist Silver to set up their operation. The provision of these initial services is completed when Silver starts retailing CP's product in the outlet.

The agreement requires Silver to pay an initial fee of \$300,000 upon signing the franchise agreement. After the set-up is completed, CP will start to charge the franchisees an annual fee to cover the cost of continuing services with a reasonable profit. Provision of initial services was completed during the year, and all the initial fee has been received. Total costs incurred amount to \$250,000.

Determine the amount of revenue and profits that CP should report for the year ending 31 December 2008. You should give specific explanations by referring to relevant IFRSs.

Answers

Since the initial services were completed during the year and all the initial fee of \$300,000 has been received, Champion should recognise \$300,000 as revenue for the year ended 31 December 2008. Based on the total cost of \$250,000, a profit of \$50,000 should be reported in Champion's financial statement for the year ending 31 December 2008.

Part of the initial fee, sufficient to cover estimated costs in excess of the agreed price and to provide a reasonable profit on those sales, is deferred and recognised over the period the equipment, inventories or other tangible assets are likely to be sold to the franchisee. The balance of an initial fee is recognised as revenue when performance of all the initial services and other obligations required of the franchisor (such as assistance with site selection, staff training, financing and advertising) has been substantially accomplished.

For area franchise agreement, the fees attributable to the initial services are recognised as revenue in proportion to the number of individual outlets for which the initial services have been substantially completed.

If the initial fee is collectible over an extended period and there is a significant uncertainty that it will be collected in full, the fee is recognised as cash instalments are received.

3. Continuing Franchise Fees

An entity recognises fees charged for the use of continuing rights granted by the agreement, or for other services provided during the period of the agreement, as revenue when the services are provided or the rights used.

4. Agency Transactions

If the franchisor acts as an agent for the franchisee, such transactions do not give rise to revenue. For example, the franchisor may order supplies and arrange for their delivery to the franchisee at no profit (see Example 11.12).

Example 11.12 Company L operates a logistics company. Customers place their orders with Company L for airfreight or surface transportation services required. Company L in turn places its order with the necessary carriers. Company L can cancel its order with the carrier if its customers cancel their orders with Company L. Company L does not bear the risk of loss or other responsibility during the transportation process. Company L can normally earn a margin of 10% on airfreight and 5% on surface transportation. Company L customers usually pay the gross amount to Company L directly, while Company L pays the gross amount to the carriers.

Determine how the above transactions of Company L should be accounted for in terms of the timing of recognition and the income statement presentation. You should give specific explanations by referring to relevant IFRSs.

Answers

Company L should recognise the service income when the logistic services are rendered. In addition, Company L should recognise the income on a net basis, i.e., at the margin of 10% on airfreight and 5% on surface transportation.

The reasons for recognising the revenue on a net basis are as follows:

1. Company L only acts as an agent in the transaction; and
2. Company L does not take title of the product and does not have risks and rewards of ownership, such as the risk of loss for collection, delivery or returns.

The payment in gross amounts (i.e., just taking the credit risk) itself does not mean that Company L is taking risks and rewards in the transaction.

Source: HKICPA QP A February 2004, adapted

11.6.6.7 Fees from the Development of Customised Software

An entity recognises fees from the development of customised software as revenue by reference to the stage of completion of the development, including completion of services provided for post-delivery service support.

11.6.6.8 Barter Transactions Involving Advertising Services

An entity (seller) may enter into a barter transaction to provide advertising services in exchange for receiving advertising services from its customer (customer). Advertisements may be displayed on the Internet or poster sites, broadcast on the television or radio, published in magazines or journals, or presented in another medium.

A seller that provides advertising services in the course of its ordinary activities recognises revenue under IAS 18 from a barter transaction involving advertising when, amongst other criteria, the services exchanged are dissimilar and the amount of revenue can be measured reliably.

SIC Interpretation 31 *Revenue – Barter Transactions Involving Advertising Services* applies to an exchange of dissimilar advertising services. The main issue is, under what circumstances can a seller reliably measure revenue at the fair value of advertising services received or provided in a barter transaction?

Revenue from a barter transaction involving advertising cannot be measured reliably at the fair value of advertising services received, because reliable information not available to the seller is required to support the measurement. Consequently, revenue from a barter transaction involving advertising services is measured at the fair value of the advertising services provided by the seller to the customer. A seller can reliably measure revenue at the fair value of the advertising services it provides in a barter transaction, by reference only to non-barter transactions that

1. involve advertising similar to the advertising in the barter transaction;
2. occur frequently;
3. represent a predominant number of transactions and amount when compared to all transactions to provide advertising that is similar to the advertising in the barter transaction;
4. involve cash and/or another form of consideration (e.g., marketable securities, non-monetary assets and other services) that has a reliably measurable fair value; and
5. do not involve the same counterparty as in the barter transaction.

11.7 Customer Loyalty Programmes

Customer loyalty programmes are used by entities to provide customers with incentives to buy their goods or services. If a customer buys goods or services, the entity grants the customer award credits (often described as “points”). The customer can redeem the points for awards such as free or discounted goods or services. The programmes operate in a variety of ways. Customers may be required to accumulate a specified minimum number of points before they are able to redeem them. Points may be linked to individual purchases or groups of purchases, or to continued custom over a specified period. The entity may operate the customer loyalty programme itself or participate in a programme operated by a third party. The awards offered may include goods or services supplied by the entity itself and/or rights to claim goods or services from a third party.

IFRIC 13 *Customer Loyalty Programmes* addresses how an entity accounts for its obligation to provide free or discounted goods or services if its customers redeem the points granted to them when they bought goods or services from the entity. Before the issue of IFRIC 13, there was no detailed guidance in this area, and practices vary. Some companies measure their obligation based on the value of the points to the customer. Others measure it at the (usually lower) cost to the entity of supplying the free or discounted goods or service.

Since customers are implicitly paying for the points they receive when they buy other goods or services, some revenue should be allocated to the points. IFRIC 13 requires companies to estimate the value of the points to the customer and defer this amount of revenue as a liability until they have fulfilled their obligations to supply awards. An entity applies IAS 18 to account for points as a separately identifiable component of the sales transaction(s) in which they are granted (the initial sale). The fair value of the consideration received or receivable in respect of the initial sale is allocated between the points and the other components of the sale. The consideration allocated to the points is measured by reference to their fair value, i.e., the amount for which the points could be sold separately (see Real-life Case 11.7).

**Real-life
Case 11.7**

Singapore Airlines Group

The principal activities of Singapore Airlines Group consist of passenger and cargo air transportation, airport terminal services, engineering services, training of pilots, air charters and tour wholesaling and related activities. In its annual report of 2006–7, the group stated the following accounting policy for its frequent flyer programme:

- The company operates a frequent flyer programme called KrisFlyer that provides travel awards to programme members based on accumulated mileage.
- A portion of passenger revenue attributable to the award of frequent flyer benefits is deferred until they are utilised. The deferral of the revenue is estimated based on historical trends of breakage and redemption, which are then used to project the expected utilisation of these benefits.
- Any remaining unutilised benefits are recognised as revenue upon expiry.
- The carrying amount of the group's and the company's deferred revenue at 31 March 2007 was \$388.3 million (2006: \$309.9 million).

If the entity supplies the awards itself, it recognises the consideration allocated to award credits as revenue when points are redeemed and it fulfils its obligations to supply awards. The amount of revenue recognised is based on the number of points that have been redeemed in exchange for awards, relative to the total number expected to be redeemed (see Example 11.13).

Example 11.13 A grocery retailer operates a customer loyalty programme. It grants programme members loyalty points when they spend a specified amount on groceries. Programme members can redeem the points for further groceries. The points have no expiry date. In one period, the entity grants 100 points. Management expects 80 of these points to be redeemed. Management estimates the fair value of each loyalty point to be \$1 and defers revenue of \$100.

Year 1

At the end of the first year, 40 of the points have been redeemed in exchange for groceries, i.e., half of those expected to be redeemed.

Year 2

In the second year, management revises its expectations. It now expects 90 points to be redeemed altogether. During the second year, 41 points are redeemed.

Year 3

In the third year, a further 9 points are redeemed. Management continues to expect that only 90 points will ever be redeemed.

Determine the amount of revenue to be recognised in each of Year 1, Year 2 and Year 3.

Answers**Year 1**

$$\begin{aligned} &\text{The amount of revenue to be recognised in Year 1} \\ &= \left(\frac{\text{Number of points redeemed}}{\text{Total number of points expected to be redeemed}} \right) \times \$100 \\ &= (40 \text{ points}/80 \text{ points}) \times \$100 \\ &= \$50 \end{aligned}$$

Year 2

$$\begin{aligned} &\text{The cumulative revenue to date} \\ &= \left(\frac{\text{Cumulative number of points redeemed}}{\text{Revised estimate of total number of points expected to be redeemed}} \right) \times \$100 \\ &= [(40 + 41) \text{ points}/90 \text{ points}] \times \$100 \\ &= \$90 \end{aligned}$$

$$\begin{aligned} &\text{The amount of revenue to be recognised in Year 2} \\ &= \text{Cumulative revenue to date} - \text{Cumulative revenue recognised to date} \\ &= \$90 - \$50 \\ &= \$40 \end{aligned}$$

The cumulative revenue that the entity recognises is \$90. The entity has recognised revenue of \$50 in the first year, so it recognises \$40 in the second year.

Year 3

$$\begin{aligned} &\text{The cumulative revenue to date} \\ &= \left(\frac{\text{Cumulative number of points redeemed}}{\text{Total number of points still expected to be redeemed}} \right) \times \$100 \\ &= [(40 + 41 + 9) \text{ points}/90 \text{ points}] \times \$100 \\ &= \$100 \end{aligned}$$

The amount of revenue to be recognised in Year 3
= Cumulative revenue to date – Cumulative revenue recognised to date
= \$100 – (\$40 + \$50)
= \$10

In the third year, a further 9 points are redeemed, taking the total number of points redeemed to 90. Management continues to expect that only 90 points will ever be redeemed, i.e., that no more points will be redeemed after the third year. The cumulative revenue to date is \$100, and the entity has already recognised \$90 of revenue (\$50 in the first year and \$40 in the second year). So it recognises the remaining \$10 in the third year. All of the revenue initially deferred has now been recognised.

Source: Example 1 accompanying IFRIC 13, adapted

If a third party supplies the awards, the entity assesses whether it is collecting the consideration allocated to the points on its own account (i.e., as the principal in the transaction) or on behalf of the third party (i.e., as an agent for the third party).

1. If the entity is collecting the consideration on behalf of the third party, it
 - a. measures its revenue as the net amount retained on its own account, i.e., the difference between the consideration allocated to the points and the amount payable to the third party for supplying the awards; and
 - b. recognises this net amount as revenue when the third party becomes obliged to supply the awards and entitled to receive consideration for doing so. These events may occur as soon as the points are granted. Alternatively, if the customer can choose to claim awards from either the entity or a third party, these events may occur only when the customer chooses to claim awards from the third party.
2. If the entity is collecting the consideration on its own account, it measures its revenue as the gross consideration allocated to the points and recognises the revenue when it fulfils its obligations in respect of the awards (see Example 11.14).

Example 11.14 A retailer of electrical goods participates in a customer loyalty programme operated by an airline. It grants programme members one air travel point for each \$1 they spend on electrical goods. Programme members can redeem the points for air travel with the airline, subject to availability. The retailer pays the airline \$0.009 for each point. In one period, the retailer sells electrical goods for consideration totalling \$1 million. It grants 1 million points.

Allocation of consideration to travel points

The retailer estimates that the fair value of a point is \$0.01. It allocates to the points 1 million \times \$0.01 = \$10,000 of the consideration it has received from the sales of its electrical goods.

Revenue recognition

Having granted the points, the retailer has fulfilled its obligation to the customer. The airline is obliged to supply the awards and entitled to receive consideration for doing so. Therefore, the retailer recognises revenue from the points when it sells the electrical goods.

Revenue measurement

If the retailer has collected the consideration allocated to the points on its own account, it measures its revenue as the gross \$10,000 allocated to them. It separately recognises the \$9,000 paid or payable to the airline as an expense. If the retailer has collected the consideration on behalf of the airline, i.e., as an agent for the airline, it measures its revenue as the net amount it retains on its own account. This amount of revenue is the difference between the \$10,000 consideration allocated to the points and the \$9,000 passed on to the airline.

If at any time the unavoidable costs of meeting the obligations to supply the awards are expected to exceed the consideration received and receivable for them (i.e., the consideration allocated to the points at the time of the initial sale that has not yet been recognised as revenue plus any further consideration receivable when the customer redeems the points), the entity has onerous contracts. A liability is recognised for the excess in accordance with HKAS 37. The need to recognise such a liability could arise if the expected costs of supplying awards increase, for example, if the entity revises its expectations about the number of points that will be redeemed.

In conclusion, IFRIC 13 standardises practices and ensures that entities measure obligations for customer loyalty awards in the same way as they measure other obligations to customers, i.e., at the amount the customer has paid for them. IFRIC 13 is mandatory for annual periods beginning on or after 1 July 2008. Earlier application is permitted.

11.8 Interest, Royalties and Dividends

When it is probable that the economic benefits associated with the transaction will flow to the entity and the amount of the revenue can be measured reliably, an entity recognises revenue arising from the use by others of entity assets yielding interest, royalties and dividends on the bases discussed below (see Real-life Case 11.8).

Real-life Case 11.8 Yue Yuen Industrial (Holdings) Limited

Yue Yuen Industrial is principally engaged in the manufacture and sales of footwear products and the retailing business. The 2007 annual report of the company stated the following:

- Interest income from a financial asset is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.
- Dividend income from investments is recognised when the shareholders' rights to receive payment have been established.

11.8.1 Interest

Interest is recognised using the effective interest method as set out in IAS 39. When unpaid interest has accrued before the acquisition of an interest-bearing investment, the subsequent receipt of interest is allocated between pre-acquisition and post-acquisition periods; only the post-acquisition portion is recognised as revenue (see Example 11.15).

Example 11.15

- Entity A grants a 3-year loan of \$50,000 to an important new customer on 1 January 2008.
 - The interest rate on the loan is 4%.
 - The current market lending rate for similar loans is 6%.
- Entity A believes that the future business to be generated with this new customer will lead to a profitable lending relationship.
- On initial recognition, Entity A recognised \$47,327 (as calculated below):

	Cash inflow \$	Discount factor	Present value \$
31.12.2008.....	50,000 × 4% = 2,000	1/(1 + 6%) ¹	1,887
31.12.2009.....	2,000	1/(1 + 6%) ²	1,780
31.12.2010.....	52,000	1/(1 + 6%) ³	43,660
Fair value at initial recognition.....			<u>47,327</u>

- Calculate the amortised cost at each year-end.
- Prepare the journal entries for loans receivable, interest income and cash interest receipt at the end of 2008.

Answers

	Balance b/f	Effective interest	Interest received	Balance c/f
	\$	(6%) \$	(4%) \$	\$
31.12.2008.	47,327	2,840	(2,000)	48,167
31.12.2009.	48,167	2,890	(2,000)	49,057
31.12.2010.	49,057	2,943	(2,000)	50,000

At 31 December 2008, the journal entries are as follows:

Dr Loans receivable ($\$47,327 \times 6\%$)	2,840	
Cr Interest income (P/L)		2,840
Being effective interest income recognised for the year.		
Dr Cash (interest received, $\$50,000 \times 4\%$)	2,000	
Cr Loans receivable		2,000
Being cash interest received.		

11.8.2 Dividends

Dividends are recognised when the shareholder's right to receive payment is established. When dividends on equity securities are declared from pre-acquisition profits, those dividends are deducted from the cost of the securities. If it is difficult to make such an allocation except on an arbitrary basis, dividends are recognised as revenue unless they clearly represent a recovery of part of the cost of the equity securities.

11.8.3 Licence Fees and Royalties

Royalties are recognised on an accrual basis in accordance with the substance of the relevant agreement. Royalties accrue in accordance with the terms of the relevant agreement and are usually recognised on that basis unless, having regard to the substance of the agreement, it is more appropriate to recognise revenue on some other systematic and rational basis.

Fees and royalties paid for the use of an entity's assets (such as trademarks, patents, software, music copyright, record masters and motion picture films) are normally recognised in accordance with the substance of the agreement. As a practical matter, this may be on a straight-line basis over the life of the agreement, for example, when a licensee has the right to use certain technology for a specified period of time.

An assignment of rights for a fixed fee or non-refundable guarantee under a non-cancellable contract that permits the licensee to exploit those rights freely, in which

the licensor has no remaining obligations to perform, is, in substance, a sale. In such cases, revenue is recognised at the time of sale (see example 11.16).

Example 11.16 Examples of assignment of rights under a non-cancellable contract:

- A licensing agreement for the use of software when the licensor has no obligations subsequent to delivery;
- The granting of rights to exhibit a motion picture film in markets where the licensor has no control over the distributor and expects to receive no further revenues from the box office receipts.

In some cases, whether or not a licence fee or royalty will be received is contingent on the occurrence of a future event. In such cases, revenue is recognised only when it is probable that the fee or royalty will be received, which is normally when the event has occurred.

11.8.4 Collectibility of Amount Recognised

Revenue is recognised only when it is probable that the economic benefits associated with the transaction will flow to the entity. However, when an uncertainty arises about the collectibility of an amount already included in revenue, the uncollectible amount, or the amount in respect of which recovery has ceased to be probable, is recognised as an expense, rather than as an adjustment of the amount of revenue originally recognised.

11.9 Disclosure

An entity is required to disclose

1. the accounting policies adopted for the recognition of revenue including the methods adopted to determine the stage of completion of transactions involving the rendering of services;
2. the amount of each significant category of revenue recognised during the period including revenue arising from
 - a. the sale of goods;
 - b. the rendering of services;
 - c. interest;
 - d. royalties;
 - e. dividends; and
3. the amount of revenue arising from exchanges of goods or services included in each significant category of revenue (IAS 18.35).

11.10 Summary

Revenue is the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in

equity, other than increases relating to contributions from equity participants. Revenue is measured at the fair value of the consideration received or receivable.

An entity recognises revenue from the sale of goods when:

1. The entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
2. The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
3. The amount of revenue can be measured reliably;
4. It is probable that the economic benefits associated with the transaction will flow to the entity; and
5. The costs incurred or to be incurred in respect of the transaction can be measured reliably.

The application of the revenue recognition criteria to the following specific types of transactions involving sales of goods have been discussed: bill-and-hold sales, goods shipped subject to conditions, layaway sales, advanced payment, sale and repurchase agreements, sales to intermediate parties for resale, subscriptions to publications and similar items, instalment sales, real estate sales, and pre-completion contracts for the sale of development properties.

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised by reference to the stage of completion of the transaction at the balance sheet date.

The application of the revenue recognition criteria to the following specific types of transactions involving rendering of services has been discussed: installation fees, servicing fees included in the price of the product, advertising commissions, insurance agency commissions, financial service fees, admission fees, tuition fees, initiation, entrance and membership fees, franchise fees, fees from the development of customised software, and barter transactions involving advertising services.

IFRIC 13 requires companies to estimate the value of the points (i.e., customer loyalty award credits) to the customer and defer this amount of revenue as a liability until they have fulfilled their obligations to supply awards.

When it is probable that the economic benefits associated with the transaction will flow to the entity and the amount of the revenue can be measured reliably, an entity recognises revenue arising from the use by others of entity assets yielding interest, royalties and dividends.

An entity shall disclose information regarding revenue as required by IAS 18.

Review Questions

1. Define revenue.
2. What seems to be the primary issue in accounting for revenue?
3. Briefly describe the recognition criteria for revenue arising from the sale of goods.
4. Why, in some situations, does an entity apply the recognition criteria to separately identifiable components of a single transaction?

5. What are bill-and-hold sales?
6. What are layaway sales?
7. How should an entity deal with advanced payments from customers?
8. Briefly describe the recognition criteria for revenue arising from rendering of services.
9. How should an entity account for servicing fees included in the price of the product?
10. What are barter transactions involving advertising services?
11. How should an entity account for barter transactions involving advertising services?
12. What are the characteristics of a customer loyalty programme?
13. What are the differences between interest, royalty and dividend revenues?
14. Give some examples of information to be disclosed for revenue.

Exercises

- Exercise 11.1** Which of the following transactions is a sale, and therefore revenue should be recognised; and which of the following transactions is not a sale, and therefore revenue should not be recognised? Explain why.
- a. In a retail sale, the seller guarantees a refund if the customer is not satisfied.
 - b. Goods are shipped subject to installation, and the installation is a significant part of the contract that has not yet been completed by the seller.
 - c. The buyer has the right to rescind the purchase for a reason specified in the sales contract, and the seller is uncertain about the probability of return.

- Exercise 11.2** On 2 January 2008, DEF sold equipment to XYZ for \$300,000 with three interest-free annual payments of \$100,000. XYZ made the initial annual payment on 2 January 2008 to DEF. Two remaining annual payments would be made at the end of each year beginning from 31 December 2008.

Required:

Assume 8% is the appropriate rate to discount the nominal amount of the annual payment to the current cash sales price of the equipment. Calculate the revenue and related interest revenue in respect of the sale of the electricity equipment to XYZ.

- Exercise 11.3** On 2 January 2008, Lee sold equipment to XYZ for \$300,000 with three interest-free annual payments of \$100,000. Three annual payments would be made at the end of each year beginning from 31 December 2008.

Required:

Assume 8% is the appropriate rate to discount the nominal amount of the annual payment to the current cash sales price of the equipment. Calculate the revenue and related interest revenue in respect of the sale of the electricity equipment to XYZ.

Exercise 11.4 Two days before the financial year-end of 31 December 2008, a major customer requested Company B to defer delivering 100,000 units of Product A until 2 January 2009 because the customer's warehouse had already been closed for the New Year holidays. The customer requested Company B to issue the invoice for the goods when the goods were delivered on 2 January 2009 and agreed to settle the amount within 30 days after the invoice date under the usual credit terms granted to the customer. Since this is a major customer with a good track record, Company B entertained the request and issued the invoice to the customer when the goods were delivered to the customer on 2 January 2009.

Required:

Determine how the above transaction of Company B should be accounted for in terms of the timing of recognition and the income statement presentation.

Exercise 11.5 For the year ended 31 December 2008, Mega Shop (MS) entered into a franchise agreement with Lee. According to the agreement, Lee will pay an initial fee of \$400,000 upon signing the franchise agreement and MS will initially provide services to assist Lee to set up their operation. The provision of these initial services is completed when Lee starts retailing MS's product in the outlet. After the set-up is completed, MS will start to charge the franchisees an annual fee to cover the cost of continuing services with a reasonable profit. Provision of initial services was completed during the year, and all the initial fee has been received. Total costs incurred amount to \$300,000.

Required:

Determine the amount of revenue and profits that MS should report for the year ended 31 December 2008.

Problems

Problem 11.1 On 2 January 2008, ABC sold office equipment to XYZ for \$600,000 with five interest-free annual payments of \$120,000. XYZ made the initial annual payment on 2 January 2008 to ABC. Five remaining annual payments would be made at the end of each year beginning from 31 December 2008.

Required:

Assume 10% is the appropriate rate to discount the nominal amount of the annual payment to the current cash sales price of the equipment. Calculate the revenue and related interest revenue in respect of the sale of the office equipment to XYZ.

Problem 11.2 Gold Limited provides computer hardware as well as network infrastructure development services to its customers. Historically, all costs for sale of computer hardware were incurred upon completion of installation work. The workload and relevant costs of the network infrastructure development services were evenly distributed over the development period.

On 30 October 2008, Gold Limited entered into a contract with Sunshine in which the sale of computer hardware and the provision of related infrastructure development services were bundled together. Based on historical data, the company estimated that the fair value of sale of computer hardware accounted for 70% while provision of development services accounted for the remaining 30% of the present value of the \$700,000 contract price.

Required:

Determine how to apply the revenue recognition criteria to the sale of computer hardware and the provision of network infrastructure development services. Determine the amount of sales to be recognised for the sale of computer hardware and the provision of network infrastructure development services.

Problem 11.3 The terms under which Partway sells its holidays are that a 10% deposit is required on booking and the balance of the holiday must be paid six weeks before the travel date. In previous years, Partway has recognised revenue (and profit) from the sale of its holidays at the date the holiday is actually taken. From the beginning of November 2007, Partway has made it a condition of booking that all customers must have holiday cancellation insurance, and as a result, it is unlikely that the outstanding balance of any holidays will be unpaid due to cancellation. In preparing its financial statements to 31 October 2008, the directors are proposing to change to recognising revenue (and related estimated costs) at the date when a booking is made. The directors also feel that this change will help to negate the adverse effect of comparison with last year's results (year ended 31 October 2007), which were better than the current year's.

Required:

Comment on whether Partway's proposal to change the timing of its recognition of its revenue is acceptable and whether this would be a change of accounting policy.

(ACCA 2.5 December 2006, adapted)

Problem 11.4 Silver Company Limited (Silver) is principally engaged in the business of property development and holding. For the year ended 31 December 2007, Silver successfully pre-sold 200 units out of the 1,000 units of a self-developed residential property that was still under construction (50% completion). Total consideration for the 200 units was \$500 million, and Silver had received \$100 million as down payments.

For the year ended 31 December 2008, Silver successfully sold the remaining 800 units of the self-developed residential property when they were still under construction (80% completion). The construction was 100% completed in August 2008. Total consideration for the 800 units sold in 2008 was \$2,200 million, and Silver received the \$2,200 million in full from the buyers when the relevant occupation permit was issued by the government authority in October 2008. Immediately after the issue of the relevant occupation permit, Silver also received from buyers the remaining \$400 million balances for the 200 units sold in 2007.

Required:

Determine and explain how Silver should account for the pre-sale of self-developed residential properties in the financial statements for the years ended 31 December 2007 and 31 December 2008.

Problem 11.5 During the year ending 31 December 2008, Day and Night (DN) entered into a franchise agreement with ABC. DN will not keep any inventory. Any goods ordered by ABC will be shipped directly from DN's authorised suppliers to ABC.

According to the franchise agreement, DN will initially provide services to assist ABC to set up their operation. These include finding suitable outlet locations, outlet image design, and staff training. The provision of these initial services is completed when ABC starts retailing DN's product in the outlet. The agreement requires ABC to pay an initial fee of \$1,100,000 upon signing the franchise agreement.

DN estimates that \$100,000 of the initial fee will cover part of the costs of continuing services and provide a reasonable profit on those services. After the set-up is completed, DN will also charge ABC an annual fee of \$200,000 to cover the remaining cost of continuing services with a reasonable profit.

Provision of initial services is partly completed, and the entire initial fee has been received. It is expected that ABC will open its outlet in February 2009. The cost incurred to date by DN for the ABC franchise was \$640,000, and the total cost is expected to be \$800,000. ABC has already placed orders for its 2009 sales, and the goods will be delivered in early 2009.

Required:

Determine the amount of revenue and profits that should be reported for the year ended 31 December 2008, using the latest information available on revenue.

Case Studies

Case Study 11.1

During the year ending 31 December 2005, JML entered into a number of franchise agreements with some PRC franchisees as a result of JML's plan to expand its business in Mainland China. These agreements were entered into by a wholly owned subsidiary of JML, JML (China), which was newly set up in the PRC. JML (China) has recruited a few local employees to run a small office in Shanghai. Most of the franchisee-serving work is done by Hong Kong head office staff, although they travel frequently to the Mainland. JML (China) will not keep any inventory. Any goods ordered by the franchisees will be shipped directly from JML's workshops.

According to the franchise agreement, JML (China) will initially provide services to assist the franchisees to set up their operations in China. These include finding suitable outlet locations, outlet image design, staff training, information system sourcing and testing. The provision of these initial services is normally completed when the franchisees start retailing JML's product in the outlets. The agreement usually requires a franchisee to pay an initial fee of \$1.8 million upon signing the franchise agreement, though JML (China) in one case accepted instalments from the franchisees. The initial

fee is refundable, after deduction of the cost incurred by JML (China), when substantial performance has been completed. After the set-up is completed, JML (China) will start to charge the franchisees an annual fee to cover the cost of continuing services, such as staff training and information consultancies, with a reasonable profit. As at the latest date, JML (China) has the following franchise agreements with PRC franchisees.

Shanghai franchisee Provision of initial services was completed during the year, and all the initial fee has been received. Total costs incurred amount to \$1 million. The Shanghai franchisee agreed to pay an annual franchise servicing fee of \$500,000 to JML (China). According to the agreement, Shanghai shall purchase from JML (China)'s holding company, JML, or from JML's subsidiaries, goods of at least \$50 million per annum and a total of \$400 million over a period of five years. As of the latest date, the franchisee had taken delivery of goods with a total invoice price of \$40 million only. Shanghai had already ordered the remaining \$10 million in accordance with the agreement but requested delivery in early 2006.

Beijing franchisee Provision of initial services started recently. One-third of the initial fee, i.e., \$600,000, has been received. JML (China) has assisted the Beijing franchisee to locate a suitable shopping mall for its outlet, but Beijing is yet to sign any concrete agreement with the landlord. JML (China) has provided some training to the franchisee's senior management on retail business management. Recruitment of the franchisee sales team has not started yet. The cost incurred to date by JML (China) for these initial services is \$150,000, and the total cost is expected to be \$1 million.

Guangzhou franchisee Provision of initial services is partly completed, and all the initial fee has been received. It is expected that the Guangzhou franchisee will open its first outlet in March 2006. The cost incurred to date by JML (China) for the Guangzhou franchisee is \$700,000, and the total cost is expected to be \$1 million. The Guangzhou franchisee has already placed orders for its 2006 sales, and the goods will be delivered in early 2006.

Required:

With respect to the initial franchisee fee:

1. Explain the general principles that should be applied in the recognition.
2. For each of the franchisees, calculate the amount of revenue and profits that should be reported for the year ending 31 December 2005, using the latest information available on revenue.

(HKICPA FE December 2005, adapted)

**Case
Study 11.2**

Under the existing OEM agreements between Perfect Industry and its customers, customers give Perfect Industry formal written acceptance to confirm that the goods delivered conform to their specifications. However, it may take a few weeks after the delivery of goods for some customers to send the written acceptance. Some customers do not send written acceptance until they settle the amount due. Some customers

never send written acceptance. Perfect Industry's existing accounting practice is to recognise sales revenue when goods are delivered to carriers or locations designated by the customers. One of the directors of Perfect Industry, Mr Lam, after receiving the standard OEM agreement in detail, has queried whether this practice is appropriate.

Required:

Write a memo to Mr Lam explaining your views on whether the existing revenue recognition practice for OEM sales is appropriate.

(HKICPA FE June 2004, adapted)

**Case
Study 11.3**

You are an accounting manager of Cherry Limited (Cherry), a manufacturer of kitchen appliances for both the industrial and consumer sectors. In addition to sales through wholesalers, Cherry also operates directly in the retail market through dedicated showrooms. Relevant information and extracts of documents for the forthcoming management meeting to be held on 31 August 2003 are as follows:

Extract of a memo dated 31 July 2003

To : Sales Director
From : Assistant Sales Director – Retail
Date : 31 July 2003

Although we are facing an environment full of uncertainties and many enterprises are experiencing revenue decline, it is important that we outperform in the kitchen appliances industry. Starting from 1 October 2003, we shall commence offering new credit terms to our customers. This marketing programme shall be referred to as the "No pay 450" programme (NP450). Customers will make no down payment and will be charged no interest if their entire purchase price is paid within 450 days from the date of purchase. If the full amount of the purchase is not paid within that time, they will be required to pay interest at the rate of 12% per annum from the date of purchase ...

We expect that the NP450 programme will be very successful. We estimate that sales via the NP450 programme will account for more than half of the annual turnover of our division for the financial year ending 30 June 2004.

We estimate that approximately 40% of NP450 customers will pay within 60 days from the date goods are delivered (though they are not required to do so). Since the programme is innovative, it is not known how many customers will opt to pay after the 450-day credit-free period, but we estimate that it will not exceed 10% ...

Required:

Draft a memorandum to the managing director explaining how sales, as well as the 12% interest charge, under the NP450 programme should be accounted for in Cherry's financial statements.

(HKICPA QP A June 2003, adapted)

**Case
Study 11.4**

One of your audit clients, a start-up Internet company named Travel.com running a travel agency business online, has a disagreement with you on the issue of revenue recognition. When Travel.com sells a \$2,000 ticket, they book all \$2,000 as revenue and deduct the cost of the ticket as cost of goods sold. The management of Travel.com argues that their practice meets generally accepted accounting principles (GAAP) since the company temporarily holds the plane seat in its inventory, but they do not further explain how plane seats are accounted for as inventory.

Required:

Discuss the incentives for Travel.com wanting to record revenue this way, and whether or not their proposed practice is consistent with GAAP.

(HKICPA QP A June 2001, adapted)

**Case
Study 11.5**

A supermarket operates a customer loyalty programme. It grants programme members loyalty points when they spend a specified amount on groceries. Programme members can redeem the points for further groceries. The points have no expiry date. In one period, the entity grants 100,000 points. Management expects 75,000 of these points to be redeemed. Management estimates the fair value of each loyalty point to be \$1, and defers revenue of \$100,000.

Year 1

At the end of the first year, 30,000 of the points have been redeemed in exchange for groceries.

Year 2

In the second year, management revises its expectations. It now expects 80,000 points to be redeemed altogether. During the second year, 35,000 points are redeemed.

Year 3

In the third year, a further 15,000 points are redeemed. Management continues to expect that only 80,000 points will ever be redeemed.

Required:

Determine the amount of revenue to be recognised in each of Year 1, Year 2 and Year 3.

12

Employee Benefits

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of employee benefits
- 2 The recognition, measurement and disclosure for short-term employee benefits
- 3 The recognition, measurement and disclosure for termination benefits
- 4 The recognition, measurement and disclosure for post-employment benefits
- 5 The distinction between defined contribution plans and defined benefit plans
- 6 How to recognise actuarial gains and losses inside and outside profit or loss
- 7 The recognition, measurement and disclosure for other long-term employee benefits

Real-life

Case 12.1

Hutchison Whampoa Limited

Hutchison Whampoa's principal businesses include ports and related services, property and hotels, retail, infrastructure, energy, finance and investments, and telecommunications. Its 2006 annual report stated the following accounting policy for pension costs:

- The group operates several defined benefit plans.
- Pension costs for defined benefit plans are assessed using the projected unit credit method ... Under this method, the cost of providing pensions is charged to profit or loss so as to spread the regular cost over the future service lives of employees in accordance with the advice of the actuaries who carry out a full valuation of the plans each year.
- The pension obligation is measured at the present value of the estimated future cash outflows using interest rates determined by reference to market yields at the balance sheet date based on high-quality corporate bonds with currency and term similar to the estimated term of benefit obligations.
- Actuarial gains and losses are recognised in full in the year in which they occur.

Employee benefits include not only wages, salaries and fringe benefits such as sick leave and medical care, but also post-employment benefits such as pensions. As indicated in Real-life Case 12.1, Hutchison Whampoa Limited operates several defined benefit plans and assesses its pension costs using the projected unit credit method. This chapter discusses in detail the accounting treatment of employee benefits under IAS 19. The projected unit credit method as well as the recognition and measurement of actuarial gains and losses will be illustrated. Other than defined benefit plans, post-employment benefit plans can be operated as defined contribution plans. What are the differences in accounting treatment for these two types of pension plans?

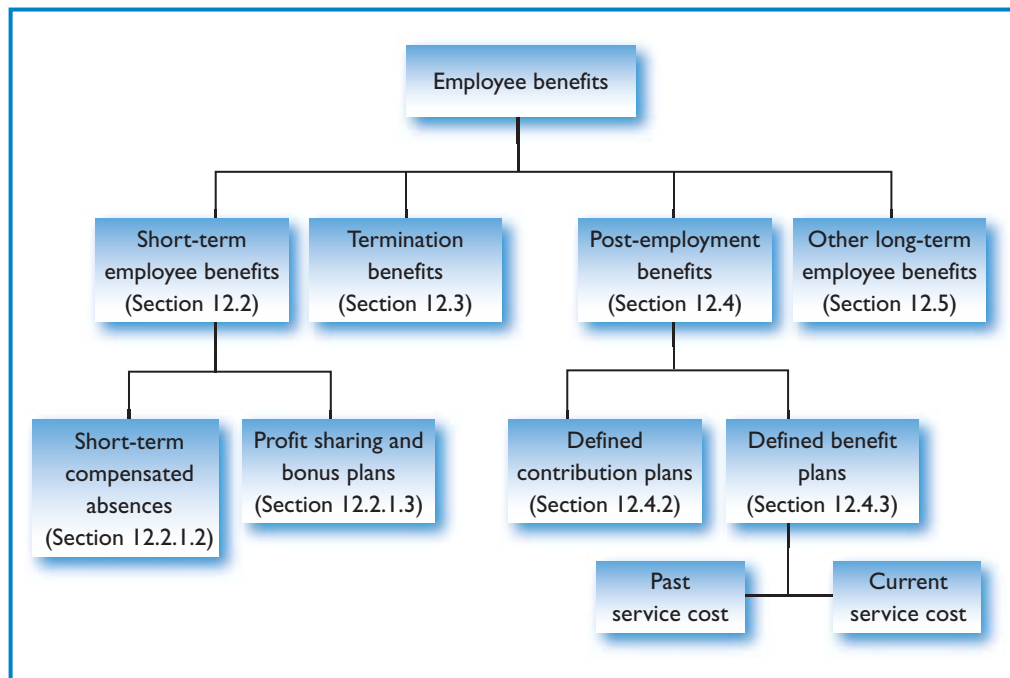
12.1 Applicable Standard and Scope

IAS 19 *Employee Benefits* prescribes the accounting and disclosure by employers for employee benefits. An employer applies IAS 19 to account for all employee benefits, except those to which IFRS 2 *Share-based Payment* applies. IAS 19 does not deal with reporting by employee benefit plans (see IAS 26 *Accounting and Reporting by Retirement Benefit Plans*).

Employee benefits covered by IAS 19 include those provided

1. under formal plans or other formal agreements between an entity and individual employees, groups of employees or their representatives;
2. under legislative requirements, or through industry arrangements, whereby entities are required to contribute to national, state, industry or other multi-employer plans; or
3. by those informal practices that give rise to a constructive obligation.

FIGURE 12.1 Types of employee benefits



Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees, and include the following:

1. Short-term employee benefits for current employees, such as wages and salaries;
2. Termination benefits;
3. Post-employment benefits such as pensions and other retirement benefits; and
4. Other long-term employee benefits such as long-service leave.

Since each of the above categories has different characteristics, IAS 19 establishes separate requirements for each category (see Figure 12.1).

Employee benefits include benefits provided to either employees or their dependants. An entity may settle employee benefits by payments (or the provision of goods or services) made directly to the employees, to their spouses, to their children or to other entities, such as insurance companies. For the purposes of IAS 19, employees include directors and other management personnel.

12.2 Short-term Employee Benefits

Short-term employee benefits include items such as

- wages, salaries and social security contributions;
- short-term compensated absences (such as paid annual leave and paid sick leave) where the absences are expected to occur within 12 months after the end of the period in which the employees render the related employee service;

- profit sharing and bonuses payable within 12 months after the end of the period in which the employees render the related service; and
- non-monetary benefits (such as medical care, housing, cars and free or subsidised goods or services) for current employees.

Short-term employee benefits are employee benefits (other than termination benefits) that fall due wholly within 12 months after the end of the period in which the employees render the related service.

Accounting for short-term employee benefits is generally straightforward because:

1. No actuarial assumptions are required to measure the obligation or the cost;
2. There is no possibility of any actuarial gain or loss; and
3. The obligations are measured on an undiscounted basis.

12.2.1 Recognition and Measurement

While Section 12.2.1.1 discusses the main recognition and measurement requirements for all short-term employee benefits, Sections 12.2.1.2 and 12.2.1.3 explain how an entity applies these requirements to short-term employee benefits in the form of compensated absences and profit sharing and bonus plans respectively.

12.2.1.1 Main Requirements for All Short-term Employee Benefits

When an employee has rendered service to an entity during an accounting period, the entity recognises the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service

1. as a liability (accrued expense), after deducting any amount already paid. If the amount already paid exceeds the undiscounted amount of the benefits, an entity recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund; and
2. as an expense, unless another IFRS requires or permits the inclusion of the benefits in the cost of an asset (e.g., IAS 2 *Inventories* and IAS 16 *Property, Plant and Equipment*).

12.2.1.2 Short-term Compensated Absences

An entity recognises the expected cost of short-term employee benefits in the form of compensated absences as follows:

1. In the case of accumulating compensated absences, when the employees render service that increases their entitlement to future compensated absences; and
2. In the case of non-accumulating compensated absences, when the absences occur.

Accumulating compensated absences are those that are carried forward and can be used in future periods if the current period's entitlement is not used in full.

Non-accumulating compensated absences are those that are not carried forward and cannot be used in future periods if the current period's entitlement is not used in full.

An entity may compensate employees for absence for various reasons including vacation, sickness and short-term disability, maternity or paternity, jury service and military service. Entitlement to compensated absences could be accumulating or non-accumulating.

Accumulating compensated absences may be either

1. vesting (employees are entitled to a cash payment for unused entitlement on leaving the entity); or
2. non-vesting (employees are not entitled to a cash payment for unused entitlement on leaving the entity).

An obligation arises as employees render service that increases their entitlement to future compensated absences. The obligation exists, and is recognised, even if the compensated absences are non-vesting, although the possibility that employees may leave before they use an accumulated non-vesting entitlement affects the measurement of that obligation.

An entity measures the expected cost of accumulating compensated absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the balance sheet date (i.e., the end of the reporting period) (IAS 19.14). This obligation is the amount of additional payments that are expected to arise solely from the fact that the benefit accumulates (see Example 12.1). In many cases, an entity may not need to make detailed computations to estimate that there is no material obligation for unused compensated absences. For example, a sick leave obligation is likely to be material only if there is a formal or informal understanding that unused paid sick leave may be taken as paid vacation.

Example 12.1 Company A has 1,000 employees, who are each entitled to 5 working days of paid sick leave for each year. Unused sick leave may be carried forward for one calendar year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (a LIFO basis). At 31 December 2007, the average unused entitlement is 2 days per employee. Company A expects, based on past experience, which is expected to continue, that 900 employees will take no more than 5 days of paid sick leave in 2008 and that the remaining 100 employees will take an average of 6 days each.

Determine the expected cost of accumulating compensated absences.

Answers

Company A expects that it will pay an additional 100 days of sick pay as a result of the unused entitlement that has accumulated at 31 December 2007 (1 day each, for 100 employees). Therefore, Company A recognises a liability equal to 100 days of sick pay.

Non-accumulating compensated absences do not carry forward to the next year. They expire if the current period's entitlement is not used in full and do not entitle employees to a cash payment for unused entitlement on leaving the entity. An entity does not recognise any liability or expense until the time of the absence, because employee service does not increase the amount of the benefit (see Example 12.2).

Example 12.2 Examples of non-accumulating compensated absences include

- sick pay (to the extent that unused past entitlement does not increase future entitlement);
- maternity or paternity leave; and
- compensated absences for jury service or military service.

12.2.1.3 Profit Sharing and Bonus Plans

An entity recognises the expected cost of profit sharing and bonus payments under the main requirements when, and only when:

1. The entity has a present legal or constructive obligation to make such payments as a result of past events; and
2. A reliable estimate of the obligation can be made (IAS 19.17).

An entity may not have a legal obligation to pay a bonus. Nevertheless, if an entity has a practice of paying bonuses, the entity may have a constructive obligation where it has no realistic alternative but to pay the bonus. Under some profit sharing plans, employees receive a share of the profit only if they remain with the entity for a specified period. Such plans create a constructive obligation as employees render service that increases the amount to be paid if they remain in service until the end of the specified period. The measurement of such constructive obligations, however, reflects the possibility that some employees may leave without receiving profit sharing payments (see Example 12.3).

Example 12.3 A profit sharing plan requires an entity to pay a specified proportion of its net profit for the year to employees who serve throughout the year. If no employees leave during the year, the total profit sharing payments for the year will be 3% of net profit. The entity estimates that staff turnover will reduce the payments to 2.5% of net profit.

Determine the expected cost of profit sharing and bonus payments.

Answers

The entity is required to recognise a liability and an expense of 2.5% of net profit.

An entity can make a reliable estimate of its legal or constructive obligation under a profit sharing or bonus plan when, and only when:

1. The formal terms of the plan contain a formula for determining the amount of the benefit;
2. The entity determines the amounts to be paid before the financial statements are authorised for issue; or
3. Past practice gives clear evidence of the amount of the entity's constructive obligation.

An obligation under profit sharing and bonus plans results from employee service and not from a transaction with the entity's owners. Therefore, an entity recognises the cost of profit sharing and bonus plans as an expense, rather than as a distribution of net profit. If profit sharing and bonus payments are not due wholly within 12 months after the end of the period in which the employees render the related service, those payments are other long-term employee benefits (see Section 12.5).

12.2.2 Disclosure

Although IAS 19 does not require specific disclosures about short-term employee benefits, other IFRSs may require disclosures. For example, IAS 24 *Related Party Disclosures* requires disclosures about employee benefits for key management personnel. IAS 1 *Presentation of Financial Statements* requires disclosure of employee benefits expense.

12.3 Termination Benefits

12.3.1 Recognition and Measurement

An entity recognises termination benefits as a liability and an expense when, and only when, the entity is demonstrably committed to either

1. terminating the employment of an employee or group of employees before the normal retirement date; or

2. providing termination benefits as a result of an offer made in order to encourage voluntary redundancy (IAS 19.133).

Termination benefits are employee benefits payable as a result of either

- an entity's decision to terminate an employee's employment before the normal retirement date; or
- an employee's decision to accept voluntary redundancy in exchange for those benefits.

An entity is demonstrably committed to a termination when, and only when, the entity

1. has a detailed formal plan for the termination, which includes, at a minimum
 - a. the location, function and approximate number of employees whose services are to be terminated;
 - b. the termination benefits for each job classification or function; and
 - c. the time at which the plan will be implemented. Implementation shall begin as soon as possible, and the period of time to complete implementation shall be such that material changes to the plan are not likely.
2. is without realistic possibility of withdrawal.

An entity may be committed, by legislation, by contractual or other agreements with employees or their representatives or by a constructive obligation based on business practice, custom or a desire to act equitably, to make payments (or provide other benefits) to employees when it terminates their employment. Termination benefits do not provide an entity with future economic benefits and are recognised as an expense immediately.

Where termination benefits fall due more than 12 months after the reporting period, they are discounted to the present value using the discount rate specified in IAS 19.78. In the case of an offer made to encourage voluntary redundancy, the measurement of termination benefits is based on the number of employees expected to accept the offer.

12.3.2 Disclosure

Where there is uncertainty about the number of employees who will accept an offer of termination benefits, a contingent liability exists. As required by IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, an entity discloses information about the contingent liability unless the possibility of an outflow in settlement is remote. As required by IAS 1, an entity discloses the nature and amount of material termination benefits expense. An entity also discloses information about termination benefits for key management personnel where required by IAS 24 *Related Party Disclosures*.

12.4 Post-employment Benefits

Post-employment benefits include retirement benefits (e.g., pensions) and other post-employment benefits (post-employment life insurance and post-employment medical care). Post-employment benefit plans are classified as either defined contribution plans or defined benefit plans.

Post-employment benefits are employee benefits (other than termination benefits) that are payable after the completion of employment.

Post-employment benefit plans are formal or informal arrangements under which an entity provides post-employment benefits for one or more employees.

Defined contribution plans are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

Defined benefit plans are post-employment benefit plans other than defined contribution plans.

12.4.1 Distinction between Defined Contribution Plans and Defined Benefit Plans

Under defined contribution plans

1. an entity's legal or constructive obligation is limited to the amount that it agrees to contribute to the fund; and
2. in consequence, actuarial risk (that benefits will be less than expected) and investment risk (that assets invested will be insufficient to meet expected benefits) fall on the employee (see Table 12.1).

Thus, the amount of post-employment benefits received by the employee is determined by the amount of contributions paid by an entity (and perhaps also the employee) to a post-employment benefit plan or to an insurance company, together with investment returns arising from the contributions. An entity will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods (see Example 12.4).

TABLE 12.1

Distinction between defined contribution plans and defined benefit plans

	Defined contribution plan	Defined benefit plan
Entity's obligation	Provides agreed contribution	Provides agreed benefits
Actuarial risk	Falls on the employee	Falls on the employer
Investment risk	Falls on the employee	Falls on the employer

Example 12.4 Company A contributes to a defined contribution retirement plan that is available to salaried employees of the company. Company A's contributions to the retirement plan are calculated as 10% of the employees' basic salaries (amounting to \$10 million for the current period) and are expensed as incurred. The employees also contribute 5% of their basic salaries to the retirement plan.

Required:

1. Determine Company A's pension obligation and prepare the journal entry of the pension expense for the current period.
2. Determine the amount of post-employment benefits to be received by a salaried employee.

Answers

1. Company A's pension obligation is 10% of the employees' basic salaries, which is the amount that Company A agrees to contribute to the retirement plan. The pension obligation for the current period is \$1 million ($\$10 \text{ million} \times 10\%$).

The following journal entry should be recorded by Company A:

Dr P/L – Pension expense	\$1,000,000	
Cr Cash		\$1,000,000
Being contribution to the retirement plan.		

2. The amount of post-employment benefits to be received by a salaried employee is the total of his 5% contribution, Company A's 10% contribution, and the investment returns (or minus the investment loss) arising from the contributions.

Under defined benefit plans:

1. The entity's obligation is to provide the agreed benefits to current and former employees; and
2. Actuarial risk and investment risk fall, in substance, on the entity. If actuarial or investment experience is worse than expected, the entity's obligation may be increased (see Table 12.1).

12.4.1.1 Multi-employer Plans

Where a multi-employer plan is a defined benefit plan, an entity is required to

1. account for its proportionate share of the defined benefit obligation, plan assets and cost associated with the plan in the same way as for any other defined benefit plan; and
2. disclose the information required by IAS 19.120A.

Multi-employer plans are defined contribution plans (other than state plans) or defined benefit plans (other than state plans) that

- pool the assets contributed by various entities that are not under common control; and
- use those assets to provide benefits to employees of more than one entity, on the basis that contribution and benefit levels are determined without regard to the identity of the entity that employs the employees concerned.

When sufficient information is not available to use defined benefit accounting for a multi-employer plan that is a defined benefit plan, an entity is required to

1. account for the plan as if it were a defined contribution plan;
2. disclose
 - a. the fact that the plan is a defined benefit plan; and
 - b. the reason why sufficient information is not available to enable the entity to account for the plan as a defined benefit plan; and
3. to the extent that a surplus or deficit in the plan may affect the amount of future contributions, disclose in addition
 - a. any available information about that surplus or deficit;
 - b. the basis used to determine that surplus or deficit; and
 - c. the implications, if any, for the entity.

Multi-employer plans are distinct from group administration plans, which are merely an aggregation of single-employer plans combined to allow participating employers to pool their assets for investment purposes and reduce investment management and administration costs, but the claims of different employers are segregated for the sole benefit of their own employees. Defined benefit plans that share risk between various entities under common control, for example, a parent and its subsidiaries, are not multi-employer plans.

12.4.1.2 State Plans

State plans are established by legislation to cover all entities (or all entities in a particular category, for example a specific industry) and are operated by national or local government or by another body that is not subject to control or influence by the reporting entity. An entity shall account for a state plan in the same way as for a multi-employer plan (IAS 19.36). Mandatory Provident Fund Scheme in Hong Kong and various pension plans organised by the municipal and provincial governments in Mainland China are good examples of state plans (see Real-life Case 12.2).

12.4.1.3 Insured Benefits

An entity may pay insurance premiums to fund a post-employment benefit plan. The entity shall treat such a plan as a defined contribution plan unless the entity has a legal or constructive obligation to either

1. pay the employee benefits directly when they fall due; or
2. pay further amounts if the insurer does not pay all future employee benefits relating to employee service in the current and prior periods.

If the entity retains such a legal or constructive obligation, the entity treats the plan as a defined benefit plan.

12.4.2 Defined Contribution Plans

Accounting for defined contribution plans is straightforward because the reporting entity's obligation for each period is determined by the amounts to be contributed for that period. Consequently, no actuarial assumptions are required to measure the obligation or the expense, and there is no possibility of any actuarial gain or loss. Moreover, the obligations are measured on an undiscounted basis, except where they do not fall due wholly within 12 months after the end of the period in which the employees render the related service.

12.4.2.1 Recognition and Measurement

When an employee has rendered service to an entity during a period, the entity recognises the contribution payable to a defined contribution plan in exchange for that service

1. as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the balance sheet date, an entity recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund; and
2. as an expense, unless another IFRS requires or permits including the contribution in the cost of an asset (see, for example, IAS 2 *Inventories*) (see Real-life Example 12.2).

Real-life

Case 12.2

The Hong Kong and China Gas Company Limited

The Hong Kong and China Gas Company is principally engaged in the production, distribution and marketing of gas, water and related activities in Hong Kong and Mainland China. Its 2006 annual report stated the following accounting policy for its defined contribution retirement schemes:

- The group contributes to defined contribution retirement schemes and Mandatory Provident Fund schemes that are available to salaried employees in Hong Kong. The group's contributions to these retirement schemes are calculated as a percentage of the employees' basic salaries or relevant income and are expensed as incurred. No forfeited contributions have been utilised by the group to reduce the existing contributions.

**Real-life
Case 12.2**
(cont'd)

- For employees in Mainland China, the group contributes on a monthly basis to various defined contribution plans organised by the relevant municipal and provincial governments in the PRC based on a certain percentage of the relevant employees' monthly salaries. The municipal and provincial governments undertake to assume the retirement benefit obligations payable to all existing and future retired employees under these plans, and the group has no further constructive obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred.

Where contributions to a defined contribution plan do not fall due wholly within 12 months after the end of the period in which the employees render the related service, they are discounted using the discount rate specified in IAS 19.78 (see "Actuarial Assumptions" on pages 389–390).

12.4.2.2 Disclosure

An entity discloses the amount recognised as an expense for defined contribution plans (IAS 19.46). Where required by IAS 24 *Related Party Disclosures*, an entity also discloses information about contributions to defined contribution plans for key management personnel.

12.4.3 Defined Benefit Plans

Accounting for defined benefit plans is complex because:

1. Actuarial assumptions are required to measure the obligation and the expense;
2. There is a possibility of actuarial gains and losses; and
3. The obligations are measured on a discounted basis as they may be settled many years after the employees render the related service.

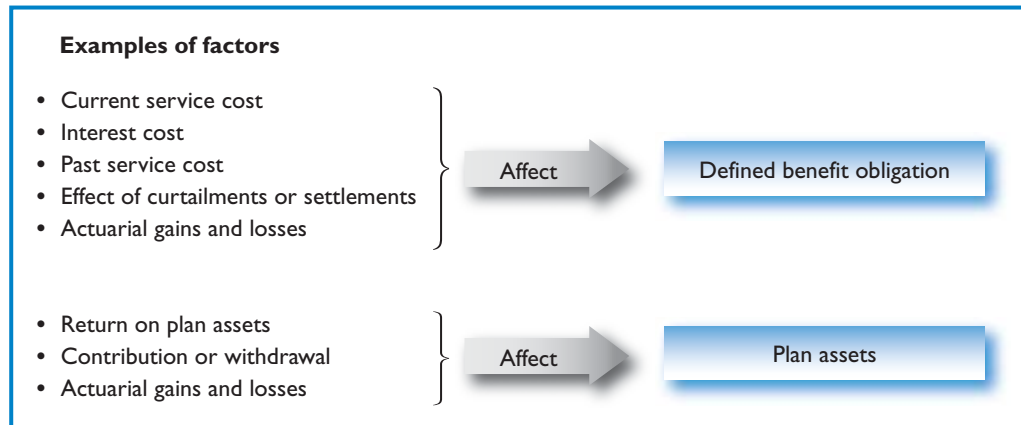
Figure 12.2 shows that several factors affect the determination of defined benefit obligation as well as the valuation of plan assets. Each of these factors is discussed in detail in the following sub-sections.

12.4.3.1 Recognition and Measurement – General

Defined benefit plans may be unfunded or wholly or partly funded by contributions by an entity, and sometimes its employees, into an entity or fund that is legally separate from the reporting entity and from which the employee benefits are paid.

The reporting entity is, in substance, underwriting the actuarial and investment risks associated with the plan. Consequently, the expense recognised for a defined benefit plan is not necessarily the amount of the contribution due for the period. Where

FIGURE 12.2 Recognition and measurement – Defined benefit plans



an entity has more than one defined benefit plan, the entity applies these procedures for each material plan separately.

Accounting by an entity for defined benefit plans involves the following steps:

1. Using actuarial techniques to make a reliable estimate of the amount of benefit that employees have earned in return for their service in the current and prior periods;
2. Discounting that benefit using the projected unit credit method in order to determine the present value of the defined benefit obligation and the current service cost;
3. Determining the fair value of any plan assets;
4. Determining the total amount of actuarial gains and losses and the amount of those actuarial gains and losses to be recognised;
5. Where a plan has been introduced or changed, determining the resulting past service cost; and
6. Where a plan has been curtailed or settled, determining the resulting gain or loss.

Accounting for the Constructive Obligation

An entity accounts for both its legal obligation under the formal terms of a defined benefit plan and any constructive obligation that arises from the entity's informal practices. Informal practices may give rise to a constructive obligation where, for example, a change in the entity's informal practices would cause unacceptable damage to its relationship with employees.

The formal terms may permit an entity to terminate its obligation under the plan. Since it is usually difficult for an entity to cancel a plan and still retain employees, in the absence of evidence to the contrary, accounting for post-employment benefits assumes that an entity that is currently promising such benefits will continue to do so over the remaining working lives of employees.

Balance Sheet (Statement of Financial Position)

In accordance with IAS 19.54, a defined benefit liability recognised in the balance sheet is the net total of the following amounts:

1. The present value of the defined benefit obligation at the balance sheet date (see IAS 19.64);
2. Plus any actuarial gains (less any actuarial losses) not recognised because of the treatment set out in IAS 19.92–19.93;
3. Minus any past service cost not yet recognised (see IAS 19.96);
4. Minus the fair value at the balance sheet date of plan assets (if any) out of which the obligations are to be settled directly (see IAS 19.102–19.104) (see Example 12.5).

Example 12.5 Company A has a defined benefit plan for its employees, and the movements on the defined benefit obligation and plan assets are set out below:

Liabilities (or obligation)	\$'000	Plan (scheme) assets	\$'000
Balance b/f	1,000	Balance b/f	900
Current service cost	100	Contribution made	100
Interest cost	5	Expected return on assets	20
Past service cost	7		<u>1,020</u>
Curtailement/settlement	6		
	<u>1,118</u>		
Actuarial loss	25	Actuarial gain	5
Present value of obligation	<u>1,143</u>	Fair value of plan assets	<u>1,025</u>

Company A has recognised all costs, except for actuarial gain and loss. Actuarial loss of \$8,000 has been recognised during the year.

Required:

Calculate the amount recognised in the balance sheet and reconcile it to the present value of defined benefit obligation.

Answers

	\$'000
Amount recognised in the balance sheet and reconciliation:	
Present value of defined benefit obligation	1,143
Less: Fair value of plan assets	<u>1,025</u>
	118
Less: Unrecognised actuarial loss (\$25 – \$5 – \$8)	<u>(12)</u>
Balance recognised in the balance sheet	<u>106</u>

The **present value of a defined benefit obligation** is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

Actuarial gains and losses comprise

- experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred); and
- the effects of changes in actuarial assumptions.

Fair value is the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.

Past service cost

- is the increase in the present value of the defined benefit obligation for employee service in prior periods, resulting in the current period from the introduction of, or changes to, post-employment benefits or other long-term employee benefits; and
- may be either positive (where benefits are introduced or improved) or negative (where existing benefits are reduced).

Plan assets comprise

- assets held by a long-term employee benefit fund; and
- qualifying insurance policies.

An entity determines the present value of defined benefit obligations and the fair value of any plan assets with sufficient regularity that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the balance sheet date.

IAS 19 encourages, but does not require, an entity to involve a qualified actuary in the measurement of all material post-employment benefit obligations. If a qualified actuary carries out a detailed valuation of the obligation before the balance sheet date, the results of that valuation are updated for any material transactions and other material changes in circumstances (including changes in market prices and interest rates) up to the balance sheet date.

The amount determined and recognised in the balance sheet may be negative (i.e., an asset). An entity is required by IAS 19.58 to measure the resulting asset at the lower of

1. the amount determined under IAS 19.54 [IAS 19.58(a)]; and
2. the total of
 - a. any cumulative unrecognised net actuarial losses and past service cost (see IAS 19.92, 19.93 and 19.96) [IAS 19.58(b)(i)]; and
 - b. the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. The present value of these economic benefits is determined using the discount rate specified in IAS 19.78 [IAS 19.58(b)(ii)].

The application of the above requirement shall not result in

- a gain being recognised solely as a result of an actuarial loss or past service cost in the current period; or
- a loss being recognised solely as a result of an actuarial gain in the current period.

In accordance with IAS 19.58A, the entity therefore recognises immediately under IAS 19.54 the following, to the extent that they arise while the defined benefit asset is determined under IAS 19.58(b):

1. Net actuarial losses of the current period and past service cost of the current period to the extent that they exceed any reduction in the present value of the economic benefits specified in paragraph IAS 19.58(b)(ii). If there is no change or an increase in the present value of the economic benefits, the entire net actuarial losses of the current period and past service cost of the current period are recognised immediately under IAS 19.54.
2. Net actuarial gains of the current period after the deduction of past service cost of the current period to the extent that they exceed any increase in the present value of the economic benefits specified in IAS 19.58(b)(ii). If there is no change or a decrease in the present value of the economic benefits, the entire net actuarial gains of the current period after the deduction of past service cost of the current period are recognised immediately under IAS 19.54.

IAS 19.58A applies to an entity only if it has, at the beginning or end of the accounting period, a surplus in a defined benefit plan and cannot, based on the current terms of the plan, recover that surplus fully through refunds or reductions in future contributions. In such cases, past service cost and actuarial losses that arise in the period, the recognition of which is deferred under IAS 19.54, will increase the amount specified in IAS 19.58(b)(i). If that increase is not offset by an equal decrease in the present value of economic benefits that qualify for recognition under IAS 19.58(b)(ii), there will be an increase in the net total specified by IAS 19.58(b) and, hence, a recognised gain. IAS 19.58A prohibits the recognition of a gain in these circumstances.

The opposite effect arises with actuarial gains that arise in the period, the recognition of which is deferred under IAS 19.54, to the extent that the actuarial gains reduce cumulative unrecognised actuarial losses. IAS 19.58A prohibits the recognition of a loss in these circumstances (see Appendix C to IAS 19 for numerical examples).

An asset may arise where a defined benefit plan has been overfunded or in certain cases where actuarial gains are recognised. An entity recognises an asset in such cases because

1. the entity controls a resource, which is the ability to use the surplus to generate future benefits;
2. that control is a result of past events (contributions paid by the entity and service rendered by the employee); and
3. future economic benefits are available to the entity in the form of a reduction in future contributions or a cash refund, either directly to the entity or indirectly to another plan in deficit.

Profit or Loss

IAS 19.61 requires an entity to recognise the net total of the following amounts in profit or loss, except to the extent that another IFRS requires or permits their inclusion in the cost of an asset:

1. Current service cost;
2. Interest cost;
3. The expected return on any plan assets and on any reimbursement rights;
4. Actuarial gains and losses as required in accordance with the entity's accounting policy;
5. Past service cost;
6. The effect of any curtailments or settlements; and
7. The effect of the limit in IAS 19.58(b), unless it is recognised outside profit or loss in accordance with IAS 19.93C (see Example 12.6).

Current service cost is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.

Interest cost is the increase during a period in the present value of a defined benefit obligation that arises because the benefits are one period closer to settlement.

The **return on plan assets** is interest, dividends and other revenue derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less any costs of administering the plan and less any tax payable by the plan itself.

Example 12.6 Same information as in Example 12.5.

Required:

Calculate the amount charged to profit or loss, and prepare the related journal entries that should be recorded by Company A.

Answers

	\$'000
The charges/(credit) to the profit or loss include:	
Current service cost	100
Interest cost	5
Past service cost	7
Settlement and curtailment cost	6
Actuarial loss recognised during the year	8
Expected return on plan assets	(20)

The following journal entries should be recorded by Company A:

Dr P/L – Current service cost	\$100,000	
Cr Retirement plan.....		\$100,000
To charge the current service cost to income statement.		
Dr P/L – Interest cost	\$5,000	
Cr Retirement plan.....		\$5,000
To charge the interest cost to income statement.		
Dr P/L – Past service cost.....	\$7,000	
Cr Retirement plan.....		\$7,000
To charge the past service cost to income statement.		
Dr P/L – Settlement and curtailment cost.....	\$6,000	
Cr Retirement plan.....		\$6,000
To charge the settlement and curtailment cost to income statement.		
Dr P/L – Actuarial loss.....	\$8,000	
Cr Retirement plan.....		\$8,000
To charge the actuarial loss recognised during the year.		
Dr Retirement plan.....	\$20,000	
Cr P/L – Expected return on plan assets		\$20,000
To recognise expected return on plan assets.		

12.4.3.2 Recognition and Measurement – Present Value of Defined Benefit Obligations and Current Service Cost

The ultimate cost of a defined benefit plan may be influenced by many variables, such as final salaries, employee turnover and mortality, medical cost trends and, for a funded plan, the investment earnings on the plan assets. The ultimate cost of the plan is uncertain, and this uncertainty is likely to persist over a long period of time.

In order to measure the present value of the post-employment benefit obligations and the related current service cost, it is necessary to

1. apply an actuarial valuation method;
2. attribute benefit to periods of service; and
3. make actuarial assumptions.

Actuarial Valuation Method

IAS 19.64 requires that an entity use the projected unit credit method to determine the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost. As discussed in IAS 19.65, this method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation (see Example 12.7).

Example 12.7 A lump sum benefit is payable on termination of service and equal to 1% of final salary for each year of service. The salary in year 1 is \$100,000, and salary is assumed to increase at 7% (compound) each year. The discount rate used is 10% per annum.

The following table shows how the obligation builds up for an employee who is expected to leave at the end of year 5, assuming that there are no changes in actuarial assumptions. For simplicity, this example ignores the additional adjustment needed to reflect the probability that the employee may leave the entity at an earlier or later date.

	Year 1	Year 2	Year 3	Year 4	Year 5
	\$	\$	\$	\$	\$
Benefit attributed to:					
prior years	0	1,310.8	2,621.6	3,932.4	5,243.2
current year (1% of final salary) ¹	1,310.8	1,310.8	1,310.8	1,310.8	1,310.8
current and prior years	1,310.8	2,621.6	3,932.4	5,243.2	6,554.0
Opening obligation ²	0	895.3	1,969.6	3,249.9	4,766.5
Interest at 10%	0	89.5	197.0	325.0	476.7
Current service cost ³	895.3	984.8	1,083.3	1,191.6	1,310.8
Closing obligation ⁴	895.3	1,969.6	3,249.9	4,766.5	6,554.0

Note

- Final salary = $\$100,000 \times (1 + 7\%)^4 = \$131,080$
1% of final salary = $\$131,080 \times 1\% = \$1,310.8$
- The opening obligation is the present value of benefit attributed to prior years.
- The current service cost is the present value of benefit attributed to the current year.
Year 1: $\$1,310.8 \div (1 + 10\%)^4 = \895.3
Year 2: $\$1,310.8 \div (1 + 10\%)^3 = \984.8
Year 3: $\$1,310.8 \div (1 + 10\%)^2 = \$1,083.3$
Year 4: $\$1,310.8 \div (1 + 10\%)^1 = \$1,191.6$
- The closing obligation is the present value of benefit attributed to current and prior years.

Note that an entity discounts the whole of a post-employment benefit obligation, even if part of the obligation falls due within 12 months of the balance sheet date.

Attributing Benefit to Periods of Service

In determining the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost, an entity attributes benefit to periods of service under the plan's benefit formula. However, if an employee's service in later years leads to a materially higher level of benefit than in earlier years, the entity is required to attribute benefit on a straight-line basis from

1. the date when service by the employee first leads to benefits under the plan (whether or not the benefits are conditional on further service); until
2. the date when further service by the employee will lead to no material amount of further benefits under the plan, other than from further salary increases (IAS 19.67).

In line with the first part of IAS 19.67 requirements, the projected unit credit method requires an entity to attribute benefit to

1. the current period in order to determine current service cost; and
2. the current and prior periods in order to determine the present value of defined benefit obligations.

The obligation arises as employees render services in return for post-employment benefits that an entity expects to pay in future reporting periods. Actuarial techniques allow an entity to measure that obligation with sufficient reliability to justify recognition of a liability (see Example 12.8).

- Example 12.8**
1. A defined benefit plan provides a lump-sum benefit of \$10,000 payable on retirement for each year of service.
 - a. A benefit of \$10,000 is attributed to each year.
 - b. The current service cost is the present value of \$10,000.
 - c. The present value of the defined benefit obligation is the present value of \$10,000, multiplied by the number of years of service up to the balance sheet date.
 - d. If the benefit is payable immediately when the employee leaves the entity, the current service cost and the present value of the defined benefit obligation reflect the date at which the employee is expected to leave. Thus, because of the effect of discounting, they are less than the amounts that would be determined if the employee left at the balance sheet date.
 2. A plan provides a monthly pension of 0.2% of final salary for each year of service. The pension is payable from the age of 65.
 - a. Benefit equal to the present value, at the expected retirement date, of a monthly pension of 0.2% of the estimated final salary payable from the expected retirement date until the expected date of death is attributed to each year of service.

- b. The current service cost is the present value of that benefit.
- c. The present value of the defined benefit obligation is the present value of monthly pension payments of 0.2% of final salary, multiplied by the number of years of service up to the balance sheet date.
- d. The current service cost and the present value of the defined benefit obligation are discounted because pension payments begin at the age of 65.

Employee service gives rise to an obligation under a defined benefit plan even if the benefits are conditional on future employment (i.e., they are not vested). Employee service before the vesting date gives rise to a constructive obligation because at each successive balance sheet date, the amount of future service that an employee will have to render before becoming entitled to the benefit is reduced. In measuring its defined benefit obligation, an entity considers the probability that some employees may not satisfy any vesting requirements (see Example 12.9).

- Example 12.9**
1. A plan pays a benefit of \$10,000 for each year of service. The benefits vest after 10 years of service.
A benefit of \$10,000 is attributed to each year. In each of the first 10 years, the current service cost and the present value of the obligation reflect the probability that the employee may not complete 10 years of service.
 2. A plan pays a benefit of \$10,000 for each year of service, excluding service before the age of 25. The benefits vest immediately.
No benefit is attributed to service before the age of 25 because service before that date does not lead to benefits (conditional or unconditional). A benefit of \$10,000 is attributed to each subsequent year.

Similarly, although certain post-employment benefits, for example, post-employment medical benefits, become payable only if a specified event occurs when an employee is no longer employed, an obligation is created when the employee renders service that will provide entitlement to the benefit if the specified event occurs. The probability that the specified event will occur affects the measurement of the obligation but does not determine whether the obligation exists.

The obligation increases until the date when further service by the employee leads to no material amount of further benefits. Therefore, all benefit is attributed to periods ending on or before that date (see Scenarios 1 to 3 of Example 12.10). Benefit is attributed to individual accounting periods under the plan's benefit formula. However, if an employee's service in later years leads to a materially higher level of benefit than in earlier years, the entity attributes benefit on a straight-line basis until the date when further service by the employee leads to no material amount of further benefits as required by IAS 19.67 (see Scenario 4 of Example 12.10).

Example 12.10 Scenario 1

A plan pays a lump-sum benefit of \$100,000 that vests after 10 years of service. The plan provides no further benefit for subsequent service.

- A benefit of \$10,000 ($\$100,000 \div 10$) is attributed to each of the first 10 years.
- The current service cost in each of the first 10 years reflects the probability that the employee may not complete 10 years of service.
- No benefit is attributed to subsequent years.

Scenario 2

A plan pays a lump-sum retirement benefit of \$200,000 to all employees who are still employed at the age of 55 after 20 years of service, or who are still employed at the age of 65 regardless of their length of service.

- For employees who join before the age of 35, service first leads to benefits under the plan at the age of 35. Those benefits are conditional on further service. Also, service beyond the age of 55 will lead to no material amount of further benefits. For these employees, the entity attributes benefit of \$10,000 ($\$200,000$ divided by 20) to each year from the age of 35 to the age of 55.
- For employees who join between the ages of 35 and 45, service beyond 20 years will lead to no material amount of further benefits. For these employees, the entity attributes benefit of \$10,000 ($\$200,000$ divided by 20) to each of the first 20 years.
- For an employee who joins at the age of 55, service beyond 10 years will lead to no material amount of further benefits. For this employee, the entity attributes benefit of \$20,000 ($\$200,000$ divided by 10) to each of the first 10 years.
- For all employees, the current service cost and the present value of the obligation reflect the probability that the employee may not complete the necessary period of service.

Scenario 3

A post-employment medical plan reimburses 40% of an employee's post-employment medical costs if the employee leaves after more than 10 and less than 20 years of service and 50% of those costs if the employee leaves after 20 or more years of service.

- Under the plan's benefit formula, the entity attributes 4% of the present value of the expected medical costs (40% divided by 10) to each of the first 10 years and 1% (10% divided by 10) to each of the second 10 years.
- The current service cost in each year reflects the probability that the employee may not complete the necessary period of service to earn part or all of the benefits.
- For employees expected to leave within 10 years, no benefit is attributed.

Scenario 4

A post-employment medical plan reimburses 10% of an employee's post-employment medical costs if the employee leaves after more than 10 and less than 20 years of service and 50% of those costs if the employee leaves after 20 or more years of service. Service in later years will lead to a materially higher level of benefit than in earlier years.

- For employees expected to leave after 20 or more years, the entity attributes benefit on a straight-line basis under IAS 19.67. Since service beyond 20 years will lead to no material amount of further benefits, the benefit attributed to each of the first 20 years is 2.5% of the present value of the expected medical costs (50% divided by 20).
- For employees expected to leave after 10 to 20 years, the benefit attributed to each of the first 10 years is 1% of the present value of the expected medical costs. For these employees, no benefit is attributed to service between the end of the 10th year and the estimated date of leaving.
- For employees expected to leave within 10 years, no benefit is attributed.

Where the amount of a benefit is a constant proportion of final salary for each year of service, future salary increases will affect the amount required to settle the obligation that exists for service before the balance sheet date, but do not create an additional obligation. Therefore:

1. For the purpose of IAS 19.67(b), salary increases do not lead to further benefits, even though the amount of the benefits is dependent on final salary; and
2. The amount of benefit attributed to each period is a constant proportion of the salary to which the benefit is linked (see Example 12.11).

Example 12.11 Employees are entitled to a benefit of 3% of final salary for each year of service before the age of 55.

Benefit of 3% of estimated final salary is attributed to each year up to the age of 55. This is the date when further service by the employee will lead to no material amount of further benefits under the plan. No benefit is attributed to service after that age.

Actuarial Assumptions

IAS 19.72 requires that the actuarial assumptions used should be unbiased and mutually compatible. Actuarial assumptions are unbiased if they are neither imprudent

nor excessively conservative. Being an entity's best estimates of the variables that will determine the ultimate cost of providing post-employment benefits, actuarial assumptions comprise the following:

1. Demographic assumptions about the future characteristics of current and former employees (and their dependants) who are eligible for benefits, dealing with matters such as
 - a. mortality, both during and after employment;
 - b. rates of employee turnover, disability and early retirement;
 - c. the proportion of plan members with dependants who will be eligible for benefits; and
 - d. claim rates under medical plans; and
2. Financial assumptions, dealing with items such as
 - a. the discount rate;
 - b. future salary and benefit levels;
 - c. in the case of medical benefits, future medical costs, including, where material, the cost of administering claims and benefit payments; and
 - d. the expected rate of return on plan assets.

IAS 19 requires that financial assumptions should be based on market expectations, at the balance sheet date, for the period over which the obligations are to be settled (IAS 19.77).

The rate used to discount post-employment benefit obligations (both funded and unfunded) is determined by reference to market yields at the balance sheet date on high-quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at the balance sheet date) on government bonds shall be used. The currency and term of the corporate bonds or government bonds should be consistent with the currency and estimated term of the post-employment benefit obligations (IAS 19.78).

Regarding actuarial assumptions of salaries, benefits and medical costs, post-employment benefit obligations are measured on a basis that reflects

1. estimated future salary increases based on inflation, seniority, promotion and employment market situation;
2. the benefits set out in the terms of the plan (or resulting from any constructive obligation that goes beyond those terms) at the balance sheet date; and
3. estimated future changes in the level of any state benefits that affect the benefits payable under a defined benefit plan, if, and only if, either
 - a. those changes were enacted before the balance sheet date; or
 - b. past history, or other reliable evidence, indicates that those state benefits will change in some predictable manner, for example, in line with future changes in general price levels or general salary levels.

Assumptions about medical costs take into account estimated future changes in the cost of medical services, resulting from both inflation and specific changes in medical costs.

Actuarial Gains and Losses

Actuarial gains and losses may result from increases or decreases in either the present value of a defined benefit obligation or the fair value of any related plan assets. Causes of actuarial gains and losses include, for example:

1. Unexpectedly high or low rates of employee turnover, early retirement or mortality or of increases in salaries, benefits (if the formal or constructive terms of a plan provide for inflationary benefit increases) or medical costs;
2. The effect of changes in estimates of future employee turnover, early retirement or mortality or of increases in salaries, benefits (if the formal or constructive terms of a plan provide for inflationary benefit increases) or medical costs;
3. The effect of changes in the discount rate; and
4. Differences between the actual return on plan assets and the expected return on plan assets (see IAS 19.105–19.107).

In the long term, actuarial gains and losses may offset one another. Therefore, estimates of post-employment benefit obligations may be viewed as a range (or “corridor”) around the best estimate. An entity is permitted, but not required, to recognise actuarial gains and losses that fall within that range.

10% “Corridor” Rule In measuring its defined benefit liability in accordance with IAS 19.54, an entity, subject to IAS 19.58A, recognises a portion of its actuarial gains and losses as income or expense if the net cumulative unrecognised actuarial gains and losses at the end of the previous reporting period exceeded the greater of

- 10% of the present value of the defined benefit obligation at that date (before deducting plan assets); and
- 10% of the fair value of any plan assets at that date (IAS 19.92).

An entity calculates and applies these limits separately for each defined benefit plan.

The portion of actuarial gains and losses to be recognised for each defined benefit plan is the excess determined in accordance with IAS 19.92, divided by the expected average remaining working lives of the employees participating in that plan (see Example 12.12).

Example 12.12 The following information is given about a funded defined benefit plan. To keep interest computations simple, all transactions are assumed to occur at year-end. The present value of the obligation and the fair value of the plan assets were both \$1 million at 1 January 2007. Net cumulative unrecognised actuarial gains at that date were \$140,000.

	2007	2008	2009
Discount rate at start of year.....	10.0%	9.0%	8.0%
Expected rate of return on plan assets at start of year	12.0%	11.1%	10.3%
	\$'000	\$'000	\$'000
Current service cost.....	130	140	150
Benefits paid	150	180	190
Contributions paid	90	100	110
Present value of obligation at 31 December.....	1,141	1,117	1,208
Fair value of plan assets at 31 December	1,092	1,109	1,093
Expected average remaining working lives of employees (years).....	10	10	10

Required:

1. Summarise the changes in the present value of the obligation and in the fair value of the plan assets and determine the amount of the actuarial gains or losses for the period.
2. Determine the limits of “10% corridor” and the net actuarial gain or loss to be recognised in the following period.
3. Determine the amounts to be recognised in the balance sheet and profit or loss.

Answers

1. The following table summarises the changes in the present value of the obligation and in the fair value of the plan assets and shows the computation of the amounts of the actuarial gains or losses for the period.

	2007 \$'000	2008 \$'000	2009 \$'000
Present value of obligation, 1 January	1,000	1,141	1,117
Interest cost.....	100	103	89
Current service cost	130	140	150
Benefits paid.....	(150)	(180)	(190)
Actuarial (gain) loss on obligation (balancing figure)	61	(87)	42
Present value of obligation, 31 December.....	<u>1,141</u>	<u>1,117</u>	<u>1,208</u>
Fair value of plan assets, 1 January	1,000	1,092	1,109
Expected return on plan assets	120	121	114
Contributions	90	100	110
Benefits paid.....	(150)	(180)	(190)
Actuarial gain (loss) on plan assets (balancing figure)	32	(24)	(50)
Fair value of plan assets, 31 December.....	<u>1,092</u>	<u>1,109</u>	<u>1,093</u>

2. The limits of the “corridor”, and the recognised and unrecognised actuarial gains and losses are as follows:

The limits of the “corridor”

	2007 \$'000	2008 \$'000	2009 \$'000
(A) 10% of the present value of the obligation before deducting plan assets	100	114	112
(B) 10% of the fair value of any plan assets	100	109	111
Greater of (A) and (B)	100	114	112

Actuarial gains and losses to be recognised

	2007 \$'000	2008 \$'000	2009 \$'000
Net cumulative unrecognised actuarial gains (losses) at 1 January	140	107	170
Limits of “corridor” at 1 January	100	114	112
Excess [A].	40	–	58
Average expected remaining working lives (years) [B]	10	10	10
Actuarial gain (loss) to be recognised [A/B].	4	–	6

Unrecognised actuarial gains and losses

	2007 \$'000	2008 \$'000	2009 \$'000
Unrecognised actuarial gains (losses) at 1 January	140	107	170
Actuarial gain (loss) for year – obligation	(61)	87	(42)
Actuarial gain (loss) for year – plan assets	32	(24)	(50)
Subtotal	111	170	78
Actuarial (gain) loss recognised	(4)	–	(6)
Unrecognised actuarial gains (losses) at 31 December	107	170	72

3. The limits to be recognised in the balance sheet and profit or loss are as follows:

	2007 \$'000	2008 \$'000	2009 \$'000
Present value of the obligation.....	1,141	1,117	1,208
Fair value of plan assets	(1,092)	(1,109)	(1,093)
	49	8	115
Unrecognised actuarial gains (losses).....	107	170	72
Liability recognised in balance sheet	156	178	187
Current service cost	130	140	150
Interest cost.....	100	103	89
Expected return on plan assets	(120)	(121)	(114)
Net actuarial (gain) loss recognised in year	(4)	–	(6)
Expense recognised in profit or loss.....	106	122	119

Faster recognition in profit or loss An entity may, however, adopt any systematic method:

1. that results in faster recognition of actuarial gains and losses;
2. provided that the same basis is applied to both gains and losses; and
3. the basis is applied consistently from period to period.

An entity may apply such systematic methods to actuarial gains and losses even if they are within the limits (i.e., 10% corridor) specified in IAS 19.92 (IAS 19.93).

Faster recognition outside profit or loss in other comprehensive income If an entity adopts a policy of recognising actuarial gains and losses in the period in which they occur, it may recognise them outside profit or loss (or in other comprehensive income), in accordance with IAS 19.93B–19.93D, providing it does so for

1. all of its defined benefit plans; and
2. all of its actuarial gains and losses (IAS 19.93A).

They should be presented in the statement of comprehensive income. An entity that recognises actuarial gains and losses in accordance with IAS 19.93A recognises any adjustments arising from the limit in IAS 19.58(b) in other comprehensive income (see Real-life Case 12.3).

Real-life

Case 12.3

Hutchison Whampoa Limited

As per Real-life Case 12.1, the 2006 annual report of Hutchison Whampoa stated the following accounting policy for actuarial gains and losses and pension costs:

**Real-life
Case 12.3**

(cont'd)

- The group operates several defined benefit plans.
- Actuarial gains and losses are recognised in full in the year in which they occur, outside profit or loss, in reserves.

In addition, the annual report disclosed:

- Management appointed actuaries to carry out a full valuation of these pension plans to determine the pension obligations that are required to be disclosed and accounted for in the accounts in accordance with the IFRS requirements.
- The actuaries use assumptions and estimates in determining the fair value of the defined benefit plans and evaluate and update these assumptions on an annual basis. Judgement is required to determine the principal actuarial assumptions to determine the present value of defined benefit obligations and service costs. Changes to the principal actuarial assumptions can significantly affect the present value of plan obligations and service costs in future periods.

The annual report then disclosed the amount of faster recognition of actuarial gains:

	2006 US\$ million	2006 HK\$ million	2005 HK\$ million
Actuarial gains and losses of defined benefit plans.....	81	636	(283)

In summary, IAS 19 requires an entity to recognise, at a minimum, a specified portion of the actuarial gains and losses that fall outside a “corridor” of plus or minus 10%. (Appendix A to IAS 19 illustrates the treatment of actuarial gains and losses, among other things.) IAS 19 also permits systematic methods of faster recognition (e.g., immediate recognition of all actuarial gains and losses), provided that those methods satisfy the conditions set out in IAS 19.93 or 19.93A.

Past Service Cost

In measuring its defined benefit liability under IAS 19.54, an entity, subject to IAS 19.58A, recognises past service cost as an expense

1. on a straight-line basis over the average period until the benefits become vested; or
2. immediately, to the extent that the benefits are already vested immediately following the introduction of, or changes to, a defined benefit plan by an entity (see Example 12.13).

- Example 12.13**
- An entity operates a pension plan that provides a pension of 2% of final salary for each year of service. The benefits become vested after 5 years of service.
 - On 1 January 2008, the entity improves the pension to 2.5% of final salary for each year of service starting from 1 January 2004.
 - At the date of the improvement, the present value of the additional benefits for service from 1 January 2004 to 1 January 2008 is as follows:

Employees with more than 5 years' service at 1/1/08	\$150,000
Employees with less than 5 years' service at 1/1/08 (average period until vesting: 3 years)	120,000
	<u>\$270,000</u>

- The entity recognises \$150,000 immediately because those benefits are already vested.
- The entity recognises \$120,000 on a straight-line basis over 3 years from 1 January 2008.

Past service cost arises when an entity introduces a defined benefit plan or changes the benefits payable under an existing defined benefit plan. Such changes are in return for employee service over the period until the benefits concerned are vested. Therefore, past service cost is recognised over that period, regardless of the fact that the cost refers to employee service in previous periods. Past service cost is measured as the change in the liability resulting from the amendment (see Example 12.14).

- Example 12.14** Same information as in Example 12.12, except for the following:

	2007	2008	2009
	\$	\$	\$
Present value of obligation at 31 December	1,141	1,197	1,295

In 2008, the plan was amended to provide additional benefits with effect from 1 January 2008. The present value as at 1 January 2008 of additional benefits for employee service before 1 January 2008 was \$50,000 for vested benefits and \$30,000 for non-vested benefits. As at 1 January 2008, the entity estimated that the average period until the non-vested benefits would become vested was 3 years; the past service cost arising from additional non-vested benefits is therefore recognised on a straight-line basis over 3 years. The entity has adopted a policy of recognising actuarial gains and losses under the minimum requirements of IAS 19.93.

Required:

1. Summarise the changes in the present value of the obligation and in the fair value of the plan assets and determine the amount of the actuarial gains or losses for the period.
2. Determine the limits of “10% corridor” and the net actuarial gain or loss to be recognised in the following period.
3. Determine the amounts to be recognised in the balance sheet and profit or loss.

Answers

1. The following table summarises the changes in the present value of the obligation and in the fair value of the plan assets and shows the computation of the amounts of the actuarial gains or losses for the period.

	2007 \$'000	2008 \$'000	2009 \$'000
Present value of obligation, 1 January	1,000	1,141	1,197
Interest cost	100	103	96
Current service cost	130	140	150
Past service cost – non-vested benefits	–	30	–
Past service cost – vested benefits	–	50	–
Benefits paid	(150)	(180)	(190)
Actuarial (gain) loss on obligation (balancing figure)	61	(87)	42
Present value of obligation, 31 December	<u>1,141</u>	<u>1,197</u>	<u>1,295</u>
Fair value of plan assets, 1 January	1,000	1,092	1,109
Expected return on plan assets	120	121	114
Contributions	90	100	110
Benefits paid	(150)	(180)	(190)
Actuarial gain (loss) on plan assets (balancing figure)	32	(24)	(50)
Fair value of plan assets, 31 December	<u>1,092</u>	<u>1,109</u>	<u>1,093</u>

2. The limits of the “corridor”, and the recognised and unrecognised actuarial gains and losses are as follows:

The limits of the “corridor”

	2007 \$'000	2008 \$'000	2009 \$'000
(A) 10% of the present value of the obligation before deducting plan assets	100	114	120
(B) 10% of the fair value of any plan assets	100	109	111
Greater of (A) and (B)	100	114	120

Actuarial gains and losses to be recognised

	2007 \$'000	2008 \$'000	2009 \$'000
Net cumulative unrecognised actuarial gains (losses) at 1 January . .	140	107	170
Limits of “corridor” at 1 January	<u>100</u>	<u>114</u>	<u>120</u>
Excess [A].	<u>40</u>	–	<u>50</u>
Average expected remaining working lives (years) [B]	10	10	10
Actuarial gain (loss) to be recognised [A/B].	<u>4</u>	–	<u>5</u>

Unrecognised actuarial gains and losses

	2007 \$'000	2008 \$'000	2009 \$'000
Unrecognised actuarial gains (losses) at 1 January.	140	107	170
Actuarial gain (loss) for year – obligation	(61)	87	(42)
Actuarial gain (loss) for year – plan assets	<u>32</u>	<u>(24)</u>	<u>(50)</u>
Subtotal	111	170	78
Actuarial (gain) loss recognised	<u>(4)</u>	–	<u>(5)</u>
Unrecognised actuarial gains (losses) at 31 December	<u>107</u>	<u>170</u>	<u>73</u>

3. The amounts to be recognised in the balance sheet and profit or loss are as follows:

	2007 \$'000	2008 \$'000	2009 \$'000
Present value of the obligation	1,141	1,197	1,295
Fair value of plan assets	<u>(1,092)</u>	<u>(1,109)</u>	<u>(1,093)</u>
	49	88	202
Unrecognised actuarial gains (losses)	107	170	73
Unrecognised past service cost – non-vested benefits	<u>–</u>	<u>(20)</u>	<u>(10)</u>
Liability recognised in balance sheet	<u>156</u>	<u>238</u>	<u>265</u>
Current service cost	130	140	150
Interest cost	100	103	96
Expected return on plan assets	(120)	(121)	(114)
Net actuarial (gain) loss recognised in year	(4)	–	(5)
Past service cost – non-vested benefits	–	10	10
Past service cost – vested benefits	<u>–</u>	<u>50*</u>	<u>–</u>
Expense recognised in profit or loss	<u>106</u>	<u>182</u>	<u>137</u>

* The past service cost arising from additional vested benefits is recognised immediately in accordance with IAS 19.96.

Where an entity reduces benefits payable under an existing defined benefit plan, the resulting reduction in the defined benefit liability is recognised as (negative) past service cost over the average period until the reduced portion of the benefits becomes vested. Where an entity reduces certain benefits payable under an existing defined benefit plan and, at the same time, increases other benefits payable under the plan for the same employees, the entity treats the change as a single net change.

12.4.3.3 Recognition and Measurement – Plan Assets

Fair Value of Plan Assets

The fair value of any plan assets is deducted in determining the amount recognised in the balance sheet under IAS 19.54. When no market price is available, the fair value of plan assets is estimated; for example, by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets (or, if they have no maturity, the expected period until the settlement of the related obligation).

Where plan assets include qualifying insurance policies that exactly match the amount and timing of some or all of the benefits payable under the plan, the fair value of those insurance policies is deemed to be the present value of the related obligations.

Reimbursements

When, and only when, it is virtually certain that another party will reimburse some or all of the expenditure required to settle a defined benefit obligation, an entity shall recognise its right to reimbursement as a separate asset. In the income statement (or in the statement of comprehensive income), the expense relating to a defined benefit plan may be presented net of the amount recognised for a reimbursement (see Example 12.15).

Example 12.15

Present value of obligation	\$1,241
Unrecognised actuarial gains	17
Liability recognised in income statement	<u>\$1,258</u>
Rights under insurance policies that exactly match the amount and timing of some of the benefits payable under the plan.	
Those benefits have a present value of	<u>\$1,092</u>

The unrecognised actuarial gains of \$17 are the net cumulative actuarial gains on the obligation and on the reimbursement rights.

If the right to reimbursement arises under an insurance policy that exactly matches the amount and timing of some or all of the benefits payable under a defined benefit plan, the fair value of the reimbursement right is deemed to be the present value of the related obligation.

Return on Plan Assets

The expected return on plan assets is one component of the expense recognised in the profit or loss. The difference between the expected return on plan assets and the actual return on plan assets is an actuarial gain or loss; it is included with the actuarial gains and losses on the defined benefit obligation in determining the net amount that is compared with the limits of the 10% “corridor” (see Example 12.16).

Example 12.16 Same information as in Example 12.12.

Required:

Determine the return on plan assets and the related disclosure.

Answers

	2007	2008	2009
	\$'000	\$'000	\$'000
Fair value of plan assets, 1 January	1,000	1,092	1,109
Expected return on plan assets (Working 1)	120	121	114
Contributions	90	100	110
Benefits paid	(150)	(180)	(190)
Actuarial gain (loss) on plan assets (balancing figure)	32	(24)	(50)
Fair value of plan assets, 31 December	<u>1,092</u>	<u>1,109</u>	<u>1,093</u>

Working 1

	2007	2008	2009
	\$'000	\$'000	\$'000
Fair value of plan assets, 1 January	1,000	1,092	1,109
Expected rate of return on plan assets at start of year	12.0%	11.1%	10.3%
Expected return on plan assets	<u>120</u>	<u>121</u>	<u>114</u>

Disclosure

	2007	2008	2009
	\$'000	\$'000	\$'000
Expected return on plan assets	120	121	114
Actuarial gain (loss) on plan assets	<u>32</u>	<u>(24)</u>	<u>(50)</u>
Actual return on plan assets	<u>152</u>	<u>97</u>	<u>64</u>

The expected return on plan assets is based on market expectations, at the beginning of the period, for returns over the entire life of the related obligation. The expected return on plan assets reflects changes in the fair value of plan assets held during the period as a result of actual contributions paid into the fund and actual benefits paid out of the fund. In determining the expected and actual return on plan assets, an entity deducts expected administration costs, other than those included in the actuarial assumptions used to measure the obligation (see Example 12.17).

Example 12.17 At 1 January 2007, the fair value of plan assets was \$10 million and net cumulative unrecognised actuarial gains were \$760,000. On 30 June 2007, the plan paid benefits of \$1,900,000 and received contributions of \$4,900,000. At 31 December 2007, the fair value of plan assets was \$15 million and the present value of the defined benefit obligation was \$14,792,000. Actuarial losses on the obligation for 2007 were \$60,000. At 1 January 2007, the reporting entity made the following estimates, based on market prices at that date:

	%
Interest and dividend income, after tax payable by the fund	9.25
Realised and unrealised gains on plan assets (after tax)	2.00
Administration costs	(1.00)
Expected rate of return	<u>10.25</u>

Required:

Determine the expected and actual return on plan assets for 2007.

Answers

For 2007, the expected and actual return on plan assets are as follows:

	\$'000
Return on \$10 million held for 12 months at 10.25%	1,025
Return on \$3 million held for 6 months at 5% (equivalent to 10.25% annually, compounded every 6 months)	<u>150</u>
Expected return on plan assets for 2007	<u>1,175</u>
Fair value of plan assets at 31 December 2007	15,000
Less fair value of plan assets at 1 January 2007	(10,000)
Less contributions received	(4,900)
Add benefits paid	1,900
Actual return on plan assets	<u>2,000</u>

The difference between the expected return on plan assets (\$1,175,000) and the actual return on plan assets (\$2 million) is an actuarial gain of \$825,000. Therefore, the cumulative net unrecognised actuarial gains are \$1,525,000 (\$760,000 plus \$825,000 less \$60,000).

Under IAS 19.92, the limits of the “corridor” are set at \$1,500,000, which is the greater of

- 10% of \$15 million; and
- 10% of \$14,792,000.

In the following year (2008), the entity recognises in profit or loss an actuarial gain of \$25,000 (\$1,525,000 less \$1,500,000) divided by the expected average remaining working life of the employees concerned.

The expected return on plan assets for 2008 will be based on market expectations at 1 January 2008 for returns over the entire life of the obligation.

Business Combinations

In a business combination, an entity recognises assets and liabilities arising from post-employment benefits at the present value of the obligation less the fair value of any plan assets (see IFRS 3 *Business Combinations*). The present value of the obligation includes all of the following, even if the acquiree had not yet recognised them at the acquisition date:

1. Actuarial gains and losses that arose before the acquisition date (whether or not they fell inside the 10% “corridor”);
2. Past service cost that arose from benefit changes, or the introduction of a plan, before the acquisition date; and
3. Amounts that, under the transitional provisions of IAS 19.155(b), the acquiree had not recognised.

Curtailments and Settlements

An entity recognises gains or losses on the curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on a curtailment or settlement comprises

1. any resulting change in the present value of the defined benefit obligation;
2. any resulting change in the fair value of the plan assets;
3. any related actuarial gains and losses and past service cost that, under IAS 19.92 and 96, were not previously recognised.

Before determining the effect of a curtailment or settlement, an entity re-measures the obligation (and the related plan assets, if any) using current actuarial assumptions (including current market interest rates and other current market prices).

A curtailment occurs when an entity either

1. is demonstrably committed to making a material reduction in the number of employees covered by a plan; or
2. amends the terms of a defined benefit plan such that a material element of future service by current employees will no longer qualify for benefits, or will qualify only for reduced benefits.

A curtailment may arise from an isolated event, such as the closing of a plant, discontinuance of an operation or termination or suspension of a plan. Curtailments are often linked with a restructuring. Thus, an entity accounts for a curtailment at the same time as for a related restructuring.

A settlement occurs when an entity enters into a transaction that eliminates all further legal or constructive obligation for part or all of the benefits provided under a defined benefit plan, for example, when a lump-sum cash payment is made to, or on behalf of, plan participants in exchange for their rights to receive specified post-employment benefits.

A settlement occurs together with a curtailment if a plan is terminated such that the obligation is settled and the plan ceases to exist. However, the termination of a plan is not a curtailment or settlement if the plan is replaced by a new plan that offers benefits that are, in substance, identical.

Presentation

Offset An entity offsets an asset relating to one plan against a liability relating to another plan when, and only when, the entity

1. has a legally enforceable right to use a surplus in one plan to settle obligations under the other plan; and
2. intends either to settle the obligations on a net basis, or to realise the surplus in one plan and settle its obligation under the other plan simultaneously.

Current/non-current distinction IAS 19 does not specify whether an entity is required to distinguish current and non-current portions of assets and liabilities arising from post-employment benefits.

Financial components of post-employment benefit costs IAS 19 does not specify whether an entity is required to present current service cost, interest cost and the expected return on plan assets as components of a single item of income or expense on the face of the income statement.

Disclosure

An entity discloses information that enables users of financial statements to evaluate the nature of its defined benefit plans and the financial effects of changes in those plans during the period. Specifically, an entity discloses the following information about defined benefit plans:

1. The entity's accounting policy for recognising actuarial gains and losses;
2. A general description of the type of plan;
3. A reconciliation of opening and closing balances of the present value of the defined benefit obligation showing separately, if applicable, the effects during the period attributable to each of the following:
 - a. Current service cost;
 - b. Interest cost;
 - c. Contributions by plan participants;
 - d. Actuarial gains and losses;
 - e. Foreign currency exchange rate changes on plans measured in a currency different from the entity's presentation currency;
 - f. Benefits paid;
 - g. Past service cost;
 - h. Business combinations;
 - i. Curtailments; and
 - j. Settlements.
4. An analysis of the defined benefit obligation into amounts arising from plans that are wholly unfunded and amounts arising from plans that are wholly or partly funded;
5. A reconciliation of the opening and closing balances of the fair value of plan assets and of the opening and closing balances of any reimbursement right recognised as an asset in accordance with IAS 19.104A showing separately, if applicable, the effects during the period attributable to each of the following:
 - a. Expected return on plan assets;
 - b. Actuarial gains and losses;
 - c. Foreign currency exchange rate changes on plans measured in a currency different from the entity's presentation currency;
 - d. Contributions by the employer;
 - e. Contributions by plan participants;
 - f. Benefits paid;
 - g. Business combinations; and
 - h. Settlements.
6. A reconciliation of the present value of the defined benefit obligation in (3) and the fair value of the plan assets in (5) to the assets and liabilities recognised in the balance sheet, showing at least the following:
 - a. The net actuarial gains or losses not recognised in the balance sheet;
 - b. The past service cost not recognised in the balance sheet;
 - c. Any amount not recognised as an asset, because of the limit in IAS 19.58(b);
 - d. The fair value at the balance sheet date of any reimbursement right recognised as an asset in accordance with IAS 19.104A; and
 - e. The other amounts recognised in the balance sheet.

7. The total expense recognised in the profit or loss for each of the following, and the line item(s) in which they are included:
 - a. Current service cost;
 - b. Interest cost;
 - c. Expected return on plan assets;
 - d. Expected return on any reimbursement right recognised as an asset in accordance with IAS 19.104A;
 - e. Actuarial gains and losses;
 - f. Past service cost;
 - g. The effect of any curtailment or settlement; and
 - h. The effect of the limit in IAS 19.58(b).
8. The total amount recognised in the other comprehensive income for each of the following:
 - a. Actuarial gains and losses; and
 - b. The effect of the limit in IAS 19.58(b).
9. For entities that recognise actuarial gains and losses in other comprehensive income in accordance with IAS 19.93A, the cumulative amount of actuarial gains and losses recognised in other comprehensive income;
10. For each major category of plan assets, which shall include, but is not limited to, equity instruments, debt instruments, property, and all other assets, the percentage or amount that each major category constitutes of the fair value of the total plan assets;
11. The amounts included in the fair value of plan assets for the following:
 - a. Each category of the entity's own financial instruments; and
 - b. Any property occupied by, or other assets used by, the entity.
12. A narrative description of the basis used to determine the overall expected rate of return on assets, including the effect of the major categories of plan assets;
13. The actual return on plan assets, as well as the actual return on any reimbursement right recognised as an asset in accordance with IAS 19.104A;
14. The principal actuarial assumptions used as at the balance sheet date, including, when applicable, the following:
 - a. The discount rates;
 - b. The expected rates of return on any plan assets for the periods presented in the financial statements;
 - c. The expected rates of return for the periods presented in the financial statements on any reimbursement right recognised as an asset in accordance with IAS 19.104A;
 - d. The expected rates of salary increases (and of changes in an index or other variable specified in the formal or constructive terms of a plan as the basis for future benefit increases);
 - e. Medical cost trend rates; and
 - f. Any other material actuarial assumptions used.

15. The effect of an increase of one percentage point and the effect of a decrease of one percentage point in the assumed medical cost trend rates on the following:
 - a. The aggregate of the current service cost and interest cost components of net periodic post-employment medical costs; and
 - b. The accumulated post-employment benefit obligation for medical costs.
16. The amounts for the current annual period and previous four annual periods of the following:
 - a. The present value of the defined benefit obligation, the fair value of the plan assets and the surplus or deficit in the plan; and
 - b. The experience adjustments arising on the following:
 - (i) The plan liabilities expressed either as (1) an amount or (2) a percentage of the plan liabilities at the balance sheet date; and
 - (ii) The plan assets expressed either as (1) an amount or (2) a percentage of the plan assets at the balance sheet date.
17. The employer's best estimate, as soon as it can reasonably be determined, of contributions expected to be paid to the plan during the annual period beginning after the balance sheet date.

When an entity has more than one defined benefit plan, disclosures may be made in total, separately for each plan, or in such groupings as are considered to be the most useful. A comprehensive disclosure example is shown in the 2006 annual report of Hong Kong and China Gas Company Limited (see Real-life Case 12.4).

Real-life

Case 12.4

The Hong Kong and China Gas Company Limited

Selected information on employee benefits from the Hong Kong and China Gas Company's 2006 annual report:

- Retirement benefit assets and liabilities

	Group		Company	
	2006 HK\$ million	2005 HK\$ million	2006 HK\$ million	2005 HK\$ million
At 31 December . . .	36.1	(16.1)	36.1	(16.1)

- During the year, the group operated two defined benefit retirement schemes in Hong Kong ... The Workmen Retirement Scheme is a final salary defined benefit scheme ... The contributions made by the group and

**Real-life
Case 12.4**
(cont'd)

the employees before 1 July 2003 are subject to a minimum guaranteed return ... this part of the Local Employees Provident Scheme constitutes a defined benefit scheme. Effective from 1 July 2003, members have been offered investment choices without any minimum guaranteed return ... This part of the Local Employees Provident Scheme is a defined contribution scheme ...

- Effective from 15 February 2006, the Local Employees Provident Scheme was converted into a defined contribution scheme as described in Note 2 (s).
- The amounts recognised in the balance sheet are determined as follows:

	Group and company	
	2006	2005
	HK\$ million	HK\$ million
Fair value of plan assets.....	376.8	1,891.9
Present value of funded obligations.....	(272.0)	(1,832.4)
Present value of overfunded obligations.....	104.8	59.5
Unrecognised actuarial gains.....	(68.7)	(75.6)
Asset/(liability) in the balance sheet.....	<u>36.1</u>	<u>(16.1)</u>
Experience adjustments arising on plan liabilities – gain.....	5.5	6.7
Experience adjustments arising on plan assets – gain.....	<u>119.3</u>	<u>2.2</u>

- The amounts recognised in the income statement are as follows:

	Group and company	
	2006	2005
	HK\$ million	HK\$ million
Current service cost.....	11.5	11.1
Interest cost.....	18.7	78.3
Expected return on plan assets.....	(29.6)	(110.6)
Total.....	<u>0.6</u>	<u>(21.2)</u>

Real-life
Case 12.4

(cont'd)

- The movement in the fair value of plan assets is as follows:

	Group and company	
	2006 HK\$ million	2005 HK\$ million
At 1 January	1,891.9	1,847.3
Expected return on plan assets	29.6	110.6
Actuarial gain	119.3	2.2
Contribution paid	9.1	9.1
Benefits paid	(31.5)	(77.3)
Settlements on curtailment	(1,641.6)	–
At 31 December	<u>376.8</u>	<u>1,891.9</u>

- The actual return on plan assets was HK\$148.9 million (2005: HK\$112.8 million).
- The major categories of plan assets as a percentage of total plan assets are as follows:

	Group and company	
	2006 %	2005 %
Equity securities	70	78.3
Debt securities	19.5	18.0
Cash	10.5	3.7

- The principal actuarial assumptions used are as follows:

	Group and company	
	2006 %	2005 %
Discount rate	3.8	4.3
Expected rate of return on plan assets	6.0	6.0
Expected rate of future salary increases	3.5	3.5

12.5 Other Long-term Employee Benefits

Other long-term employee benefits include, for example, the following:

- Long-term compensated absences such as long-service or sabbatical leave;
- Jubilee or other long-service benefits;
- Long-term disability benefits;
- Profit sharing and bonuses payable 12 months or more after the end of the period in which the employees render the related service; and
- Deferred compensation paid 12 months or more after the end of the period in which it is earned.

Other long-term employee benefits are employee benefits (other than post-employment benefits and termination benefits) that do not fall due wholly within 12 months after the end of the period in which the employees render the related service.

Because measuring other long-term employee benefits is not usually subject to the same degree of uncertainty as measuring post-employment benefits, and the introduction of, or changes to, other long-term employee benefits rarely causes a material amount of past service cost, IAS 19 requires a simplified accounting method for other long-term employee benefits. This method differs from the accounting required for post-employment benefits as follows:

1. Actuarial gains and losses are recognised immediately and no “corridor” is applied; and
2. All past service cost is recognised immediately.

The amount recognised as a liability for other long-term employee benefits shall be the net total of the present value of the defined benefit obligation at the balance sheet date minus the fair value at the balance sheet date of plan assets (if any) out of which the obligations are to be settled directly.

12.6 Summary

Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees, and include short-term employee benefits for current employees, termination benefits, post-employment benefits, and other long-term employee benefits.

Short-term employee benefits include items such as wages, salaries and social security contributions; short-term compensated absences; short-term profit sharing and bonuses payable; and non-monetary benefits for current employees.

When an employee has rendered service to an entity during an accounting period, the entity is required to recognise the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as a liability (accrued expense) after deducting any amount already paid, and as an expense unless another IFRS requires or permits the inclusion of the benefits in the cost of an asset.

An entity recognises termination benefits as a liability and an expense when, and only when, the entity is demonstrably committed to either

1. terminating the employment of an employee or group of employees before the normal retirement date; or
2. providing termination benefits as a result of an offer made in order to encourage voluntary redundancy.

Post-employment benefits include retirement benefits and other benefits such as post-employment medical care. Post-employment benefit plans are classified as either defined contribution plans or defined benefit plans.

When an employee has rendered service to an entity during a period, the entity recognises the contribution payable to a defined contribution plan in exchange for that service as a liability (accrued expense) after deducting any contribution already paid, and an expense.

Accounting by an entity for defined benefit plans involves the following steps:

1. Using actuarial techniques to make a reliable estimate of the amount of benefit that employees have earned in return for their service in the current and prior periods;
2. Discounting that benefit using the projected unit credit method in order to determine the present value of the defined benefit obligation and the current service cost;
3. Determining the fair value of any plan assets;
4. Determining the total amount of actuarial gains and losses and the amount of those actuarial gains and losses to be recognised;
5. Where a plan has been introduced or changed, determining the resulting past service cost; and
6. Where a plan has been curtailed or settled, determining the resulting gain or loss.

Other long-term employee benefits are employee benefits (other than post-employment benefits and termination benefits) that do not fall due wholly within 12 months after the end of the period in which the employees render the related service.

For other long-term employee benefits, an entity recognises the net total of the following amounts as expense or income:

1. Current service cost;
2. Interest cost;
3. The expected return on any plan assets and on any reimbursement right recognised as an asset;
4. Actuarial gains and losses, which shall all be recognised immediately;
5. Past service costs, which shall all be recognised immediately; and
6. The effect of any curtailments or settlements.

Review Questions

1. Define employee benefits.
2. Give some examples of short-term employee benefits.
3. Why is accounting for short-term employee benefits generally straightforward?
4. What criteria need to be satisfied to show that an entity is demonstrably committed to a termination?
5. Give some examples of long-term employee benefits.
6. What are the differences between defined contribution plans and defined benefit plans?
7. Describe how the projected unit credit method is used to determine the present value of defined benefit obligations.
8. Explain the gain or loss on a curtailment or settlement.
9. Explain how to recognise actuarial gains and losses in the period in which they occur, outside profit or loss.
10. Give some examples of other long-term employee benefits.
11. Give some examples of information to be disclosed for employee benefits.

Exercises

Exercise 12.1 Company C has 200 employees, who are each entitled to 5 working days of paid sick leave for each year. Unused sick leave may be carried forward for one calendar year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (a LIFO basis). At 31 December 2007, the average unused entitlement is 2 days per employee. Company C expects, based on past experience, which is expected to continue, that 170 employees will take no more than 5 days of paid sick leave in 2008, and that the remaining 30 employees will take an average of 6 days each. The average daily wage for 2008 is expected to be \$300.

Required:

Determine Company C's expected cost of accumulating compensated absences at 31 December 2007.

Exercise 12.2 Company D's profit sharing plan requires the entity to pay a specified proportion of its net profit for the year to employees who serve throughout the year. If no employees leave during the year, the total profit sharing payments for the year will be 8% of net profit. Company D estimates that staff turnover will reduce the payments to 7% of net profit. The net profit for the current year is \$5 million.

Required:

Determine the expected cost of profit sharing and bonus payments for the current year.

Exercise 12.3 Company A contributes to a defined contribution retirement scheme that is available to salaried employees of the company. Company A's contributions to the retirement scheme are calculated as 10% of the employees' basic salaries and are expensed as incurred. The employees also contribute 5% of their basic salaries to the retirement scheme.

Required:

1. Determine Company A's pension obligation.
2. Determine the amount of post-employment benefits to be received by a particular salaried employee.

Exercise 12.4 A plan pays a lump-sum retirement benefit of \$150,000 to all employees who are still employed at the age of 60 after 20 years of service, or who are still employed at the age of 65 regardless of their length of service.

Required:

Explain how to attribute benefit to periods of services.

Exercise 12.5 Gold Limited operates a pension plan that provides a pension of 3% of final salary for each year of service. The benefits become vested after 5 years of service. On 1 January 2008, Gold improves the pension to 4% of final salary for each year of service starting from 1 January 2004. At the date of the improvement, the present value of the additional benefits for service from 1 January 2004 to 1 January 2008 is as follows:

	\$
Employees with more than 5 years' service at 1/1/08	300,000
Employees with less than 5 years' service at 1/1/08 (average period until vesting: 2 years).....	80,000
	<u>380,000</u>

Required:

Determine when and how much past service costs should be recognised as an expense.

Problems

Problem 12.1 Company B has 2,000 employees, who are each entitled to 7 working days of paid sick leave for each year. Unused sick leave may be carried forward for one calendar year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (a LIFO basis). At 31 December 2007, the average unused entitlement is 3 days per employee. Company B expects,

based on past experience, which is expected to continue, that 1,700 employees will take no more than 6 days of paid sick leave in 2008, that 100 employees will take an average of 8 days each, and that the remaining 200 employees will take an average of 9 days each. The average daily wage for 2008 is expected to be \$300.

Required:

Determine Company B's expected cost of accumulating compensated absences at 31 December 2007.

Problem 12.2 Company E has a defined benefit plan for its employees. The movements on the defined benefit obligation and plan assets are set out below:

Liabilities (or obligation)	\$'000	Plan (scheme) assets	\$'000
Balance b/f	1,000	Balance b/f	950
Current service cost	200	Contribution made	100
Interest cost	15	Expected return on assets	30
Past service cost	10		<u>1,080</u>
Curtailed/settlement	8		
	<u>1,233</u>		
Actuarial loss	30	Actuarial gain	10
Present value of obligation	<u>1,203</u>	Fair value of plan assets	<u>1,090</u>

Company E has recognised all cost, except for actuarial gain and loss. Actuarial loss of only \$9,000 has been recognised during the year.

Required:

1. Calculate the amount recognised in the balance sheet and reconcile it to the present value of defined benefit obligation.
2. Calculate the amount charged to profit or loss.

Problem 12.3 Sunshine Limited is considering the following two proposed post-employment medical plans:

1. Plan A reimburses 50% of an employee's post-employment medical costs if the employee leaves after more than 10 and less than 15 years of service and 60% of those costs if the employee leaves after 15 or more years of service.
2. Plan B reimburses 20% of an employee's post-employment medical costs if the employee leaves after more than 10 and less than 15 years of service and 60% of those costs if the employee leaves after 15 or more years of service. Service in later years will lead to a materially higher level of benefit than in earlier years.

Required:

Explain to Sunshine Limited how to attribute benefit to periods of service for each of the above two post-employment medical plans.

Problem 12.4 Company CDF contracted to pay its employees on termination of service a lump-sum benefit equal to 2% of final annual salary for each year of service. The annual salary of Employee S at the beginning of Year 1 is \$100,000 and is assumed to increase at 5% (compound) each year.

For simplicity, assume Employee S will leave Company CDF at the end of Year 3, there are no changes in actuarial assumptions, and the appropriate discount rate is 10% per annum.

Required:

Determine the present value of Company CDF's obligation to Employee S's post-employment benefit at the end of the year for each of the 3 years and the current services cost and interest cost for each of the 3 years.

Problem 12.5 High Tech Toys Group (HTT Group) is engaged in the manufacture and trading of electronic toys, with two production plants in Hong Kong and Shenzhen respectively. On 18 November 2005, the board of HTT Group decided to close down the production plant in Hong Kong. On 14 December 2005, a detailed plan for closing down the Hong Kong plant (including the disposal of the leasehold property in which the plant was situated) was approved by the board. Prior to the balance sheet date of 31 December 2005, redundancy notices were sent to the workers for termination of the employment contract on 28 February 2006 and a property agent was engaged for the disposal of the leasehold property. Also, a transportation contract of \$800,000 was entered into with a logistics company to ship the machinery acquired after 2002 from Hong Kong to Shenzhen in early February 2006. A deposit of \$100,000 was paid on 30 December 2005. All the other machinery, equipment and furniture and fixtures will be abandoned.

Required:

Explain the accounting treatments of the following events/transactions in the balance sheet of 31 December 2005 of HTT Group:

1. Unused entitlement of annual leave of workers (Each worker is entitled to 15 working days of paid leave annually. Unused entitlement of paid leave can be carried forward to a future period. Workers are entitled to a cash payment for unused entitlements on leaving the company); and
2. Severance payment under the Employment Ordinance for the redundant workers.

(HKICPA QP A February 2006, adapted)

Case Studies

Case Study 12.1 Company C contracted to pay its employees on termination of service a lump-sum benefit equal to 1% of final annual salary for each year of service. The annual salary of Employee Y at the beginning of Year 1 is \$200,000 and is assumed to increase at 8% (compound) each year.

For simplicity, assume Employee Y will leave Company C at the end of Year 5, there are no changes in actuarial assumptions, and the appropriate discount rate is 10% per annum.

Required:

Determine the present value of Company C's obligation to Employee Y's post-employment benefit at the end of the year for each of the 5 years and the current services cost and interest cost for each of the 5 years.

Case Study 12.2

Edward Chan is an employee of Golden Dragon Limited, a Hong Kong garment trading company. Management of Golden Dragon Limited decided to terminate Mr Chan's employment contract on 31 December 2004. The following table sets out key terms of Mr Chan's employment and profile:

Age	40
Commencement date	1 November 1998.
Basic salary	\$40,000. Paid on the last day of each month. 12 months per year.
Annual paid leave	10 working days per year. A maximum of 5 days untaken annual leave can be carried forward for one calendar year only. Paid leave is first taken out of the balance brought forward from the previous year and then out of the current year's entitlement (a FIFO basis). 15 days untaken annual leave as at 31 December 2004 – 5 days carried forward from 2003 and 10 days entitlement for 2004.
Mandatory Provident Fund Scheme	Monthly contribution of 5% of monthly salary to be made by the employer, subject to a cap of \$1,000 per month. Accumulated contribution up to 31 December 2004 made by the company was \$49,000.
Severance payment and long service payment	According to Hong Kong employment laws.*

* Under the Hong Kong Employment Ordinance, severance payment and long service payment are determined by multiplying the number of years of service by two-thirds of the last full month of salary. The monthly salary is subject to a cap of \$22,500.

Required:

Identify and calculate the amount of the employee benefits in relation to Mr Chan's employment that Golden Dragon Limited should recognise as an expense in its financial statements for the year ended 31 December 2004. Explain the reasons for recognition and the calculations in accordance with relevant accounting standards.

(HKICPA QP A September 2004, adapted)

Case
Study 12.3

Savage, a public limited company, operates a funded defined benefit plan for its employees. The plan provides a pension of 1% of the final salary for each year of service. The cost for the year is determined using the projected unit credit method. This reflects service rendered to the dates of valuation of the plan and incorporates actuarial assumptions primarily regarding discount rates, which are based on the market yields of high-quality corporate bonds. The expected average remaining working lives of employees is 12 years.

The directors have provided the following information about the defined benefit plan for the current year (year ended 31 October 2005):

- (i) The actuarial cost of providing benefits in respect of employees' service for the year to 31 October 2005 was \$40 million. This is the present value of the pension benefits earned by the employees in the year.
- (ii) The pension benefits paid to former employees in the year were \$42 million.
- (iii) Savage should have paid contributions to the fund of \$28 million. Because of cash flow problems, \$8 million of this amount had not been paid at the financial year-end of 31 October 2005.
- (iv) The present value of the obligation to provide benefits to current and former employees was \$3,000 million at 31 October 2004 and \$3,375 million at 31 October 2005.
- (v) The fair value of the plan assets was \$2,900 million at 31 October 2004 and \$3,170 million (including the contributions owed by Savage) at 31 October 2005. The actuarial gains recognised at 31 October 2004 were \$336 million.

With effect from 1 November 2004, the company had amended the plan so that the employees were now provided with an increased pension entitlement. The benefits became vested immediately, and the actuaries computed that the present value of the cost of these benefits at 1 November 2004 was \$125 million. The discount rates and expected rates of return on the plan assets were as follows:

	31 October 2004	31 October 2005
Discount rate.	6%	7%
Expected rate of return on plan assets	8%	9%

The company has recognised actuarial gains and losses in profit or loss up to 31 October 2004 but now wishes to recognise such gains and losses in other comprehensive income.

Required:

1. Show the amounts that will be recognised in the balance sheet, income statement and other comprehensive income of Savage for the year ended 31 October 2005 under IAS 19 *Employee Benefits*, and the movement in the net liability in the balance sheet. (Your calculations should show the changes in the present value of the obligation and the fair value of the plan assets during the year. Ignore any deferred taxation effects and assume that pension benefits and the contributions paid were settled at 31 October 2005.)

2. Explain how the non-payment of contributions and the change in the pension benefits should be treated in the financial statements of Savage for the year ended 31 October 2005.

(ACCA 3.6 December 2005, adapted)

Case Study 12.4 Base has implemented in full IAS 19 in its financial statements. The directors have included the following amounts in the figure for cost of sales:

	\$ million
Current service cost.....	5
Actuarial deficit on obligation	4
Interest cost	3
Actuarial gain on assets	(2)
Charged to cost of sales	10

They are unsure as to the treatment of these amounts given their stated objective of maximising current-year profit. The fair value of the plan assets at 31 May 2002 was \$48 million, and the present value of the defined benefit obligation was \$54 million at that date. The net cumulative unrecognised actuarial loss at 31 May 2002 was \$3 million, and the expected remaining working lives of the employees was 10 years.

Required:

Determine the accounting treatment of the above amounts in the figure for cost of sales for the year ended 31 May 2003 in accordance with IAS 19 *Employee Benefits*.

(ACCA 3.6 June 2003, adapted)

Case Study 12.5 Barking, an unlisted company, operates in the house building and commercial property investment development sector. The sector has seen an upturn in activity during recent years, and the directors have been considering future plans with a view to determining their impact on the financial statements for the financial year to 30 November 2004.

Barking wishes to obtain a stock exchange listing in the year to 30 November 2004. It is to be acquired by Ash, a significantly smaller listed company, in a share-for-share exchange whereby Barking will receive sufficient voting shares of Ash to control the new group.

The acquisition will also have other planned effects on the company. Barking operates a defined benefit pension scheme. On acquisition, the scheme will be frozen and replaced by a group defined contribution scheme, and as a result, no additional benefits in the old scheme will accrue to the employees. Ash's employees are also in a defined benefit scheme that has been classified as a multi-employer plan, but it is currently impossible to identify its share of the underlying assets and liabilities in the

scheme. After acquisition, Ash's employees will be transferred to the group's defined contribution scheme, with the previous scheme being frozen.

Required:

Draft a report to the directors of Barking, setting out the financial reporting implications of the above plans on retirement benefits for the financial statements for the year to 30 November 2004.

(ACCA 3.6 December 2003, adapted)

13

Income Taxes

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of tax base, temporary difference and deferred tax (the definitions)
- 2 The recognition and measurement of current tax liabilities and current tax assets
- 3 The recognition of deferred tax liabilities and deferred tax assets
- 4 The measurement of deferred tax liabilities and deferred tax assets
- 5 The recognition of current tax and deferred tax in profit or loss and equity
- 6 The presentation and disclosures of income taxes

Real-life

Case 13.1

The Hongkong and Shanghai Hotels, Limited

The Hongkong and Shanghai Hotels, Limited (HSH), listed in Hong Kong and engaged in owning and managing prestigious hotels, including the Peninsula Hotels and other properties in Asia and the United States, commented in its 2005 interim report as follows:

- The directors consider it inappropriate for the company to adopt two particular aspects of the new/revised HKFRSs (converged to IFRSs) as these would result in the financial statements, in the view of the directors, either not reflecting the commercial substance of the business or being subject to significant potential short-term volatility ...
- HKAS 12 *Income Taxes* (equivalent to IAS 12), together with HKAS-Int. 21 *Income Taxes – Recovery of Revalued Non-Depreciable Assets* (equivalent to SIC 21), requires deferred taxation to be recognised on any revaluation movements on investment properties. It is further provided that any such deferred tax liability should be calculated at the profits tax rate in the case of assets that the management has no definite intention to sell.
- The company has not made such provision in respect of its Hong Kong investment properties since the directors consider that such provision would result in the financial statements not reflecting the commercial substance of the business since, should any such sale eventuate, any gain would be regarded as capital in nature and would not be subject to any tax in Hong Kong.
- Should this aspect of HKAS 12 have been adopted, deferred tax liabilities amounting to HK\$2,008 million on the revaluation surpluses arising from revaluation of Hong Kong investment properties would have been provided.

In HSH's 2005 interim report, its profit for the 6-month period was only HK\$1,301 million. While its total equity was HK\$16,136 million and total liabilities were only HK\$4,401 million as at 30 June 2005, its resulting debt to equity ratio was only 27%.

One of the most famous quotes by Benjamin Franklin is, "In this world nothing can be said to be certain, except death and taxes." No entity can avoid tax forever unless it ceases before any profit is derived. An entity that is not required to pay tax or is required to pay little tax in a year may only defer the tax payment to a future year. In consequence, an entity is used to determining and providing not only the current tax payable and receivable, but also the tax deferred because of some reasons. However, why did HSH in Real-life Case 13.1 argue that some such provisions "would result in the financial statements not reflecting the commercial substance of the business"? What are the requirements of IAS 12?

This chapter addresses the requirements on accounting for both current tax and deferred tax and explains the balance sheet liability method and full provision approach in recognising deferred tax.

13.1 Applicable Standard and Scope

An entity is required to apply IAS 12 *Income Taxes* in accounting for income taxes (IAS 12.1), which include both current tax and deferred tax. In accounting for the deferred tax, IAS 12 adopts the balance sheet liability method, focusing on temporary differences, which include both timing differences and other circumstances that do not give rise to timing differences, and requires full provision for deferred tax with only certain exceptions.

For the purposes of IAS 12, income taxes include the following:

- All domestic and foreign taxes that are based on taxable profits, and
- Taxes, such as withholding taxes that are payable by a subsidiary, associate or joint venture on distributions to the reporting entity.

IAS 12 does not deal with the methods of accounting for government grants (see IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*), or investment tax credits. However, IAS 12 deals with the accounting for temporary differences that may arise from such grants or investment tax credits.

13.2 Recognition and Measurement of Current Tax Liabilities and Current Tax Assets

In accordance with IAS 12, an entity's income tax is divided into current tax and deferred tax. The accounting requirements on current tax are more straightforward.

Current tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period.

Taxable profit (tax loss) is the profit (loss) for a period, determined in accordance with the rules established by the taxation authorities, upon which income taxes are payable (recoverable).

Accounting profit is profit or loss for a period before deducting tax expense (IAS 12.5).

13.2.1 Recognition of Current Tax Liabilities and Current Tax Assets

Current tax not yet paid for current and prior periods is recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset (IAS 12.12).

The benefit relating to a tax loss that can be carried back to recover current tax of a previous period is also recognised as an asset (IAS 12.13). When a tax loss is used to recover current tax of a previous period, an entity recognises the benefit as an asset in the period in which the tax loss occurs because it is probable that the benefit will flow to the entity and the benefit can be reliably measured.

13.2.2 Measurement of Current Tax Liabilities and Current Tax Assets

An entity is required to measure the current tax liabilities or assets for the current and prior periods at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date (IAS 12.46).

Real-life

Case 13.2

BP plc

BP plc described its income tax, particularly current tax, in its 2006 annual report as follows:

- Income tax expense represents the sum of the tax currently payable and deferred tax.
- The tax currently payable is based on the taxable profits for the period. Taxable profit differs from net profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other periods and it further excludes items that are never taxable or deductible.
- The group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

13.3 Balance Sheet Liability Method and Tax Base

Interestingly, IAS 12 has not properly defined deferred tax but has only defined deferred tax liabilities and deferred tax assets. One of the reasons should be due to the method, i.e., the balance sheet liability method, which IAS 12 has adopted in accounting for the deferred tax of an entity. By using the balance sheet liability method, the determination of the deferred tax is largely referenced to the differences, i.e., temporary differences, between the carrying amount of an asset or liability in the balance sheet and its tax base. The understanding of tax base and temporary difference is thus also crucial.

Real-life

Case 13.3

China Construction Bank Corporation

China Construction Bank Corporation, the first bank listed overseas among the big four Chinese commercial banks and, in terms of market capitalisation, one of the top ten listed banks in the world, clarified its deferred tax in its 2006 annual report as follows:

- Deferred tax is provided using the balance sheet liability method, for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.
- Deferred tax assets also arise from unused tax losses and unused tax credits.

13.3.1 Balance Sheet Liability Method

Historically, the accounting for the deferred tax used the income statement liability method, which focused on timing differences. The balance sheet liability method, instead, focuses on temporary differences.

Timing differences are differences between taxable profit and accounting profit that originate in one period and reverse in one or more subsequent periods. In contrast to the timing differences derived from the income statement, temporary differences focus on the balance sheet and represent the differences between the carrying amount of an asset or liability and its tax base on the balance sheet.

Example 13.1 Except for a motor vehicle purchased in 2004, Bonnie Hong Kong Limited, incorporated in Hong Kong and subject to Hong Kong profits tax, did not have any timing differences or temporary differences for deferred tax purposes in its financial statements.

On 2 January 2004, Bonnie purchased a motor vehicle for \$200,000, which was depreciated over its estimated useful life of 4 years on a straight-line basis without any estimated residual value. For Hong Kong profits tax purposes, Bonnie was granted an initial allowance of 60% on the cost of the vehicle and an annual allowance of 30% on its written-down value. The carrying amount and written-down value of the vehicle are set out below:

	Carrying amount \$	Tax base \$	Timing differences \$	Temporary differences \$
Cost.	200,000	200,000		
Initial allowance	0	60% (120,000)	120,000	
	200,000	80,000	120,000	120,000
Depreciation and annual allowance	25% (50,000)	30% (24,000)	(26,000)	
Balance at 31 December 2004 . .	150,000	56,000	94,000	94,000
Depreciation and annual allowance	25% (50,000)	30% (16,800)	(33,200)	
Balance at 31 December 2005 . .	100,000	39,200	60,800	60,800
Depreciation and annual allowance	25% (50,000)	30% (11,760)	(38,240)	
Balance at 31 December 2006 . .	50,000	27,440	22,560	22,560
Depreciation and annual allowance	25% (50,000)	30% (8,232)	(41,768)	
Balance at 31 December 2007 . .	0	19,208	(19,208)	(19,208)

The timing differences in respect of the motor vehicle were the differences resulting from the depreciation and depreciation allowance of each year.

- In 2004, the taxable profit (after depreciation allowance on the vehicle) was lower than the accounting profit (after the depreciation) by \$94,000.
- In 2005, the taxable profit (after depreciation allowance on the vehicle) was higher than the accounting profit (after the depreciation) by \$33,200. It reversed the timing differences of 2004. The accumulated timing differences were \$60,800 ($\$94,000 - \$33,200$).

The temporary differences instead focus on the differences between the balances, i.e., the carrying amount and the tax base.

- In 2004, the carrying amount of the vehicle was \$150,000 while the tax base (written down value in this case) was \$56,000. The temporary difference was \$94,000.
- In 2005, the carrying amount of the vehicle was \$100,000 while the tax base was \$39,200. The temporary difference was \$60,800.

Timing differences are determined by accumulating the impact on the income statement of different years, while temporary differences are determined by comparing the balances of each year independently. More discussions, including the rationale and explanation, on temporary differences are set out in Section 13.4.

All timing differences are temporary differences. However, some temporary differences arise in certain circumstances that do not give rise to timing differences, and some temporary differences are not timing differences. In consequence, IAS 12 was revised to focus on temporary differences by using the balance sheet liability method.

Example 13.2 Temporary differences arise in the following circumstances, which do not give rise to timing differences:

1. Subsidiaries, associates or joint ventures have not distributed their entire profits to the parent or investor;
2. Assets are revalued, and no equivalent adjustment is made for tax purposes; and
3. The cost of a business combination is allocated to the identifiable assets acquired and liabilities assumed by reference to their fair values, but no equivalent adjustment is made for tax purposes.

Temporary differences that are not timing differences, for example, arise when:

1. The non-monetary assets and liabilities of an entity are measured in its functional currency but the taxable profit or tax loss (and, hence, the tax base of its non-monetary assets and liabilities) is determined in a different currency;
2. The carrying amount of an asset or liability on initial recognition differs from its initial tax base.

13.3.2 Tax Base

In order to derive the temporary differences (further elaborated in Section 13.4), the tax base of an asset or liability has to be determined. To understand the concept of tax base is of key importance in applying the requirements of IAS 12.

The **tax base** of an asset or liability is defined as the amount attributed to that asset or liability for tax purposes (IAS 12.5).

The tax base of an asset and tax base of a liability can be addressed and considered separately.

13.3.2.1 Tax Base of an Asset

The tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefits that will flow to an entity when it recovers the carrying amount of the asset. In a simple situation, for example, the plant and equipment under profits tax (say in Hong Kong), its tax base is its tax written-down value.

In some other cases, the tax base of an asset may be calculated as the asset's carrying amount, less any future taxable amounts plus any future deductible amounts that are expected to arise from recovering the asset's carrying amount as at the balance sheet date.

For assets:

$$\begin{array}{ccccccc} \text{Tax base} & & & & & & \\ \text{of an asset} & = & \text{Carrying} & - & \text{Future} & + & \text{Future} \\ & & \text{amount of} & & \text{taxable} & & \text{deductible} \\ & & \text{an asset} & & \text{amounts} & & \text{amounts} \end{array}$$

- Example 13.3** 1. A machine cost \$5,000. For financial reporting purposes, depreciation of \$1,000 has been made. For tax purposes, a depreciation allowance of \$3,000 has been deducted in current or prior periods and the remaining cost of \$2,000 will be deductible in future periods. Revenue generated by using the machine (i.e., revenue generated from recovering the carrying amount of the machine) is taxable, and any gain or loss on disposal will be subject to a balancing adjustment for tax purposes.

The tax base of the machine is \$2,000 or calculated as:

$$\begin{array}{rcccccc} \text{Carrying amount} & - & \text{Taxable amounts} & + & \text{Deductible amounts} & = & \text{Tax base} \\ \$4,000 & & - \$4,000 & & + \$2,000 & & = \$2,000 \end{array}$$

2. Trade receivables have a carrying amount of \$1,500, for which impairment losses of \$500 have been made. An impairment loss of \$200 has not yet been deducted for tax purposes but is expected to give rise to future deductible amounts.

The tax base of the trade receivables is \$1,700 (the amount that will be deductible for tax purposes) or calculated as:

$$\begin{array}{r r r r r r r} \text{Carrying amount} & - & \text{Taxable amounts} & + & \text{Deductible amounts} & = & \text{Tax base} \\ \$1,500 & - & \text{Nil} & + & \$200 & = & \$1,700 \end{array}$$

3. Interest receivables have a carrying amount of \$2,600, and the related interest revenue will be taxed when received (on a cash basis).

The tax base of the interest receivables is nil or calculated as:

$$\begin{array}{r r r r r r r} \text{Carrying amount} & - & \text{Taxable amounts} & + & \text{Deductible amounts} & = & \text{Tax base} \\ \$2,600 & - & \$2,600 & + & \text{Nil} & = & \text{Nil} \end{array}$$

4. Land with a cost of \$1 million has been revalued to \$1.8 million. For tax purposes, no depreciation for the land can be deductible. Revenue generated from the use of the land is taxable, but any gain on disposal of the land at the revalued amount will not be taxable.

The tax base of the land is \$1 million or calculated as:

$$\begin{array}{r r r r r r r} \text{Carrying amount} & - & \text{Taxable amounts} & + & \text{Deductible amounts} & = & \text{Tax base} \\ \$1.8 \text{ million} & - & \$1.8 \text{ million} & + & \$1 \text{ million} & = & \$1 \text{ million} \end{array}$$

If the economic benefits from an asset will not be taxable, the tax base of the asset is equal to its carrying amount.

- Example 13.4**
- Dividends receivable from a subsidiary have a carrying amount of \$100. The dividends are not taxable. In substance, the entire carrying amount of the asset is deductible against the economic benefits. In consequence, the tax base of the dividends receivable is \$100.
 - A loan receivable has a carrying amount of \$100. The repayment of the loan will have no tax consequences. The tax base of the loan is \$100.

13.3.2.2 Tax Base of a Liability

The tax base of a liability is its carrying amount, less any amount that will be deductible for tax purposes in respect of that liability in future periods.

The tax base of a liability may be calculated as the liability's carrying amount as at the balance sheet date less any future deductible amounts, plus any future taxable amounts that are expected to arise from settling the liability's carrying amount as at the balance sheet date.

For liabilities:

$$\boxed{\text{Tax base of a liability}} = \boxed{\text{Carrying amount of a liability}} - \boxed{\text{Future deductible amounts}} + \boxed{\text{Future taxable amounts}}$$

- Example 13.5** 1. Current liabilities include accrued salaries with a carrying amount of \$1,200. The related expense has already been deducted for tax purposes on an accrued basis. The tax base of the accrued salaries is \$1,200 or calculated as

$$\begin{array}{rcccccc} \text{Carrying amount} & - & \text{Deductible amounts} & + & \text{Taxable amounts} & = & \text{Tax base} \\ \$1,200 & - & \text{Nil} & + & \text{Nil} & = & \$1,200 \end{array}$$

2. Current liabilities include provision for a legal claim with a carrying amount of \$20,000. The related expense will be deductible for tax purposes only when it is required for payment.

The tax base of the legal claim provision is nil or calculated as:

$$\begin{array}{rcccccc} \text{Carrying amount} & - & \text{Deductible amounts} & + & \text{Taxable amounts} & = & \text{Tax base} \\ \$20,000 & - & \$20,000 & + & \text{Nil} & = & \text{Nil} \end{array}$$

3. A loan payable in foreign currency has a carrying amount on initial recognition of \$15,000. Subsequently, the carrying amount is reduced to \$12,000 to reflect the change in exchange rates (an unrealised foreign exchange gain). Exchange gains are taxable only when they are realised. The repayment of the carrying amount of the loan, \$12,000, will give rise to taxable amounts of \$3,000.

The tax base of the loan is \$15,000 or calculated as:

$$\begin{array}{rcccccc} \text{Carrying amount} & - & \text{Deductible amounts} & + & \text{Taxable amounts} & = & \text{Tax base} \\ \$12,000 & - & \text{Nil} & + & \$3,000 & = & \$15,000 \end{array}$$

13.3.2.3 Tax Base of a Liability for Revenue Received in Advance

In case of a liability in the nature of “revenue received in advance”, the tax base of such liability is determined differently. The tax base of such liability is its carrying amount, less any amount of the revenue that will not be taxable in future periods. The tax base of a liability for “revenue received in advance” is calculated as the liability’s carrying amount less any amount of the “revenue received in advance” that has been included in taxable amounts in the current or a previous reporting period.

For liabilities for revenue received in advance:

$$\text{Tax base} = \text{Carrying amount} - \text{Revenue that will not be taxable in future periods}$$

- Example 13.6** Current liabilities include interest revenue received in advance, with a carrying amount of \$8,500. The related interest revenue is taxed on a cash basis.

The tax base of the interest received in advance is nil or calculated as:

		Amount of revenue received in advance		
Carrying amount	–	that has increased taxable amount (or	=	Tax base
		decreased tax loss)		
\$8,500	–	\$8,500	=	Nil

13.3.2.4 Tax Bases for Some Specific Items

Where the tax base of an asset or liability is not immediately apparent, it is helpful to consider the fundamental principle upon which IAS 12 is based – that is, when a recovery or settlement of the carrying amount of an asset or liability would make future tax payments larger (smaller) than they would be if such recovery or settlement were to have no tax consequences, an entity is required to recognise a deferred tax liability (asset) with certain limited exceptions.

Some items not being recognised as assets and liabilities in the balance sheet does not imply that there is no tax base for such items. These items may still have a tax base.

Example 13.7 In accordance with IAS 38 *Intangible Assets*, research costs of \$13,000 are recognised as an expense in determining accounting profit in the period in which they are incurred. The research costs are deductible in determining taxable profit in a later period when the tax requirements are fulfilled.

The tax base of the research cost is \$13,000 (the amount that will be deductible for tax purposes) or calculated as:

Carrying amount	–	Taxable amounts	+	Deductible amounts	=	Tax base
Nil	–	Nil	+	\$13,000	=	\$13,000

While group accounting is outside the scope of this book, it is worth noting that in consolidated financial statements, temporary differences are determined by comparing the carrying amounts of assets and liabilities in the consolidated financial statements with the appropriate tax base. In some jurisdictions, the appropriate tax base is determined by reference to a consolidated tax return in these jurisdictions in which such a return is filed. In other jurisdictions, the tax base is determined by reference to the tax returns of each entity in the group, for example in Hong Kong, there is no group relief.

13.4 Temporary Differences

When the tax base of an asset or a liability is ascertained, it is compared with the carrying amount of the asset or liability to determine the temporary differences, which are used to determine whether there are deferred tax liabilities and deferred tax assets.

Temporary differences are differences between the carrying amount of an asset or liability in the balance sheet and its tax base.

Temporary differences may be either

- **taxable temporary differences**, which are temporary differences that will result in taxable amounts in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled; or
- **deductible temporary differences**, which are temporary differences that will result in amounts that are deductible in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled (IAS 12.5).

13.4.1 Rationale behind Temporary Differences

When an entity recognises an asset, it implies that the carrying amount of the asset will be recovered from the use of the asset in the future. The recovery is in the form of economic benefits that flow to the entity.

If the carrying amount of the asset recognised exceeds its tax base, it implies that the amount of taxable future economic benefit will exceed the amount that will be allowed as a deduction for tax purposes in future periods. This difference is a taxable temporary difference, and the obligation to pay the resulting income taxes in future periods is a deferred tax liability.

As the entity recovers the carrying amount of the asset, the taxable temporary difference will reverse. In consequence, the entity will have taxable profit and will be required to make tax payments on the recovery of the carrying amount of the asset.

Example 13.8 Based on Example 13.1, Bonnie Hong Kong Limited purchased a motor vehicle for \$200,000. The carrying amount and tax base of the vehicle for the first year are extracted below.

	Carrying amount \$	Tax base \$	Temporary differences \$
Cost	200,000	200,000	
Initial allowance	0	60% (120,000)	
	200,000	80,000	120,000
Depreciation and annual allowance ...	25% (50,000)	30% (24,000)	
Balance at 31 December 2004	<u>150,000</u>	<u>56,000</u>	94,000

The initial recognition of the vehicle of \$200,000 implies that \$200,000 will be recovered from its usage in the form of future economic benefits, say, rental income derived from the vehicle.

When the carrying amount of the vehicle is \$200,000 and its tax base is only \$80,000, the minimum future economic benefits of \$200,000 derived from the vehicle will exceed the amount of \$80,000 that will be allowed for tax deduction in future periods. This difference of \$120,000 is a taxable temporary difference, and the obligation to pay the resulting income taxes in future periods is a deferred tax liability.

As Bonnie recovered the carrying amount of the vehicle and the depreciation of \$50,000 was provided in the first year, the annual allowance of the vehicle was \$24,000. The taxable temporary difference had been reversed, and it implied that the excess of the future economic benefits over the future deductible amount had been dropped.

The recognition of a liability, on the contrary, implies that the carrying amount will be settled in future periods through an outflow from the entity of resources embodying economic benefits. When resources flow out from the entity, part or all of their amounts may be deductible in determining taxable profit of a period later than the period in which the liability is recognised. In such a case, a temporary difference between the carrying amount of the liability and its tax base results.

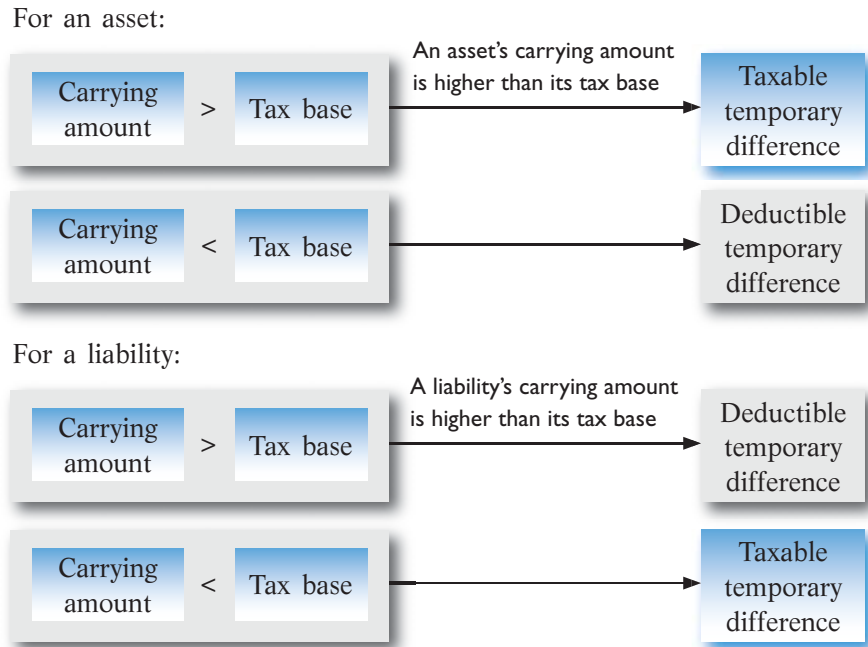
In consequence, when income taxes are recoverable in future periods because part of the liability will be allowed as deduction in determining taxable profit, a deferred tax asset arises. Similarly, if the carrying amount of an asset is less than its tax base, a deferred tax asset in respect of the income taxes that will be recoverable in future periods will result, too.

Example 13.9 On 3 April 2007, Bonnie Hong Kong Limited made a provision for a legal claim with a carrying amount of \$20,000. The accounting profit was deducted with this related expense. However, the expense would be deductible for tax purposes only when it was paid. Thus, the tax base of the provision was nil at that time. The excess of the carrying amount of the provision over its tax base represents a deductible temporary difference that gives rise to a deferred tax asset.

When the provision for legal claim is settled later in 2008, the settled provision will be allowed as a deduction in determining Bonnie's taxable profit. The income taxes will be recovered at that time, and the deferred tax asset will be crystallised.

13.4.2 Relationship of Tax Base and Temporary Differences

Generally, if the carrying amount of an asset is higher (or lower) than the tax base, the temporary difference is a taxable temporary difference (or a deductible temporary difference). While the carrying amount of a liability is higher (or lower) than its tax base, the temporary difference is a deductible temporary difference (or a taxable temporary difference).



Example 13.10 Based on Example 13.1, the temporary differences of Bonnie Hong Kong Limited can be further classified as taxable temporary differences and deductible temporary differences as follows:

	Carrying amount \$	Tax base \$	Temporary differences \$
Cost	200,000	200,000	
Initial allowance	<u>0</u>	60% (120,000)	
Depreciation and annual allowance ..	25% (50,000)	30% (24,000)	120,000 Taxable temporary difference
Balance at 31 December 2004	150,000	56,000	94,000 Taxable temporary difference
Depreciation and annual allowance ..	25% (50,000)	30% (16,800)	
Balance at 31 December 2005	100,000	39,200	60,800 Taxable temporary difference
Depreciation and annual allowance ..	25% (50,000)	30% (11,760)	
Balance at 31 December 2006	50,000	27,440	22,560 Taxable temporary difference
Depreciation and annual allowance ..	25% (50,000)	30% (9,232)	
Balance at 31 December 2007	<u>0</u>	<u>19,208</u>	(19,208) Deductible temporary difference

13.4.3 Circumstances Resulting in Taxable Temporary Differences

Taxable temporary differences may result from the following circumstances:

1. Depreciation on an asset allowed in determining taxable profit in the initial years is higher than that used in determining accounting profit (see Example 13.12a).
2. Interest revenue to be received is included in accounting profit, but it is included in taxable profit when cash is collected (see Example 13.12b).
3. Assets are revalued, and no equivalent adjustment is made for tax purposes (see Example 13.12c).
4. Development costs are capitalised and amortised over future periods in determining accounting profit, but they are deducted in determining taxable profit in the period in which they are incurred.
5. The cost of a business combination that is an acquisition is allocated to the identifiable assets and liabilities acquired by reference to their fair values, but no equivalent adjustment is made for tax purposes.
6. Goodwill arises in a business consolidation, and it may not be deductible for tax purposes.
7. The tax base of an asset or liability on initial recognition differs from its initial carrying amount.

Example 13.11 Based on Example 13.3, the following examples are further analysed to determine that there are taxable temporary differences:

- a. A machine cost \$5,000. For financial reporting purposes, depreciation of \$1,000 has been made. For tax purposes, a depreciation allowance of \$3,000 has been deducted in current or prior periods and the remaining cost of \$2,000 will be deductible in future periods. Revenue generated by using the machine (i.e., revenue generated from recovering the carrying amount of the machine) is taxable, and any gain or loss on disposal will be subject to a balancing adjustment for tax purposes.
 - While the carrying amount of the vehicle is \$4,000 and its tax base is \$2,000, a taxable temporary difference results and gives rise to a deferred tax liability.
- b. Interest receivables have a carrying amount of \$2,600, and the related interest revenue will be taxed when received (on a cash basis).
 - Since the tax base of the interest receivables is nil, it gives rise to a taxable temporary difference and a resulting deferred tax liability.
- c. Land with a cost of \$1 million has been revalued to \$1.8 million. For tax purposes, no depreciation for the land can be deductible. Revenue generated from the use of the land is taxable, but any gain on disposal of the land at the revalued amount will not be taxable.
 - While the fair value adjustment is not taxable, the tax base of the land is only \$1 million. A temporary difference results, with a consequential deferred tax liability.

13.4.4 Circumstances Resulting in Deductible Temporary Differences

Deductible temporary differences may result from the following circumstances:

1. Impairment losses are made on financial assets or other assets, but they can only be deductible for tax purposes in future periods when certain conditions for tax deduction are fulfilled (see Examples 13.12a and 13.12d).
2. Expenses are accrued, but they are only deductible upon cash paid (see Example 13.12b).
3. Income received but not yet recognised in the income statement is taxed on a cash basis (see Example 13.12c).

Example 13.12 Based on Examples 13.3, 13.5, 13.6 and 13.7, the following examples are further analysed to determine that there are deductible temporary differences:

- a. Trade receivables have a carrying amount of \$1,500, for which impairment losses of \$500 have been made. An impairment loss of \$200 has not yet been deducted for tax purposes but is expected to give rise to future deductible amounts.
 - The carrying amount of the trade receivables is \$1,500, and its tax base is \$1,700. A deductible temporary difference results, while the impairment losses can be deductible in future.
- b. Current liabilities include provision for a legal claim with a carrying amount of \$20,000. The related expense will be deductible for tax purposes only when it is required for payment.
 - The carrying amount of the liabilities on the legal claim is higher than the related tax base, which is nil. Thus, it gives rise to a deductible temporary difference.
- c. Current liabilities include interest revenue received in advance, with a carrying amount of \$8,500. The related interest revenue was taxed on a cash basis.
 - The carrying amount of the liabilities is \$8,500, but the tax base is nil. It implies a deductible temporary difference.
- d. Research costs of \$13,000 are recognised as an expense in determining accounting profit in the period in which they are incurred. The research costs are deductible in determining taxable profit in a later period when the tax requirements are fulfilled.
 - The tax base of the research cost is \$13,000, but its carrying amount is nil. The carrying amount of the asset is lower than its tax base, and a deductible temporary difference results.

13.4.5 Temporary Differences and Deferred Tax Liabilities/Assets

“Temporary differences” implies the future tax consequences of transactions and other events recognised in an entity’s balance sheet that may give rise to deferred tax liabilities

and assets. If the recognition criteria are fulfilled, deferred tax liabilities and assets are calculated in accordance with the following formula:

$$\begin{array}{l} \text{Taxable} \\ \text{temporary} \\ \text{difference} \end{array} \times \begin{array}{c} \text{Tax rates} \end{array} = \begin{array}{c} \text{Deferred tax} \\ \text{liability} \end{array}$$

$$\begin{array}{c} \text{Deductible} \\ \text{temporary} \\ \text{difference} \end{array} \times \begin{array}{c} \text{Tax rates} \end{array} = \begin{array}{c} \text{Deferred tax} \\ \text{asset} \end{array}$$

In addition to deductible temporary differences, deferred tax assets also arise from unused tax losses and unused tax credits that tax law allows to be carried forward, and they are calculated in accordance with the following formula:

$$\begin{array}{c} \text{Unused tax} \\ \text{losses and/or} \\ \text{credits} \end{array} \times \begin{array}{c} \text{Tax rates} \end{array} = \begin{array}{c} \text{Deferred tax} \\ \text{asset} \end{array}$$

In consequence, deferred tax liabilities and deferred tax assets are defined in IAS 12 as follows:

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences (IAS 12.5).

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of

- deductible temporary differences;
- the carryforward of unused tax losses; and
- the carryforward of unused tax credits (IAS 12.5).

Real-life

Case 13.4

MTR Corporation Limited

MTR Corporation Limited, the only railway operation in Hong Kong, briefly explained its deferred tax assets and liabilities in its 2006 annual report as follows:

- Deferred tax assets and liabilities arise from deductible and taxable temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases.
- Deferred tax assets also arise from unused tax losses and unused tax credits.
- Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised.

Previous accounting standards permitted an entity not to recognise deferred tax liabilities and assets where there was reasonable evidence that timing differences would not reverse for some considerable periods ahead. This recognition approach is usually called the partial provision approach.

On the contrary, IAS 12 adopts a full provision approach. When the recognition criteria are met, IAS 12 requires an entity to recognise deferred tax liabilities and deferred tax assets for all temporary differences and unused tax losses and credits with only some identified exceptions. In other words, provision for deferred tax would also be required for some timing differences that would not reverse for some considerable periods. The following sections explain the exceptions that an entity may have in recognising deferred tax liabilities and deferred tax assets.

13.5 Recognition of Deferred Tax Liabilities

An entity is required to recognise a deferred tax liability for all taxable temporary differences, except to the extent that the deferred tax liability arises from the following three situations:

1. The deferred tax liability arises from the initial recognition of goodwill (termed as “goodwill exception”, see Section 13.5.1);
2. The deferred tax liability arises from the initial recognition of an asset or liability in a transaction that
 - a. is not a business combination; and
 - b. at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss) (termed as “initial recognition exception”; see Section 13.5.2); and
3. The deferred tax liability arises from the taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures. Additional requirements are imposed on such deferred tax liability, and this may be termed “investment exception on deferred tax liability” (see Section 13.5.3) (IAS 12.15).

Real-life Case 13.5

BP plc

In its 2006 annual report, BP plc briefly but precisely summarised the recognition of deferred tax liabilities under IAS 12 as follows:

- Deferred tax liabilities are recognised for all taxable temporary differences:
 - Except where the deferred tax liability arises on goodwill that is not tax deductible or the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
 - In respect of taxable temporary differences associated with investments in subsidiaries, jointly controlled entities and associates, except where the timing of the reversal of the temporary differences can be controlled by the group and it is probable that the temporary differences will not reverse in the foreseeable future.

13.5.1 Goodwill Exception

In accordance with IFRS 3 *Business Combinations*, goodwill arising in a business combination is measured as the excess of the cost of the combination over the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities.

In many jurisdictions, goodwill (no matter whether it is an amortisation or a cost of a business disposal) cannot be deductible for tax purposes. In that case, the tax base of goodwill is nil. When it is compared with the carrying amount of the goodwill, a taxable temporary difference results.

Goodwill is measured as a residual. If a deferred tax liability is recognised for such a taxable temporary difference resulting from the initial recognition of goodwill, the carrying amount of goodwill will also be further increased. In consequence, IAS 12 prohibits the recognition of deferred tax liability for a taxable temporary difference resulting from the initial recognition of goodwill.

13.5.1.1 Extension to Subsequent Reduction Relating to the Initial Recognition of Goodwill

IAS 12 also extends the requirement to prohibit the recognition of the subsequent reductions in a deferred tax liability that is unrecognised because it results from the initial recognition of goodwill.

Example 13.13 In Hong Kong, goodwill acquired in a business combination is not deductible for tax purposes. On 3 April 2006, Melody Limited, a Hong Kong incorporated company, acquired Tony Inc. at \$1 million while Tony's net identifiable assets had a fair value of \$600,000. At the end of the subsequent year, 31 March 2008, Melody assessed that there was an impairment loss of \$100,000 for the goodwill arising from the acquisition of Tony.

	Carrying amount \$	Tax base \$	Temporary differences \$
Cost of business combination	1,000,000		
Fair value of net assets	(600,000)		
Goodwill at 3 April 2006	400,000	Nil	400,000 Taxable temporary difference
Impairment loss for 2007–08	(100,000)		
Goodwill at 3 March 2008	300,000	Nil	300,000 Taxable temporary difference

On 3 April 2006, goodwill was initially recognised at \$400,000. As it was not deductible for tax purposes, the tax base of the goodwill is nil. Even though there was a taxable temporary difference, IAS 12 prohibited the recognition of the deferred tax liability for this taxable temporary difference.

On 31 March 2008, Melody subsequently recognised an impairment loss of \$100,000 for the goodwill. The taxable temporary difference relating to the goodwill was reduced from \$400,000 to \$300,000, with a resulting decrease in the value of the unrecognised deferred tax liability. That decrease in the value of the unrecognised deferred tax liability was also regarded as relating to the initial recognition of the goodwill. IAS 12 extends the prohibition to recognise this subsequent reduction in goodwill.

13.5.1.2 Deferred Tax Liabilities Not Arising from Initial Recognition of Goodwill

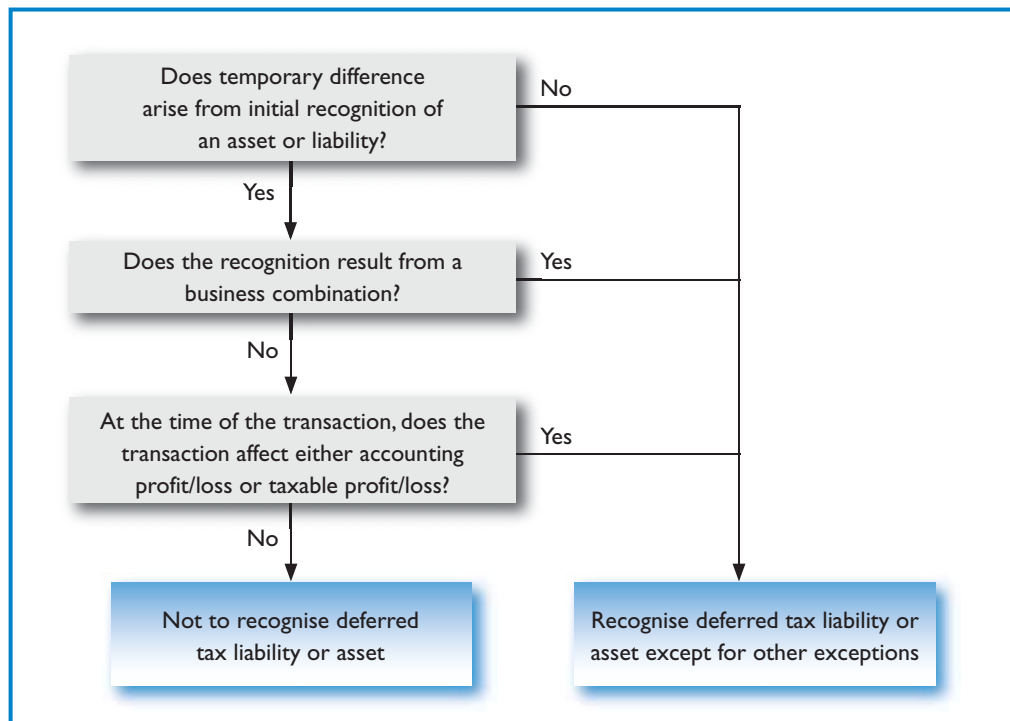
Given the goodwill exception, an entity is still required to recognise the deferred tax liabilities for taxable temporary differences relating to goodwill that do not arise from the initial recognition of goodwill. This situation normally arises when the goodwill is deductible for tax purposes in some jurisdictions.

Example 13.14 Based on Example 13.13, if Melody's goodwill was deductible at 20% per annum on a straight-line basis, the tax base of the goodwill would be \$1 million initially and can be compared with its carrying amount as follows:

	Carrying amount \$	Tax base \$	Temporary differences \$
Goodwill at 3 April 2006.....	400,000	400,000	Nil
Tax deduction	—	(80,000)	
Goodwill at 3 March 2006.....	400,000	320,000	80,000 Taxable temporary difference
Tax deduction	—	(80,000)	
Impairment loss for 2007–8.....	(100,000)	—	
Goodwill at 31 March 2008.....	<u>300,000</u>	<u>240,000</u>	60,000 Taxable temporary difference

The taxable temporary difference did not result from the initial recognition of the goodwill. In consequence, IAS 12 does not prohibit the recognition of the resulting deferred tax liability and the deferred tax liability for the taxable temporary difference should be recognised.

FIGURE 13.1 Initial recognition exception for deferred tax liabilities and assets



13.5.2 Initial Recognition Exception

The initial recognition exception set out in IAS 12 specifically prohibits the recognition of deferred tax liabilities (and assets) if the following three conditions are met:

1. The deferred tax liability arises from the initial recognition of an asset or liability;
2. The transaction is not a business combination; and
3. At the time of the transaction, the transaction affects neither accounting profit nor taxable profit (tax loss).

Figure 13.1 summarises the requirements of the initial recognition exception.

Example 13.15 Tony International Limited acquired land in Hong Kong Island on 2 July 2007 at a cost and upfront payment of \$1 billion and would use it to build its own factory for new operation. The land was classified as an operating lease under the prepaid lease payment in the balance sheet as it was a lease from the government with an expiry on 30 June 2047. The Inland Revenue Department would not allow the amortisation of the lease payment as a deductible expense and would not tax any capital gain on the disposal of the lease. The profits tax rate in Hong Kong is 17.5%.

While Tony recovers the carrying amount of the land, a taxable income of \$1 billion will result in \$175 million. The initial carrying amount of the land is \$1 billion, but its initial tax base is nil. However, because the transaction meets the initial recognition exception, Tony is prohibited from recognising the resulting deferred tax liability of \$175 million.

If there is no initial recognition exception, the following entry may be required. It may distort the financial performance and position of Tony while it in fact has not incurred any income or expenses so far.

Dr Deferred tax expense.....	\$175 million	
Cr Deferred tax liability.....		\$175 million

IAS 12 considers that if there is no initial recognition exception, the recognition of such deferred tax liabilities arising from the initial recognition of an asset or liability would make the financial statements less transparent. In addition, there is the argument that temporary differences resulting from such transactions do not give rise to timing differences too. In consequence, IAS 12 does not permit an entity to recognise the resulting deferred tax liability or asset, either on initial recognition or subsequently. Furthermore, the entity does not recognise subsequent changes in the unrecognised deferred tax liability or asset as the asset is depreciated.

Example 13.16 Based on Example 13.15, on 30 June 2008 Tony should have an amortisation of \$25 million ($\$1 \text{ billion} \div 40 \text{ years}$) on its operating lease on land. Even if the carrying amount of the land was only \$975 million, the deferred tax liability should become \$170,625,000 instead of \$175,000,000. However, the entity is also prohibited from recognising such subsequent changes in the unrecognised deferred tax liability or asset as it results from (or is only depreciation of) the initial recognition of the asset that meets the initial recognition exception.

Real-life Case 13.6

Marks and Spencer Group plc

In its 2007 annual report, Marks and Spencer Group plc, one of the UK's leading retailers, briefly stated the goodwill exception and initial recognition exception on deferred tax as follows:

- Deferred tax is not recognised in respect of
 - the initial recognition of goodwill that is not tax deductible; and
 - the initial recognition of an asset or liability in a transaction that is not a business combination and at the time of the transaction does not affect accounting or taxable profits.

13.5.2.1 Compound Financial Instrument – Initial Recognition of Equity

In accordance with IAS 32 *Financial Instruments – Presentation*, the issuer of a compound financial instrument (for example, a convertible bond) classifies

1. the instrument's liability component as a liability; and
2. its equity component as equity (see Chapter 18).

In some jurisdictions, for example, Hong Kong, the tax base of the liability component on initial recognition is equal to the initial carrying amount of the sum of the liability and equity components. The resulting taxable temporary difference arises from the initial recognition of the equity component separately from the liability component.

Since it results only from initial recognition of equity, not from the initial recognition of asset or liability, the initial recognition exception does not apply. Consequently, an entity recognises the resulting deferred tax liability. The deferred tax is charged directly to the carrying amount of the equity component, but the subsequent changes in the deferred tax liability are recognised in the income statement as deferred tax expense or income (see Section 13.8.2).

Example 13.17 Tony International Limited issued a non-interest-bearing convertible loan and received \$1,000 on 31 December 2007. The convertible loan will be repayable at par on 1 January 2011. In accordance with IAS 32, the entity classifies the instrument's liability component as a liability and the equity component as equity.

Tony assigns an initial carrying amount of \$751 to the liability component of the convertible loan and \$249 to the equity component. Subsequently, the entity recognises imputed discount as interest expenses at an annual rate of 10% on the carrying amount of the liability component at the beginning of the year. The tax authorities do not allow the entity to claim any deduction for the imputed discount on the liability component of the convertible loan. The tax rate is 40%.

The temporary differences associated with the liability component and the resulting deferred tax liability and deferred tax expense and income are as follows:

	2007	2008	2009	2010
	\$	\$	\$	\$
Carrying amount of liability component.....	751	826	909	1,000
Tax base.....	1,000	1,000	1,000	1,000
Taxable temporary difference.....	249	174	91	–
Opening deferred tax liability at 40%.....	0	100	70	37
Deferred tax charged to equity.....	100	–	–	–
Deferred tax expense/(income).....	–	(30)	(33)	(37)
Closing deferred tax liability at 40%.....	100	70	37	–

Tony recognises the resulting deferred tax liability by adjusting the initial carrying amount of the equity component of the convertible liability. Therefore, the amounts recognised at that date are as follows:

	\$
Liability component.....	751
Deferred tax liability.....	100
Equity component (\$249 less \$100).....	149
	<u>1,000</u>

Subsequent changes in the deferred tax liability are recognised in the income statement as tax income (see IAS 12.23). Therefore, the entity's income statement is as follows:

	2007	2008	2009	2010
	\$	\$	\$	\$
Interest expense (imputed discount).....	–	75	83	91
Deferred tax income.....	<u>–</u>	<u>(30)</u>	<u>(33)</u>	<u>(37)</u>
Net effect.....	<u>–</u>	<u>45</u>	<u>50</u>	<u>54</u>

13.5.3 Investment Exception on Deferred Tax Liability

An entity is required to recognise a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures, except to the extent that both of the following conditions are satisfied:

1. The parent, investor or venturer is able to control the timing of the reversal of the temporary difference; and
2. It is probable that the temporary difference will not reverse in the foreseeable future (IAS 12.39).

Example 13.18 Bonnie Limited has a branch in Country A, and the branch has generated earnings that combined with the retained earnings of Bonnie. Income taxes in Country A will be charged on the earnings generated by the branch if the profits are distributed to Bonnie. IAS 12 prohibits recognition of the resulting deferred tax liability if Bonnie is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Real-life

Case 13.7

Royal Dutch Shell plc

Royal Dutch Shell plc explained its deferred tax on the distribution of its group companies in its 2006 annual report as follows:

- Deferred tax is not provided for taxes on possible future distributions of retained earnings of Shell Group companies and equity accounted investments where the timing of the distribution can be controlled and it is probable that the retained earnings will be reinvested by the companies concerned.

13.6 Recognition of Deferred Tax Assets

In recognising a deferred tax asset, an entity still has the initial recognition exception and investment exception. Additionally, an entity has to meet the “probable criterion” for the deferred tax asset arising from both (1) deductible temporary difference and (2) unused tax losses and unused tax credits.

In respect of deductible temporary differences, IAS 12 requires an entity to recognise a deferred tax asset for all deductible temporary differences subject to the following three situations:

1. The amount of deferred tax asset to be recognised is limited to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised (termed as “probable criterion”; see Section 13.6.1).
2. An entity does not recognise the deferred tax asset that arises from the initial recognition of an asset or liability in a transaction that
 - a. is not a business combination; and
 - b. at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss) (termed as “initial recognition exception”; see Section 13.6.2).
3. A separate requirement, termed as “investment exception on deferred tax asset” (see Section 13.6.3), is imposed on an entity that separately determines whether the deferred tax asset arising from deductible temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures should be recognised (IAS 12.24).

In respect of the unused tax losses and unused tax credits, IAS 12 requires an entity to recognise a deferred tax asset for the carryforward of unused tax losses and unused tax credits to the extent that it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised (IAS 12.34). It is also the “probable criterion” for recognising a deferred tax asset for deductible temporary differences, but additional considerations should be observed by an entity (see Section 13.6.1).

13.6.1 Probable Criterion

The general recognition criteria for an asset, for example, property, plant and equipment and intangible assets, include a probable criterion: an asset is recognised when, inter alia, it is probable that any future economic benefit associated with the asset will flow to the entity.

In case of the deferred tax asset, the future economic benefit is in the form of reductions in tax payments or deductions in determining taxable profits of future periods. An entity can only have such future economic benefits when it earns sufficient taxable profits for the deductions.

In consequence, IAS 12 allows an entity to recognise deferred tax assets only when it is probable that there are sufficient taxable profits for the entity to utilise and offset the deductible temporary differences, unused tax losses or unused tax credits.

Example 13.19 Before the end of 2007, AJS Limited had ceased its operation while it still owned certain assets with no book value. While the tax base for those assets was \$90,000, AJS had already signed a contract to dispose of the assets in a lump sum of \$60,000. The corporate tax rate for AJS is 17.5%.

Discuss the accounting implication for the year 2007.

Answers

AJS had a deductible temporary difference of \$90,000 on its assets, and the related deferred tax asset should be \$15,750 ($\$90,000 \times 17.5\%$).

However, since AJS had ceased its operation, it would not have any future taxable profits, except for the disposal of the asset. AJS can thus recognise the deferred tax asset only to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised, i.e., only \$60,000 can be utilised.

In consequence, AJS should only recognise the deferred tax asset of \$10,500 ($\$60,000 \times 17.5\%$).

Real-life Case 13.8

Singapore Telecommunications Limited

Singapore Telecommunications Limited (SingTel), named as Asia's leading communications group, with headquarters in Singapore and a presence throughout Asia, the Middle East, Europe and North America, explained in its 2007 annual report for its recognition of deferred tax assets as follows:

- Deferred tax assets are recognised for all deductible temporary differences and carryforward of unutilised tax losses, to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and carryforward of unused losses can be utilised.

13.6.1.1 Circumstances under Which Probable Criterion Is Fulfilled

Probable criterion can be fulfilled when there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity that are expected to reverse

1. in the same period as the expected reversal of the deductible temporary difference; or
2. in periods into which a tax loss arising from the deferred tax asset can be carried back or forward.

In such circumstances, the deferred tax asset is recognised in the period in which the deductible temporary differences, unused tax losses or unused tax credits arise.

When there are insufficient taxable temporary differences relating to the same taxation authority and the same taxable entity, the deferred tax asset is recognised to the extent that:

1. It is probable that the entity will have sufficient taxable profit relating to the same taxation authority and the same taxable entity in the same period as the reversal of the deductible temporary difference (or in the periods into which a tax loss arising from the deferred tax asset can be carried back or forward); or
2. Tax planning opportunities are available to the entity that will create taxable profit in appropriate periods.

13.6.1.2 Additional Considerations for Unused Tax Losses and Unused Tax Credits

The criteria applied for recognising deferred tax assets arising from the carryforward of unused tax losses and tax credits are the same. However, the existence of unused tax losses is strong evidence that future taxable profit may not be available. In recognising the deferred tax asset, an entity should ensure that there are sufficient taxable profits or other convincing evidence that sufficient taxable profits will be available. In addition, an entity is also required to have proper disclosure of the amount of the deferred tax asset and the nature of the evidence supporting its recognition (see Section 13.10).

Example 13.20 In assessing the probable criterion for unused tax losses and unused tax credit, an entity can consider the following:

1. Whether the entity has sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity, which will result in taxable amounts against which the unused tax losses or unused tax credits can be utilised before they expire;
2. Whether it is probable that the entity will have taxable profits before the unused tax losses or unused tax credits expire;
3. Whether the unused tax losses result from identifiable causes that are unlikely to recur; and

4. Whether tax planning opportunities are available to the entity that will create taxable profit in the period in which the unused tax losses or unused tax credits can be utilised.

13.6.2 Initial Recognition Exception

As with the initial recognition exception for deferred tax liabilities, IAS 12 sets out the same initial recognition exception for deferred tax assets and prohibits the recognition of the deferred tax assets (and liabilities) if the following three conditions are met:

1. The deferred tax asset arises from the initial recognition of an asset or liability;
2. The transaction is not a business combination; and
3. At the time of the transaction, the transaction affects neither accounting profit nor taxable profit (tax loss).

A detailed explanation can be found in Section 13.5.2.

13.6.3 Investment Exception on Deferred Tax Asset

An entity is required to recognise a deferred tax asset for all deductible temporary differences arising from investments in subsidiaries, branches and associates, and interests in joint ventures, to the extent that, and only to the extent that, it is probable that:

1. The temporary difference will reverse in the foreseeable future; and
2. Taxable profit will be available against which the temporary difference can be utilised (IAS 12.44).

Example 13.21 Unrealised profits resulting from intragroup sales of inventories and property, plant and equipment are eliminated from the carrying amount of assets, but no equivalent adjustment is made for tax purposes.

The profits in the seller's book might have been taxed while the tax bases of the inventories and property, plant and equipment in the buyer's book should be higher than their carrying amounts. Deductible temporary differences should then result, but they can only be recognised to the extent that the differences will reverse and there will be taxable profits to offset the differences.

13.6.4 Reassessment of Unrecognised Deferred Tax Assets

At each balance sheet date, an entity is required to reassess the unrecognised deferred tax assets. The entity recognises a previously unrecognised deferred tax asset to the

extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Example 13.22 Based on Example 13.19, AJS Limited recognised a deferred tax asset of \$10,500 while there was an unrecognised deferred tax asset of \$5,250 in respect of a deductible temporary difference of \$30,000.

In 2008, AJS recovered a receivable of \$20,000 on which a full impairment loss was made and allowed for tax purposes in 2006.

Discuss the implication on the deferred tax asset and suggest other situations in which AJS may further recognise the deferred tax asset.

Answers

AJS is required to reassess its unrecognised deferred tax asset of \$5,250 at each balance sheet date. With the recovery of the receivable, AJS should then recognise the extent of unrecognised deferred asset that would be offset with the taxable profit arising from such recovery. In consequence, a deferred tax asset of \$3,500 ($\$20,000 \times 17.5\%$) should be further recognised.

In reassessing the unrecognised deferred tax assets, AJS can consider the following situations:

1. As its case suggested, it recommenced its operations with a foreseeable profitability in future periods (or an improvement in trading conditions).
2. It further recovered more impaired receivables.
3. A tax planning opportunity can arise.
4. At the date of a business combination or subsequently, it would acquire or be acquired in a business combination.

13.7 Measurement of Deferred Tax Liabilities and Deferred Tax Assets

In recognising the deferred tax assets and liabilities, an entity is required to use the appropriate tax rates to measure the amount of the deferred tax assets and liabilities, consider the discounting issues and review the deferred tax assets recognised.

13.7.1 Appropriate Tax Rates

IAS 12 requires an entity to determine the tax rates or to measure the deferred tax assets and liabilities in accordance with the following two requirements:

1. At the tax rates that are expected to apply to the period when the asset is realised or the liability is settled; and
2. Based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date (IAS 12.47).

IAS 12 further requires the measurement of deferred tax liabilities and deferred tax assets to reflect the tax consequences that would follow from the manner in which the entity expects, at the balance sheet date, to recover or settle the carrying amount of its assets and liabilities (IAS 12.51).

Example 13.23 Tai Chi Chau Limited (TCC) owned a motor vehicle for its operation with a cost of \$30,000. The carrying amount of the vehicle was \$25,000, and its tax base was \$10,000. TCC was subject to a profits tax rate of 17.5%. Any gain or loss on disposal of its assets used for its operation over its original cost was not subject to profits tax.

Discuss the deferred tax implication on the motor vehicle based on the following scenario:

1. TCC would use the vehicle for its operation until the end of its useful life.
2. TCC would dispose of the vehicle soon at \$12,000.
3. TCC revalued the vehicle to \$35,000 and would use it until the end of its useful life.
4. TCC revalued the vehicle to \$35,000 and would dispose of it soon at that value.

Answers

The manner in which an entity recovers (settles) the carrying amount of an asset (liability) may affect either or both of the following:

1. The tax rate applicable when the entity recovers (settles) the carrying amount of the asset (liability); and
2. The tax base of the asset (liability).

In such cases, an entity measures deferred tax liabilities and deferred tax assets using the tax rate and the tax base that are consistent with the expected manner of recovery or settlement.

TCC should comply with the above requirements and determine the following:

1. When it uses the vehicle for its operation until the end of its useful life, the tax rate of 17.5% should be applied to the taxable temporary difference of \$15,000 ($\$25,000 - \$10,000$). It results in a deferred tax liability of \$2,625 ($\$15,000 \times 17.5\%$).
2. When it disposes of the vehicle soon at \$12,000, part of the taxable temporary difference, i.e., \$12,000, should be recovered from the sale. However, as the tax rate should be the same for that part, the deferred tax liability should still be \$2,625.
3. When TCC revalues the vehicle to \$35,000 and uses it until the end of its useful life, the taxable temporary difference should become \$25,000 ($\$35,000 - \$10,000$) and the appropriate tax rates applicable to the difference would be as follows:

	Taxable temporary difference	Tax rate	Deferred tax liability
	\$	%	\$
Cumulative tax allowance.....	20,000	17.5	3,500
Revaluation surplus over the cost...	5,000	17.5	875
	<u>25,000</u>		<u>4,375</u>

While TCC expected to recover the carrying amount of the vehicle by using it in the operation, the vehicle would generate taxable income of at least \$35,000. Since the amount deductible for tax purposes should be only \$10,000, the taxable temporary difference would give rise to a deferred tax liability of \$4,375.

- When TCC revalues the vehicle to \$35,000 and disposes of it soon, it implies that the carrying amount of the vehicle will be recovered from selling the vehicle rather than using it. The taxable temporary difference of \$25,000 should be analysed as follows:

	Taxable temporary difference	Tax rate	Deferred tax liability
	\$	%	\$
Cumulative tax allowance.....	20,000	17.5	3,500
Revaluation surplus over the cost...	5,000	Nil	—
	<u>25,000</u>		<u>3,500</u>

Since any gain or loss on disposal of the vehicle used for operation over its original cost is not subject to profits tax, the taxable temporary difference rising from cumulative tax allowance would be taxed at 17.5% but the taxable temporary difference arising from revaluation surplus would not be subject to profits tax, i.e., at zero tax rate.

Real-life

Case 13.9

The Hongkong and Shanghai Hotels, Limited

The Hongkong and Shanghai Hotels, Limited (HSH), in its 2005 interim report, did not provide deferred tax on the temporary differences of its investment properties and explained it as follows:

**Real-life
Case 13.9**

(cont'd)

- HKAS 12 *Income Taxes* (equivalent to IAS 12), together with HKAS-Int. 21 *Income Taxes – Recovery of Revalued Non-depreciable Assets* (equivalent to SIC 21), requires deferred taxation to be recognised on any revaluation movements on investment properties. It is further provided that any such deferred tax liability should be calculated at the profits tax rate in the case of assets that the management has no definite intention to sell.
- The company has not made such provision in respect of its Hong Kong investment properties since the directors consider that such provision would result in the financial statements not reflecting the commercial substance of the business since, should any such sale eventuate, any gain would be regarded as capital in nature and would not be subject to any tax in Hong Kong.

The requirements of IAS 12 or HKAS 12 imply that the measurement of deferred tax should be based on an entity's expected manner of realisation or settlement of the carrying amount of the assets and liabilities at the balance sheet date. In other words, if an entity expects to utilise an asset to generate rental (or recover the carrying amount of the asset from rental), the rental income is subject to a specific tax rate. The deferred tax in respect of the asset's temporary difference should be measured at the specific tax rate.

If an entity has not intended to dispose of its asset, it is unreasonable to argue that a specific tax rate on sale would be imposed on the asset. Then, if the entity continuously uses the asset to derive income and the income is subject to a tax rate, the tax will be levied on the income until the asset cannot derive any further income. At that time, the carrying amount of the asset would become nil.

After the 2005 interim report, HSH revised its position and provided deferred tax on revaluation surpluses on its investment properties. However, it still argued that it should be unnecessary. In its 2007 interim report, it stated the following:

- It is the directors' position that the group's investment properties are held for the long term and that if any Hong Kong investment properties were sold, tax would not be payable on such disposal as the gain would be capital in nature and such gains are subject to a nil tax rate in Hong Kong. The directors therefore expect that the provision for deferred taxation in respect of revaluation surpluses for Hong Kong investment properties, amounting to HK\$2,623 million as at 30 June 2007, would not materialise.

13.7.2 Discounting Prohibited

IAS 12 prohibits the deferred tax assets and liabilities from being discounted (IAS 12.53). IAS 12 considers alternative approaches in requiring or allowing deferred tax assets and liabilities on a discounted basis.

If discounting of deferred tax assets and liabilities is required, detailed scheduling of the timing of the reversal of each temporary difference will be needed. Since it is impracticable or highly complex to have such detailed scheduling of the timing of the reversal of each temporary difference, it is inappropriate to require discounting of deferred tax assets and liabilities.

If discounting of deferred tax assets and liabilities is permitted, but not compulsorily required, the comparability between different entities will be affected.

In consequence, IAS 12 does not require or permit the discounting of deferred tax assets and liabilities.

13.7.3 Review of Deferred Tax Assets Recognised

As there is a “probable criterion” before a deferred tax asset can be recognised, IAS 12 requires an entity to review the carrying amount of a deferred tax asset at each balance sheet date.

If it is no longer probable that sufficient taxable profit will be available to allow the benefit of a deferred tax asset or part of it to be utilised, an entity is required to write off the carrying amount of the deferred tax asset that cannot be utilised.

If it is subsequently probable that sufficient taxable profit will be available, the amount of deferred tax asset written off can be reversed to the extent that sufficient taxable profit will be available (IAS 12.56).

Real-life

Case 13.10

Singapore Telecommunications Limited (SingTel)

In respect of its deferred tax asset, SingTel further explained in its 2007 annual report for its annual review on them as follows:

- At each balance sheet date, the group reassesses unrecognised deferred tax assets and the carrying amount of deferred tax assets.
- The group recognises a previously unrecognised deferred tax asset to the extent that it is probable that future taxable profit will allow the deferred tax asset to be recovered.
- The group conversely reduces the carrying amount of a deferred tax asset to the extent that it is no longer probable that sufficient future taxable profit will be available to allow the benefit of part or all of the deferred tax asset to be utilised.

13.8 Recognition of Current and Deferred Tax

The balance sheet liability method and full provision approach are adopted in IAS 12 in ascertaining the amount of assets and liabilities in respect of current tax and deferred tax to be recognised in the balance sheet. The explanation and illustration are thus focused on the assets and liabilities perspective. However, the consequential effect of the current and deferred tax should still be accounted for in the balance sheet or

income statement. This section discusses the issues in accounting for the current and deferred tax effects, including how to account for the tax expense or tax income.

Tax expense (tax income) is the aggregate amount included in the determination of profit or loss for the period in respect of current tax and deferred tax (IAS 12.5).

The general principle in accounting for the current and deferred tax effects of a transaction or other event should be the same and should also be consistent with the accounting for the transaction or event itself. In particular, if the transaction or event affects equity or arises from a business combination, the effect should be accounted for consistently.

13.8.1 Effect in the Income Statement

An entity is required to recognise the current and deferred tax as income or an expense and include it in the profit or loss for the period, except to the extent that the tax arises from

1. a transaction or event that is recognised, in the same or a different period, directly in equity; or
2. a business combination (IAS 12.58).

Most deferred tax liabilities and deferred tax assets arise where income or expense is included in accounting profit in one period but is included in taxable profit (tax loss) in a different period. The resulting deferred tax is recognised in the income statement.

Example 13.24 Based on Example 13.10, the temporary differences in respect of the assets of Bonnie Hong Kong Limited arose mainly from the discrepancy between the depreciation for accounting purposes and the depreciation for taxation purposes, and they were as follows:

		\$
31 December 2004	Taxable temporary difference.....	94,000
31 December 2005	Taxable temporary difference.....	60,800
31 December 2006	Taxable temporary difference.....	22,560
31 December 2007	Deductible temporary difference.....	(19,208)

If the profits tax rate to Bonnie is 17.5%, prepare the journal entries for the years 2004 to 2007.

Answers

The deferred tax charges and credit for Bonnie for each year-end should be:

	Taxable/(deductible) temporary difference \$	Tax rate %	Deferred tax liabilities/(assets) \$	Deferred charge/(credit) \$
2004	94,000	17.5	16,450	16,450
2005	60,800	17.5	10,640	(5,810)
2006	22,560	17.5	3,948	(6,692)
2007	(19,208)	17.5	(3,361)	(7,309)

Since the temporary differences resulted from the difference between the depreciation charged to the income statement and that allowed for tax deduction, the journal entries for each year-end from 2004 to 2007 should be as follows:

2004	Dr Income statement – deferred tax charge	\$16,450	
	Cr Deferred tax liabilities		\$16,450
2005	Dr Deferred tax liabilities	\$5,810	
	Cr Income statement – deferred tax credit		\$5,810
2006	Dr Deferred tax liabilities	\$6,692	
	Cr Income statement – deferred tax credit		\$6,692
2007	Dr Deferred tax liabilities	\$7,309	
	Cr Income statement – deferred tax credit		\$7,309

The carrying amount of deferred tax assets and liabilities may change even though there is no change in the amount of the related temporary differences. This can result, for example, from

1. a change in tax rates or tax laws;
2. a reassessment of the recoverability of deferred tax assets; or
3. a change in the expected manner of recovery of an asset.

13.8.2 Items Credited or Charged Directly to Equity

Accounting for the current and deferred tax effects of a transaction should be consistent with the accounting for the transaction. In consequence, IAS 12 specifically requires

that if the current tax and deferred tax relates to items that are credited or charged directly to equity, an entity is required to charge or credit the related tax directly to equity (IAS 12.61).

Example 13.25 Certain accounting standards require or permit certain items to be credited or charged directly to equity. Examples of such items include the following:

1. A change in carrying amount arising from the revaluation of property, plant and equipment (see IAS 16 *Property, Plant and Equipment*);
2. An adjustment to the opening balance of retained earnings resulting from either a change in accounting policy that is applied retrospectively or the correction of an error (see IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*);
3. Exchange differences arising on the translation of the financial statements of a foreign operation (see IAS 21 *The Effects of Changes in Foreign Exchange Rates*); and
4. Amounts arising on initial recognition of the equity component of a compound financial instrument.

Example 13.26 Based on Example 13.23, Tai Chi Chau Limited (TCC) owned a motor vehicle for its operation with a cost of \$30,000. The carrying amount of the vehicle was \$25,000, and its tax base was \$10,000. TCC was subject to a profits tax rate of 17.5%. Any gain or loss on disposal of its assets used for its operation over its original cost was not subject to profits tax.

TCC revalued the vehicle to \$35,000, and a taxable temporary difference of \$25,000 (\$35,000 – \$10,000) gave rise to a deferred tax liability of \$4,375.

Discuss and prepare journal entries for the deferred tax.

Answers

The taxable temporary difference can be analysed as follows:

	Taxable temporary difference	Tax rate	Deferred tax liability
	\$	%	\$
Cumulative tax allowance	15,000	17.5	2,625
Revaluation surplus over the carrying amount...	10,000	17.5	1,750
	<u>25,000</u>		<u>4,375</u>

Since the revaluation surplus of \$10,000 (\$35,000 – \$25,000) is directly credited to equity in accordance with IAS 16, the deferred tax relating to the surplus is required

to be charged directly to equity, i.e., revaluation surplus. The resulting journal entries would be as follows:

Dr Income statement – deferred tax charge.....	\$2,625	
Revaluation surplus (equity).....	1,750	
Cr Deferred tax liabilities		\$4,375

IAS 16 does not specify whether an entity, including TCC, should transfer each year from revaluation surplus to retained earnings an amount equal to the difference between the depreciation on a revalued asset and the depreciation based on the cost of that asset. If an entity makes such a transfer, the amount transferred is net of any related deferred tax. Similar considerations apply to transfers made on disposal of an item of property, plant or equipment.

In exceptional circumstances, it may be difficult to determine the amount of current and deferred tax that relates to items credited or charged to equity. In such cases, the current and deferred tax related to items that are credited or charged to equity is based on a reasonable pro rata allocation of the current and deferred tax of the entity in the tax jurisdiction concerned, or another method that achieves a more appropriate allocation in the circumstances.

Real-life

Case 13.11 Hong Kong Exchanges and Clearing Limited

In its 2006 annual report, Hong Kong Exchanges and Clearing Limited, a listed stock exchange in Hong Kong, not only explained the recognition of deferred tax in equity but also identified the related items as follows:

- Movements in deferred tax provision are recognised in the profit and loss account with the exception of deferred tax related to fair value re-measurement of leasehold buildings, available-for-sale financial assets and cash flow hedges, which is charged or credited directly to equity, is also credited or charged directly to equity.

13.8.3 Deferred Tax Arising from a Business Combination

Temporary differences may arise in a business combination. At the acquisition date, an entity recognises the resulting deferred tax assets or deferred tax liabilities as identifiable assets or liabilities in accordance with IFRS 3 *Business Combinations*,

except for those deferred tax liabilities arising from the initial recognition of goodwill (see Section 13.5.1).

When deferred tax assets or deferred tax liabilities are recognised in a business combination, they affect goodwill or the amount of any excess of the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities over the cost of the combination.

13.9 Presentation

13.9.1 Offset

An entity is not allowed to offset current tax assets and current tax liabilities unless the entity meets all of the following conditions:

1. The entity has a legally enforceable right to set off the recognised amounts; and
2. The entity intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously (IAS 12.71).

An entity is also not allowed to offset deferred tax assets and deferred tax liabilities, unless the entity meets all of the following conditions:

1. The entity has a legally enforceable right to set off current tax assets against current tax liabilities; and
2. The deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either
 - a. the same taxable entity; or
 - b. different taxable entities that intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered (IAS 12.74).

Real-life

Case 13.12

HSBC Holdings plc

HSBC Holdings plc defined its policy on offsetting deferred tax assets and liabilities in its 2006 annual report as follows:

- Deferred tax assets and liabilities are offset when they arise in the same tax reporting group, they are related to income taxes levied by the same taxation authority, and a legal right to offset exists in the entity.

13.9.2 Tax Expense (Income) Related to Profit or Loss from Ordinary Activities

An entity is required to present the tax expense (income) related to profit or loss from ordinary activities on the face of the income statement (IAS 12.77).

13.10 Disclosures

An entity is required to separately disclose the major components of tax expense (income) (IAS 12.79). Components of tax expense (income) may include the following:

1. Current tax expense (income);
2. Any adjustments recognised in the period for current tax of prior periods;
3. The amount of deferred tax expense (income) relating to the origination and reversal of temporary differences;
4. The amount of deferred tax expense (income) relating to changes in tax rates or the imposition of new taxes;
5. The amount of the benefit arising from a previously unrecognised tax loss, tax credit or temporary difference of a prior period that is used to reduce current tax expense;
6. The amount of the benefit from a previously unrecognised tax loss, tax credit or temporary difference of a prior period that is used to reduce deferred tax expense;
7. Deferred tax expense arising from the write-down, or reversal of a previous write-down, of a deferred tax asset; and
8. The amount of tax expense (income) relating to those changes in accounting policies and errors that are included in profit or loss in accordance with IAS 8, because they cannot be accounted for retrospectively.

An entity is required to separately disclose the following:

1. The aggregate current and deferred tax relating to items that are charged or credited to equity;
2. An explanation of the relationship between tax expense (income) and accounting profit in either or both of the following forms:
 - a. A numerical reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rate(s), disclosing also the basis on which the applicable tax rate(s) is (are) computed; or
 - b. A numerical reconciliation between the average effective tax rate and the applicable tax rate, disclosing also the basis on which the applicable tax rate is computed;
3. An explanation of changes in the applicable tax rate(s) compared to the previous accounting period;
4. The amount (and expiry date, if any) of deductible temporary differences, unused tax losses, and unused tax credits for which no deferred tax asset is recognised in the balance sheet;
5. The aggregate amount of temporary differences associated with investments in subsidiaries, branches and associates and interests in joint ventures, for which deferred tax liabilities have not been recognised (see Section 13.4.4.);
6. In respect of each type of temporary difference, and in respect of each type of unused tax losses and unused tax credits:
 - a. The amount of the deferred tax assets and liabilities recognised in the balance sheet for each period presented; and

- b. The amount of the deferred tax income or expense recognised in the income statement, if this is not apparent from the changes in the amounts recognised in the balance sheet;
7. In respect of discontinued operations, the tax expense relating to
 - a. the gain or loss on discontinuance; and
 - b. the profit or loss from the ordinary activities of the discontinued operation for the period, together with the corresponding amounts for each prior period presented;
8. The amount of income tax consequences of dividends to shareholders of the entity that were proposed or declared before the financial statements were authorised for issue, but are not recognised as a liability in the financial statements (IAS 12.81).

Real-life**Case 13.13****MTR Corporation Limited**

In accordance with IAS or HKAS 12, most companies provide an explanation of the relationship between tax expense and accounting profit in either the tax expense reconciliation or the effective tax rate reconciliation. However, some companies provide both reconciliations simultaneously, including MTR Corporation Limited in its 2006 annual report as follows:

	2006		2005	
	HK\$ million	%	HK\$ million	%
Profit before tax	9,169		10,012	
Notional tax on profit before tax, calculated at the rates applicable to profits in the tax jurisdictions concerned	1,584	17.3	1,737	17.3
Tax effect of non-deductible expenses . . .	27	0.3	30	0.3
Tax effect of non-taxable revenue	(230)	(2.5)	(228)	(2.3)
Tax effect of unused tax losses not recognised	30	0.3	10	0.1
Actual tax expenses	1,411	15.4	1,549	15.4

An entity is required to disclose the amount of a deferred tax asset and the nature of the evidence supporting its recognition, when:

1. The utilisation of the deferred tax asset is dependent on future taxable profits in excess of the profits arising from the reversal of existing taxable temporary differences; and
2. The entity has suffered a loss in either the current or preceding period in the tax jurisdiction to which the deferred tax asset relates (IAS 12.82).

In a situation where distribution of dividend may have a higher or lower rate of tax, an entity is required to disclose the nature of the potential income tax consequences that would result from the payment of dividends to its shareholders. In addition, the entity is also required to disclose the amounts of the potential income tax consequences practicably determinable and whether there are any potential income tax consequences not practicably determinable (IAS 12.82A).

13.11 Summary

Income tax includes both current tax and deferred tax and should be accounted for in accordance with IAS 12 *Income Taxes*. Current tax is the amount of income taxes payable or recoverable in respect of the taxable profit or tax loss for a period. Deferred tax has not been formally defined in IAS 12, which has only defined deferred tax liabilities and deferred tax assets.

In accounting for the deferred tax of an entity, IAS 12 adopts the balance sheet liability method, which focuses on the temporary differences of the assets and liabilities in the balance sheet. Temporary differences are the differences between the carrying amount of an asset or liability in the balance sheet and its tax base. In turn, the tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

Temporary differences may be either taxable temporary differences or deductible temporary differences. An entity is required to recognise all deferred tax liabilities and deferred tax assets for all such temporary differences, except in specific exceptional situations. This is the full provision approach adopted in IAS 12. Exceptions to full provision include goodwill exception, initial recognition exception and investment exception. In addition, the recognition of deferred tax assets includes the recognition of the carryforward of unused tax losses and unused tax credits but has to meet the probable criterion as compared with the recognition of deferred tax liabilities.

The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences expected to recover or settle the carrying amount of the assets and liabilities. Discounting on deferred tax assets and liabilities is not allowed, and the recovery of deferred tax assets should be reviewed at each balance sheet date.

Current and deferred tax is recognised as an income or an expense and included in profit or loss for the period, except to the extent that the tax arises from a business combination or a transaction or event that is recognised directly in equity. In those cases, current and deferred tax may be charged to the goodwill or the equity directly if appropriate.

Review Questions

1. What are income tax, current tax and deferred tax?
2. How does an entity recognise and measure current tax?
3. What is the balance sheet liability method?
4. Contrast temporary differences with timing differences.
5. How can an entity determine the tax base of an asset and a liability?

6. Why can a temporary difference of an asset be related to deferred tax liability?
7. Determine the relationship between tax base and temporary difference.
8. Determine the relationship between temporary difference and deferred tax liability/asset.
9. What is the full provision approach in recognising deferred tax?
10. What are the exceptions in recognising deferred tax liabilities?
11. What is goodwill exception in recognising deferred tax liabilities?
12. Why would IAS 12 introduce an initial recognition exception in recognising deferred tax liabilities and assets?
13. What is the investment exception on deferred tax liability?
14. What are the exceptions in recognising deferred tax assets?
15. Why does IAS 12 additionally impose a probable criterion in recognising deferred tax assets?
16. How does an entity measure deferred tax assets and liabilities?
17. Why is discounting on deferred tax assets and liabilities not allowed?
18. How does an entity recognise the movements in deferred tax liabilities or assets?
19. State the presentation requirements on income taxes.

Exercises

- Exercise 13.1** Explain the differences between timing differences and temporary differences and illustrate the role of temporary differences in recognising deferred tax.
- Exercise 13.2** Advance Technology Limited (ATL) owned a plastic injection moulding machine for its operation with a cost of \$50,000. Accumulated depreciation at year-end was \$20,000, and its accumulated tax allowance was \$35,000. ATL was subject to a profits tax rate of 20%.
Discuss and prepare journal entries for the deferred tax.
- Exercise 13.3** Based on Exercise 13.2, Advance Technology Limited (ATL) owned a plastic injection moulding machine for its operation with a cost of \$50,000. Accumulated depreciation at year-end was \$20,000, and its accumulated tax allowance was \$35,000. ATL proposed revaluing the plastic injection moulding machine to \$80,000 at year-end. ATL was subject to a profits tax rate of 20%. Any gain or loss on disposal of its assets used for its operation over its original cost was not subject to profits tax.
Discuss and prepare journal entries for the deferred tax.
- Exercise 13.4** During the year, because of the market downturn, Alice and Ada Singapore Limited (AASL) sustained a loss for tax purposes. The managing director, Ada Lau, considers that since the tax law allows the carrying forward and offsetting of the tax loss to the future assessable profit, the tax loss should be recognised as an asset in the balance sheet. However, the auditor of AASL insists that the tax loss should not be recognised as an asset.

Explain to Ada the grounds for recognising and not recognising the tax loss as an asset.

Exercise 13.5 Based on Exercise 13.4, Ada Lau of AASL wants to know the circumstances when AASL can recognise the tax loss as an asset in the balance sheet.

Explain to Ada the circumstances in which AASL can probably recognise the tax loss as an asset in the balance sheet.

Problems

Problem 13.1 Melody Corporation plans to adopt the International Financial Reporting Standards in preparing its financial statements, and it is particularly concerned over the impact of the adoption of the deferred tax requirements in accordance with IAS 12 *Income Taxes* in its income statement.

Explain to Melody the potential impact on its profit in respect of the deferred tax requirements.

Problem 13.2 JJSA Company Limited sustained a deferred tax asset of \$500,000 in respect of a deductible temporary difference of \$2 million, but JJSA had only recognised \$100,000 as an asset in the balance sheet. During the year, JJSA pioneered a new production process and expected to generate a prosperous business and sustainable profit from 2009.

Required:

1. Discuss the implication of the current development on JJSA's deferred tax asset.
2. Suggest journal entries to effect the implication in (1).
3. If the tax rate is increased to 20%, discuss and suggest journal entries.

Problem 13.3 Allgone's deferred tax (in credit) at 31 March 2008 is \$3 million. Its directors have estimated the deferred tax provision at 31 March 2008 is to be adjusted to reflect the tax base of the company's net assets being \$16 million less than their carrying values. The rate of income tax is 30%, and deferred tax shall be charged to the income statement.

Advise Allgone whether it should go ahead with the tax adjustment.

(ACCA 2.5 June 2003, adapted)

Case Studies

Case Study 13.1 Benson Holdings Limited (BHL) established a wholly owned subsidiary, Ape Processing Limited (APL), in Chongqing, Mainland China, in 2006. On 1 October 2006, APL purchased production equipment at a cost of \$20 million. For BHL to prepare consolidated financial statements, APL prepared a set of financial statements in accordance with International Financial Reporting Standards (IFRS). For IFRS

reporting purposes, the useful life of APL's equipment is 8 years from the date of purchase and depreciation is recognised monthly on a straight-line basis with nil residual value. For tax computation under the tax laws of Mainland China, depreciation is calculated monthly on a straight-line basis over 10 years with a residual value of 10% based on the cost recorded in the books of APL.

As APL is located in a special economic zone at Chongqing, it is exempted from income tax for the first 3 years after establishment and subject to a reduced income tax rate of 15% thereafter.

During the year ended 31 December 2007, BHL purchased products from APL for a total amount of \$40 million. As at 31 December 2007, \$9 million of these goods was unsold to outside customers. APL had recognised a profit of \$5,600,000 for these intragroup transactions in 2007. No such intragroup purchase was made in 2006.

BHL is subject to Hong Kong profits tax at the rate of 17.5% for the year of assessment 2007/2008.

There are no other temporary differences for both BHL and APL as at 31 December 2006 and 2007.

Required:

1. Calculate the temporary differences as at 31 December 2007 in respect of the equipment in the financial statements of APL prepared in accordance with IFRS.
2. Determine and explain the amount of deferred tax assets/liabilities to be recognised in the consolidated balance sheet of BHL as at 31 December 2007.

(HKICPA QP A May 2005, adapted)

**Case
Study 13.2**

Nette purchased a building on 1 June 2007 for \$10 million. The building qualified for a grant of \$2 million, which has been treated as a deferred credit in the financial statements. The tax allowances are reduced by the amount of the grant. There are additional temporary differences of \$40 million in respect of deferred tax liabilities at the year-end.

Also, the company has sold extraction equipment that carries a 5-year warranty. The directors have made a provision for the warranty of \$4 million at 31 May 2008; this amount is deductible for tax when costs are incurred under the warranty. In addition to the warranty provision, the company has unused tax losses of \$70 million. The directors of the company are unsure as to whether a provision for deferred taxation is required.

(Assume that the depreciation of the building is straight-line over 10 years, and tax allowances of 25% on the reducing balance basis can be claimed on the building. Tax is payable at 30%.)

Required:

Explain with reasons and suitable extracts/computations the accounting treatment of the above situation in the financial statements for the year ended 31 May 2008.

(ACCA 3.6 June 2004, adapted)

Case**Study 13.3**

You are auditing WTL's financial statements for the year ended 30 September 2006. The following is an exchange between Miss Lee and your assistants during a meeting reviewing the draft financial statements prepared by Miss Lee:

Assistants: We notice that your company's policy is to carry office for own use at valuation. The opening gross carrying amount was based on the valuation made 4 years ago. The market value of Office A at 30 September 2006 was \$32 million. The original cost of Office A was \$2 million, and the tax written-down value at 1 October 2002 was \$500,000. During the year ended 30 September 2006, capital allowance claimed was \$100,000. Depreciation charged for the year was \$1.5 million, and the opening carrying amount was \$38 million. At a tax rate of 16%, there would be a very significant deferred tax implication for this year's financial statements.

Miss Lee: Fine. Please go on.

Assistants: We noticed that at 30 September 2006, your company held some inventories acquired for distribution to FPI. Since the expected distribution agreement with FPI did not materialise and the goods have been made to FPI's specific requirements and US standards, you may need to write off the inventories if you are not able to sell them at a price above their cost before the approval of the financial statements. This is also consistent with your company's established policy to write off all goods with an age over 6 months at the balance sheet date.

We also noticed the surveyor's report on the current open market values of the offices, including Office A. Professional valuations of Office C (which is an investment property) and Office D (which is held for resale) as at 30 September 2006 were \$23 million and \$28 million respectively, while their carrying amounts at that date were \$25 million and \$30 million respectively. We consider that these values should be reflected in this year's financial statements, since they account for more than 30% of your company's total assets.

Miss Lee: I am not sure I agree with you. The inventories at a cost of \$7 million were purchased for FPI, and we are in the process of claiming from FPI for the losses we suffered. We are also contacting other buyers in the United States to try to sell these specialised goods. Some of them may be willing to take the inventories, although we don't know whether this will happen at this moment.

Regarding Office A, as our company has always been making a profit since incorporation, we estimate that the recoverable amount for Office A is higher than its carrying amount based on the previous valuation. Regarding Office C, we have already secured a rental agreement at a rent above the current market rate. Therefore, I don't think you should refer to the surveyor's report. As for Office D, since it has been newly acquired and remained idle since acquisition, we will state it at cost. There is no impairment at all for any of these offices.

As the auditor of WTL, explain to Miss Lee the key deferred taxation implications arising from the issues identified if WTL had already adopted IAS 12 at the year ended 30 September 2002.

(HKICPA FE December 2003, adapted)

14

Provisions and Contingencies

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of provisions, contingent liabilities and contingent assets (the definition)
- 2 The recognition and measurement of provisions and contingencies
- 3 The recognition of reimbursements
- 4 The changes in and use of provisions
- 5 How to prepare appropriate disclosures in respect of provisions and contingencies

Real-life

Case 14.1

The Hong Kong and China Gas Company Limited

The Hong Kong and China Gas Company is principally engaged in the production, distribution and marketing of gas, water and related activities in Hong Kong and Mainland China. Its annual report of 2007 stated the following accounting policy for provisions and contingencies:

- Provisions are recognised when the group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where the group expects a provision to be reimbursed, the reimbursement is recognised as a separate asset when the reimbursement is virtually certain. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.
- A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the group. It can also be a present obligation arising from past events that is not recognised because it is not probable that an outflow of economic resources will be required or the amount of obligation cannot be measured reliably. A contingent liability is not recognised but is disclosed in the notes to the accounts. When a change in the probability of an outflow occurs so that the outflow is probable, it will then be recognised as a provision.
- A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain events not wholly within the control of the group. Contingent assets are not recognised but are disclosed in the notes to the accounts when an inflow of economic benefits is probable. When inflow is virtually certain, an asset is recognised.

When does an entity recognise a provision and when does it disclose contingent liabilities and contingent assets? Does the entity have the freedom to choose between recognition of provisions and disclosure of contingencies? To enhance comparability and consistency within an entity and across different entities, IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* provides comprehensive guidance on the accounting treatments for provisions and contingencies. However, as indicated in the above accounting policies for provisions and contingencies in the 2007 annual report of the Hong Kong and China Gas Company Limited, quite a number of technical terms have been used in the accounting standard – for example, *legal* or *constructive obligation*, *reliable estimate*, *contingent liability*, *present value*, *past events*, *possible obligation* and *contingent asset*. This chapter will explain all these terms. It will also discuss the reimbursement of expenditures from third parties, the change in and use of

provisions, as well as how to apply the recognition and measurement rules to specific situations such as future operating losses, onerous contracts and restructuring.

14.1 Applicable Standard and Scope

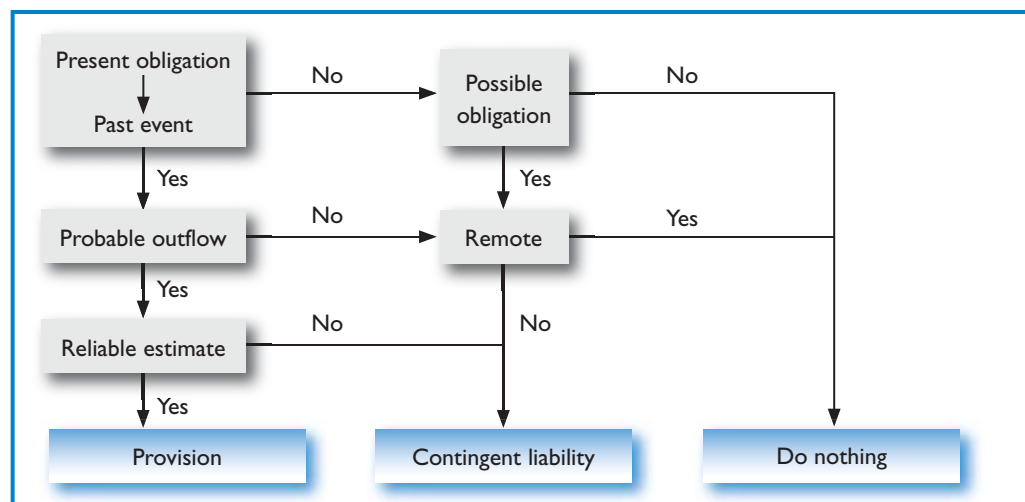
The objective of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* is to ensure that appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to the financial statements to enable users to understand their nature, timing and amount.

Table 14.1 compares the accounting treatment for provisions and contingent liabilities, while Figure 14.1 summarises the main recognition requirements of IAS 37 for provisions and contingent liabilities in a decision tree format.

TABLE 14.1 Provisions and contingent liabilities

Where, as a result of past events, there may be an outflow of resources embodying future economic benefits in the settlement of (a) a present obligation or (b) a possible obligation whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity:		
There is a present obligation that probably requires an outflow of resources.	There is a possible obligation or a present obligation that may, but probably will not, require an outflow of resources.	There is a possible obligation or a present obligation where the likelihood of an outflow of resources is remote.
<ul style="list-style-type: none"> • A provision is recognised. • Disclosures are required for the provision. 	<ul style="list-style-type: none"> • No provision is recognised. • Disclosures are required for the contingent liability. 	<ul style="list-style-type: none"> • No provision is recognised. • No disclosure is required.

FIGURE 14.1 Provisions and contingent liabilities



A **provision** is a liability of uncertain timing or amount.

A **contingent liability** is defined as

- a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or
- a present obligation that arises from past events but is not recognised because
 - it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - the amount of the obligation cannot be measured with sufficient reliability.

A **contingent asset** is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

An entity is required to apply IAS 37 in accounting for provisions, contingent liabilities and contingent assets, except for

1. those resulting from executory contracts where the contract is onerous; or
2. those covered by another IAS, including
 - a. financial instruments (including guarantees) (see IAS 39 *Financial Instruments – Recognition and Measurement* and Chapters 15–18);
 - b. the treatment by an acquirer of contingent liabilities assumed in a business combination (see IFRS 3 *Business Combinations*);
 - c. construction contracts (see IAS 11 *Construction Contracts* and Chapter 10);
 - d. income taxes (see IAS 12 *Income Taxes* and Chapter 13);
 - e. leases (see IAS 17 *Leases* and Chapter 4). However, as IAS 17 contains no specific requirements to deal with operating leases that have become onerous, IAS 37 applies to such cases;
 - f. employee benefits (see IAS 19 *Employee Benefits* and Chapter 12); and
 - g. insurance contracts (see IFRS 4 *Insurance Contracts*). However, IAS 37 applies to provisions, contingent liabilities and contingent assets of an insurer, other than those arising from its contractual obligations and rights under insurance contracts within the scope of IFRS 4.

An **executory contract** is a contract under which neither party has performed any of its obligations or both parties have partially performed their obligations to an equal extent.

An **onerous contract** is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

14.2 Provisions and Other Liabilities

What is the difference between provisions and other liabilities? Provisions involve uncertainty about the timing or amount of the future expenditure required in a settlement. By contrast, trade payables are liabilities to pay for goods or services that have been received or supplied and have been invoiced or formally agreed with the supplier. Similarly, accruals are liabilities to pay for goods or services that have been received or supplied but have not been paid, invoiced or formally agreed with the supplier, including amounts due to employees (for example, amounts relating to accrued vacation pay). Although it is sometimes necessary to estimate the amount or timing of accruals, the uncertainty is generally much less than for provisions. Accruals are often reported as part of trade and other payables, whereas provisions are reported separately.

14.3 Recognition of Provisions

An entity recognises provisions only when the following three criteria are met:

1. An entity has a present obligation (legal or constructive) as a result of a past event;
2. It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
3. A reliable estimate can be made of the amount of the obligation (IAS 37.14).

14.3.1 Present Obligation

The first recognition criterion is to have a present obligation (legal or constructive) as a result of a past event. In almost all cases, an entity is clear whether a past event has given rise to a present obligation. In the rare cases when an entity is not clear whether there is a present obligation, a past event is deemed to have given rise to a present obligation if, taking account of all available evidence including, for example, the opinion of experts, it is more likely than not that a present obligation exists at the balance sheet date. An example of such a rare case relates to a lawsuit where it may be disputed whether certain events have occurred or whether those events have resulted in a present obligation. The evidence considered includes any additional evidence provided by events after the balance sheet date.

A **legal obligation** is an obligation that derives from

- a contract (through its explicit or implicit terms);
- a legislation; or
- another operation of law.

A **constructive obligation** is an obligation that derives from an entity's actions where:

- By an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept certain responsibilities; and
- As a result, the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

14.3.2 Past Events

A past event that leads to a present obligation is called an obligating event. An obligating event creates a legal or constructive obligation that results in an entity having no realistic alternative to settling that obligation. This could happen only

1. where the settlement of the obligation can be enforced by law; or
2. in the case of a constructive obligation, where the event creates valid expectations in other parties that the entity will discharge the obligation.

Financial statements deal with the financial position of an entity at the end of its reporting period and not its possible position in the future. Therefore, an entity only recognises liabilities that exist at the balance sheet date and does not recognise provision for costs that need to be incurred to operate in the future. It is only those obligations arising from past events existing independently of an entity's future actions (i.e., the future conduct of its business) that are recognised as provisions (see Example 14.1).

Example 14.1 Examples of obligations arising from past events existing independently of an entity's future actions that are recognised as provisions:

- Penalties or clean-up costs for unlawful environmental damage, both of which would lead to an outflow of resources embodying economic benefits in settlement regardless of the future actions of the entity;
- Decommissioning costs of an oil installation or a nuclear power station to the extent that the entity is obliged to rectify damage already caused.

Example of no present obligation and no recognition of provision:

- Because of commercial pressures or legal requirements, an entity may intend or need to carry out expenditure to operate in a particular way in the future (for example, by fitting smoke filters in a certain type of factory). Because the entity can avoid the future expenditure by its future actions, for example by changing its method of operation, it has no present obligation for that future expenditure and no provision is recognised.

An obligation always involves another party to whom the obligation is owed. It is not necessary to know the identity of the party to whom the obligation is owed. The obligation may even be to the public at large. Since an obligation always involves a commitment to another party, a management or board decision does not give rise to a constructive obligation at the balance sheet date unless the decision has been communicated before the balance sheet date to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the entity will discharge its responsibilities.

An event that does not give rise to an obligation immediately may do so at a later date, because of changes in the law or because an act (for example, a sufficiently specific public statement) by the entity gives rise to a constructive obligation (see Example 14.2).

Example 14.2 When environmental damage is caused, there may be no obligation to remedy the consequences. However, the causing of the damage will become an obligating event when:

- A new law requires the existing damage to be rectified; or
- The entity publicly accepts responsibility for rectification in a way that creates a constructive obligation.

Where details of a proposed new law have yet to be finalised, an obligation arises only when the legislation is virtually certain to be enacted as drafted. For the purpose of IAS 37, such an obligation is treated as a legal obligation. Differences in circumstances surrounding enactment make it impossible to specify a single event that would make the enactment of a law virtually certain. In many cases it will be impossible to be virtually certain of the enactment of a law until it is enacted (see Example 14.3).

Example 14.3 Company A is principally engaged in oil drilling and production of oil products. The company causes contamination but cleans up only when required to do so under the laws of the particular country in which it operates. One country in which it operates has had no legislation requiring cleaning up, and Company A has been contaminating land in that country for several years. At 31 December 2007, it is virtually certain that a draft law requiring a clean-up of land already contaminated will be enacted shortly after the year ended 31 December 2007.

Should Company A recognise any provisions or disclose any contingencies for the current period?

Answers

Present obligation as a result of a past obligating event – The obligating event is the contamination of the land because of the virtual certainty of legislation requiring cleaning up.

An outflow of resources embodying economic benefits in settlement – Probable.

Conclusion – Company A should recognise a provision for the best estimate of the costs of the clean-up.

14.3.3 Probable Outflow of Resources Embodying Economic Benefits

The second recognition criterion is that it is probable to have an outflow of resources embodying economic benefits to settle that obligation. For the purpose of IAS 37, an outflow of resources or other event is regarded as probable if the event is more likely than not to occur, i.e., the probability that the event will occur is greater than the

probability that it will not. Where it is not probable that a present obligation exists, an entity discloses a contingent liability, unless the possibility of an outflow of resources embodying economic benefits is remote (see Section 14.4).

Where there are a number of similar obligations (e.g., product warranties or similar contracts), the probability that an outflow will be required in settlement is determined by considering the class of obligations as a whole. Although the likelihood of outflow for any one item may be small, it may well be probable that some outflow of resources will be needed to settle the class of obligations as a whole. If that is the case, an entity recognises a provision (if the other recognition criteria are met) (see Example 14.4).

Example 14.4 Manufacturer ABC gives warranties at the time of sale to purchasers of its product. Under the terms of the contract for sale, Manufacturer ABC undertakes to make good, by repair or replacement, manufacturing defects that become apparent within 2 years from the date of sale. Based on past experience, it is probable (i.e., more likely than not) that there will be some claims under the warranties.

Should Manufacturer ABC recognise any provisions for the warranty products sold before the balance sheet date?

Answers

Present obligation as a result of a past obligating event – The obligating event is the sale of the product with a warranty, which gives rise to a legal obligation.

An outflow of resources embodying economic benefits in settlement – Probable for the warranties as a whole.

Conclusion – Manufacturer ABC should make a provision for the best estimate of the costs of making good under the warranty products sold before the balance sheet date.

14.3.4 Reliable Estimate of the Obligation

The third recognition criterion is to have a reliable estimate of the amount of the recognition. The use of estimates is an essential part of the preparation of financial statements and does not undermine their reliability. This is especially true in the case of provisions, which by their nature are more uncertain than most other liability items. Except in extremely rare cases, an entity will be able to determine a range of possible outcomes and can therefore make an estimate of the obligation that is sufficiently reliable to use in recognising a provision. In the extremely rare case where no reliable estimate can be made, a liability that cannot be recognised is disclosed as a contingent liability (see Section 14.4).

14.4 Contingent Liabilities

An entity does not recognise a contingent liability (IAS 37.27). Instead, an entity discloses a contingent liability unless the possibility of an outflow of resources embodying economic benefits is remote.

Where an entity is jointly and severally liable for an obligation, the part of the obligation that is expected to be met by other parties is treated as a contingent liability. The entity recognises a provision for the part of the obligation for which an outflow of resources embodying economic benefits is probable, except in the extremely rare circumstances where no reliable estimate can be made (see Real-life Case 14.2).

**Real-life
Case 14.2**

Cheung Kong (Holdings) Limited

The principal activities of Cheung Kong are property development and investment, hotel and serviced suite operation, property and project management and investment in securities. The group disclosed the following information on contingent liabilities in its 2006 annual report:

- The group's share of contingent liability of a jointly controlled entity in respect of guaranteed return payments payable to the other party of a co-operative joint venture in the next 43 years amounted to HK\$4,488 million;
- The minimum share of revenue/profit guaranteed by the company to be received by other partners of joint development projects amounted to HK\$1,422 million (2005 – HK\$672 million).
- The company provided guarantees for loan financing as follows:
 - Bank and other loans utilised by subsidiaries – HK\$34,182 million (2005 – HK\$22,205 million);
 - Loan from joint development partner to a subsidiary – HK\$4,000 million (2005 – Nil);
 - Bank loans utilised by jointly controlled entities – HK\$1,130 million (2005 – HK\$1,109 million), and certain subsidiaries which provided guarantees for bank loans utilised by jointly controlled entities amounting to HK\$2,571 million (2005 – HK\$3,622 million).

Contingent liabilities may develop in a way not initially expected. Therefore, they are assessed continually to determine whether an outflow of resources embodying economic benefits has become probable. If it becomes probable that an outflow of future economic benefits will be required for an item previously dealt with as a contingent liability, an entity should recognise a provision in the financial statements of the period in which the change in probability occurs (except in the extremely rare circumstances where no reliable estimate can be made).

14.5 Contingent Assets

An entity does not recognise a contingent asset (IAS 37.31). Contingent assets usually arise from unplanned or other unexpected events that give rise to the possibility of an inflow of economic benefits to the entity. An example is a claim that an entity is pursuing through legal processes, where the outcome is uncertain.

Contingent assets are not recognised in financial statements, since this may result in recognising income that may never be realised. However, when the realisation of

TABLE 14.2 **Contingent assets**

Where, as a result of past events, there is a possible asset whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity:

The inflow of economic benefits is virtually certain.	The inflow of economic benefits is probable but not virtually certain.	The inflow is not probable.
---	--	-----------------------------

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • The asset is not contingent. | <ul style="list-style-type: none"> • No asset is recognised. • Disclosures are required. | <ul style="list-style-type: none"> • No asset is recognised. • No disclosure is required. |
|--|--|---|

income is virtually certain, the related asset is not a contingent asset and its recognition is appropriate.

Contingent assets are assessed continually to ensure that developments are appropriately reflected in the financial statements. If it has become virtually certain that an inflow of economic benefits will arise, the asset and the related income are recognised in the financial statements of the period in which the change occurs. An entity discloses a contingent asset where an inflow of economic benefits is probable (see Table 14.2).

14.6 Measurement

14.6.1 Best Estimates

The amount recognised as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date (IAS 37.36). It will often be impossible or prohibitively expensive to settle or transfer an obligation at the balance sheet date. However, the estimate of the amount that an entity would rationally pay to settle or transfer the obligation gives the best estimate of the expenditure required to settle the present obligation at the balance sheet date.

The **best estimate** is the amount that an entity would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party at that time (IAS 37.37).

The estimates of outcome and financial effect are determined by

- the judgement of the management of the entity;
- supplemented by experience of similar transactions; and
- in some cases, reports from independent experts.

The evidence considered includes any additional evidence provided by events after the balance sheet date.

Uncertainties surrounding the amount to be recognised as a provision are dealt with by various means depending upon the circumstances. Where the provision being measured involves a large population of items, the obligation is estimated by weighing all possible outcomes by their associated probabilities (i.e., the expected value). The provision will therefore be different depending on whether the probability of a loss of a given amount is, for example, 60% or 90% (see Example 14.5). Where there is a continuous range of possible outcomes, and each point in that range is as likely as any other, the mid-point of the range is used.

Example 14.5 Company A sells goods with a warranty under which customers are covered for the cost of repairs of any manufacturing defects that become apparent within the first 6 months after purchase. If minor defects were detected in all products sold, repair costs of \$2 million would result. If major defects were detected in all products sold, repair costs of \$10 million would result. In accordance with IAS 37, Company A assesses the probability of an outflow for the warranty obligations as a whole. What is the expected value of the cost of repairs in the following two independent situations?

1. Company A's past experience and future expectations indicate that for the coming year, 75% of the goods sold will have no defects, 20% of the goods sold will have minor defects, and 5% of the goods sold will have major defects.
2. Company A's past experience and future expectations indicate that for the coming year, 70% of the goods sold will have no defects, 20% of the goods sold will have minor defects, and 10% of the goods sold will have major defects.

Answers

1. The expected value of the cost of repairs is
 $(75\% \text{ of nil}) + (20\% \text{ of } \$2 \text{ million}) + (5\% \text{ of } \$10 \text{ million}) = \$900,000$
2. The expected value of the cost of repairs is
 $(70\% \text{ of nil}) + (20\% \text{ of } \$2 \text{ million}) + (10\% \text{ of } \$10 \text{ million}) = \$1,400,000$

Where a single obligation is being measured, the individual most likely outcome may be the best estimate of the liability. However, even in such a case, the entity considers other possible outcomes. Where other possible outcomes are either mostly higher or mostly lower than the most likely outcome, the best estimate will be a higher or lower amount. For example, if an entity has to rectify a serious fault in a major plant that it has constructed for a customer, the individual most likely outcome may be for the repair to succeed at the first attempt at a cost of \$1,000, but a provision for a larger amount is made if there is a significant chance that further attempts will be necessary.

The provision is measured before tax, as the tax consequences of the provision, and changes in it, are dealt with under IAS 12 *Income Taxes* (see Chapter 13).

14.6.2 Risks and Uncertainties

The risks and uncertainties that inevitably surround many events and circumstances shall be taken into account in reaching the best estimate of a provision (IAS 37.42).

Risk describes variability of outcome. A risk adjustment may increase the amount at which a liability is measured. Caution is needed in making judgements under conditions of uncertainty, so that income or assets are not overstated and expenses or liabilities are not understated. However, uncertainty does not justify the creation of excessive provisions or a deliberate overstatement of liabilities. For example, if the projected costs of a particularly adverse outcome are estimated on a prudent basis, that outcome is not then deliberately treated as more probable than is realistically the case. Care is needed to avoid duplicating adjustments for risk and uncertainty with consequent overstatement of a provision.

14.6.3 Present Value

Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation (IAS 37.45).

Because of the time value of money, provisions relating to cash outflows that arise soon after the balance sheet date are more onerous than those where cash outflows of the same amount arise later. Provisions are therefore discounted where the effect is material (see Example 14.6).

The discount rate (or rates)

1. is a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability, and
2. does not reflect risks for which future cash flow estimates have been adjusted.

- Example 14.6**
- Entity A is involved in a court case about the plagiarism of software.
 - Legal opinion seems to indicate that Entity A will lose the case.
 - Entity A estimates that:
 - The most likely outcome (60% chance) will be a settlement payment of costs and penalties of \$1 million in 2 years' time;
 - The best case scenario (30% chance) is deemed to be a settlement payment of \$500,000 in one year's time; and
 - The worst case scenario (10% chance) will be a settlement payment of \$2 million in 3 years' time.
 - Applicable discount rate is 5%.

Answers

- As regards the plagiarism case, the following table illustrates the potential outcomes (present values at 5%):

	\$'000	Year	PV \$	Probability %	Total \$
Best case	500	1	476,190	30	142,857
Most likely	1,000	2	907,030	60	544,218
Worst case	2,000	3	1,727,675	10	172,768
					<u>859,843</u>

- As compared with the most likely outcome, which indicates a provision of \$907,030, the expected value of the provision as above is \$859,843.
- The difference, while an accounting estimate has been used, is not material.
- In consequence, a provision of \$860,000 can be made as it is estimated by a more scientific approach.

Source: ACCA 3.6 June 2003, adapted

14.6.4 Future Events

Future events that may affect the amount required to settle an obligation are reflected in the amount of a provision where there is sufficient objective evidence that they will occur.

Expected future events may be particularly important in measuring provisions. For example, an entity may believe that the cost of cleaning up a site at the end of its life will be reduced by future changes in technology. The amount recognised reflects a reasonable expectation of technically qualified, objective observers, taking account of all available evidence as to the technology that will be available at the time of the clean-up. Thus it is appropriate to include, for example, expected cost reductions associated with increased experience in applying existing technology or the expected cost of applying existing technology to a larger or more complex clean-up operation than has previously been carried out. However, an entity does not anticipate the development of a completely new technology for cleaning up unless it is supported by sufficient objective evidence (see Example 14.7).

Example 14.7 Company B believes that the cost of cleaning up a current factory site at the end of its life will be reduced by future changes in technology. The amount of provisions before considering the following changes in technology is \$100 million:

1. Expected cost reduction associated with increased experience in applying existing technology is \$20 million.
2. Expected cost reduction associated with the development of a completely new technology for cleaning up is \$10 million. Although the development of the completely new technology cannot be supported by sufficient objective evidence,

Company B feels confident of the eventual success of the new technology.
What amount of provisions should be recognised?

Answers

The amount of provision should be

$$\$100 \text{ million} - \$20 \text{ million} = \$80 \text{ million}$$

The effect of possible new legislation is taken into consideration in measuring an existing obligation when sufficient objective evidence exists that the legislation is virtually certain to be enacted. The variety of circumstances that arise in practice makes it impossible to specify a single event that will provide sufficient, objective evidence in every case. Evidence is required both of what legislation will demand and of whether it is virtually certain to be enacted and implemented in due course. In many cases, sufficient objective evidence will not exist until the new legislation is enacted.

14.6.5 Expected Disposal of Assets

An entity does not consider gains on the expected disposal of assets in measuring a provision, even if the expected disposal is closely linked to the event giving rise to the provision. Instead, an entity recognises gains on expected disposals of assets at the time specified by the relevant IASs dealing with the assets concerned.

14.7 Reimbursements

Sometimes an entity is able to look to another party to pay part or all of the expenditure required to settle a provision (for example, through insurance contracts, indemnity clauses or suppliers' warranties). The other party may either reimburse amounts paid by the entity or pay the amounts directly.

In most cases, the entity will remain liable for the whole of the amount in question so that the entity would have to settle the full amount if the third party failed to pay for any reason. In this situation, the entity recognises a provision for the full amount of the liability, and also a separate asset for the expected reimbursement when it is virtually certain that reimbursement will be received if the entity settles the liability. Thus, IAS 37 requires the following:

1. Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognised when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation;
2. The reimbursement is treated as a separate asset;
3. The amount recognised for the reimbursement does not exceed the amount of the provision; and

TABLE 14.3 Reimbursements

Some or all of the expenditure required to settle a provision is expected to be reimbursed by another party:

The entity has the obligation for the part of the expenditure to be reimbursed by the other party.	The obligation for the amount expected to be reimbursed remains with the entity, and it is virtually certain that reimbursement will be received if the entity settles the provision.	The obligation for the amount expected to be reimbursed remains with the entity, and the reimbursement is not virtually certain if the entity settles the provision.
<ul style="list-style-type: none"> • The entity has no liability for the amount to be reimbursed. 	<ul style="list-style-type: none"> • The reimbursement is recognised as a separate asset in the balance sheet (i.e., statement of financial position) and may be offset against the expense in the income statement. • The amount recognised for the expected reimbursement does not exceed the liability. 	<ul style="list-style-type: none"> • The expected reimbursement is not recognised as an asset.
<ul style="list-style-type: none"> • No disclosure is required. 	<ul style="list-style-type: none"> • The reimbursement is disclosed together with the amount recognised for the reimbursement. 	<ul style="list-style-type: none"> • The expected reimbursement is disclosed.

4. The expense relating to a provision may be presented net of the amount recognised for a reimbursement in the income statement.

In some cases, the entity will not be liable for the costs in question if the third party fails to pay. In this situation, the entity has no liability for those costs and should not recognise any provision.

In cases involving an obligation for which an entity is jointly and severally liable, the entity discloses a contingent liability to the extent that it is expected that the obligation will be settled by the other parties. Table 14.3 summarises the accounting treatment for reimbursements.

14.8 Changes in Provisions

An entity reviews the provisions at each balance sheet date and adjusts them to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the entity reverses the provision. Where discounting is used, the carrying amount of a provision increases in each period to reflect the passage of time. This increase is recognised as borrowing cost.

14.9 Use of Provisions

A provision is to be used only for expenditures for which the provision was originally recognised (IAS 37.63). Only expenditures that relate to the original provision are set against it. Setting expenditures against a provision that was originally recognised for another purpose would conceal the impact of two different events.

14.10 Application of the Recognition and Measurement Rules

This section discusses the application of the recognition and measurement rules of provisions and contingencies to the following specific situations:

1. Future operating losses;
2. Onerous contracts; and
3. Restructuring.

14.10.1 Future Operating Losses

An entity does not recognise provisions for future operating losses. Future operating losses do not meet the definition of a liability and the general recognition criteria set out for provisions. An expectation of future operating losses is an indication that certain assets of the operation may be impaired. An entity tests these assets for impairment under IAS 36 *Impairment of Assets* (see Chapter 8).

14.10.2 Onerous Contracts

If an entity has a contract that is onerous, the entity recognises the present obligation under the contract and measures it as a provision.

Many contracts (for example, some routine purchase orders) can be cancelled without paying compensation to the other party, and therefore there is no obligation. Other contracts establish both rights and obligations for each of the contracting parties. Where events make such a contract onerous, the contract falls within the scope of IAS 37 and the entity is required to recognise a liability.

IAS 37 defines an onerous contract as a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it (see Example 14.8).

Example 14.8 Company F operates profitably from a factory that it has leased under an operating lease. During December 2007, the company relocates its operations to a new factory. The lease on the old factory continues for the next 4 years, it cannot be cancelled, and the factory cannot be re-let to another user.

- a. Should Company F recognise any provisions or disclose any contingencies as at 31 December 2007, the balance sheet date?

- b. Will your answer in Part (a) be different if the old factory can be used as a temporary godown generating a low level of income?

Answers

Part (a)

Present obligation as a result of a past obligating event – The obligating event is the signing of the lease contract, which gives rise to a legal obligation.

An outflow of resources embodying economic benefits in settlement – When the lease becomes onerous, an outflow of resources embodying economic benefits is probable (Until the lease becomes onerous, the entity accounts for the lease under IAS 17 *Leases*).

Conclusion – Company F should recognise a provision for the best estimate of the unavoidable lease payments.

Part (b)

Conclusion – Company F should recognise a provision for the best estimate of the net amount of the unavoidable lease costs, i.e., the gross unavoidable lease costs less the probable net revenue expected from the godown operations.

Before a separate provision for an onerous contract is established, an entity recognises any impairment loss that has occurred on assets dedicated to that contract (see IAS 36 *Impairment of Assets* and Chapter 8).

14.10.3 Restructuring

A restructuring is a programme that is planned and controlled by management, and materially changes either

1. the scope of a business undertaken by an entity; or
2. the manner in which that business is conducted.

An entity recognises a provision for restructuring costs only when the general recognition criteria for provisions set out in Section 14.3 are met (see Example 14.9).

Example 14.9 Examples of events that may fall under the definition of restructuring:

- Sale or termination of a line of business;
- The closure of business locations in a country or region or the relocation of business activities from one country or region to another;
- Changes in management structure, for example, eliminating a layer of management;
- Fundamental reorganisations that have a material effect on the nature and focus of the entity's operations.

A constructive obligation to restructure arises only when an entity

1. has a detailed formal plan for the restructuring identifying at least
 - a. the business or part of a business concerned;
 - b. the principal locations affected;
 - c. the location, function, and approximate number of employees who will be compensated for terminating their services;
 - d. the expenditures that will be undertaken; and
 - e. when the plan will be implemented; and
2. has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it (IAS 37.72).

Evidence that an entity has started to implement a restructuring plan would be provided, for example, by dismantling plant or selling assets or by the public announcement of the main features of the plan. A public announcement of a detailed plan to restructure constitutes a constructive obligation to restructure only if it is made in such a way and in sufficient detail (i.e., setting out the main features of the plan) that it gives rise to valid expectations in other parties such as customers, suppliers and employees (or their representatives) that the entity will carry out the restructuring (see Example 14.10).

Example 14.10 On 12 December 2007, the board of Company D decided to close down a division making a particular product. On 20 December 2007, a detailed plan for closing down the division was agreed by the board; letters were sent to customers warning them to seek an alternative source of supply, and redundancy notices were sent to the staff of the division. The best estimate of the costs of closing the division was \$10 million as at 31 December 2007.

Should Company D recognise any provisions or disclose any contingencies?

Answers

Present obligation as a result of a past obligating event – The obligating event is the communication of the decision to the customers and employees, which gives rise to a constructive obligation from that date, because it creates a valid expectation that the division will be closed.

An outflow of resources embodying economic benefits in settlement – Probable.

Conclusion – Company D should recognise a provision of \$10 million as at 31 December 2007, which is the best estimate of the costs of closing the division.

For a plan to be sufficient to give rise to a constructive obligation when communicated to those affected by it, its implementation needs to be planned to begin as soon as possible and to be completed in a time frame that makes significant

changes to the plan unlikely. If it is expected that there will be a long delay before the restructuring begins or that the restructuring will take an unreasonably long time, it is unlikely that the plan will raise a valid expectation on the part of others that the entity is at present committed to restructuring, because the time frame allows opportunities for the entity to change its plans.

A management or board decision to restructure taken before the balance sheet date does not give rise to a constructive obligation at the balance sheet date unless the entity has, before the balance sheet date

1. started to implement the restructuring plan; or
2. announced the main features of the restructuring plan to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the entity will carry out the restructuring.

If an entity starts to implement a restructuring plan, or announces its main features to those affected, only after the balance sheet date, disclosure is required under IAS 10 *Events after the Reporting Period*, if the restructuring is material and non-disclosure could influence the economic decisions that users make on the basis of the financial statements (see Example 21.9 of Chapter 21).

Although a constructive obligation is not created solely by a management decision, an obligation may result from other earlier events together with such a decision. For example, negotiations with employee representatives for termination payments, or with purchasers for the sale of an operation, may have been concluded subject only to board approval. Once that approval has been obtained and communicated to the other parties, the entity has a constructive obligation to restructure, if the conditions discussed above are met.

In some countries, the ultimate authority is vested in a board whose membership includes representatives of interests other than those of management (e.g., employees) or notification to such representatives may be necessary before the board decision is taken. Because a decision by such a board involves communication to these representatives, it may result in a constructive obligation to restructure.

No obligation arises for the sale of an operation until the entity is committed to the sale, i.e., there is a binding sale agreement (IAS 37.78). Even when an entity has taken a decision to sell an operation and announced that decision publicly, it cannot be committed to the sale until a purchaser has been identified and there is a binding sale agreement. Until there is a binding sale agreement, the entity will be able to change its mind and indeed will have to take another course of action if a purchaser cannot be found on acceptable terms. When the sale of an operation is envisaged as part of a restructuring, the assets of the operation are reviewed for impairment under IAS 36 *Impairment of Assets*. When a sale is only part of a restructuring, a constructive obligation can arise for the other parts of the restructuring before a binding sale agreement exists.

A restructuring provision includes only the direct expenditures arising from the restructuring, which are those that are both necessarily entailed by the restructuring and not associated with the ongoing activities of the entity (see Example 14.11).

Example 14.11 Examples of costs that are not included in a restructuring provision:

- Retraining or relocating continuing staff;
- Marketing;
- Investment in new systems and distribution networks.

Note: The above expenditures relate to the future conduct of the business and are not liabilities for restructuring at the balance sheet date.

Identifiable future operating losses up to the date of a restructuring are not included in a provision, unless they relate to an onerous contract. Gains on the expected disposal of assets are not taken into account in measuring a restructuring provision, even if the sale of assets is envisaged as part of the restructuring.

14.11 Disclosure

While comparative information is not required, an entity discloses the following information for each class of provision:

1. The carrying amount at the beginning and end of the period;
2. Additional provisions made in the period, including increases to existing provisions;
3. Amounts used (i.e., incurred and charged against the provision) during the period;
4. Unused amounts reversed during the period; and
5. The increase during the period in the discounted amount arising from the passage of time and the effect of any change in the discount rate (IAS 37.84).

An entity also discloses the following information for each class of provision:

1. A brief description of the nature of the obligation and the expected timing of any resulting outflows of economic benefits;
2. An indication of the uncertainties about the amount or timing of those outflows. Where necessary to provide adequate information, an entity discloses the major assumptions made concerning future events; and
3. The amount of any expected reimbursement, stating the amount of any asset that has been recognised for that expected reimbursement (see Example 14.12).

Example 14.12 In 2000, an entity involved in nuclear activities recognises a provision for decommissioning costs of \$300 million. The provision is estimated using the assumption that decommissioning will take place in 60–70 years' time. However, there is a possibility that it will not take place until 100–110 years' time, in which case the present value of the costs will be significantly reduced. The following information is disclosed:

- A provision of \$300 million has been recognised for decommissioning costs. These costs are expected to be incurred between 2060 and 2070; however,

there is a possibility that decommissioning will not take place until 2100–2110. If the costs were measured based upon the expectation that they would not be incurred until 2100–2110, the provision would be reduced to \$136 million. The provision has been estimated using existing technology, at current prices, and discounted using a real discount rate of 2%.

Unless the possibility of any outflow in settlement is remote, an entity discloses for each class of contingent liability at the balance sheet date a brief description of the nature of the contingent liability and, where practicable

1. an estimate of its financial effect;
2. an indication of the uncertainties relating to the amount or timing of any outflow; and
3. the possibility of any reimbursement (IAS 37.86).

In determining which provisions or contingent liabilities may be aggregated to form a class, it is necessary to consider whether the nature of the items is sufficiently similar for a single statement about them to fulfil the disclosure requirements of IAS 37. Thus, it may be appropriate to treat as a single class of provision amounts relating to warranties of different products, but it would not be appropriate to treat as a single class amounts relating to normal warranties and amounts that are subject to legal proceedings.

Where a provision and a contingent liability arise from the same set of circumstances, an entity makes the disclosures required in a way that shows the link between the provision and the contingent liability.

Where an inflow of economic benefits is probable, an entity discloses a brief description of the nature of the contingent assets at the balance sheet date and, where practicable, an estimate of their financial effect, measured using the principles set out for provisions (IAS 37.89). It is important that disclosures for contingent assets avoid giving misleading indications of the likelihood of income arising.

Where any of the information required by the disclosure requirements of IAS 37 is not disclosed because it is not practicable to do so, an entity states that fact in the notes to the financial statements. In extremely rare cases, disclosure of some or all of the required information can be expected to prejudice seriously the position of the entity in a dispute with other parties on the subject matter of the provision, contingent liability or contingent asset. In such cases, an entity need not disclose the information, but it discloses the general nature of the dispute, together with the fact that, and reason why, the information has not been disclosed (see Example 14.13).

Example 14.13 An entity is involved in a dispute with a competitor, who is alleging that the entity has infringed patents and is seeking damages of \$100 million. The entity recognises a provision for its best estimate of the obligation, but discloses none of the

information required by paragraphs 84 and 85 of IAS 37. The following information is disclosed:

- Litigation is in process against the company relating to a dispute with a competitor who alleges that the company has infringed patents and is seeking damages of \$100 million. The information usually required by IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* is not disclosed, on the grounds that it can be expected to prejudice seriously the outcome of the litigation. The directors are of the opinion that the claim can be successfully resisted by the company.

14.12 Summary

An entity recognises provisions only when the following three criteria are met:

1. An entity has a present obligation (legal or constructive) as a result of a past event;
2. It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
3. A reliable estimate can be made of the amount of the obligation.

An entity discloses a contingent liability unless the possibility of an outflow of resources embodying economic benefits is remote. An entity discloses a contingent asset where an inflow of economic benefits is probable.

The amount recognised as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date. Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation.

Future events that may affect the amount required to settle an obligation are reflected in the amount of a provision where there is sufficient objective evidence that they will occur. An entity does not consider gains on the expected disposal of assets in measuring a provision, even if the expected disposal is closely linked to the event giving rise to the provision.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, an entity recognises the reimbursement when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation.

An entity reviews the provisions at each balance sheet date and adjusts them to reflect the current best estimate. A provision is to be used only for expenditures for which the provision was originally recognised.

An entity does not recognise provisions for future operating losses. If an entity has a contract that is onerous, the entity recognises the present obligation under the contract and measures it as a provision.

An entity recognises a provision for restructuring costs only when the general recognition criteria for provisions are met.

While comparative information is not required, IAS 37 requires an entity to disclose certain information for each class of provisions.

Review Questions

1. Define provisions.
2. What are the differences between provisions and other liabilities?
3. Briefly describe the three recognition criteria of provisions.
4. What is an executory contract?
5. How is a legal obligation distinguished from a constructive obligation?
6. What is an obligating event?
7. How can it be determined whether an outflow of resources or other event is regarded as probable?
8. Define contingent liabilities.
9. Define contingent assets.
10. Should an entity consider gains on the expected disposal of assets in measuring a provision?
11. When does an entity recognise reimbursement?
12. Why does an entity review the provisions at the balance sheet date?
13. Why is it not appropriate to set expenditures against a provision that was originally recognised for another purpose?
14. Why is it not appropriate for an entity to recognise provisions for future operating losses?
15. What is an onerous contract?
16. Give some examples of items to be disclosed for a provision.

Exercises

Exercise 14.1 Company X is in the oil industry and causes contamination, and it operates in a country where there is no environmental legislation. However, Company X has a widely published environmental policy in which it undertakes to clean up all contamination that it causes. It has a record of honouring this published policy.

Required:

Should Company X recognise any provisions or disclose any contingencies for the current period?

Exercise 14.2 Company Y leases office premises where its lease requires it to reinstate the premises at the end of the lease. The eventual costs relate to the restoration of the alterations made to the premises. At the balance sheet date, certain alterations have been made to the premises but the premises have not been put into use.

Required:

Should Company Y recognise any provisions or disclose any contingencies for the current period?

- Exercise 14.3** On 12 December 2007, the board of Company Z decided to close down a division. Before the balance sheet date (31 December 2007) the decision was not communicated to any of those affected, and no other steps were taken to implement the decision.

Required:

Should Company Z recognise any provisions or disclose any contingencies for the current period?

- Exercise 14.4** The Hong Kong government introduces a number of changes to the income tax system. As a result of these changes, Company U, an entity in the financial services sector, will need to retrain a large proportion of its administrative and sales workforce in order to ensure continued compliance with financial services regulation. At the balance sheet date, no retraining of staff has taken place.

Required:

Should Company U recognise any provisions or disclose any contingencies for the current period?

- Exercise 14.5** Company C, a retail store, has a policy of refunding purchases by dissatisfied customers, even though it is under no legal obligation to do so. Its policy of making refunds is generally known.

Required:

Should Company C recognise any provisions or disclose any contingencies for the current period?

Problems

- Problem 14.1** Company B operates an offshore oilfield where its licensing agreement requires it to remove the oil rig at the end of production and restore the seabed. 90% of the eventual costs relates to the removal of the oil rig and restoration of damage caused by building it, and 10% arises through the extraction of oil. At the balance sheet date, the rig has been constructed but no oil has been extracted.

Required:

Should Company B recognise any provisions or disclose any contingencies for the current period?

Problem 14.2 Under new legislation, Company E is required to fit smoke filters in its factories by 30 June 2008. The company has not fitted the smoke filters.

Required:

Should Company E recognise any provisions or disclose any contingencies as at the following balance sheet dates?

- a. 31 December 2007; and
- b. 31 December 2008.

Problem 14.3 An entity that operates a chain of retail outlets decides not to insure itself in respect of the risk of minor accidents to its customers; instead, it will “self insure”. Based on its past experience, it expects to pay \$1,500,000 a year in respect of these accidents.

Required:

Should provision be made for the amount expected to arise in a normal year?

Problem 14.4 A manufacturer gives warranties at the time of sale to purchasers of its three product lines. Under the terms of the warranty, the manufacturer undertakes to repair or replace items that fail to perform satisfactorily for 2 years from the date of sale. At the balance sheet date, a provision of \$60,000 has been recognised. The provision has not been discounted as the effect of discounting is not material.

Required:

Draft the information to be disclosed in the financial statements in accordance with IAS 37.

Problem 14.5 On 31 December 2007, Company G gives a guarantee of certain borrowings of Company H, whose financial condition at that time is sound. During 2008, the financial condition of Company H deteriorates and at 30 June 2008 Company H files for protection from its creditors.

Required:

Determine the appropriate accounting treatment for the guarantee given to Company H by Company G as at the following balance sheet dates:

- a. 31 December 2007; and
- b. 31 December 2008.

Case Studies

Case Study 14.1 Some assets require, in addition to routine maintenance, substantial expenditure every few years for major refits or refurbishment and the replacement of major components. IAS 16 *Property, Plant and Equipment* gives guidance on allocating expenditure on

an asset to its component parts where these components have different useful lives or provide benefits in a different pattern.

A furnace has a lining that needs to be replaced every 5 years for technical reasons. At the balance sheet date, the lining has been in use for 3 years.

Required:

Determine the appropriate accounting treatment in accounting for the lining of the furnace.

**Case
Study 14.2**

May Wah Company is a toy manufacturer. Consider the following situations:

Situation 1

In 2007, May Wah filed a suit against its business partner for breach of contract. May Wah's legal counsel estimates that a favourable settlement is highly probable. The company has had a number of these similarly significant lawsuits in the past 5 years.

Situation 2

In 2007, May Wah began to promote a new toy by including a coupon, redeemable for a movie ticket, in each toy box. The movie ticket, which costs May Wah \$50, is purchased in advance and then mailed to the customer when the coupon is received by May Wah. May Wah estimated, on the basis of past experience, that 60% of the coupons would be redeemed. 40% of the coupons were actually redeemed during the current year of sales, and the remaining 20% of the coupons are expected to be redeemed next year.

Situation 3

For a different toy, May Wah started the toy promotion programme by including a coupon, redeemable for a movie ticket in 2007. The movie ticket, which costs May Wah \$50, is purchased in advance and then mailed to the customer when the coupon is received by May Wah. In 2007, no coupon issued by May Wah was redeemed by customers. At the end of year 2007, based on past industry experience, May Wah estimated 35% of the coupons issued in 2007 would be redeemed. In 2008, customers actually redeemed 80% of the coupons issued in 2007.

Required:

Advise May Wah on how to account for the above situations with explanations for the relevant years.

(HKICPA QP A September 1999, adapted)

**Case
Study 14.3**

Fat Choy has signed up to use certain patented technology for production of a product newly designed by Fat Choy and introduced into the market late last year. This new product has proved to be very successful and has attracted substantial sales for the year. The owner of this patented technology is of the view that every product Fat Choy makes is subject to a royalty payment. Fat Choy, however, disagrees with this view and is currently in negotiation with the patent owner for the exact amount of royalties. ABC & Company, the existing auditor of Fat Choy, suggested a provision for an amount based on the patent owner's estimate.

Required:

Advise Fat Choy on the appropriate accounting treatment for the above issue.

(HKICPA FE December 2004, adapted)

Case Study 14.4

The line of business of Pohler Speed, a public limited company, is global mail, logistics and financial services. The financial director wishes to prepare a report on the key points in the financial statements for the year ended 30 November 2004 in which the company has reported a net profit before tax of \$500 million.

A formal announcement for a further restructuring of the group was made after the year-end on 5 December 2004. A provision has not been made in the financial statements, as a public issue of shares is being planned and the company does not wish to lower the reported profits. Prior to the year-end, the company has sold certain plant and issued redundancy notices to some employees in anticipation of the formal commencement of the restructuring. The company prepared a formal plan for the restructuring, which was approved by the board and communicated to the trade union representatives prior to the year-end.

The directors estimate the cost of the restructuring to be \$60 million, and it could take up to 2 years to complete the restructuring. The estimated cost of restructuring includes \$10 million for retraining and relocating existing employees, and the directors feel that costs of \$20 million (of which \$5 million is relocation expenses) will have been incurred by the time the financial statements are approved.

Draft a report explaining recommended accounting practice in each of the above areas and discussing whether the accounting practices used by the company are acceptable, as well as the issues involved.

(ACCA 3.6 December 2004, adapted)

Case Study 14.5

Mini Automobile Limited (MAL) signed a firm sales contract with Car Trading Inc. (CTI) on 1 May 2006. The contract specifies that 300 units of Mini Wagon II (MW II) have to be delivered before 28 February 2007 at a fixed price of \$380,000 per unit. If the delivery is more than 1 month late, MAL will grant CTI a discount of 30% on each delayed unit. The cost of production is \$288,000 per unit. Up to 31 December 2006, MAL was able to deliver only 260 units. MAL will be able to deliver only another 20 units before 28 February 2007. The unexpected delay is due to a strike in one of the production plants.

MAL signed an agreement to lease premises for its showroom for 3 years. According to the lease agreement, MAL is responsible for restoration of the premises to the original condition at the expiry of the lease term. As at 31 December 2006, MAL had already incurred \$10 million in renovating and decorating the showroom. MAL estimates that it will incur \$800,000 to restore the premises to their original condition.

As at 31 December 2006, MAL was a defendant in a patent infringement lawsuit of its driving control system (DCS) that has a high probability of making a loss of \$120 million. If MAL loses the case, the management will take legal action to claim the loss from the DCS developer. The company's lawyers advise that it is also highly

probable that MAL will be successful in the recovery of \$100 million from the DCS developer.

Required:

For each of the above situations, determine the following:

1. Whether a provision should be made;
2. The amount of the provision, if any, in MAL's balance sheet at 31 December 2006;
and
3. The required disclosure by reference to the relevant accounting standards.

(HKICPA QP A September 2006, adapted)

PART
IV

Financial Instruments

- 15 Financial Instruments – An Introduction
- 16 Financial Assets
- 17 Financial Liabilities and Derecognition
- 18 Financial Instruments – Presentation and Disclosure



15

Financial Instruments – An Introduction

Learning Outcomes

This chapter enables you to understand the following:

- 1 The scope of financial instruments
- 2 The meaning of financial instruments, financial assets and financial liability (the definitions)
- 3 The initial recognition of financial assets and financial liabilities (the recognition criteria)
- 4 The measurement of financial assets and financial liabilities at initial recognition (the initial measurement)

Real-life

Case 15.1

Royal Dutch Shell plc

Royal Dutch Shell plc, a global group of energy and petrochemical companies, has prepared its financial statements in accordance with IFRSs since 2005 and clarified in its financial statements that its financial instruments contained various items as follows:

- Financial instruments and other derivative contracts in the consolidated balance sheet comprise financial assets, cash and cash equivalents, debt and certain amounts (including derivatives) reported within other non-current assets, accounts receivable, accounts payable and accrued liabilities and other non-current liabilities.

The scope of financial instruments is extensive, ranging from simple items, including cash and trade receivables, to some complex items, including equity-linked notes and derivatives. Although most entities have cash or receivables and some complex financial instruments are also widely held, no specific authoritative pronouncements or recognition and measurement standards have been established for them anywhere in the world except for the United States.

The issuance of IAS 39 *Financial Instruments – Recognition and Measurement* is a critical step in addressing the recognition and measurement of financial instruments. It not only describes the initial recognition and measurement of financial assets and financial liabilities but also refines some traditional accounting requirements, for example, the provision for bad debts on receivables. In addition to IAS 39, IAS 32 *Financial Instruments – Presentation* and IFRS 7 *Financial Instruments – Disclosures* also address the accounting requirements on financial instruments but focus on the presentation and disclosure aspects.

This chapter introduces the definition of financial instruments and the scope and related accounting requirements in recognising and measuring financial instruments initially. Chapters 16 and 17 will have more in-depth discussion on the accounting requirements in subsequently measuring financial assets and financial liabilities respectively. Chapter 18 will discuss the presentation and disclosure issues in financial instruments.

15.1 Applicable Standard and Scope

IAS 39 *Financial Instruments – Recognition and Measurement* is to establish principles for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. The requirements for presenting information about financial instruments are in IAS 32 *Financial Instruments – Presentation* and the requirements for disclosing information about financial instruments are in IFRS 7 *Financial Instruments – Disclosures*.

An entity is required to apply IAS 39 to all types of financial instruments except the following:

1. Those interests in subsidiaries, associates and joint ventures that are accounted for under IAS 27 *Consolidated and Separate Financial Statements*, IAS 28 *Investments in Associates* or IAS 31 *Interests in Joint Ventures*.
2. Rights and obligations under leases to which IAS 17 *Leases* applies, except in the following circumstances:
 - a. Lease receivables recognised by a lessor are subject to the derecognition and impairment provisions of IAS 39;
 - b. Finance lease payables recognised by a lessee are subject to the derecognition provisions of IAS 39; and
 - c. Derivatives that are embedded in leases are subject to the embedded derivatives provisions of IAS 39.
3. Employers' rights and obligations under employee benefit plans, to which IAS 19 *Employee Benefits* applies.
4. Financial instruments issued by the entity (i.e., the issuer) that meet the definition of an equity instrument in IAS 32 (including options and warrants).
5. Rights and obligations arising under (a) an insurance contract as defined in IFRS 4 *Insurance Contracts*, other than an issuer's rights and obligations arising under an insurance contract that meets the definition of a financial guarantee contract in IAS 39, or (b) a contract that is within the scope of IFRS 4 because it contains a discretionary participation feature.

However, IAS 39 applies to a derivative that is embedded in such a contract if the derivative is not itself a contract within the scope of IFRS 4.

Moreover, if an issuer of financial guarantee contracts has previously asserted explicitly that it regards such contracts as insurance contracts and has used accounting applicable to insurance contracts, the issuer may elect to apply either IAS 39 or IFRS 4 to such financial guarantee contracts. The issuer may make that election contract by contract, but the election for each contract is irrevocable.

6. Contracts for contingent consideration in a business combination (see IFRS 3 *Business Combinations*).
7. Contracts between an acquirer and a vendor in a business combination to buy or sell an acquiree at a future date.
8. Loan commitments other than those loan commitments described in IAS 39 – but all loan commitments are still subject to the derecognition provisions of IAS 39.
9. Financial instruments, contracts and obligations under share-based payment transactions to which IFRS 2 *Share-based Payment* applies, except for contracts within the scope specified in IAS 39.

10. Rights to payments to reimburse the entity for expenditure it is required to make to settle a liability that it recognises as a provision in accordance with IAS 37, or for which, in an earlier period, it recognised a provision in accordance with IAS 37.

15.1.1 Loan Commitments within IAS 39

Loan commitments are not within the scope of IAS 39, except for the following:

1. Loan commitments that the entity designates as financial liabilities at fair value through profit or loss;
2. Loan commitments that can be settled net in cash or by delivering or issuing another financial instrument. These loan commitments are derivatives;
3. Commitments to provide a loan at a below-market interest rate that are a kind of financial liability and explained in Chapter 17 (IAS 39.4).

15.1.2 Contracts to Buy or Sell Non-financial Items

The scope of financial instruments in IAS 39 includes those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments. An entity is required to apply IAS 39 to such contracts as if they were financial instruments (IAS 39.5).

However, IAS 39 will not be applied to those contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements.

Example 15.1 There are various ways in which a contract to buy or sell a non-financial item can be settled net in cash or another financial instrument or by exchanging financial instruments. These include the following:

1. When the terms of the contract permit either party to settle it net in cash or another financial instrument or by exchanging financial instruments;
2. When the ability to settle net in cash or another financial instrument, or by exchanging financial instruments, is not explicit in the terms of the contract, but the entity has a practice of settling similar contracts net in cash or another financial instrument or by exchanging financial instruments;
3. When, for similar contracts, the entity has a practice of taking delivery of the underlying and selling it within a short period after delivery for the purpose of generating a profit from short-term fluctuations in price or dealer's margin; and
4. When the non-financial item that is the subject of the contract is readily convertible to cash.

15.2 Meaning of Financial Instruments

A financial instrument is formally defined in IAS 32, while IAS 39 refers to the same definition as follows:

A **financial instrument** is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity (IAS 32.11 and IAS 39.8).

The above definition of a financial instrument implies that a financial asset, financial liability and equity instrument are also financial instruments.

15.2.1 Definition of Financial Asset

A **financial asset** is any asset that is

1. cash;
2. an equity instrument of another entity;
3. a contractual right
 - a. to receive cash or another financial asset from another entity; or
 - b. to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity;
4. a contract that will or may be settled in the entity's own equity instruments and is
 - a. a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
 - b. a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments (IAS 32.11 and IAS 39.8).

The first two elements in the definition of a financial asset, cash and equity instruments held by an entity, are specifically defined as financial assets. Investment in equity instruments, except for an investment in a subsidiary, associate or joint venture, is a financial asset.

The third element in the definition implies that a contractual right to receive or exchange financial instruments with a favourable impact to an entity is itself a financial asset. For example, a bank deposit is a financial asset because it represents a contractual right of an entity to receive the cash from the bank upon maturity. If a chain of contractual rights ultimately leads to the receipt of cash or to the acquisition of an equity instrument, it meets the definition of a financial asset.

Example 15.2 Do the following items held by an entity meet the definition of a financial asset?

1. Gold bullion
2. Artefacts and antiques
3. Inventories
4. Income tax receivable
5. Prepaid expenses

Answers

The above items are not financial assets, because of the following reasons:

1. Although gold bullion is highly liquid, there is no contractual right to receive cash or another financial asset inherent in bullion.
2. Artefacts and antiques may be valuable, but there is no contractual right to receive cash or another financial asset inherent in them.
3. Physical assets (such as inventories, property, plant and equipment), leased assets and intangible assets (such as patents and trademarks) are not financial assets. Control of such physical and intangible assets creates an opportunity to generate an inflow of cash or another financial asset, but it does not give rise to a present right to receive cash or another financial asset.
4. Income tax receivable is not contractual, as it is created as a result of a statutory requirement imposed by the government. Accounting for income taxes is dealt with in IAS 12 *Income Taxes* (see Chapter 13).
5. Assets such as prepaid expenses, for which the future economic benefit is the receipt of goods or services, rather than the right to receive cash or another financial asset, are not financial assets.

A contract held by an entity to receive or deliver its own equity instruments is normally the entity's own equity instruments. However, a contract is not an equity instrument if the contract is to receive (1) a variable number of the equity's own equity instruments (if the contract is a non-derivative) or (2) a variable number of shares whose value equals a fixed amount or an amount based on changes in an underlying variable, e.g., a commodity price (if the contract is a derivative). Such a contract is not an equity instrument but a financial asset (or a financial liability) (see Section 15.2.3).

15.2.2 Definition of Financial Liability

A **financial liability** is any liability that is

1. a contractual obligation
 - a. to deliver cash or another financial asset to another entity; or
 - b. to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or

2. a contract that will or may be settled in the entity's own equity instruments and is
 - a. a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
 - b. a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments (IAS 32.11 and IAS 39.8).

An entity's contractual right to receive cash or another financial asset is another entity's contractual obligation to deliver cash or another financial asset. In simple cases, a financial liability is an entity's contractual obligation to deliver cash or another financial asset to another entity. In a more complicated situation, similar to financial assets, financial liabilities may also include contracts to deliver (1) a variable number of the entity's own equity instruments (if the contract is a non-derivative) or (2) a variable number of shares whose value equals a fixed amount or an amount based on changes in an underlying variable, e.g., a commodity price (if the contract is a derivative).

Example 15.3 Common examples of financial assets representing a contractual right to receive cash in the future and corresponding financial liabilities representing a contractual obligation to deliver cash in the future are

1. trade accounts receivable and payable;
2. notes receivable and payable;
3. loans receivable and payable; and
4. bonds receivable and payable.

In each case, one party's contractual right to receive (or obligation to pay) cash is matched by the other party's corresponding obligation to pay (or right to receive).

The ability to exercise a contractual right or the requirement to satisfy a contractual obligation may be absolute, or it may be contingent on the occurrence of a future event. For example, a financial guarantee is a contractual right of the lender to receive cash from the guarantor, and a corresponding contractual obligation of the guarantor to pay the lender, if the borrower defaults.

A contingent right and obligation meet the definition of a financial asset and a financial liability, even though such assets and liabilities are not always recognised in the financial statements. Financial guarantee contracts are one kind of financial liabilities to be discussed in Chapter 17.

15.2.3 Definition of Equity Instrument

An **equity instrument** is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities (IAS 32.11 and IAS 39.8).

The definition of an equity instrument looks simple. However, in applying the definition to determine whether a contract is an equity instrument, an entity is required to ensure whether the contract represents an obligation to deliver a specified amount or represents an obligation to deliver a specified equity interest.

A contract to pay (or receive) a specified amount (rather than a specified equity interest) is not an equity instrument, because the entity engaged in such a contract does not know, before the transaction is settled, how many of its own shares (or how much cash) it will receive (or deliver) and the entity may not even know whether it will receive (or deliver) its own shares.

More specifically, IAS 32 requires an entity to classify a contract as an equity instrument if, and only if, both of the following conditions are met:

1. The instrument includes no contractual obligation
 - a. to deliver cash or another financial asset to another entity; or
 - b. to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the issuer.
2. If the instrument will or may be settled in the issuer's own equity instruments, it is
 - a. a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or
 - b. a derivative that will be settled only by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments. For this purpose, the issuer's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the issuer's own equity instruments (IAS 32.16).

A contractual obligation, including one arising from a derivative (see Section 15.2.4), that will or may result in the future receipt or delivery of the issuer's own equity instruments, but does not meet the above conditions, is not an equity instrument.

Example 15.4 Examples of equity instruments include the following:

- Non-puttable ordinary shares (i.e., no right to the holder to put it back to the issuer);
- Preference shares that are non-redeemable and non-cumulative;
- Preference shares that are redeemable and/or have distribution only at the discretion of the issuer; and

- Warrants or written call options that allow the holder to subscribe for or purchase a fixed number of non-puttable ordinary shares in the issuing entity in exchange for a fixed amount of cash or another financial asset.

An entity's obligation to issue or purchase a fixed number of its own equity instruments in exchange for a fixed amount of cash or another financial asset is an equity instrument of the entity. However, if such a contract contains an obligation for the entity to pay cash or another financial asset, it also gives rise to a liability for the present value of the redemption amount. Such a contract is then a financial liability rather than an equity instrument.

As a result of the introduction of such a formal definition on equity instruments, certain instruments classified as equity instruments previously should be reclassified as financial liabilities, including preference shares that are redeemable not at the discretion of the issuer and/or have distribution not at the discretion of the issuer.

Real-life

Case 15.2

Standard Chartered plc

Standard Chartered plc, a banking group listed on both the London and Hong Kong stock exchanges, has adopted IFRSs since 2005. Pursuant to the adoption of IAS 32, Standard Chartered plc reclassified certain items from equity to liabilities and stated the following in its notes to the financial statements of 2005:

- Preference shares, which carry a mandatory coupon or are redeemable on a specific date or at the option of the shareholder, are classified as financial liabilities and are presented in other borrowed funds.
- Upon the adoption of IAS 32 on 1 January 2005, the group's £100 million 7 $\frac{3}{8}$ % and £100 million 8 $\frac{1}{4}$ % irredeemable £1 preference shares were reclassified from equity to subordinated liabilities and other borrowed funds.

More discussion and illustration on the presentation of financial liabilities and equity instruments (together with financial assets) can be found in Chapter 18.

15.2.4 Definition of Derivative

A **derivative** is a financial instrument or other contract within the scope of IAS 39 with all three of the following characteristics:

1. Its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable (sometimes called the "underlying");

2. It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and
3. It is settled at a future date (IAS 39.9).

Financial instruments include primary instruments (such as receivables, payables and equity instruments) and derivative financial instruments or simply derivatives (such as financial options, futures and forwards, interest rate swaps and currency swaps). Derivative financial instruments meet the definition of a financial instrument and, accordingly, are within the scope of IAS 39.

The definition of a derivative in IAS 39 includes contracts that are settled gross by delivery of the underlying item (e.g., a forward contract to purchase a fixed-rate debt instrument). An entity may have a contract to buy or sell a non-financial item that can be settled net in cash or another financial instrument or by exchanging financial instruments (e.g., a contract to buy or sell a commodity at a fixed price at a future date). Such a contract is within the scope of IAS 39 unless it was entered into and continues to be held for the purpose of delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements (see Section 15.1.2).

Example 15.5 Melody Limited makes a 5-year fixed-rate loan to Tony Inc., while Tony at the same time makes a 5-year variable-rate loan for the same amount to Melody. There are no transfers of principal at inception of the two loans, since Melody and Tony have a netting agreement.

Is this a derivative under IAS 39?

Answers

Yes. This meets the definition of a derivative (that is to say, there is an underlying variable, no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors, and future settlement).

The contractual effect of the loans is the equivalent of an interest rate swap arrangement with no initial net investment. Non-derivative transactions are aggregated and treated as a derivative when the transactions result, in substance, in a derivative. Indicators of this would include the following:

- They are entered into at the same time and in contemplation of one another;
- They have the same counterparty;
- They relate to the same risk;
- There is no apparent economic need or substantive business purpose for structuring the transactions separately that could not also have been accomplished in a single transaction.

The same answer would apply if Melody and Tony did not have a netting agreement, because the definition of a derivative does not require net settlement.

One of the defining characteristics of a derivative is that it has an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors. An option contract meets that definition because the premium is less than the investment that would be required to obtain the underlying financial instrument to which the option is linked. A currency swap that requires an initial exchange of different currencies of equal fair values meets the definition because it has a zero initial net investment.

Example 15.6 Many derivative instruments, such as futures contracts and exchange traded written options, require margin accounts.

Is the margin account part of the initial net investment?

Answers

No, the margin account is not part of the initial net investment in a derivative instrument. Margin accounts are a form of collateral for the counterparty or clearing house and may take the form of cash, securities or other specified assets, typically liquid assets. Margin accounts are separate assets that are accounted for separately.

15.3 Initial Recognition of Financial Assets and Financial Liabilities

15.3.1 Initial Recognition at Trade Date

Initial recognition requirements for financial assets and financial liabilities in IAS 39 are the same. An entity is required to recognise a financial asset or a financial liability on its balance sheet when, and only when, the entity becomes a party to the contractual provisions of the instrument (IAS 39.14).

In other accounting standards, the recognition criteria are

1. it is probable that future economic benefits associated with the item will flow to (or flow out from) the entity; and
2. the cost of the item can be measured reliably.

If the criteria are met, an entity would normally recognise the asset (or liability) on a settlement date basis.

The settlement date is the date that an asset is delivered to or by an entity. As compared to the settlement date, the trade date is the date that an entity commits itself to purchase or sell an asset. The recognition criteria in IAS 39 instead require an entity to recognise a financial asset or financial liability when it becomes a party to the contractual provisions of the instruments. These criteria imply an entity to recognise financial asset or financial liability on a trade date basis.

In consequence of these recognition criteria, all the financial assets and liabilities, including derivatives (such as options and futures), become “on-balance sheet” from the trade date. In other words, an entity is also required to recognise all of its contractual rights and obligations under derivatives in its balance sheet as assets and liabilities.

Example 15.7 On 5 March 2008, Melody Limited signed a call option contract to purchase pounds sterling on 31 March 2009. Melody argued that as it had the right not to exercise the call option, it would not be required to recognise the option contract until 31 March 2009. Comment on the validity of Melody's argument to defer the recognition of the call option.

Answers

When Melody signed the contract on 5 March 2008, it had become a party to the contractual provisions of a call option contract on pounds sterling. Therefore, it should recognise the call option contract regardless of whether it would exercise the call option or not. The option should be recognised on 5 March 2008, the trade date.

Melody could not argue to defer the recognition of the call option until it chose to exercise the call option on 31 March 2009, the settlement date.

15.3.2 Regular Way Purchase or Sale of Financial Asset

While all financial liabilities should be recognised using trade date accounting, an entity can choose to recognise or derecognise a financial asset either using trade date accounting or settlement date accounting if it is a regular way purchase or sale of financial asset (IAS 39.38).

A **regular way purchase or sale** is a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned (IAS 39.9).

IAS 39 specifically states that a contract that requires or permits net settlement of the change in the value of the contract (such as a derivative contract) is not a regular way contract. Instead, such a contract is accounted for as a derivative in the period between the trade date and the settlement date.

No matter which accounting method is used for a regular way purchase or sale, the method used is applied consistently for all purchases and sales of financial assets that belong to the same category of financial assets.

Real-life

Case 15.3

Ping An Insurance (Group) Company of China, Ltd.

Ping An Insurance (Group) Company of China, Ltd., one of the largest insurance companies in the People's Republic of China, stated the following in its annual report of 2006:

**Real-life
Case 15.3**
(cont'd)

- All regular way purchases and sales of financial assets are recognised on the trade date, i.e., the date the group commits to purchase or sell the asset. Regular way purchases or sales of financial assets require delivery of assets within the time frame generally established by regulation or convention in the marketplace.

In practice, to align with the recognition of other purchases and sales, most entities are similar to Ping An Insurance (Group) Company of China, Ltd. to recognise regular way purchase and sale of financial assets on the trade date.

15.4 Initial Measurement of Financial Assets and Financial Liabilities

IAS 39 has not only the same initial recognition requirements for both financial assets and financial liabilities, but also the same initial measurement basis for both financial assets and financial liabilities.

When a financial asset or financial liability (except at fair value through profit or loss) is recognised initially, an entity is required to measure it at

1. its fair value; plus
2. its transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability (IAS 39.43).

In the case of a financial asset or financial liability that will be classified as a financial asset or financial liability at fair value through profit or loss, an entity is only required to measure it at its fair value. Its transaction costs should not be recognised (IAS 39.43).

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction (IAS 39.9).

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or financial liability. An incremental cost is one that would not have been incurred if the entity had not acquired, issued or disposed of the financial instrument (IAS 39.9).

When an entity uses settlement date accounting for an asset that is subsequently measured at cost or amortised cost, the asset is recognised initially at its fair value on the trade date.

15.4.1 Fair Value on Initial Recognition

IAS 39 specifically states that the fair value of a financial instrument on initial recognition is normally the transaction price, i.e., the fair value of the consideration given or received (IAS 39.AG64).

Real-life

Case 15.4

BP plc and China Insurance International Holdings Co. Ltd.

BP plc, one of the world's leading oil companies on the basis of market capitalisation and proved reserves, explained the determination of the initial measurement of its financial instrument in its 2006 annual report as follows:

- When financial assets are recognised initially, they are measured at fair value, normally being the transaction price plus, in the case of financial assets not at fair value through profit or loss, directly attributable transaction costs.

China Insurance International Holdings Company Limited, the first publicly traded China-related insurance company, also explained the determination of the initial measurement of its financial instruments in its 2006 annual report as follows:

- Investments in debt and equity securities are initially stated at cost, which is their transaction price unless fair value can be more reliably estimated using valuation techniques whose variables include only data from observable markets.

The fair value of a financial instrument on initial recognition is normally the transaction price, i.e., the fair value of the consideration given or received. However, if part of the consideration given or received is for something other than the financial instrument, the fair value of the financial instrument is estimated using a valuation technique (IAS 39.AG64). Chapter 16 further explains various kinds of valuation techniques in estimating the fair value of a financial instrument.

Real-life

Case 15.5

HSBC Holdings plc

In addition to referring to the transaction price of a financial instrument, HSBC Holdings plc explained the determination of the initial measurement of its financial instrument in its 2006 annual report using other approaches as follows:

- All financial instruments are recognised initially at fair value. The fair value of a financial instrument on initial recognition is normally the transaction price, i.e., the fair value of the consideration given or received.
- In certain circumstances, however, the initial fair value may be based on other observable current market transactions in the same instrument, without modification or repackaging, or on a valuation technique whose variables include only data from observable markets.

Example 15.8 Advance Finance Inc. originates a loan of \$1 million that bears an off-market interest rate, 6% per annum, when the market rate for similar loans is 8%, and receives an upfront fee of \$250,000 as compensation.

Advance Finance Inc. should recognise the loan at its fair value, i.e., net of the fee it receives, at \$750,000 (\$1,000,000 – \$250,000). While cash interest of \$60,000 per annum will be received, the effective interest rate is still 8% per annum ($\$60,000 \div \$750,000$).

Example 15.9 Advance Finance Inc. grants a 3-year loan of \$50,000 to a new customer on 1 January 2008. Advance Finance Inc. charges interest at 4% per annum as it expects to generate more new business from this new customer. The current market lending rate of a similar loan is 6% per annum.

Discuss the implication of the loan.

Answers

On initial recognition, Advance Finance Inc. should recognise the loan receivable at the fair value. Even though the best evidence of the fair value of the loan at initial recognition is the transaction price, if part of the consideration given is for something other than the loan, the fair value of the loan should be estimated using a valuation technique.

The fair value of the loan receivable can be estimated as the present value of all future cash receipts discounted using the prevailing market interest rate for a similar instrument. By using the market interest rate of 6% for a similar loan, Advance Finance Inc. derives the present value of the interests and principal repayments as follows:

	Cash inflow		Present value
	\$	Discount factor	\$
2008	2,000	$1 \div (1 + 6\%)^1$	1,887
2009	2,000	$1 \div (1 + 6\%)^2$	1,780
2010	2,000	$1 \div (1 + 6\%)^3$	1,679
2010	50,000	$1 \div (1 + 6\%)^3$	41,981
Present value of all future cash receipts			47,327

Discounting the interest and principal repayments using the market rate of 6%, Advance Finance Inc. will recognise an originated loan of \$47,327. The difference of \$2,673 between \$50,000 and \$47,327 may represent the value of future business with the customer. However, it does not qualify for recognition as an asset and should be expensed immediately. Advance Finance Inc. recognises the loan receivable as follows:

Dr Financial asset	\$47,327	
Profit or loss	2,673	
Cr Cash		\$50,000

IAS 39 also specifically mentions that short-term receivables and payables with no stated interest rate may be measured at the original invoice amount if the effect of discounting is immaterial.

15.5 Compound Financial Instruments and Embedded Derivatives

There are certain financial instruments that have a hybrid or combined nature. For example, a convertible bond is a debt instrument with an embedded option to convert the debt instrument to equity shares. From the perspective of the issuer, the debt instrument is a financial liability while the embedded option may be an equity instrument. From the perspective of the holder of that convertible bond, the debt instrument is a financial asset and the embedded option is similar to a derivative.

In IAS 32, from the perspective of an issuer, these kinds of financial instruments are termed as compound financial instruments. IAS 32 requires an issuer of a compound financial instrument to separately classify different components of the instrument in accordance with the definition of financial liability and equity instrument.

In IAS 39, from the perspective of a holder, these kinds of financial instruments are termed as hybrid (combined) instruments. IAS 39 requires a holder of a hybrid instrument to separately account for the embedded derivative of the instrument if certain conditions are fulfilled.

15.5.1 Compound Financial Instruments under IAS 32

The issuer of a single non-derivative financial instrument is required to evaluate the terms of the financial instrument to determine whether it contains both a liability and an equity component. Such components are classified separately as financial liabilities, financial assets or equity instruments in accordance with the substance of the contractual arrangement and the definitions of a financial liability, financial asset and equity instrument (IAS 32.38).

On initial recognition, the issuer is required to recognise separately the components of a financial instrument that

1. creates a financial liability of the entity; and
2. grants an option to the holder of the instrument to convert it into an equity instrument of the entity.

In accordance with its definition, an equity instrument is an instrument that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Therefore, when the initial carrying amount of a compound financial instrument is allocated to its equity and liability components, the equity component is assigned the residual amount after deducting from the fair value of the instrument as a whole the amount separately determined for the liability component. The separation or classification is not affected by a change in the likelihood that a conversion option will be exercised.

Example 15.10 AJS Limited issues 2,000 convertible bonds on 2 January 2008. The bonds have a 3-year term and are issued at par with a face value of \$1,000 per bond, giving total proceeds of \$2 million. Interest is payable annually in arrears at a nominal annual interest rate of 6%. Each bond is convertible at any time up to maturity into 250 ordinary shares.

When the bonds are issued, the prevailing market interest rate for similar debt without conversion options is 9%.

Discuss and prepare the journal entries for AJS Limited on 2 January 2008.

Answers

The bonds, which are convertible by the holder into a fixed number of ordinary shares of AJS, are a compound financial instrument.

From the perspective of AJS, such an instrument comprises two components:

1. A financial liability (a contractual arrangement to deliver cash or another financial asset); and
2. An equity instrument (a call option granting the holder the right, for a specified period of time, to convert it into a fixed number of ordinary shares of the entity).

The economic effect of issuing such an instrument is substantially the same as issuing simultaneously a debt instrument with an early settlement provision and warrants to purchase ordinary shares, or issuing a debt instrument with detachable share purchase warrants. Accordingly, in all cases, AJS presents the liability and equity components separately on its balance sheet.

AJS first determines the carrying amount of the liability component by measuring the fair value of a similar liability that does not have an associated equity component. The carrying amount of the equity instrument represented by the option to convert the instrument into ordinary shares is then determined by deducting the fair value of the financial liability from the fair value of the compound financial instrument as a whole.

The present value of the liability component is calculated using a discount rate of 9%, the market interest rate for similar bonds having no conversion rights, as follows:

	\$
Proceeds of the bond issue.....	2,000,000
Present value of the principal – \$2,000,000 payable at the end of 3 years.....	1,544,367
Present value of the interest – \$120,000 payable annually in arrears for 3 years... ..	303,755
Total liability component	<u>1,848,122</u>
Equity component (residual amount by deduction).....	<u>151,878</u>

The journal entry on 2 January 2008 would be:

Dr Cash.....	\$2,000,000	
Cr Financial liabilities		\$1,848,122
Equity		151,878

In case a compound financial instrument contains multiple components, for example, a convertible bond with a call feature, the value of any such derivative features other than the equity component is included in the liability component. Only those features or components that meet the definition of the equity instrument can be classified as equity components, which are assigned with a residual amount after deducting the value of the liability component from the fair value of the instrument as a whole.

15.5.2 Embedded Derivative under IAS 39

A holder of a hybrid (combined) instrument is required to evaluate whether the embedded derivative should be separately accounted for in accordance with IAS 39.

A hybrid instrument includes a non-derivative host contract and an embedded derivative, with the effect that some of the cash flows of the hybrid instrument vary in a way similar to a stand-alone derivative. However, a derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty from that instrument, is not an embedded derivative, but a separate financial instrument.

Example 15.11 Examples of a contract with an embedded derivative include the following:

1. A call, put or prepayment option embedded in a host debt contract;
2. An option or automatic provision to extend the remaining term to maturity of a debt instrument;
3. Equity-indexed interest or principal payments embedded in a host debt instrument;

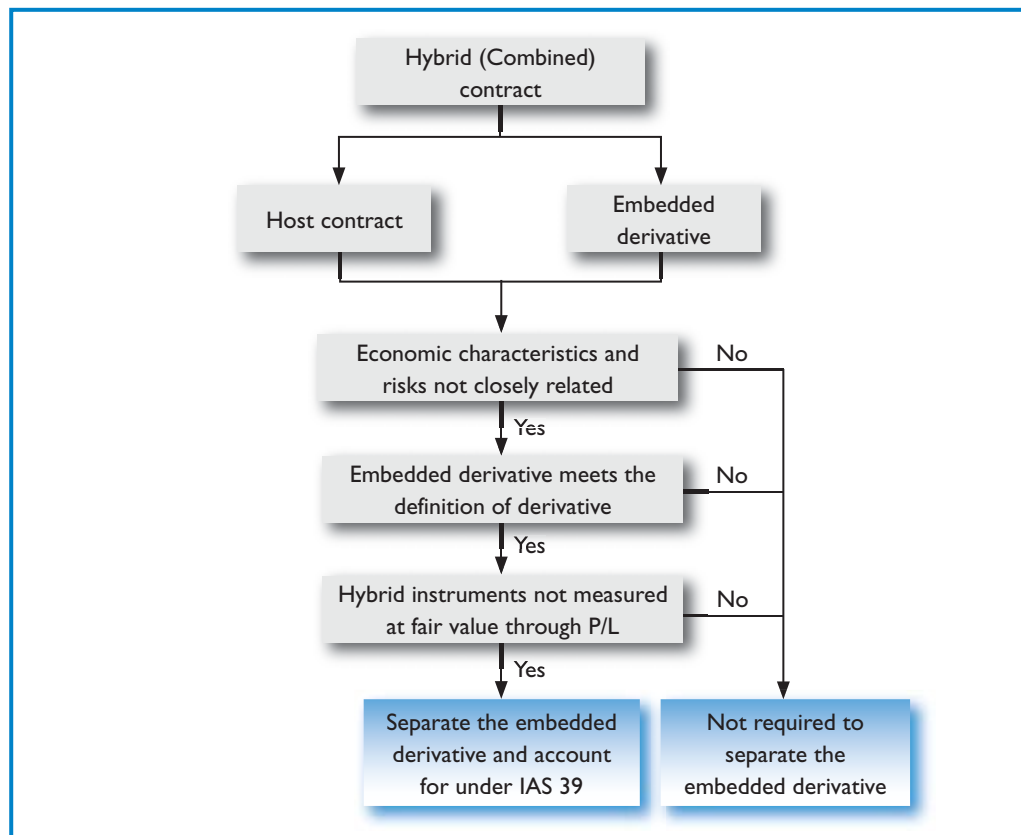
4. Commodity-indexed interest or principal payments embedded in a host debt instrument;
5. An equity conversion feature embedded in a convertible debt instrument.

IAS 39 requires an entity to separate an embedded derivative from the host contract and account for such an embedded derivative as a derivative if, and only if:

1. The economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;
2. A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
3. The hybrid instrument is not measured at fair value with changes in fair value recognised in profit or loss (i.e., a derivative that is embedded in a financial asset or financial liability at fair value through profit or loss is not separated).

Figure 15.1 summarises when an entity is required to separate the embedded derivative from the host contract.

FIGURE 15.1 The conditions to separate the embedded derivative from the host contract



If an embedded derivative is separated, the host contract is accounted for under IAS 39 if it is a financial instrument, and in accordance with other appropriate accounting standards if it is not a financial instrument. IAS 39 does not address whether an embedded derivative is presented separately on the face of the financial statements (IAS 39.11). The separated embedded derivative is similar to a simple derivative to be accounted for in the same manner as other derivatives.

Example 15.12 Tony Finance Limited invested in a bond that would be convertible into shares of the issuing entity before maturity. Discuss and suggest an accounting treatment for the convertible bond held by Tony.

Answers

An investment in a convertible bond comprises two elements:

1. The host contract, i.e., the bond; and
2. The embedded derivative, i.e., the equity conversion option.

An investment in a convertible bond can be classified as an available-for-sale financial asset provided it is not purchased for trading purposes. However, an investment in a convertible bond that is convertible before maturity generally cannot be classified as a held-to-maturity investment because that would be inconsistent with paying for the conversion feature – the right to convert into equity shares before maturity. Chapter 16 has further discussion on available-for-sale financial assets and held-to-maturity investments.

If the bond is classified as available for sale (i.e., fair value changes recognised directly in equity until the bond is sold), the equity conversion option (the embedded derivative) will be separated. The amount paid for the bond is split between the debt instrument without the conversion option and the equity conversion option. Changes in the fair value of the equity conversion option are recognised in profit or loss unless the option is part of a cash flow hedging relationship.

If a contract contains one or more embedded derivatives, an entity may designate the entire hybrid (combined) contract as a financial asset or financial liability at fair value through profit or loss unless:

1. The embedded derivative does not significantly modify the cash flows that otherwise would be required by the contract; or
2. It is clear with little or no analysis when a similar hybrid instrument is first considered that separation of the embedded derivative is prohibited, such as a prepayment option embedded in a loan that permits the holder to prepay the loan for approximately its amortised cost (IAS 39.11A).

If an entity is required by IAS 39 to separate an embedded derivative from its host contract, but is unable to measure the embedded derivative separately either at acquisition or at a subsequent financial reporting date, the entity is required to

designate the entire hybrid contract as at fair value through profit or loss (IAS 39.12). The classification of a financial asset or financial liability at fair value through profit or loss is further discussed in Chapter 16.

**Real-life
Case 15.6**

BP plc

BP plc explained its accounting policy on embedded derivatives in 2006 as follows:

- Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contract.
- Contracts are assessed for embedded derivatives when the group becomes a party to them, including at the date of a business combination.
- Embedded derivatives are measured at fair value at each balance sheet date. Any gains or losses arising from changes in fair value are taken directly to profit or loss.

In order to separately account for an embedded derivative, an entity is required to determine reliably the fair value of the embedded derivative. However, if an entity is unable to determine reliably the fair value of an embedded derivative on the basis of its terms and conditions (for example, because the embedded derivative is based on an unquoted equity instrument), the fair value of the embedded derivative is the difference between

- the fair value of the hybrid instrument; and
- the fair value of the host contract, if those can be determined under IAS 39.

If the entity is unable to determine the fair value of the embedded derivative using the above method, the hybrid instrument as a whole is designated as at fair value through profit or loss.

Example 15.13 Based on Example 15.12, Tony Finance Limited invested in a bond that would be convertible into shares of the issuing entity before maturity. The purchase consideration and fair value of the convertible bond was \$3 million, and the fair value of the embedded derivative was \$500,000.

1. Prepare journal entries for accounting for the convertible bond held by Tony as available-for-sale financial assets.
2. Discuss any alternative method in accounting for the convertible bond.

Answers

1. As discussed in Example 15.12, if the bond is classified as available for sale (i.e., fair value changes recognised directly in equity until the bond is sold), the equity conversion option (the embedded derivative) will be separated. The amount paid

for the bond is split between the debt instrument without the conversion option and the equity conversion option. Then, the journal entries would be:

Dr Available-for-sale financial assets	\$2,500,000	
Embedded derivative	500,000	
Cr Cash		\$3,000,000

The embedded derivative would then be accounted for as a derivative. Chapter 16 has further discussion on subsequent measurement of derivatives (which are accounted for as held for trading as at fair value through profit or loss if they are not designated and effective hedging instruments).

2. If the convertible bond is measured at fair value with changes in fair value recognised in profit or loss, separating the embedded derivative from the host bond is not permitted. Then, the journal entries would be:

Dr Financial assets at fair value through profit or loss	\$3,000,000	
Cr Cash		\$3,000,000

15.6 Summary

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The accounting requirements for financial instruments are under the scope of IAS 32, IAS 39 and IFRS 7, which also cover those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments.

Financial asset, financial liability and equity instrument are specifically defined in IAS 32, and the same definitions are adopted in IAS 39 and IFRS 7. Items should be classified as a financial asset, financial liability or equity instrument in accordance with the substance of a contractual arrangement and the definitions. Derivatives are also defined in IAS 39 as financial instruments or other contracts with value changes in response to an underlying, no or little initial investment and a future settlement date.

Financial assets and financial liabilities should be initially recognised only when the entity becomes a party to the contractual provision of the instrument. Such initial recognition requirements imply a trade date accounting and a major discrepancy from the requirements of other accounting standards. An entity can choose to use settlement date accounting only when it is a regular way purchase or sale of financial asset.

Initial measurement of a financial asset and financial liability is its fair value plus transaction cost. Transaction cost is not recognised for those financial assets and financial liabilities at fair value through profit or loss. Fair value is normally the transaction price, i.e., the fair value of the consideration given or received. If part of the consideration given or received is for something other than the financial instrument, the fair value of the instrument is estimated using a valuation technique.

IAS 32 further requires an issuer of a single non-derivative compound financial instrument to evaluate the terms of the instrument to determine whether it contains both a liability and an equity component. Such components are classified separately as financial liabilities, financial assets or equity instruments. IAS 39 instead requires a holder of a hybrid instrument to separately account for the embedded derivative of the instrument if certain conditions are fulfilled.

Review Questions

1. Why is there a need for accounting standards on financial instruments?
2. Which accounting standards are applicable to financial instruments?
3. What kinds of financial instruments are out of the scope of IAS 39?
4. What kinds of contracts to buy or sell non-financial items are within the scope of IAS 39?
5. Define financial instruments.
6. Define financial assets and financial liabilities.
7. What is an equity instrument?
8. Discuss the conditions that an entity must ensure before an instrument can be classified as an equity instrument.
9. What is a derivative?
10. When should a financial asset and a financial liability be recognised?
11. What is the difference between a regular way purchase or sale financial asset and other purchases or sales?
12. Discuss the initial measurement basis on financial asset and financial liability.
13. What is the fair value of a financial instrument on initial recognition?
14. What is a compound financial instrument?
15. Discuss the recognition requirement on compound financial instruments from the perspective of the issuer.
16. What are a hybrid instrument and an embedded derivative?
17. How does an entity recognise an embedded derivative?

Exercises

- Exercise 15.1** Knut Commodity Inc. enters into a fixed price forward contract to purchase 1 million kilograms of gold in accordance with its expected usage requirements. The contract permits Knut to take physical delivery of the gold at the end of 6 months or to pay or receive a net settlement in cash, based on the change in fair value of gold. Is the contract accounted for as a derivative?
- Exercise 15.2** Prosperous Building Limited will enter into a contract with a listed blue-chip company in Singapore to build a 30-floor office tower in a newly developed region. The blue-chip company, however, requires Prosperous to make a deposit for the contract, and the deposit will be refunded without interest when the contract is finished. The contract sum and the variation order may ultimately be more than S\$1 billion, and Prosperous

is requested to deposit S\$10 million as deposits for at least 5 years to the bank account of the blue-chip company. The financial controller of Prosperous is concerned over whether any valuation technique should be employed in order to ascertain the fair value of the deposit.

Advise Prosperous on the proper accounting treatment of the deposit.

Exercise 15.3 FRE Limited purchases a contract with an embedded derivative, and FRE is required to separate the embedded derivative from the contract. However, the embedded derivative cannot be reliably measured because it will be settled by an unquoted equity instrument whose fair value cannot be reliably measured. Can FRE measure the embedded derivative measured at cost?

Problems

Problem 15.1 Bonnie Europe plc owns an office building in Singapore. Bonnie enters into a put option with an investor that permits Bonnie to put the building to the investor for \$200 million. The current value of the building is \$250 million. The option expires in 5 years. The option, if exercised, may be settled through physical delivery or net cash, at Bonnie's option.

How do both Bonnie and the investor account for the option?

Problem 15.2 Advance Finance Corporation enters into a forward contract to purchase 1 million ordinary shares of Knut Limited in 1 year. The current market price of Knut's share is \$5 per share; the 1-year forward price of Knut's share is \$5.50 per share. Advance Finance is required to prepay the forward contract at inception with a \$5 million payment.

Is the forward contract a derivative?

Problem 15.3 JAS Limited issued a callable convertible bond to ISB Corporation, i.e., ISB may give back the bond to JAS or a third party as requested by JAS earlier. The proceeds received on the issue of a callable convertible bond are \$160 million. The value of a similar bond without a call or equity conversion option is \$157 million.

Based on an option pricing model, it is determined that the value to JAS of the embedded call feature in a similar bond without an equity conversion option is \$20 million.

Calculate the amounts for the liability and equity portions and suggest journal entries.

Problem 15.4 Aileen Holdings Limited purchases a 5-year debt instrument issued by Vincent plc with a principal amount of \$1 million that is indexed to the share price of Cathy Singapore Limited. At maturity, Aileen Holdings Limited will receive from Vincent plc the principal amount plus or minus the change in the fair value of 10,000 shares of Cathy Singapore Limited. The current share price is \$110. No separate interest payments are made by Vincent plc. The purchase price is \$1 million.

Aileen Holdings Limited classifies the debt instrument as available for sale. It concludes that the instrument is a hybrid instrument with an embedded derivative because of the equity-indexed principal. For the purposes of separating an embedded derivative, is the host contract an equity instrument or a debt instrument?

Case Studies

Case Study 15.1 Advance Brokerage Consultants Limited (ABC) issues 3,000 convertible bonds on 2 January 2008. The bonds have a 2-year term and are issued at par with a face value of \$1,000 per bond, giving total proceeds of \$3 million. Interest is payable annually in arrears at a nominal annual interest rate of 5%. Each bond is convertible at any time up to maturity into 250 ordinary shares.

When the bonds are issued, the prevailing market interest rate for similar debt without conversion options is 8%.

Determine the liability and equity components of this compound financial instrument, and prepare the journal entries for ABC Limited on 2 January 2008.

Case Study 15.2 Sloan Limited (Sloan) is considering obtaining external funds by the issue of redeemable convertible preference shares (PS) with a principal amount of \$500 million. By the end of the fourth year from the date of issue of the PS, Sloan would have to redeem the PS. Sloan would pay a fixed dividend at 8% per annum cumulative. At any time during the 4 years, the PS could be converted into 100 million ordinary shares of Sloan if the holders exercised the conversion option, without which Sloan would have to pay a dividend at 10% per annum cumulative.

Determine how Sloan should account for the financial instruments to be issued.

(HKICPA QP A September 2006, adapted)

Case Study 15.3 Sloan Limited (Sloan) is considering obtaining external funds by the issue of 100 million ordinary shares for \$500 million. At the same time, Sloan would write a put option to repurchase the 100 million ordinary shares at \$6.60 per share at the end of the fourth year from the date of issue of the ordinary shares. The put option would necessitate gross physical settlement. The fair value of the put option at the contract date is estimated at \$15 million.

Determine how Sloan should account for the financial instruments to be issued.

(HKICPA QP A September 2006, adapted)

16

Financial Assets

Learning Outcomes

This chapter enables you to understand the following:

- 1 The subsequent measurement of financial assets
- 2 The categories of financial assets and their subsequent measurement
- 3 The fair value measurement consideration for subsequent measurement
- 4 Gains and losses recognised for financial assets
- 5 The reclassification of financial assets
- 6 The impairment and reversal of impairment on financial assets

Real-life

Case 16.1

BASF Aktiengesellschaft

BASF Aktiengesellschaft (BASF), one of the largest chemical companies, with its headquarters in Germany, has adopted IFRSs in preparing its financial statements since 2005. In its annual report of 2006, BASF classified its financial assets and financial liabilities into the following valuation categories:

- Financial assets and liabilities that are measured at fair value and recognised in income;
- Loans and receivables;
- Held-to-maturity financial instruments;
- Available-for-sale financial instruments; and
- Financial liabilities.

The classification of financial assets, *prima facie*, looks more complicated than that of financial liabilities and also affects the valuation of the financial assets.

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The definition and initial recognition of financial asset, financial liability and equity instrument are explained in Chapter 15.

A financial asset is one kind of financial instrument and is defined as including cash, an equity instrument of another entity and a contractual right to receive cash or another financial asset from another entity. This chapter explains the classification and subsequent measurement requirements on financial assets.

16.1 Subsequent Measurement of Financial Assets

At initial recognition, a financial asset normally uses trade date accounting at fair value plus transaction cost, except for financial assets at fair value through profit or loss. A financial asset at fair value through profit or loss is initially recognised at fair value only.

After initial recognition, an entity is required to measure financial assets, including derivatives that are assets, at their fair values, except for the following financial assets:

1. Investments in equity instruments without fair value, measured at cost;
2. Loans and receivables, measured at amortised cost; and
3. Held-to-maturity investments, measured at amortised cost.

The IASB considered that fair value is a more appropriate measure than amortised cost for most financial assets. In consequence, explicitly, IAS 39 requires an entity to measure all financial assets at fair value without deducting any costs to be incurred on sale, unless the financial assets are one of the above classifications and meet the respective definitions and requirements.

If a financial asset can be classified as investments in equity instruments without fair value, it is measured at cost. If a financial asset can be classified as loans and receivables and held-to-maturity investments, it is measured at amortised cost using the effective interest method. It implies that the classification of a financial asset is a critical step to determine the subsequent measurement of the financial asset.

For the purpose of subsequently measuring financial assets, IAS 39 further classifies financial assets measured at fair value into the following two categories:

1. Financial assets at fair value through profit or loss; and
2. Available-for-sale financial assets.

Four categories (without the category of “investments in equity instruments without fair value”) are named and applied to measurement and profit or loss recognition under IAS 39. An entity may use other descriptors or terms for these categories or other categorisations when presenting information on the face of the financial statements. IFRS 7 requires an entity to disclose in the notes certain information in respect of the categories and categorisation.

In re-measuring a financial instrument, if a financial instrument that was previously recognised as a financial asset is measured at fair value and its fair value falls below zero, it is a financial liability measured in accordance with IAS 39. Chapter 17 further explains the accounting for financial liability. In addition, financial assets that are designated as hedged items are subject to measurement under the hedge accounting requirements.

16.2 Categories of Financial Assets

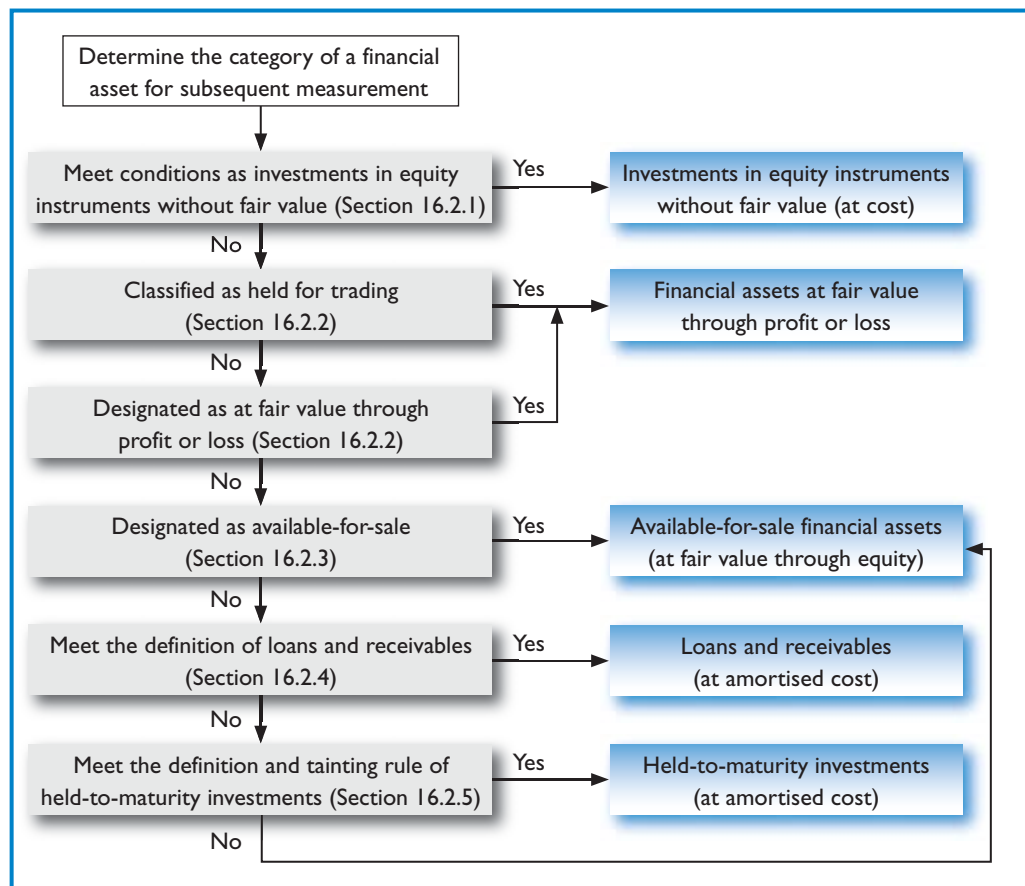
For the purpose of this chapter, five categories are used and explained for financial assets as follows:

1. Investments in equity instruments without fair value;
2. Financial assets at fair value through profit or loss;
3. Available-for-sale financial assets;
4. Loans and receivables; and
5. Held-to-maturity investments.

Figure 16.1 briefly summarises the determination of the category of a financial asset and its subsequent measurement, and further details are then explained and illustrated.

Even though the requirements of IAS 39 imply that the category of a financial asset determines the subsequent measurement of the financial asset, an entity can choose to use all or some of the categories. For example, in Real-life Case 16.2, BP plc had not designated any financial assets as held-to-maturity investments. Implicitly from the definitions and reclassification requirements in IAS 39, an entity has to determine the category of its financial asset at initial recognition.

FIGURE 16.1 Determination of the category of a financial asset



Real-life Case 16.2

BP plc

BP plc explained its classification of financial assets in its annual report of 2006 as follows:

- Financial assets are classified as loans and receivables, available-for-sale financial assets, financial assets at fair value through profit or loss, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.
- Financial assets include cash and cash equivalents, trade receivables, other receivables, loans, other investments, and derivative financial instruments.
- The group determines the classification of its financial assets at initial recognition.

16.2.1 Investments in Equity Instruments without Fair Value

No financial assets can be measured at cost unless the financial asset is an investment in equity instrument that meets all the following three conditions (see Figure 16.2):

1. The financial asset is an investment in equity instrument; in other words, it cannot be an investment in a debt instrument;
2. The financial asset does not have a quoted market price in an active market; and
3. The fair value of a financial asset cannot be reliably measured (IAS 39.46c).

Financial assets that meet all of the above three conditions can be regarded as “investments in equity instruments without fair value” and are measured at cost. The category of “investments in equity instruments” also includes derivatives that are linked to and must be settled by delivery of such unquoted equity instruments, and such derivatives are also measured at cost.

Real-life

Case 16.3

BASF Aktiengesellschaft

In its financial statements of 2006, BASF Aktiengesellschaft generally measured its participations (or ownership interests) in a company that are not accounted for under the equity method at fair value, except for the following:

- Participations which are not traded on an active market and whose net present value could not be reliably determined are contained within “other financial assets”.
- These are therefore carried at cost, as the best approximation of the market value.

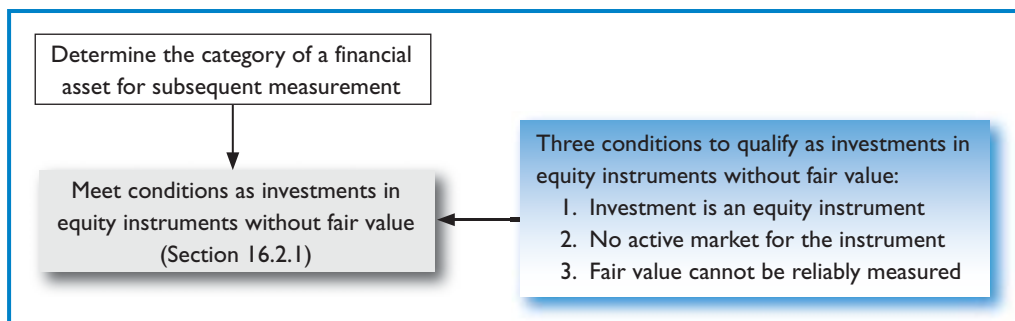
Example 16.1 Bonnie Limited invests in a convertible bond, and the convertible option is an embedded derivative that is required to be separated before the bond can be classified as an available-for-sale financial asset. However, the embedded derivative cannot be reliably measured because the convertible option will be settled by an unquoted equity instrument whose fair value cannot be reliably measured.

Can Bonnie measure the embedded derivative at cost?

Answers

No. In this case, Bonnie is required to designate the entire combined contract as at fair value through profit or loss. If the fair value of the combined instrument can be reliably measured, the combined contract is measured at fair value. However, Bonnie might conclude that the equity component of the combined instrument may be sufficiently significant to preclude it from obtaining a reliable estimate of the entire instrument. In that case, the combined instrument is measured at cost less impairment.

FIGURE 16.2 Financial assets classified as investments in equity instruments without fair value



16.2.1.1 Fair Value Measurement Consideration

Fair value is defined in IAS 39 (see Chapter 15), and the same definition is used for both initial measurement and subsequent measurement. In determining whether there is a fair value for a financial instrument for subsequent measurement, IAS 39 implies a hierarchy for the determination of fair value that an entity is required to apply. The hierarchy refers to (1) the existence of an active market and (2) no existence of an active market.

The following hierarchy is also used in determining the fair value of all financial instruments, in particular for the fair value measurement in the categories of “financial assets at fair value through profit or loss” and “available-for-sale financial assets”.

1. Active Market

The best evidence of fair value is quoted prices in an active market. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm’s length basis.

Different kinds of quoted market price would be used as a reference in the following manner:

- The appropriate quoted market price for a financial asset held or a financial liability to be issued is usually the current bid price.
- The appropriate quoted market price for a financial asset to be acquired or a financial liability held is usually the asking price.
- When an entity has assets and liabilities with offsetting market risks, it may use mid-market prices as a basis for establishing fair values for the offsetting risk positions and apply the bid or asking price to the net open position as appropriate.
- When current bid and asking prices are unavailable, the price of the most recent transaction provides evidence of the current fair value as long as there has not been a significant change in economic circumstances since the time of the transaction.

2. Valuation Technique

If there is no quotation of an active market for a financial instrument, or part of the consideration given or received in the transaction is for something other than the financial instrument, the fair value of the financial instrument is estimated using a valuation technique.

Valuation techniques for financial instruments specified in IAS 39 include the following:

- Using recent arm's length market transactions between knowledgeable, willing parties, if available;
- Reference to the current fair value of another instrument that is substantially the same;
- Discounted cash flow analysis; and
- Option pricing models.

If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.

Real-life

Case 16.4

Standard Chartered plc

Standard Chartered plc described in its accounting policy for 2007 how it determined the fair value of financial instruments as follows:

- The fair values of quoted financial assets or financial liabilities in active markets are based on current prices.
- If the market for a financial asset or financial liability is not active, and for unlisted securities, the group establishes fair value by using valuation techniques. These include the use of
 - recent arm's length transactions;
 - discounted cash flow analysis;
 - option pricing models; and
 - other valuation techniques commonly used by market participants.

The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. An entity obtains market data consistently in the same market where the instrument was originated or purchased.

In applying discounted cash flow analysis, an entity uses one or more discount rates equal to the prevailing rates of return for financial instruments having substantially the same terms and characteristics, including the credit quality of the instrument, the remaining term over which the contractual interest rate is fixed, the remaining term to repayment of the principal and the currency in which payments are to be made.

16.2.1.2 No Reliably Measured Fair Value

When an investment in equity instrument can be classified as “investment in equity instrument without fair value”, it implies that after the application of the hierarchy for the determination of fair value, the entity is still unable to reliably measure the equity instrument.

IAS 39 further explains that the fair value of investments in equity instruments that do not have a quoted market price in an active market is reliably measurable if:

1. The variability in the range of reasonable fair value estimates is not significant for that instrument; or
2. The probabilities of the various estimates within the range can be reasonably assessed and used in estimating fair value.

There are many situations in which the variability in the range of reasonable fair value estimates of investments in equity instruments that do not have a quoted market price is likely not to be significant. Normally it is possible to estimate the fair value of a financial asset that an entity has acquired from an outside party. However, if the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed, an entity is precluded from measuring the instrument at fair value.

16.2.2 Financial Assets at Fair Value through Profit or Loss

The definition of the category of “financial assets at fair value through profit or loss” is comparatively complicated.

First, IAS 39 formally describes this classification as “financial asset or financial liability at fair value through profit or loss” and implies that the same definition of classification can be applied to both financial assets and financial liabilities. In Chapter 17, the same classification with the same definition can be found for financial liabilities.

Second, the definition of this classification requires that certain financial instruments “held for trading” must be classified as “fair value through profit or loss” on one hand; and on the other hand, an entity is allowed to choose to designate certain other financial instruments as “fair value through profit or loss” at their initial recognition. Below is the formal definition of this classification, followed by the relevant explanation and illustration.

A **financial asset** or **financial liability at fair value through profit or loss** is a financial asset or financial liability that meets either of the following conditions:

1. It is classified as held for trading. A financial asset or financial liability is classified as held for trading if it is
 - a. acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
 - b. part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking; or

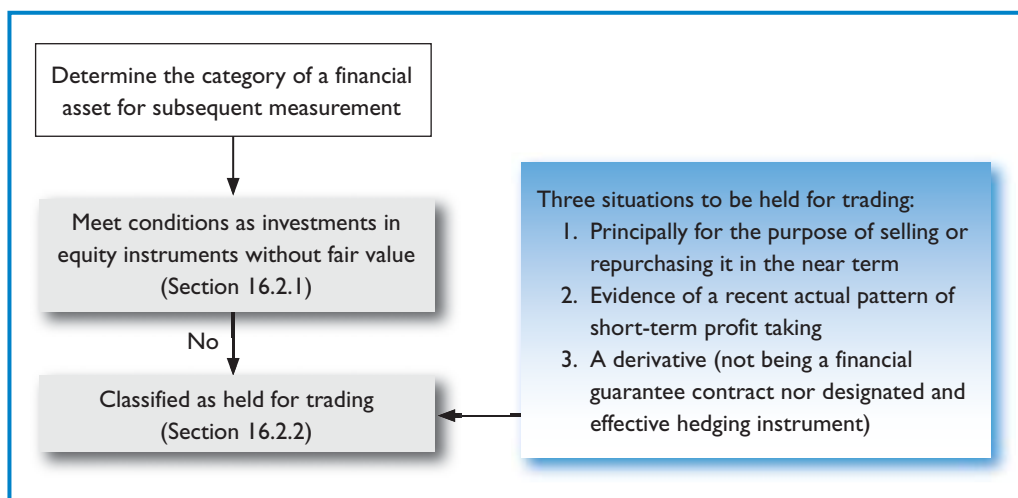
- c. a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).
- 2. Upon initial recognition, it is designated by the entity as at fair value through profit or loss. An entity may use this designation only when permitted by IAS 39.11A, or when doing so results in more relevant information, because either
 - a. it eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as “an accounting mismatch”) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases; or
 - b. a group of financial assets, financial liabilities or both is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the entity’s key management personnel, as defined in IAS 24 *Related Party Disclosures* (as revised in 2003), for example, the entity’s board of directors and chief executive officer.

16.2.2.1 First Condition – Held for Trading

An entity must classify its financial asset (or financial liability) as “fair value through profit or loss” if the instrument is held for trading. Trading generally reflects active and frequent buying and selling, and financial instruments held for trading generally are used with the objective of generating a profit from short-term fluctuations in price or dealer’s margin.

Figure 16.3 shows the situations where a financial asset must be classified as held for trading.

FIGURE 16.3 Financial assets classified as held for trading



IAS 39 explains that a financial asset or financial liability is classified as held for trading if it is

1. acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
2. part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking; or
3. a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

Example 16.2 Bonnie Limited has an investment portfolio of debt and equity instruments. Its documented portfolio management guidelines specify that the equity exposure of the portfolio should be limited to between 30% and 50% of the total portfolio value. The investment manager of the portfolio is authorised to balance the portfolio within the designated guidelines by buying and selling equity and debt instruments.

Is Bonnie permitted not to classify the instruments as “held for trading”?

Answers

It depends on Bonnie’s intentions and past practice. If Bonnie’s portfolio manager is authorised to buy and sell instruments to balance the risks in a portfolio, but there is no intention to trade and there is no past practice of trading for short-term profit, the instruments are not classified as held for trading.

If Bonnie’s portfolio manager actively buys and sells instruments to generate short-term profits, the financial instruments in the portfolio are classified as held for trading.

Trading generally reflects active and frequent buying and selling, and financial instruments held for trading generally are used with the objective of generating a profit from short-term fluctuations in price or dealer’s margin.

In accordance with the definition, a financial asset classified as held for trading depends on an entity’s intention (i.e., “for the purpose”), an entity’s past practice (i.e., “recent actual pattern”) and the nature of the asset (i.e., whether the instrument is a derivative that is not a financial guarantee contract and not a designated and effective hedging instrument). The last circumstance implies that all derivatives, in normal situations, should be measured at fair value with the changes in fair value recognised in profit or loss.

Real-life

Case 16.5

China Life Insurance Company Limited

China Life Insurance Company Limited, one of the largest life insurance entities in China, explained its category “financial assets at fair value through income” in its annual report of 2006 as follows:

**Real-life
Case 16.5**
(cont'd)

- This category has two sub-categories: financial assets held for trading and those designated at fair value through income at inception.
- A financial asset is classified as held for trading at inception if acquired principally for the purpose of selling in the short term or if it forms part of a portfolio of financial assets in which there is evidence of short-term profit taking.
- Any other additional financial assets may be designated at fair value through income at inception by the group.
- The group presently has no financial assets designated at fair value through income at inception.

The definition of a financial instrument held for trading states that it is “part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking”. Although the term “portfolio” is not explicitly defined in IAS 39, the context in which it is used suggests that a portfolio is a group of financial assets (or financial liabilities) that are managed as part of that group. If there is evidence of a recent actual pattern of short-term profit taking on financial instruments included in such a portfolio, those financial instruments qualify as held for trading even though an individual financial instrument may in fact be held for a longer period of time.

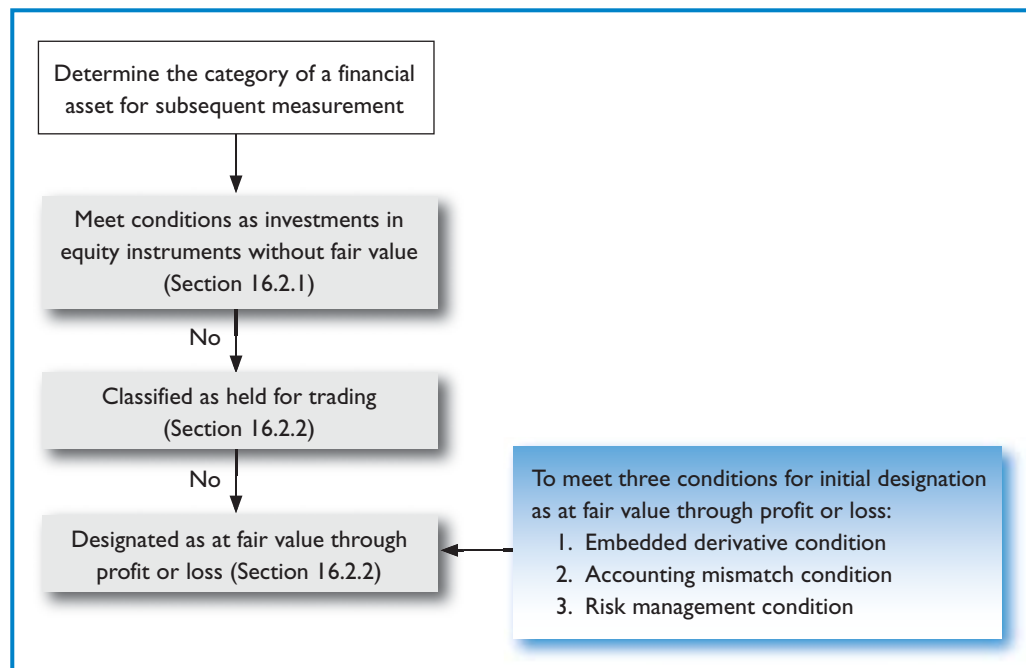
16.2.2.2 Second Condition – Fair Value Option (Initial Designation by the Entity)

Except for those financial assets held for trading, other financial assets are not required to be designated as at “fair value through profit or loss”. An entity can instead designate a financial asset, a financial liability or a group of financial instruments (including financial assets, financial liabilities or both) as at fair value through profit or loss. It is termed as a “fair value option” available to an entity to choose in measuring its financial instruments as at fair value through profit or loss.

The decision to use the fair value option is similar to an accounting policy choice, but unlike an accounting policy choice, it is not required to be applied consistently to all similar transactions. However, when an entity chooses to use this fair value option and designates a financial instrument as at fair value through profit or loss, it must make such a designation at initial recognition of the financial instruments and meet at least one of the following three conditions (see Figure 16.4) set out in IAS 39:

1. Embedded derivative condition;
2. Accounting mismatch condition; and
3. Risk management condition.

FIGURE 16.4 Financial assets designated as at fair value through profit or loss



Embedded derivative condition is a logical extension of the separation requirement on an embedded derivative as discussed in Chapter 15, while the last two conditions aim at resulting in more relevant information provided by the entity.

Before 2005, IAS 39 did not incorporate the above conditions to restrict the application of the fair value option. However, certain constituents, including prudential supervisors of banks, securities companies and insurers, were concerned that the fair value option might be used inappropriately. These constituents were concerned because of the following reasons:

1. Entities might apply the fair value option to financial assets or financial liabilities whose fair value is not verifiable. If so, because the valuation of these financial assets and financial liabilities is subjective, entities might determine their fair value in a way that inappropriately affects profit or loss.
2. The use of the option might increase, rather than decrease, volatility in profit or loss, for example, if an entity applied the option to only one part of a matched position.
3. If an entity applied the fair value option to financial liabilities, it might result in an entity recognising gains or losses in profit or loss associated with changes in its own creditworthiness.

In response to those concerns, the IASB issued an amendment to IAS 39 in June 2005 relating to the fair value option and imposed the following three conditions to restrict the application of the fair value option.

1. Embedded Derivative Condition

Upon initial recognition, an entity may designate a financial instrument as at fair value through profit or loss when IAS 39.11A permits it to do so. IAS 39.11A requires that if a contract contains one or more embedded derivatives, an entity may designate the entire hybrid (combined) contract as a financial asset or financial liability at fair value through profit or loss. However, an entity is not allowed to make such a designation if:

1. The embedded derivative does not significantly modify the cash flows that otherwise would be required by the contract; or
2. It is clear with little or no analysis when a similar hybrid instrument is first considered that separation of the embedded derivative is prohibited, such as a prepayment option embedded in a loan that permits the holder to prepay the loan for approximately its amortised cost (IAS 39.11A).

Chapter 15 explains the nature of an embedded derivative and illustrates the relevant accounting requirements. In normal cases, a financial instrument with an embedded derivative should be accounted for separately from the embedded derivative and the embedded derivative should be measured at fair value through profit or loss. In order to reduce complexity and simplify the accounting of such a combined contract, an entity can choose to use the fair value option to measure the whole financial instrument together with the embedded derivative so long as the above two restrictions are not triggered.

Real-life

Case 16.6

HSBC Holdings plc

HSBC Holdings plc also designated certain financial instruments as at fair value through profit or loss and explained in its annual report of 2007 for this category as follows:

- HSBC may designate financial instruments at fair value when the designation ... relates to financial instruments containing one or more embedded derivatives that significantly modify the cash flows resulting from those financial instruments, including certain debt issues and debt securities held.

2. Accounting Mismatch Condition

The measurement of a financial asset or financial liability is determined by its classification. It can create a measurement or recognition inconsistency between the financial asset and the related financial liability. For example, a financial asset may be classified as an available-for-sale financial asset with its fair value recognised in equity (see Section 16.2.3) while the financial liability financing the purchase of the financial asset may be measured at amortised cost. The fair value changes of the financial liability would not be recognised and “matched” with the fair value changes

of the financial asset. Such a circumstance is sometimes referred to as “an accounting mismatch” between the accounting for an asset and a liability.

In order to provide more relevant information in the financial statements, an entity may conclude that, when there is an accounting mismatch, it may be better to account for all the relevant financial instruments in the mismatch as at fair value through profit or loss.

Example 16.3 Knut Investments Limited invests in a portfolio of listed fixed income securities and has not designated the portfolio as held-to-maturity investment. It has no choice but to classify the portfolio as an available-for-sale financial asset, and the fair value changes in the portfolio are recognised in equity. The portfolio is financed by the issuance of a fixed-rate bond and Knut measures the bond at amortised cost.

Both the portfolio of fixed income securities and the fixed-rate bond share the same risk, interest rate risk, but the risk gives rise to opposite changes in the fair value of the assets and liabilities.

When the interest rate increases, the fair value of the fixed-income securities portfolio decreases and this change is recognised in equity. Simultaneously, the fair value of the fixed-rate bond should increase and tend to offset not all, but at least some, fair value changes of the portfolio. However, the fair value change of the bond would not be recognised as the bond is stated at amortised cost.

In such circumstances, an entity may conclude that its financial statements would provide more relevant information if both the asset (the fixed income securities portfolio) and the liability (the fixed-rate bond) were classified as at fair value through profit or loss.

3. Risk Management Condition

Some entities, for example, venture capital entities, mutual funds, unit trusts and insurers, may manage and evaluate the performance of financial instruments on a fair value basis in certain situations. For instruments managed and evaluated in this way, users of financial statements may regard fair value measurement as providing more relevant information. In addition, it is also established practice in some industries in some jurisdictions to recognise all financial assets at fair value through profit or loss. In consequence, IAS 39 permits financial instruments managed and evaluated on a fair value basis to be measured at fair value through profit or loss, but it also introduces two requirements to make this category operational:

1. The financial instruments are managed and evaluated on a fair value basis in accordance with a documented risk management or investment strategy; and
2. That information about the financial instruments is provided internally on that basis to the entity’s key management personnel as defined in IAS 24 *Related Party Disclosures*, for example, the entity’s board of directors and chief executive officer.

Example 16.4 AJS Corporation is an insurer that holds a portfolio of financial assets, manages that portfolio so as to maximise its total return (i.e., interest or dividends and changes in fair value), and evaluates its performance on that basis. The portfolio is held to back specific liabilities of AJS.

AJS intends to designate the portfolio at fair value through profit or loss. What kinds of requirements should AJS observe?

Answers

If the portfolio is held to back specific liabilities, the risk management condition can still be met for the assets, regardless of whether the insurer also manages and evaluates the liabilities on a fair value basis.

The condition is met when the insurer's objective is to maximise total return on the assets over the longer term even if amounts paid to holders of participating contracts depend on other factors such as the amount of gains realised in a shorter period (e.g., a year) or are subject to the insurer's discretion.

In addition, AJS has to have a proper documentation approved by its key management personnel before the condition is properly met.

The focus in this condition is on the way that the entity manages and evaluates performance, rather than on the nature of its financial instruments. In addition, and accordingly, subject to the requirement of designation at initial recognition, an entity that designates financial instruments as at fair value through profit or loss on the basis of this condition is required to so designate all eligible financial instruments that are managed and evaluated together.

In looking to an entity's documented risk management or investment strategy, IAS 39 makes no judgement on what an entity's strategy should be. However, it is worth noting that users, in making economic decisions, would find useful both a description of the chosen strategy and how designation at fair value through profit or loss is consistent with it. Proper disclosures in this respect are required in financial statements under IAS 32. Documentation of the entity's strategy need not be extensive, but it should be sufficient to demonstrate compliance with the requirements. Such documentation is not required for each individual item but may be on a portfolio basis. In many cases, the entity's existing documentation, as approved by its key management personnel, should be sufficient for this purpose.

Example 16.5 Knut Investments Limited intends to designate the financial assets managed by its treasury department as at fair value through profit or loss. Its performance management system for the treasury department as approved by the entity's key management personnel clearly demonstrates that the department's performance is evaluated on a total return basis.

Is Knut required to provide additional documentation for the designation?

Answers

No. The existing documentation is sufficient, and no further documentation is required to demonstrate compliance with the requirements.

Real-life Case 16.7

Ping An Insurance (Group) Co. of China, Limited

In its annual report of 2006, Ping An Insurance (Group) Co. of China, Limited, one of the largest listed insurance entities in China, explains its financial assets designated as at fair value through profit or loss as follows:

- For investments designated as at fair value through profit or loss, the following criteria must be met:
 - The designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the assets or liabilities or recognising gains or losses on a different basis; or
 - The assets and liabilities are part of a group of financial assets, financial liabilities or both which are managed and their performance evaluated on a fair value basis, in accordance with a documented risk management or investment strategy.
- These investments are initially recorded at fair value. Subsequent to initial recognition, these investments are re-measured at fair value. Fair value adjustments and realised gain and loss are recognised in the income statement.
- Financial assets at fair value through profit or loss include derivative financial instruments.

16.2.2.3 Specific Requirements for Fair Value Option

When an entity has chosen to apply the fair value option to a financial asset, the definition of the fair value option additionally imposes strict requirements on measurement and disclosure.

The definition of a financial asset at fair value through profit or loss specifically requires that an entity is not allowed to designate any investments in equity instruments without fair value (see Section 16.2.1) as at fair value through profit or loss. It also specifies that requirements for determining a reliable measure of the fair value of a financial asset apply equally to all items that are measured at fair value, whether by designation or otherwise, or whose fair value is disclosed.

The disclosure requirements on financial instruments are set out in IFRS 7 (see Chapter 18), and IAS 39 specifies that IFRS 7 requires the entity to provide certain disclosures about financial assets and financial liabilities it has designated as at fair value through profit or loss, including how it has satisfied the three designation

conditions. For instruments qualifying in accordance with the above risk management condition, that disclosure should include a narrative description of how designation as at fair value through profit or loss is consistent with the entity's documented risk management or investment strategy.

16.2.3 Available-for-sale Financial Assets

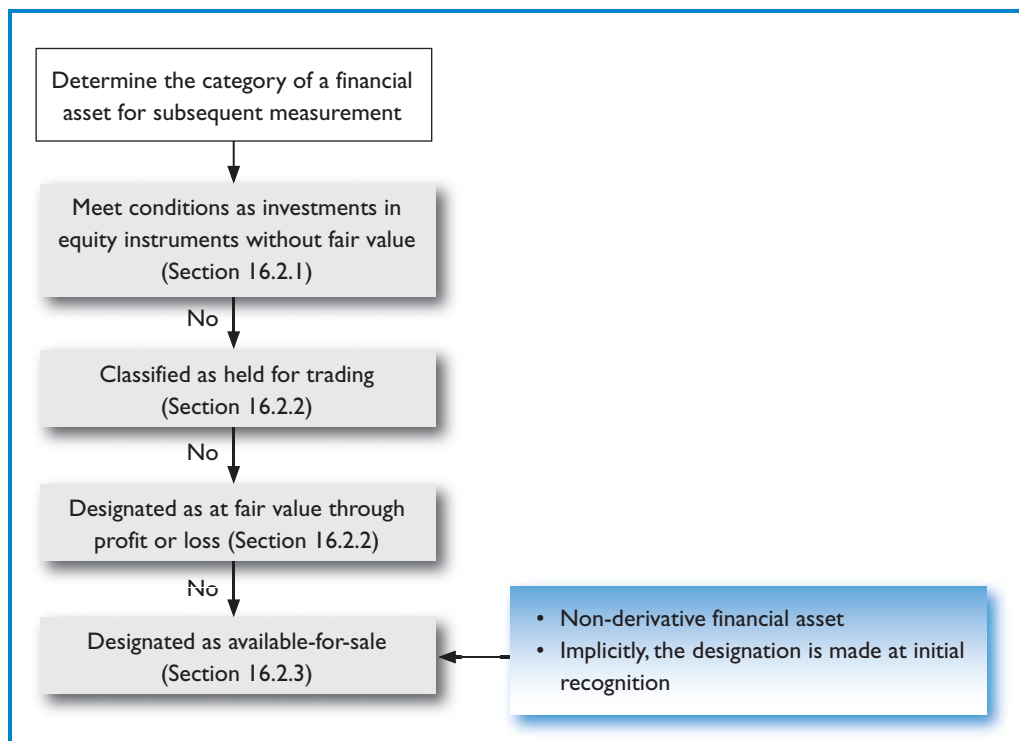
Available-for-sale financial assets are generally carried at fair value through equity, while the definition of "available-for-sale financial assets" is comparatively simple.

Available-for-sale financial assets are those non-derivative financial assets that

- are designated as available-for-sale; or
- are not classified as
 - loans and receivables;
 - held-to-maturity investments; or
 - financial assets at fair value through profit or loss (IAS 39.9).

IAS 39 allows an entity to designate non-derivative financial assets as available-for-sale financial assets. Figure 16.5 briefly summarises the minimum requirements of such a designation. The IASB argued that in the context of the existing mixed

FIGURE 16.5 Financial assets designated as available-for-sale



measurement model, there are no reasons to limit to any particular type of asset the ability to designate an asset as available-for-sale financial assets. Implicitly, the designation should be made at initial recognition, and as financial assets held for trading must be classified as financial assets at fair value through profit or loss (see Section 16.2.2.1), a non-derivative financial asset cannot be held for trading if it is designated as an available-for-sale financial asset.

In accordance with the definition of available-for-sale financial assets, this category also functions as a residual category. All the financial assets that have not been classified into other categories would be regarded and classified as available-for-sale financial assets.

Real-life Case 16.8

Li & Fung Limited

Li & Fung Limited, one of the largest export sourcing firms in the world, briefly explained its classification of available-for-sale financial assets in its financial statements of 2006 as follows:

- Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories.

Theoretically, investments in equity instruments without fair value (as illustrated in Section 16.2.1) are also available-for-sale financial assets. Because the definition of financial assets at fair value through profit or loss excludes investments in equity instruments, and as equity instruments do not have fixed maturity and fixed or determinable payment, they are not classified as loans and receivables and held-to-maturity investments. In consequence, investments in equity instruments without fair value should also be “residual” investments and be regarded as available-for-sale financial assets (see Figure 16.6).

Example 16.6 Knut Investments Limited invests in a bond that is convertible into shares of the issuing entity before maturity. Knut intends to hold the bond to maturity and then decides whether it would convert the bond to the shares.

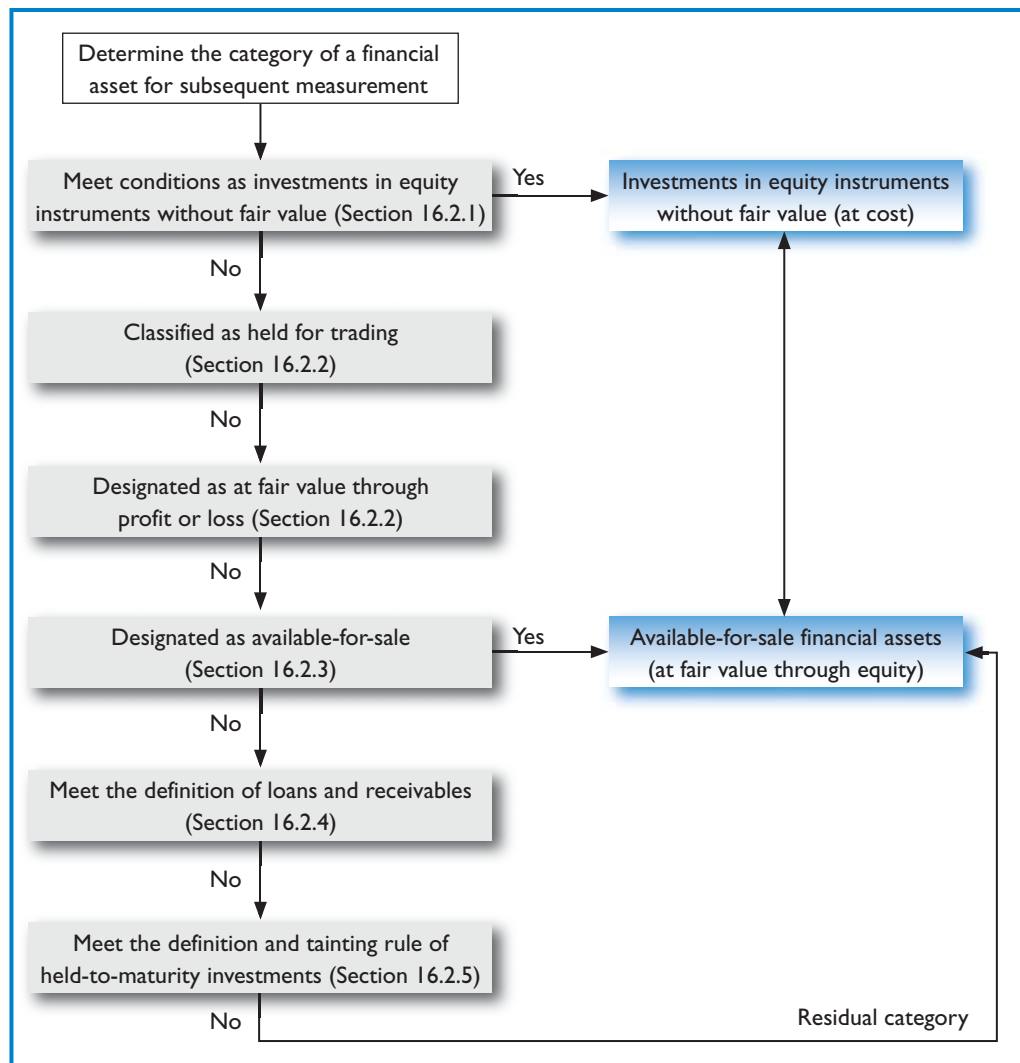
Can Knut account for the convertible bond as a held-to-maturity investment?

Answers

An investment in a convertible bond that is convertible before maturity generally cannot be classified as a held-to-maturity investment, because that would be inconsistent with paying for the conversion feature – the right to convert into equity shares before maturity.

An investment in a convertible bond can be classified as an available-for-sale financial asset provided it is not purchased for trading purposes. The equity conversion option is an embedded derivative (see Chapter 15).

FIGURE 16.6 Available-for-sale financial assets being a residual category

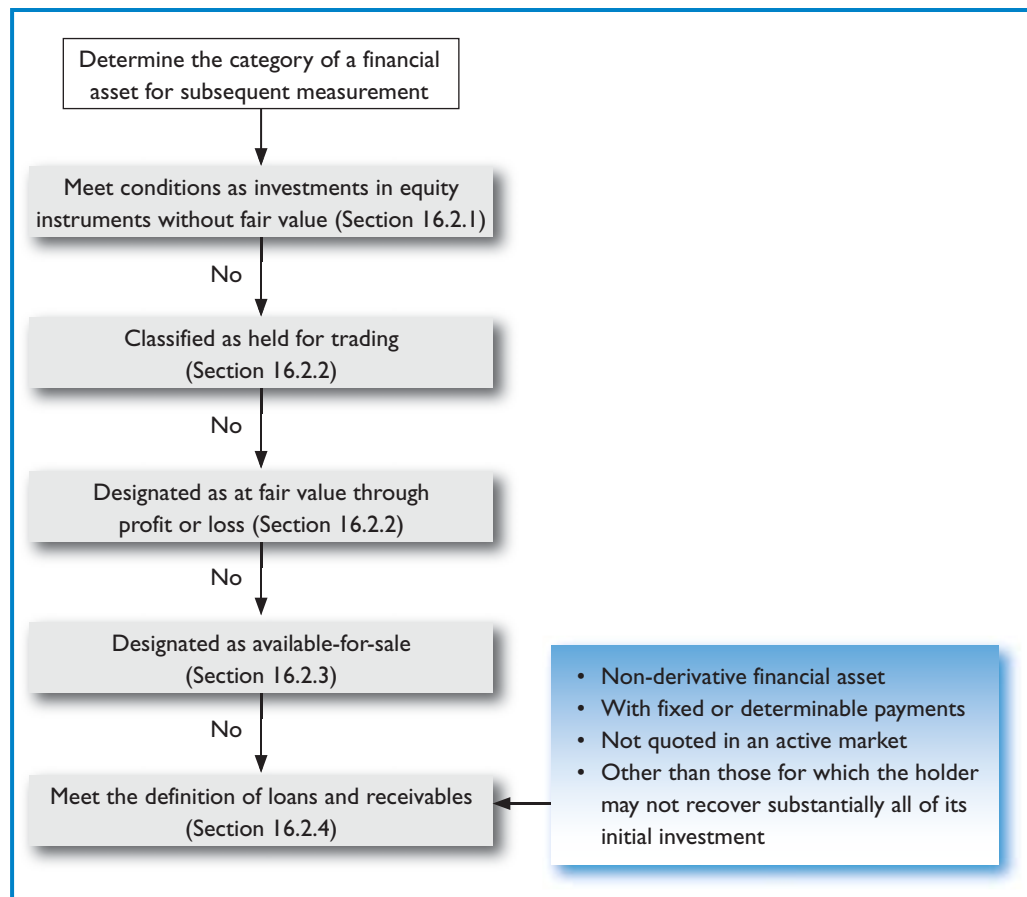


Both available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently measured at fair value. However, the changes in fair value on available-for-sale financial assets are recognised in equity, while the changes in fair value on financial assets at fair value through profit or loss, as its name suggests, are recognised in profit or loss. Section 16.4 further illustrates the relationship between the classification of financial assets and the recognition of gain or loss.

16.2.4 Loans and Receivables

Financial assets classified as loans and receivables are measured at amortised cost using the effective interest method. A financial asset is classified as loans and receivables if it meets the definition of loans and receivables as shown in Figure 16.7.

FIGURE 16.7 Financial assets classified as loans and receivables



Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, other than

- those that the entity intends to sell immediately or in the near term, which shall be classified as “held for trading”, and those that the entity upon initial recognition designates as at “fair value through profit or loss” (see Section 16.2.2);
- those that the entity upon initial recognition designates as “available for sale” (see Section 16.2.3); or
- those for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, which shall be classified as “available-for-sale”.

An interest acquired in a pool of assets that are not loans or receivables (for example, an interest in a mutual fund or a similar fund) is not a loan or receivable (IAS 39.9).

16.2.4.1 Classification at Initial Recognition

On initial recognition of a financial asset that would otherwise be classified as a loan or receivable, an entity may designate a financial asset meeting the definition of loans and receivables as a financial asset at fair value through profit or loss, or available-for-sale financial assets. Although the definition of loans and receivables does not explicitly require “designated at initial recognition”, it implies that the classification of loans and receivables is also determined at initial recognition.

16.2.4.2 Fixed or Determinable Payments

Based on the definition of loans and receivables, any non-derivative financial asset with fixed or determinable payments (including loan assets, trade receivables, investments in debt instruments and deposits held in banks) can potentially be classified as loans and receivables. Fixed or determinable payments mean that a contractual arrangement defines the amounts of payments to the holder, such as interest and principal payments. A debt instrument or bond with a variable interest can qualify for this criterion.

Example 16.7 Melody Corporation purchases a preference share, an equity instrument with fixed or determinable payments.

Can Melody classify the share as loans and receivables?

Answers

Yes. If a non-derivative equity instrument would be recorded as a liability by the issuer, and it has fixed or determinable payments and is not quoted in an active market, it can be classified within loans and receivables by Melody, provided the definition of loans and receivables is otherwise met.

IAS 32 provides guidance about the classification of a financial instrument as a liability or as equity from the perspective of the issuer of a financial instrument. If an instrument meets the definition of an equity instrument under IAS 32, it cannot be classified within loans and receivables by the holder. Definitions of financial liabilities and equity instruments are also discussed in Chapter 15.

16.2.4.3 Not Held for Trading and Not Quoted in Active Market

The IASB decided that it is appropriate to measure loans and receivables that are not held for trading at amortised cost even if an entity does not have the positive intention and ability to hold the loan asset until maturity.

However, the IASB considered that it is less appropriate to extend the category to debt instruments traded in a liquid market. In consequence, a financial asset that is quoted in an active market (such as a quoted debt instrument) does not qualify for classification as a loan or receivable. Financial assets that do not meet the definition of loans and receivables in that perspective may be classified as held-to-maturity investments if they meet the conditions for the classification of held-to-maturity (see Section 16.2.5).

16.2.4.4 Effective Interest Method and Effective Interest Rate

Real-life
Case 16.9

HSBC Holdings plc

HSBC Holdings plc explained the recognition and measurement of its loans and advances in its annual report of 2007 as follows:

- Loans and advances to banks and customers include loans and advances originated by HSBC which are not classified either as held for trading or designated at fair value. Loans and advances are recognised when cash is advanced to borrowers.
- They are initially recorded at fair value plus any directly attributable transaction costs and are subsequently measured at amortised cost using the effective interest method, less impairment losses.

As explained, and similar to HSBC's case above, an entity is required to use the effective interest method and effective interest rate to subsequently measure loans and receivables (and held-to-maturity investments) at amortised cost. IAS 39 has defined and illustrated the effective interest method and effective interest rate.

The **effective interest method** is a method

- of calculating the amortised cost of a financial asset or a financial liability (or group of financial assets or financial liabilities); and
- of allocating the interest income or interest expense over the relevant period.

The **effective interest rate** is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability (IAS 39.9).

When calculating the effective interest rate, an entity is required to estimate cash flows considering all contractual terms of the financial instrument (for example, prepayment, call and similar options) but should not consider future credit losses.

In some cases, however, the financial assets are acquired at a deep discount that reflects incurred credit losses; the entity includes such incurred credit losses in the estimated cash flows when computing the effective interest rate. This is because the credit losses have occurred and are reflected in the price. If an entity does not take into account such credit losses in the calculation of the effective interest rate, the entity would recognise a higher interest income than that inherent in the price paid.

Example 16.8 On 2 January 2007, Knut Investments Limited purchased a new 5-year debt instrument at its fair value plus transaction costs at \$8,000. The principal amount of the instrument was \$10,000, and the instrument carried fixed interest of 4.75% that would be paid annually. The issuer of the instrument had an option to prepay the instrument and that no penalty would be charged for prepayment. At inception, Knut expected the issuer not to exercise this option, and there is no incurred credit loss.

Explain and calculate the effective interest rate of the 5-year debt instrument for Knut.

Answers

The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the instrument to the net carrying amount of the instrument.

In Knut's case, the estimated future cash receipts are the annual interest receipts (\$10,000 × 4.75% = \$475 per year) and the final principal receipts (\$10,000), and the expected life of the instrument is 5 years. The effective interest rate can be found by using the following equation:

$$\$8,000 = \frac{\$475}{(1+r)^1} + \frac{\$475}{(1+r)^2} + \frac{\$475}{(1+r)^3} + \frac{\$475}{(1+r)^4} + \frac{\$475 + \$10,000}{(1+r)^5}$$

The effective interest rate, r , should be 10.03%. In other words, in order to allocate interest receipts (\$475) and the initial discount (\$10,000 – \$8,000 = \$2,000) over the term of the debt instrument at a constant rate on the carrying amount, the effective interest must be accrued at the rate of 10.03% annually.

The calculation of effective interest rate of an instrument includes all fees and points paid or received between parties to the instrument contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts (IAS 39.9).

Real-life

Case 16.10 HSBC Holdings plc

HSBC Holdings plc replicated the definition of the effective interest method in IAS 39 and clarified the effective interest method and effective interest rate in its annual report of 2007 as follows:

- The effective interest method is a way of calculating the amortised cost of a financial asset or a financial liability (or groups of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period.

**Real-life
Case 16.10**
(cont'd)

- The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability.
- When calculating the effective interest rate, HSBC estimates cash flows considering all contractual terms of the financial instrument but not future credit losses. The calculation includes all amounts paid or received by HSBC that are an integral part of the effective interest rate of a financial instrument, including transaction costs and all other premiums or discounts.

16.2.4.5 Amortised Cost

By using the effective interest method and effective interest rate, an entity can derive the amortised cost on its financial assets classified as loans and receivables (and held-to-maturity investments).

The **amortised cost of a financial asset** is

- the amount at which the financial asset is measured at initial recognition;
- minus principal repayments;
- plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount; and
- minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility (IAS 39.9).

Example 16.9 Based on Example 16.8, Knut Investments Limited purchased a new 5-year debt instrument at its fair value plus transaction costs at \$8,000 on 2 January 2007. The principal amount of the instrument was \$10,000, and the instrument carried fixed interest of 4.75% that would be paid annually. The effective interest rate as estimated was 10.03%.

Explain and calculate the amortised cost and interest income of the 5-year debt instrument for Knut in each reporting period.

Answers

While the initial amount of the 5-year debt instrument is \$8,000 and its principal (or maturity amount) is \$10,000, Knut has purchased the instrument at a discount. Since the effective interest is accrued at 10.03% annually, the interest income for 2007 will be \$802 ($\$8,000 \times 10.03\%$) and the amortisation of the discount will

be \$327 (\$802 – \$475). In consequence, the amortised cost of the 5-year debt instrument at the end of 2007 will be as follows:

	\$
The amount at which the financial asset is measured at initial recognition	8,000
Minus principal repayments	0
Plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount	327
Minus any reduction for impairment or uncollectibility	0
Amortised cost at the end of 2007	8,327

The amortised cost, interest income and cash flows of the debt instrument in each reporting period can be summarised as follows:

Year	Amortised cost at the beginning of the year \$	Interest income \$	Cash inflows \$	Amortised cost at the end of the year \$
2007	8,000	802	475	8,327
2008	8,327	836	475	8,688
2009	8,688	871	475	9,084
2010	9,084	911	475	9,520
2011	9,520	955	10,475	0

For example, in 2007, the following journal entries should be recognised by Knut:

Dr Loans and receivables	\$8,000	
Cr Cash		\$8,000
Being the initial recognition of the 5-year debt instrument.		
Dr Loans and receivables	\$802	
Cr Profit or loss (interest income)		\$802
To recognise the interest income using the effective interest rate.		
Dr Cash	\$475	
Cr Loans and receivables		\$475
Being the cash received from the 5-year debt instrument at the end of 2007.		

The last two journal entries above may be combined and recognised as follows:

Dr Loans and receivables.....	\$327	
Cash.....	\$475	
Cr Profit or loss (interest income).....		\$802
To recognise the interest income using the effective interest rate and the cash received from the 5-year debt instrument at the end of 2007.		

16.2.4.6 Changes in Accounting Estimates for Effective Interest Rate

There is a presumption that the cash flows and the expected life of a group of similar financial instruments can be estimated reliably. However, in those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a financial instrument (or group of financial instruments), the entity should use the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments) (IAS 39.9).

If an entity revises its estimates of payments or receipts of the financial asset (or financial liability), it is required to adjust the carrying amount of the financial instrument to reflect actual and revised estimated cash flows. The entity recalculates the carrying amount by computing the present value of estimated future cash flows at the financial instrument's original effective interest rate. The adjustment is recognised as income or expense in profit or loss.

This approach has the practical advantage that it does not require recalculation of the effective interest rate, i.e., the entity simply recognises the remaining cash flows at the original rate. As a result, it avoids a possible conflict with the requirement when assessing impairment to discount estimated cash flows using the original effective interest rate.

Example 16.10 Based on Examples 16.8 and 16.9, at the beginning of 2008 Knut Investments Limited revised its expectation and estimated that the issuer of the 5-year debt instrument would repay 40% of the amount of the instrument at the end of 2008.

Explain and calculate the amortised cost and interest income of the 5-year debt instrument for Knut in each reporting period.

Answers

If Knut estimated that the issuer would repay 40% of the amount of the 5-year debt instrument at the end of 2008, the cash flows of the debt instrument in the remaining reporting periods would be as follows:

Year		Cash inflows \$
2008	$(\$10,000 \times 40\%) + \475	4,475
2009	$(\$10,000 \times 60\%) \times 4.75\%$	285
2010		285
2011	$(\$10,000 \times 60\%) + \285	6,285

Knut should recalculate the carrying amount at the beginning of 2008 by computing the present value of estimated future cash flows at the debt instrument's original effective interest rate, i.e., 10.03%, by using the following equation:

$$\frac{\$4,475}{(1 + 10.03\%)^1} + \frac{\$285}{(1 + 10.03\%)^2} + \frac{\$285}{(1 + 10.03\%)^3} + \frac{\$6,285}{(1 + 10.03\%)^4} = \$8,804$$

The adjustment between the original carrying amount (\$8,327) and the recalculated carrying amount at the beginning of 2008 (\$8,804) would be recognised as income in profit or loss as follows:

Dr Loans and receivables	\$477	
Cr Profit or loss		\$477
Being the adjustment on revised estimates on the cash flows of the 5-year debt instrument at the beginning of 2008.		

The amortised cost, interest income and cash flows of the debt instrument in each reporting period should then be revised and summarised as follows:

Year	Amortised cost at the beginning of the year \$	Interest income \$	Cash inflows \$	Amortised cost at the end of the year \$
2007	8,000	802	475	8,327
2008	(\$8,327 + \$477) 8,804	883	4,475	5,212
2009	5,212	523	285	5,450
2010	5,450	547	285	5,712
2011	5,712	573	6,285	-

16.2.4.7 Floating Rate Financial Assets

For floating rate financial assets (and floating rate financial liabilities), periodic re-estimation of cash flows to reflect movements in market rates of interest alters the effective interest rate. If a floating rate financial asset is recognised initially at an amount equal to the principal receivable or payable on maturity, re-estimating the future interest payments normally has no significant effect on the carrying amount of the asset or liability.

16.2.5 Held-to-maturity Investments

The subsequent measurement of financial assets classified as held-to-maturity investments is similar to that of loans and receivables; they are measured at amortised cost using the effective interest method (see Section 16.2.4.4). The first part of the definition of held-to-maturity is as follows:

Held-to-maturity investments are defined as

- non-derivative financial assets with fixed or determinable payments and fixed maturity that an entity has the positive intention and ability to hold to maturity other than
 - those that the entity upon initial recognition designates as at “fair value through profit or loss” (see Section 16.2.2);
 - those that the entity designates as “available-for-sale” (see Section 16.2.3); and
 - those that meet the definition of “loans and receivables” (see Section 16.2.4) (IAS 39.9).

In order to classify a financial asset as a held-to-maturity investment, the financial asset must be non-derivative. Derivative financial assets and financial assets with embedded derivatives cannot be classified as held-to-maturity investments unless the derivative element can be separated from the financial assets as explained in Chapter 15. Figure 16.8 summarises the requirements that a financial asset must satisfy to be classified as held-to-maturity investments.

Example 16.11 On 1 May 2008, Tony Limited acquired a bond (financial asset) with a fixed payment at maturity and a fixed maturity date. The bond’s interest payments are indexed to the price of an equity share. Tony has the positive intention and ability to hold the bond to maturity.

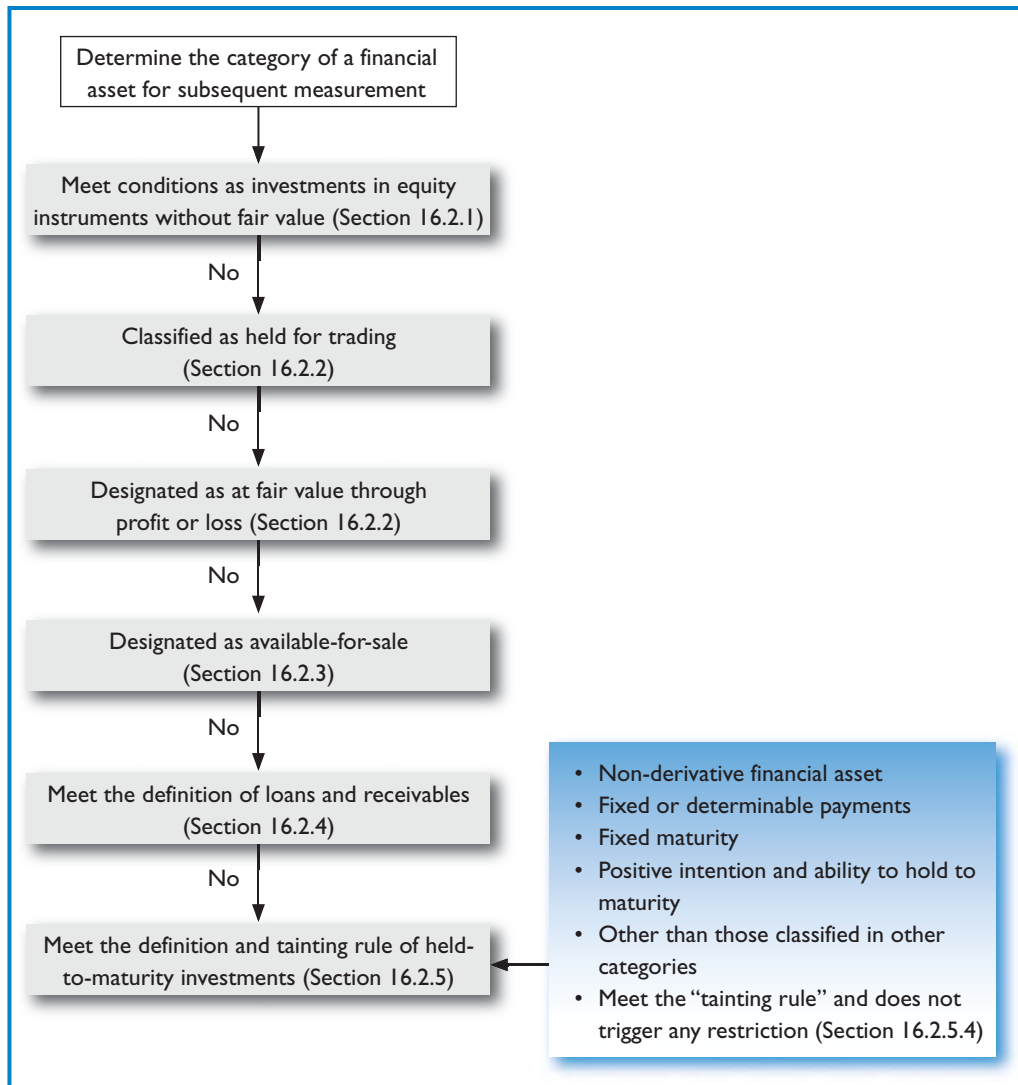
Can Tony classify the bond as a held-to-maturity investment?

Answers

Yes. However, the equity-indexed interest payments resulted in an embedded derivative that should be separated and accounted for as a derivative at fair value (i.e., classified as a financial asset at fair value through profit or loss, see Chapter 15). Assuming that the investment in the bond is \$100,000 and the equity-indexed derivative is valued at \$10,000, the journal entry for initial recognition will be as follows:

Dr Held-to-maturity investment.....	\$90,000	
Derivative.....		10,000
Cr Cash.....		\$100,000

FIGURE 16.8 Financial assets classified as held-to-maturity investments



16.2.5.1 Positive Intention and Ability to Hold to Maturity

The IASB considered that for most financial assets, fair value is a more appropriate measure than amortised cost. The held-to-maturity classification is an exception, but only if the entity has a positive intention and the ability to hold the investment to maturity. In consequence, the definition of held-to-maturity investments requires an entity to have positive intention and ability to hold an investment to maturity in order to classify the investment as held-to-maturity.

An entity is required to assess its intention and ability to hold its held-to-maturity investments to maturity not only when those financial assets are initially recognised, but also at each subsequent balance sheet date.

An entity does not have a positive intention to hold to maturity an investment in a financial asset with a fixed maturity if:

1. The entity intends to hold the financial asset for an undefined period;
2. The entity stands ready to sell the financial asset (other than if a situation arises that is non-recurring and could not have been reasonably anticipated by the entity) in response to changes in market interest rates or risks, liquidity needs, changes in the availability of and the yield on alternative investments, changes in financing sources and terms or changes in foreign currency risk; or
3. The issuer has a right to settle the financial asset at an amount significantly below its amortised cost.

An entity does not have a demonstrated ability to hold to maturity an investment in a financial asset with a fixed maturity if:

1. It does not have the financial resources available to continue to finance the investment until maturity; or
2. It is subject to an existing legal or other constraint that could frustrate its intention to hold the financial asset to maturity.

Example 16.12 Tony Limited has purchased two fixed-rate debt instruments, but their maturity is subject to callable and puttable options. Debt instrument A is callable by the issuer, while debt instrument B is puttable to the issuer by Tony.

Can Tony still classify the debt instruments as held-to-maturity investments?

Answers

1. Debt instrument A: The criteria for classification as a held-to-maturity investment are still met for a financial asset that is callable by the issuer if Tony intends and is able to hold it until it is called or until maturity and Tony would recover substantially all of its carrying amount. The call option of the issuer, if exercised, simply accelerates the asset's maturity.

However, if the financial asset is callable on a basis that would result in Tony not recovering substantially all of its carrying amount, the financial asset cannot be classified as a held-to-maturity investment. Tony should consider any premium paid and capitalised transaction costs in determining whether the carrying amount would be substantially recovered.

2. Debt instrument B: A financial asset that is puttable (i.e., Tony has the right to require that the issuer repay or redeem the financial asset before maturity) cannot be classified as a held-to-maturity investment because paying for a put feature in a financial asset is inconsistent with expressing an intention to hold the financial asset until maturity.

16.2.5.2 Fixed or Determinable Payments and Fixed Maturity

Similar to loans and receivables, held-to-maturity investments should have fixed or determinable payments, which means a contractual arrangement defining the amounts of payments to the holder. However, unlike loans and receivables, held-to-maturity investments must also have fixed maturity, which means a contractual arrangement defining the dates of payments to the holder, such as the dates of principal payments. Even a debt instrument with a variable interest rate can satisfy the criteria for a held-to-maturity investment so long as it has defined maturity.

A significant risk of non-payment does not preclude classification of a financial asset as held-to-maturity investment as long as its contractual payments are fixed or determinable and the other criteria for that classification are met.

Example 16.13 Can the following instruments be classified as held-to-maturity investments?

1. Equity instruments, including ordinary shares, share options and warrants;
2. Perpetual debt instrument that provides for interest payments for an indefinite period.

Answers

1. No, equity instruments cannot be held-to-maturity investments, either
 - a. because they have an indefinite life (such as ordinary shares); or
 - b. because the amounts the holder may receive can vary in a manner that is not predetermined (such as for share options, warrants and similar rights).
2. No, a perpetual debt instrument that provides for interest payments for an indefinite period cannot be classified as a held-to-maturity investment because there is no maturity date.

16.2.5.3 Meeting the Definition of Loans and Receivables

The definition of held-to-maturity investments specifically requires that those financial assets that meet the definition of loans and receivables cannot be classified as held-to-maturity investments. In other words, if a financial asset can be classified as loans and receivables, the financial asset does not qualify for classification as held-to-maturity investments, and vice versa.

While both loans and receivables and held-to-maturity investments are non-derivative financial assets with fixed or determinable payments, their differences are as follows:

- Fixed maturity is required for held-to-maturity investments but not required for loans and receivables.
- Positive intention and ability to hold to maturity investments is required for held-to-maturity investments but not required for loans and receivables.

- Loans and receivables cannot be a financial asset for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration.
- Loans and receivables must not be quoted in an active market, but such a requirement is not imposed on held-to-maturity investments.
- Loans and receivables are not subject to the tainting rule, which is applied to held-to-maturity investments (see Section 16.2.5.4).

Example 16.14 Melody Inc. holds a 3-month 6% fixed deposit with a bank, and the deposit has no quotation in the active market. Can Melody classify the deposit with determinable payments and fixed maturity as a held-to-maturity investment?

Answers

Melody cannot classify the deposit as a held-to-maturity investment, because the deposit has met the definition of loans and receivables, i.e., a non-derivative financial asset with determinable payments that are not quoted in an active market.

If Melody has not classified the deposit as fair value through profit or loss and available for sale, the deposit will be classified as loans and receivables.

16.2.5.4 Tainting Rule

Held-to-maturity investment is an exception from other financial assets that are subsequently measured at fair value and can be measured at amortised cost only if the entity has a positive intention and the ability to hold the investment to maturity. However, when an entity's actions cast doubt on its intention and ability to hold such investments to maturity, the remaining part of the definition of held-to-maturity investments (as set out below) precludes the use of the exception for a reasonable period of time.

The remaining part of the definition of **held-to-maturity investments**, i.e., the “tainting rule”, is as follows:

- An entity shall not classify any financial assets as held-to-maturity if the entity has, during the current financial year or during the two preceding financial years, sold or reclassified more than an insignificant amount of held-to-maturity investments before maturity (more than insignificant in relation to the total amount of held-to-maturity investments) other than sales or reclassifications that
 - are so close to maturity or the financial asset's call date (for example, less than 3 months before maturity) that changes in the market rate of interest would not have a significant effect on the financial asset's fair value;
 - occur after the entity has collected substantially all of the financial asset's original principal through scheduled payments or prepayments;or

- are attributable to an isolated event that is beyond the entity's control, is non-recurring and could not have been reasonably anticipated by the entity (IAS 39.9).

If an entity has sold or reclassified part of the held-to-maturity investment before maturity within three financial years (i.e., the current and the two preceding financial years), no financial assets can be classified as held-to-maturity investments.

The triggering level is “more than insignificant in relation to the total amount of held-to-maturity investments”. It implies that the level will not necessarily be significant but may only be more than insignificant. A big and a small entity may have the same triggering level, as it is referred to the total amount of held-to-maturity investments, not the size of the entity nor the amount of the total assets or whole portfolio.

Example 16.15 Tony Limited holds various portfolios of held-to-maturity investments. Can Tony apply the tainting rule in the following ways?

1. Apply it separately to different categories of held-to-maturity financial assets, such as debt instruments denominated in US dollars and debt instruments denominated in euro;
2. Apply it separately to held-to-maturity financial assets held by different entities in a consolidated group, for example, if those group entities are in different countries with different legal or economic environments.

Answers

No, Tony cannot apply the tainting rule in the above ways.

1. The tainting rule in IAS 39 is clear. If an entity has sold or reclassified more than an insignificant amount of held-to-maturity investments, it cannot classify any financial assets as held-to-maturity financial assets.
2. If an entity has sold or reclassified more than an insignificant amount of investments classified as held-to-maturity in the consolidated financial statements, it cannot classify any financial assets as held-to-maturity financial assets in the consolidated financial statements unless the exemption conditions in the tainting rule are met.

There are three exemptions in the tainting rule. The first two (i.e., close to maturity, and payments collected substantially) reflect only that the maturity of the held-to-maturity investment has been reached in substance. The third exemption implies that the sale or reclassification is unanticipated and it would not cast doubt on the entity's original intention and ability to hold the disposed or reclassified investments to maturity.

Example 16.16 Examples of circumstances under which sales before maturity could satisfy the condition in the third exemption – and therefore not raise a question about the entity’s intention to hold other investments to maturity – include the following:

1. A significant deterioration in the issuer’s creditworthiness of the held-to-maturity investment;
2. A change in tax law that eliminates or significantly reduces the tax-exempt status of interest on the held-to-maturity investment (but not a change in tax law that revises the marginal tax rates applicable to interest income);
3. A major business combination or major disposition (such as a sale of a segment) that necessitates the sale or transfer of held-to-maturity investments to maintain the entity’s existing interest rate risk position or credit risk policy (by assumption that it is unanticipated);
4. A change in statutory or regulatory requirements significantly modifying either what constitutes a permissible investment or the maximum level of particular types of investments, thereby causing an entity to dispose of a held-to-maturity investment;
5. A significant increase in the industry’s regulatory capital requirements that causes the entity to downsize by selling held-to-maturity investments;
6. A significant increase in the risk weights of held-to-maturity investments used for regulatory risk-based capital purposes.

Real-life

Case 16.11

BASF Aktiengesellschaft and Hang Seng Bank Limited

It is observed that, in view of the “tainting rule”, many entities have not classified or have classified only a few of their financial assets as held-to-maturity investments. BASF Aktiengesellschaft stated in its 2006 annual report as follows:

- Held-to-maturity financial instruments consist of non-derivative financial assets with fixed or determinable payments, and a fixed term, for which the company has the ability and intent to hold until maturity, and which do not fall under other valuation categories. Initial valuation is done at fair value, which generally matches the nominal value. Subsequent valuations are generally done at the historical cost, under consideration of the effective interest method. For the BASF Group, there are no material financial assets that fall under this category.

Hang Seng Bank Limited, a blue-chip bank listed in Hong Kong, explicitly states its adoption of HKAS 39 (equivalent to IAS 39) in respect of held-to-maturity investments as follows:

- On 1 January 2005, the group has reclassified most of its held-to-maturity debt securities as available-for-sale securities. The change in fair value will cause volatility to the shareholders’ equity.

16.3 Classification and Recognition of Gains and Losses

The classification of financial assets determines not only the measurement of financial assets but also the recognition of changes in fair value of the financial assets and the gain or loss arising from such changes. However, for financial assets that are hedged items, an entity is required to follow the hedge accounting to account for the gain or loss.

16.3.1 Financial Assets at Fair Value through Profit or Loss

The name of the category “financial assets at fair value through profit or loss” clearly describes its recognition requirement on gain or loss. An entity is required to recognise a gain or loss on a financial asset classified as at fair value through profit or loss in profit or loss (IAS 39.55a).

16.3.2 Available-for-sale Financial Assets

An entity is required to recognise a gain or loss on an available-for-sale financial asset directly in equity (or in other comprehensive income) until the financial asset is derecognised, except for

- impairment losses (see Section 16.5); and
- foreign exchange gains and losses (see Section 16.3.5) (IAS 39.55b).

At the time when an available-for-sale financial asset is derecognised, the cumulative gain or loss previously recognised in equity (or in other comprehensive income) is recognised in (or reclassified from equity to) profit or loss (IAS 39.55b).

Example 16.17 On 2 January 2008, Knut Investments Limited acquired a fixed-rate debt instrument at \$10,000 and paid a purchase commission of \$120. At 31 March 2008, the quoted market price of the instrument was still \$10,000. If the asset were sold, a commission of \$150 would be paid.

Discuss and suggest journal entries for the instrument on 2 January and 31 March 2008.

Answers

The financial asset was acquired for \$10,000 plus a purchase commission of \$120. Initially, on 2 January 2008, the asset is recognised at \$10,120.

Dr Available-for-sale financial asset	\$10,120	
Cr Cash		\$10,120

On 31 March 2008, when the quoted market price of the asset was still \$10,000, even though the asset would be sold with a commission of \$150, it would still be

measured at \$10,000 (without regard to the possible commission on sale) and a loss of \$120 would be recognised in equity (or other comprehensive income), say, naming it as available-for-sale reserve.

Dr Available-for-sale reserves.....	\$120	
Cr Available-for-sale financial asset.....		\$120

If the available-for-sale financial asset has fixed or determinable payments, for example, fixed-rate debt instruments, the interest calculated using the effective interest method for that asset is recognised in profit or loss (see Chapter 11 for IAS 18 *Revenue*).

In addition, the transaction costs in respect of the available-for-sale financial asset with fixed or determinable payments are also amortised to profit or loss using the effective interest method. If the available-for-sale financial asset does not have fixed or determinable payments, the transaction costs are recognised in profit or loss when the asset is derecognised or becomes impaired (as in the case of other available-for-sale financial assets).

Dividends on an available-for-sale equity instrument are recognised in profit or loss when the entity's right to receive payment is established (see Chapter 11 for IAS 18 *Revenue*) (IAS 39.55).

Real-life

Case 16.12 HSBC Holdings plc

HSBC Holdings plc explained the recognition of gain or loss on available-for-sale financial assets in its annual report of 2007 as follows:

- Available-for-sale securities are initially measured at fair value plus direct and incremental transaction costs. They are subsequently re-measured at fair value, and changes therein are recognised in equity in the “available-for-sale reserve” until the securities are either sold or impaired.
- When available-for-sale securities are sold, cumulative gains or losses previously recognised in equity are recognised in the income statement as “gains less losses from financial investments”.
- Interest income is recognised on available-for-sale securities using the effective interest rate method, calculated over the asset's expected life.
- Premiums and/or discounts arising on the purchase of dated investment securities are included in the calculation of their effective interest rates.
- Dividends are recognised in the income statement when the right to receive payment has been established.

Example 16.18 Knut Investments Limited holds shares in Bonnie Group, and the investments in shares are classified as available-for-sale financial assets. On 15 March 2008, the fair value of the investments in shares is \$20,500 and the cumulative gain recognised in equity is \$8,500.

On the same day, Bonnie Group is acquired by Tony Inc., a US-listed entity. After the acquisition, Knut receives shares in Tony Inc. in exchange for those it had in Bonnie Group of equal fair value.

Should Knut recognise the cumulative gain of \$8,500 recognised in equity in profit or loss? Discuss and suggest the journal entries on 15 March 2008.

Answers

The transaction qualifies for derecognition under IAS 39. IAS 39 requires that the cumulative gain or loss that has been recognised in equity on an available-for-sale financial asset be recognised in profit or loss when the asset is derecognised. In the exchange of shares, Knut in substance disposes of the shares it had in Bonnie and receives shares in Tony.

Dr Available-for-sale reserves.....	\$8,500	
Cr Profit or loss.....		\$8,500

16.3.3 Loans and Receivables and Held-to-maturity Investments

Both loans and receivables and held-to-maturity investments are subsequently measured at amortised cost. For financial assets carried at amortised cost, a gain or loss is recognised in profit or loss when the financial asset is derecognised or impaired, and through the amortisation process (IAS 39.56).

Real-life

Case 16.13 BP plc

BP plc explained the recognition of gain or loss on loans and receivables in its annual report of 2006 as follows:

- Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are carried at amortised cost using the effective interest method if the time value of money is significant.
- Gains and losses are recognised in income when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

16.3.4 Financial Assets Denominated in Foreign Currency

Financial instruments can be denominated in foreign currency. Under IAS 21 *The Effects of Changes in Foreign Exchange Rates* (Chapter 23), any foreign exchange gains and losses on monetary assets (except for designated hedging instruments) are recognised in profit or loss. However, under IAS 39, any gain or loss on fair value change of any available-for-sale financial assets is directly recognised in equity (or in other comprehensive income) until the financial asset is derecognised.

In order to resolve this contradiction, IAS 39 requires that the gain or loss on an available-for-sale financial asset directly in equity (or in other comprehensive income) excludes not only impairment losses (see Section 16.5) but also foreign exchange gains and losses (IAS 39.55b). In other words, when available-for-sale financial assets are monetary items as defined in IAS 21 and are denominated in foreign currency, an entity has to apply IAS 21 to the financial assets.

Monetary items as defined in IAS 23 are units of currency held and assets and liabilities to be received or paid in a fixed or determinable number of units of currency (IAS 21.8).

For the purpose of recognising foreign exchange gains and losses under IAS 21, a monetary available-for-sale financial asset (for example, debt instrument) is treated as if it were carried at amortised cost in the foreign currency. Accordingly, for such a financial asset, exchange differences resulting from changes in amortised cost are recognised in profit or loss and other changes in carrying amount are recognised in equity until the financial asset is derecognised.

Example 16.19 On 31 October 2007, Snow Finance Limited acquired a portfolio of UK-unlisted debt instruments with zero interest at £800,000, being the fair value and amortised cost of 31 October 2007. At 31 March 2008, the amortised cost of the instruments became £820,000 while the market value was £900,000. Snow classified the instruments as available-for-sale financial assets.

The functional currency of Snow is HK dollars, and the exchange rate of UK pounds was HK\$14 at 31 October 2007 and HK\$14.5 at 31 March 2008.

Discuss the implication of the above investment on the balance sheet and income statement.

Answers

On 31 October 2007, Snow classified the instruments as available-for-sale financial assets and recognised HK\$11,200,000 (£800,000 × HK\$14).

At 31 March 2008, the instruments classified as available-for-sale financial assets should be measured at fair value at HK\$13,050,000 (£900,000 × HK\$14.5). In accordance with IAS 39, the gain of HK\$1,850,000 (HK\$13,050,000 – HK\$11,200,000)

on the available-for-sale financial assets should be recognised directly in equity (or other comprehensive income), except for the foreign exchange component.

As the instruments are debt instruments, i.e., monetary items, IAS 39 requires that, for the purpose of recognising foreign exchange gains and losses under IAS 21, a monetary available-for-sale financial asset is treated as if it were carried at amortised cost in the foreign currency. In this case, the amortised cost in foreign currency at 31 March 2008 should be £820,000 and the translated amortised cost should be HK\$11,890,000 ($£820,000 \times \text{HK}\14.5).

Accordingly, for such a financial asset, exchange differences resulting from changes in amortised cost are recognised in profit or loss, i.e., HK\$690,000 ($\text{HK}\$11,890,000 - \text{HK}\$11,200,000$), and other changes in carrying amount are recognised in equity, i.e., HK\$1,160,000 ($\text{HK}\$13,050,000 - \text{HK}\$11,890,000$). As explained in IAS 39, the cumulative gain or loss that is recognised in equity is the difference between the amortised cost (adjusted for impairment, if any) and fair value of the available-for-sale monetary financial asset in the functional currency of the reporting entity.

In summary, the investment in debt instruments in functional currency, HK\$, is at:

Cost	(£800,000 × HK\$14.0)	HK\$11,200,000
Amortised cost	(£820,000 × HK\$14.5)	HK\$11,890,000
Fair value	(£900,000 × HK\$14.5)	HK\$13,050,000

In consequence, the difference between the amortised cost and fair value of HK\$1,160,000 is recognised in equity and the remaining gain of HK\$690,000 is recognised in profit or loss.

Dr Available-for-sale financial asset	HK\$1,850,000	
Cr Available-for-sale reserves		HK\$1,160,000
Profit or loss		690,000

For available-for-sale financial assets that are not monetary items under IAS 21 (for example, equity instruments), the gain or loss that is recognised directly in equity includes any related foreign exchange component.

Example 16.20 While IAS 39 describes requirements about the measurement of financial assets and the recognition of gains and losses on re-measurement in profit or loss, IAS 21 includes rules about the reporting of foreign currency items and the recognition of exchange differences in profit or loss.

In what order are IAS 21 and IAS 39 applied?

Answers

First, the measurement of a financial asset at fair value, cost or amortised cost is determined in the foreign currency in which the item is denominated in accordance with IAS 39. Then, the foreign currency amount is translated into the functional currency using the closing rate or a historical rate in accordance with IAS 21, depending on whether it is a monetary item or a non-monetary item.

1. **Monetary item**

If a monetary financial asset (such as an investment in debt instrument) is carried at amortised cost under IAS 39, amortised cost is calculated in the currency of denomination of that financial asset. Then, the foreign currency amount is recognised using the closing rate in the entity's financial statements. That applies regardless of whether a monetary item is measured at cost, amortised cost or fair value in the foreign currency.

2. **Non-monetary item**

Except for a designated hedged item, a non-monetary financial asset (such as an investment in an equity instrument) is translated

- using the closing rate if it is carried at fair value in the foreign currency; and
- at a historical rate if it is not carried at fair value under IAS 39 because its fair value cannot be reliably measured.

16.3.5 Financial Assets Using Settlement Date Accounting

In the case of a regular way purchase or sale of a financial asset, an entity can choose to recognise and derecognise a financial asset using settlement date accounting. However, the fair value of the financial asset as at the trade date (when it is purchased) may not be the same as its fair value as at the settlement date (when it is recognised). In consequence, if an entity recognises financial assets using settlement date accounting, the change in the fair value between the trade date and the settlement date is recognised depending on the classification as follows:

- For assets carried at cost or amortised cost (other than impairment losses), any change in the fair value of the asset to be received during the period between the trade date and the settlement date is not recognised.
- For assets carried at fair value through profit or loss, the change in fair value is recognised in profit or loss.
- For available-for-sale financial assets carried at fair value, the change in fair value is recognised in equity (or other comprehensive income) (IAS 39.57).

16.4 Reclassifications between Categories

Since the category and classification of a financial asset determines the measurement and recognition of the changes in re-measurement of the financial asset, specific rules on the subsequent reclassification between the different categories are also set out in IAS 39.

First, IAS 39 specifies that an entity is not allowed to reclassify a financial instrument (including a financial asset and financial liability) into or out of the fair value through profit and loss category while it is held or issued (IAS 39.50).

Second, even though no specific restriction is imposed on the reclassification of loans and receivables to other categories, it is impossible to do so. However, by definition, loans and receivables cannot be reclassified to held-to-maturity investments and investments in equity without fair value, and loans and receivables initially designed as available-for-sales financial assets are excluded from the definition of loans and receivables. In consequence, IAS 39 also implies that it is impossible to reclassify loans and receivables to other categories and the reclassification of financial assets may only be effected on the remaining three categories.

IAS 39 specifies the circumstances and requirements when a financial asset is reclassified between investments in equity without fair value, held-to-maturity investments and available-for-sale financial assets. Table 16.1 summarises the circumstances, and the specific requirements are then discussed.

16.4.1 Reclassified from Investments in Equity Instruments without Fair Value

If a reliable measure of the fair value becomes available for an “investment in equity instrument without fair value”, an entity is no longer allowed to measure that financial

TABLE 16.1 Reclassification of financial assets between categories

		Reclassified to		
		Investments in equity instrument without fair value	Available-for-sale financial assets at fair value	Held-to-maturity investments
Reclassified from	Investments in equity instrument without fair value	N/A	<ul style="list-style-type: none"> Reliable measure of fair value is available (Section 16.4.1) 	<ul style="list-style-type: none"> Impossible as equity cannot be held to maturity
	Available-for-sale financial assets at fair value	<ul style="list-style-type: none"> In rare cases, fair value is no longer available (Section 16.4.3) 	N/A	<ul style="list-style-type: none"> Change in intention or ability or tainting rule expired (Section 16.4.3)
	Held-to-maturity investments	<ul style="list-style-type: none"> Impossible as debt cannot be carried at cost 	<ul style="list-style-type: none"> Change in intention or ability Tainting rule triggered (Section 16.4.2) 	N/A

asset at cost. The entity is required to reclassify the financial asset as an available-for-sale financial asset and re-measure it at fair value (IAS 39.53).

When an investment in equity instrument without fair value is reclassified as an available-for-sale financial asset at fair value, the difference between its carrying amount and fair value is accounted for in equity as other available-for-sale financial asset (see Section 16.3.2).

16.4.2 Reclassified from Held-to-maturity Investments

If an entity changes its positive intention or no longer has the ability to hold a “held-to-maturity investment” to maturity, the investment no longer meets the definition of held-to-maturity investments. The entity is required to reclassify the investment as an available-for-sale financial asset and re-measure it at fair value (IAS 39.51).

If an entity sells or reclassifies more than an insignificant amount of held-to-maturity investments, the “tainting rule” (see Section 16.2.5.4) imposed on held-to-maturity investments will be triggered. The investments should no longer be classified as held-to-maturity investments, and the entity is required to reclassify all the remaining held-to-maturity investments as available-for-sale financial assets and re-measure them at fair value (IAS 39.52).

When a financial asset is reclassified from held-to-maturity investments to available-for-sale financial assets, the difference between its carrying amount and fair value is accounted for in equity as other available-for-sale financial assets (see Section 16.3.2).

Example 16.21 In Example 16.6, Tony Limited invested in a bond with a fixed payment at maturity and a fixed maturity date on 1 May 2008. The bond’s interest payments were indexed to the price of an equity share. While Tony had the positive intention and ability to hold the bond to maturity, the non-derivative element of the bond was classified as held-to-maturity and measured at a cost of \$90,000. The bond’s equity-indexed derivative (embedded derivative) element of \$10,000 was classified as a financial asset at fair value through profit or loss.

One month later, when the fair value of the bond increased to \$120,000, of which \$105,000 was related to the fair value of the non-derivative element, Tony changed its positive intention to hold the bond to maturity.

Discuss the implication of the change in intention.

Answers

Since Tony changed its positive intention in holding the bond, it is no longer appropriate to classify the non-derivative element of the bond as a held-to-maturity investment. Tony should reclassify the element as an available-for-sale financial asset and re-measure it at fair value, while the embedded derivative should still be classified and measured at fair value through profit or loss. The journal entries for reclassification and re-measurement are as follows:

Dr Available-for-sale financial assets	\$105,000	
Cr Held-to-maturity investments.....		\$90,000
Available-for-sale reserves.....		15,000
Being the reclassification of the non-derivative element of the bond as available-for-sale financial assets at fair value.		
<hr/>		
Dr Derivatives [(\$120,000 – \$105,000) – \$10,000]	\$5,000	
Cr Profit or loss.....		\$5,000
To re-measure the embedded derivative element of the bond at fair value.		

16.4.3 Reclassified from Available-for-sale Financial Assets at Fair Value

If an entity changes its positive intention or regains its ability to hold a financial asset to maturity, it can choose to reclassify its available-for-sale financial assets as held-to-maturity investments. An entity may also reclassify the financial assets as held-to-maturity investments if the “tainting rule”, including the “two preceding financial years” requirements (see Section 16.2.5.4), imposed on the entity has expired. If a financial asset is reclassified to held-to-maturity investments, the asset will be re-measured at amortised cost rather than at fair value.

In the rare circumstance when a reliable measure of fair value is no longer available for a financial asset, it becomes appropriate to carry the financial asset at cost (as investments in equity instruments without fair value) rather than at fair value. That circumstance may only apply to equity instruments, since only investments in equity instruments without fair value can be subsequently measured at cost (see Section 16.2.1).

In the above reclassifications, the fair value carrying amount of the financial asset on the date of reclassification becomes its new cost or amortised cost, as applicable. Any previous gain or loss on that asset that has been recognised directly in equity (as the asset was classified as an available-for-sale financial asset before the reclassification) is accounted for as follows:

1. In the case of a financial asset with a fixed maturity (for example, debt instruments), the gain or loss is amortised to profit or loss over the remaining life of the held-to-maturity investment using the effective interest method. Any difference between the new amortised cost and maturity amount is amortised over the remaining life of the financial asset using the effective interest method, similar to the amortisation of a premium and a discount.
2. In the case of a financial asset that does not have a fixed maturity (for example, equity instruments), the gain or loss remains in equity until the financial asset is sold or otherwise disposed of, when it will be recognised in profit or loss (IAS 39.54).

If the financial asset reclassified to held-to-maturity investments and investments in equity instruments without fair value is subsequently impaired, any gain or loss that has been recognised directly in equity will be recognised in profit or loss as other available-for-sale financial assets (see Section 16.5.3).

Example 16.22 On 2 January 2008, Bonnie Singapore Limited reclassified its investment in a 6% debt instrument with a cost of \$105,998 and a fair value of \$113,815 from available-for-sale financial assets to held-to-maturity investment. The debt instrument pays 6% interest annually on 30 June and has a maturity value of \$120,000 on 31 December 2010.

Discuss the implication of the reclassification and suggest journal entries.

Answers

In the reclassification, Bonnie is required to carry the fair value of \$113,815 as the new amortised cost of the debt instrument. Simultaneously, the gain of \$7,817 (\$113,815 – \$105,998) recognised in equity (when it was classified as available-for-sale financial assets) will be amortised over the remaining life of the debt instrument using the effective interest method. The difference of \$6,185 between the new amortised cost (\$113,815) and the maturity value (\$120,000) will also be amortised over the remaining life of the debt instrument using the effective interest method, similar to the amortisation of a premium and a discount.

To amortise the gain recognised in the equity, Bonnie is required to use the effective interest method and find out the effective interest rate, i , for the amortisation of the gain as follows:

$$\$105,998 = \frac{\$0}{(1+i)^1} + \frac{\$0}{(1+i)^2} + \frac{\$113,815}{(1+i)^3}$$

The effective interest rate, i , for the amortisation of the gain recognised in equity should be 2.4% per annum.

Year	Gain in equity at the beginning of the year \$	Amortisation of gain in equity \$	Pro forma amortised cost at year-end \$
2008	7,817	(105,998 × 2.4%) 2,544	108,542
2009	5,273	(108,542 × 2.4%) 2,605	111,147
2010	2,668	(111,147 × 2.4%) 2,668	113,815

The annual interest of the debt instrument is \$7,200 (\$120,000 × 6%), and the effective interest rate on the debt instrument with a new amortised cost of \$113,815 can be found by using the following equation:

$$\$113,815 = \frac{\$7,200}{(1+r)^1} + \frac{\$7,200}{(1+r)^2} + \frac{\$7,200 + \$120,000}{(1+r)^3}$$

The effective interest rate, r , should be 8% per annum, and the amortisation of the instrument from 2008 can be summarised as follows:

Year	Amortised cost at the beginning of the year \$	Amortisation of premium on reclassification \$	Cash inflows \$	Amortised cost at year-end \$
2008	113,815	9,105	7,200	115,720
2009	115,720	9,258	7,200	117,778
2010	117,778	9,422	127,200	0

At the date of reclassification, Bonnie made the following journal entries (assuming the fair value changes had not been recognised yet):

Dr Held-to-maturity investments	\$113,815	
Cr Available-for-sale financial assets		\$105,998
Available-for-sale reserves		7,817

At year-end of 2008, the following journal entries can be recognised by Bonnie as follows:

Dr Held-to-maturity investments	\$9,105	
Available-for-sale reserves	2,544	
Cr Profit or loss		\$11,649
To recognise the amortisation of gain in equity and the amortisation of the premium on reclassification using the effective interest method.		
Dr Cash	\$7,200	
Cr Held-to-maturity investments		\$7,200
Being the cash received from the debt instrument at the end of 2008.		

16.5 Impairment and Uncollectibility of Financial Assets

Before IAS 39, there was no IAS or IFRS to mandate an assessment of the impairment or the collectibility of financial assets. Even though nearly all entities would assess the recoverability of financial assets, in particular trade or other receivables, and make different amounts of bad debt, provision for bad debt or provision for doubtful debt, there were no consistent practices.

IAS 39 introduces the compulsory and consistent requirements in assessing the impairment and collectibility of financial assets and requires that all financial assets,

except for those measured at fair value through profit or loss, are subject to review for impairment. In accordance with IAS 39, an entity is required to adopt the following two-step approach in recognising the impairment loss:

1. Assessment of objective evidence of impairment; and
2. Measurement and recognition of impairment loss.

An entity is required to first assess at each balance sheet date whether there is any objective evidence that a financial asset or group of financial assets is impaired (IAS 39.58). A financial asset or a group of financial assets is impaired and impairment losses are incurred if, and only if:

- There is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (termed as a “loss event”); and
- That loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

Example 16.23 AJS Limited lends \$200,000 to a customer, Bonnie Holdings Limited. Based on past experience, AJS Limited expects that 2% of the principal amount of loans given will not be collectible.

Can AJS recognise an immediate impairment loss of \$4,000 through the establishment of an allowance for future losses when a loan is given to Bonnie?

Answers

No, AJS cannot recognise an impairment loss on the initial recognition of the loan. IAS 39 requires a financial asset to be initially measured at fair value. For a loan asset, the fair value is the amount of cash lent adjusted for any fees and costs (unless a portion of the amount lent is compensation for other stated or implied rights or privileges).

In addition, IAS 39 requires that an impairment loss is recognised only if there is objective evidence of impairment as a result of a past event that occurred after initial recognition. Accordingly, it is inconsistent with these requirements of IAS 39 if AJS reduces the carrying amount of a loan asset on initial recognition through the recognition of an immediate impairment loss.

Specifically, IAS 39 requires that an impairment loss is recognised only when it has been incurred. The IASB described the current model of impairment loss in IAS 39 as an “incurred loss” model and rejected the “expected loss” model. The IASB argued that it was inconsistent with an amortised cost model to recognise impairment on the basis of expected future transactions and events and that possible or expected future trends that may lead to a loss in the future do not provide objective evidence of impairment.

It may not be possible to identify a single, discrete event that caused the impairment. Rather, the combined effect of several events may have caused the impairment. Losses expected as a result of future events, no matter how likely, are not recognised.

Example 16.24 Objective evidence that a financial asset or group of assets is impaired includes observable data that comes to the attention of the holder of the asset about the following loss events:

1. Significant financial difficulty of the issuer or obligor;
2. A breach of contract, such as a default or delinquency in interest or principal payments;
3. The lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
4. It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
5. The disappearance of an active market for that financial asset because of financial difficulties;
6. Observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the group, including the following:
 - a. Adverse changes in the payment status of borrowers in the group (e.g., an increased number of delayed payments); or
 - b. National or local economic conditions that correlate with defaults on the assets in the group (e.g., an increase in the unemployment rate in the geographical area of the borrowers, or a decrease in property prices for mortgages in the relevant area);
7. A significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

Real-life

Case 16.14 China Life Insurance Company Limited and BASF Aktiengesellschaft

China Life Insurance Company Limited, one of the largest listed life insurers in China, explained in its 2006 annual report in respect of the assessment of objective evidence of impairment on financial assets as follows:

- Financial assets other than those accounted for as at fair value through income are adjusted for impairments, where there are declines in value that are considered to be other than temporary.
- In evaluating whether a decline in value is other than temporary, the group considers several factors, including, but not limited to, the following:
 - the extent and the duration of the decline;
 - the financial condition of and near-term prospects of the issuer; and
 - the group's ability and intent to hold the investment for a period of time to allow for a recovery of value.

**Real-life
Case 16.14**
(cont'd)

BASF Aktiengesellschaft explained its assessment of impairment on available-for-sale financial instruments in its financial statements of 2007 as follows:

- If there is objective evidence of a permanent impairment of an available-for-sale financial instrument, impairment write-downs are made.
- The indications include above all
 - a sustained deterioration in the market value;
 - a significant reduction in credit quality;
 - the existence of transfer risks;
 - payment delays;
 - higher probability of insolvency;
 - the necessity of debtor recapitalisation; or
 - the disappearance of an active market.

If no objective evidence of impairment exists on a financial asset, the second step in recognising the impairment loss will not be performed.

If any objective evidence of impairment exists on a financial asset, an entity is required to measure the amount of impairment loss and recognise the loss in accordance with the manner specified in IAS 39. The measurement and the recognition of impairment loss of a financial asset are also determined by the classification of the asset.

16.5.1 Investments in Equity Instruments without Fair Value

For investment in an equity instrument without fair value (including a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, see Section 16.2.1), if there is objective evidence that an impairment loss has been incurred on such investment, the amount of the impairment loss is measured as the difference between

- the carrying amount of the financial asset; and
- the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset (IAS 39.66).

Further elaboration on the above requirements is not provided in IAS 39. While a fair value of such equity instruments cannot be reliably measured, the availability of such present value in determining the impairment loss is questionable.

When an impairment loss is provided on an investment in an equity instrument without fair value, the entity is not allowed to subsequently reverse the impairment losses. This restriction is similar to the practice on available-for-sale equity instruments (see Section 16.5.3).

16.5.2 Loans and Receivables and Held-to-maturity Investments

For loans and receivables and held-to-maturity investments, IAS 39 provides specific guidance in assessing the objective evidence of their impairment and in measuring and recognising the impairment loss.

On one hand, the process for estimating impairment considers all credit exposures, not only those of low credit quality; on the other hand, even though the process of assessing the objective evidence and the process of measuring the impairment loss are illustrated separately below, they can be performed simultaneously.

16.5.2.1 Two-Stage Assessment of Objective Evidence

Before an impairment loss is measured and recognised, an entity is required to assess whether objective evidence of impairment exists for loans and receivables and held-to-maturity investments using a two-stage assessment approach as follows:

1. First stage (individual assessment) – an entity is required to first assess whether objective evidence of impairment exists
 - a. individually for financial assets that are individually significant; and
 - b. individually or collectively for financial assets that are not individually significant.
2. Second stage (collective assessment) – if an entity determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment.

Real-life

Case 16.15

HSBC Holdings plc

In its annual report of 2007, HSBC distinguished its individual assessment and collective assessment of impairment losses on loan portfolio as follows:

- For all loans that are considered individually significant, HSBC assesses on a case-by-case basis at each balance sheet date whether there is any objective evidence that a loan is impaired.
- Impairment is assessed on a collective basis in two circumstances:
 - To cover losses which have been incurred but have not yet been identified on loans subject to individual assessment; and
 - For homogeneous groups of loans that are not considered individually significant.

All entities have to complete both stages to assess whether objective evidence of impairment exists for loans and receivables and held-to-maturity investments, unless the entity does not have a group of assets with similar risk characteristics. The amount of the impairment loss can also be measured during these two stages simultaneously. However, in all cases, the second stage of collective assessment should not include the following:

- Financial assets that are individually assessed for impairment; and
- Financial assets for which an impairment loss is or continues to be recognised.

Example 16.25 At 29 February 2008, Tony Asia Finance Limited had loans receivable of \$3 million, with two individual significant loans of \$500,000 each and a large number of smaller credit card loans.

Discuss the alternatives Tony may adopt in assessing the objective evidence of impairment on the trade receivables.

Answers

To assess whether objective evidence of impairment exists on the receivables, Tony can consider either of the following two alternatives:

1. Perform individual assessment on all outstanding loans receivable, whether significant or not.
2. Perform a combination of individual assessment and collective assessment, for example:
 - a. Individually assess at least the two individual significant loans; and
 - b. Group all the smaller loans on the basis of similar credit risk characteristics, and perform collective assessment on each group.

For the purpose of a collective assessment of impairment, Tony groups the loans receivable on the basis of similar credit risk characteristics that are indicative of the borrowers' ability to pay all amounts due according to the contractual terms (for example, on the basis of a credit risk evaluation or grading process that considers asset type, industry, geographical location, collateral type, past-due status and other relevant factors).

The characteristics chosen are relevant to the estimation of future cash flows for groups of such assets by being indicative of the borrowers' ability to pay all amounts due according to the contractual terms of the assets being evaluated (IAS 39.AG 87).

Real-life

Case 16.16 Standard Chartered plc

In assessing objective evidence of impairment, Standard Chartered plc considered the following factors as indicated in its annual report of 2007:

- Whether the customer is more than 90 days past due;
- A customer files for bankruptcy protection (or the local equivalent) where this would avoid or delay repayment of its obligation;
- The group files to have the customer declared bankrupt or files a similar order in respect of a credit obligation;
- The group consents to a restructuring of the obligation, resulting in a diminished financial obligation, demonstrated by a material forgiveness of debt or postponement of scheduled payments;

Real-life

Case 16.16

(cont'd)

- The group sells a credit obligation at a material credit-related economic loss; or
- There is observable data indicating that there is a measurable decrease in the estimated future cash flows of a group of financial assets, although the decrease cannot yet be identified with specific individual financial assets.

16.5.2.2 Measurement and Recognition of Impairment Loss

If there is objective evidence that an impairment loss on loans and receivables or held-to-maturity investments carried at amortised cost has been incurred, the amount of the impairment loss is measured as the difference between

- the asset's carrying amount; and
- the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition) (IAS 39.63).

Example 16.26 AJS Limited calculates impairment in the unsecured portion of loans and receivables on the basis of a provision matrix that specifies fixed provision rates for the number of days a loan has been classified as non-performing as follows:

- 0% if less than 90 days;
- 20% if 90–180 days;
- 50% if 181–365 days; and
- 100% if more than 365 days.

Can the results be considered appropriate for the purpose of calculating the impairment loss on loans and receivables?

Answers

It is not necessary for the result to be appropriate, because IAS 39 requires impairment or bad debt losses to be calculated as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at its original effective interest rate.

The requirement of making impairment loss by comparing the asset's carrying amount with its present value of estimated future cash flows implies that an impairment loss is required even when the collectibility of the asset is not affected but only a delay of collection or repayment exists. For example, if a debtor delays a repayment of a 2-year loan to 4 years later without interest paid on the extended term, an impairment loss should be measured and recognised accordingly.

The amount of the impairment loss on loans and receivables or held-to-maturity investments is recognised in profit or loss while the carrying amount of the impaired asset is reduced either

- directly in the asset; or
- through use of an allowance account (IAS 39.63).

Real-life**Case 16.17****HSBC Holdings plc**

HSBC Holdings plc distinguished the use of allowance account and direct write-off in recognising impairment losses on impaired loans in its annual report of 2007 as follows:

- Losses for impaired loans are recognised promptly when there is objective evidence that impairment of a loan or portfolio of loans has occurred. Impairment allowances are calculated on individual loans and on groups of loans assessed collectively. Impairment losses are recorded as charges to the income statement. The carrying amount of impaired loans on the balance sheet is reduced through the use of impairment allowance accounts. Losses expected from future events are not recognised.
- A loan (and the related impairment allowance account) is normally written off, either partially or in full, when there is no realistic prospect of recovery of the principal amount and, for a collateralised loan, when the proceeds from realising the security have been received.

Example 16.27 In Example 16.4, Knut Investments Limited purchased a 5-year debt instrument at its fair value plus transaction costs at \$8,000 on 2 January 2007. The principal amount of the instrument was \$10,000, and the instrument carried fixed interest of 4.75% that would be paid annually. The effective interest rate as estimated was 10.03%.

At the beginning of 2008, when the instrument's carrying amount was \$8,327, because of the sub-prime and credit crunch in the United States and worldwide, the issuer of the debt instrument declared that it would not prepay the debt instrument but instead would be unable to repay all the principal and interest. It would repay only 60% of the outstanding interest and 80% of the outstanding principal.

Knut considered that 20% of the instrument's carrying amount of \$8,327 at the beginning of 2008 should be considered as uncollectible and a loss of bad debt of \$1,665.4 ($\$8,327 \times 20\%$) should be provided.

Discuss and suggest journal entries for 2008.

Answers

Since the issuer would be able to repay only 60% of the interest and 80% of principal from 2008, there is objective evidence of impairment. Knut should estimate the

impairment loss by comparing the instrument's carrying amount with the present value of estimated future cash flows discounted at the instrument's original effective interest rate, i.e., 10.03%. The present value is calculated as follows:

Year	Original cash flows \$	Estimated future cash flows \$	Discount factor	Present value of estimated future cash flows \$
2008 ...	475	285 (60%)	$1 \div (1 + 10.03\%)^1 = 0.9088$	259
2009 ...	475	285 (60%)	$1 \div (1 + 10.03\%)^2 = 0.8260$	235
2010 ...	475	285 (60%)	$1 \div (1 + 10.03\%)^3 = 0.7507$	214
2011 ...	475	285 (60%)	$1 \div (1 + 10.03\%)^4 = 0.6823$	194
2011 ...	10,000	8,000 (80%)	$1 \div (1 + 10.03\%)^4 = 0.6823$	5,458
The instrument's present value of estimated future cash flows				6,360
Less: The instrument's carrying amount at the beginning of 2008				8,327
Impairment loss				<u>1,967</u>

By providing a loss of bad debt of only \$1,665.40, Knut might not have complied with the requirements of IAS 39 and might have underestimated the impairment loss of the instrument. The journal entry to recognise the impairment loss of \$1,967 at the beginning of 2008 would then be:

Dr Profit or loss (impairment loss).....	\$1,967	
Cr Loans and receivables.....		\$1,967

1. Original Effective Interest Rate

Impairment of loans and receivables and held-to-maturity investments is measured using the financial instrument's original effective interest rate, because discounting at the current market rate of interest would, in effect, impose fair value measurement on financial assets that are otherwise measured at amortised cost.

Example 16.28 In applying the requirement of “original effective interest rate” in measuring the impairment of financial assets, different implications can be made on different examples as follows:

1. If the terms of a loan, receivable or held-to-maturity investment are renegotiated or otherwise modified because of financial difficulties of the borrower or issuer,

- impairment is measured using the original effective interest rate before the modification of terms.
2. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.
 3. If a loan, receivable or held-to-maturity investment has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate(s) determined under the contract.
 4. As a practical expedient, a creditor may measure impairment of a financial asset carried at amortised cost on the basis of an instrument's fair value using an observable market price.
 5. The calculation of the present value of the estimated future cash flows of a collateralised financial asset reflects the cash flows that may result from foreclosure less costs for obtaining and selling the collateral, whether or not foreclosure is probable.

2. Historical Loss Experience

Contractual cash flows and historical loss experience provide the basis for an entity estimating expected cash flows. Historical loss rates are adjusted on the basis of relevant observable data that reflect current economic conditions.

In a collective assessment of impairment, future cash flows in a group of financial assets are estimated on the basis of historical loss experience for assets with credit risk characteristics similar to those in the group. Entities that have no entity-specific loss experience or insufficient experience use peer group experience for comparable groups of financial assets.

Historical loss experience is adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not exist currently.

Estimates of changes in future cash flows reflect and are directionally consistent with changes in related observable data from period to period (such as changes in unemployment rates, property prices, commodity prices, payment status or other factors that are indicative of incurred losses in the group and their magnitude). The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience (IAS 39.AG89).

Example 16.29 In Example 16.25, Tony Asia Finance Limited had loans receivable of \$3 million, with two individual significant loans of \$500,000 each and a large number of smaller credit card loans.

To assess whether objective evidence of impairment exists on the credit card loans receivable, Tony may determine, on the basis of historical experience, that one of the main causes of default on credit card loans is the death of the borrower.

Tony may observe that the death rate is unchanged from one year to the next. Nevertheless, some of the borrowers in Tony's group of loans may have died in that year, indicating that an impairment loss has occurred on those loans, even if, at the year-end, Tony is not yet aware which specific borrowers have died.

It would be appropriate for an impairment loss to be recognised for these "incurred but not reported" losses. However, it would not be appropriate to recognise an impairment loss for deaths that are expected to occur in a future period, because the necessary loss event (the death of the borrower) has not yet occurred.

When using historical loss rates in estimating future cash flows, it is important that information about historical loss rates is applied to groups that are defined in a manner consistent with the groups for which the historical loss rates were observed. Therefore, the method used should enable each group to be associated with information about past loss experience in groups of assets with similar credit risk characteristics and relevant observable data that reflect current conditions.

3. Formula-based Approaches and Statistical Methods

Formula-based approaches or statistical methods may be used to determine impairment losses in a group of financial assets (e.g., for smaller balance loans) as long as they are consistent with the requirements of IAS 39. Any model used should incorporate or consider the following attributes:

- Incorporate the effect of the time value of money;
- Consider the cash flows for the entire remaining life of an asset (not only the next year); and
- Consider the age of the loans within the portfolio.

No matter which model is used, the methodology for measuring impairment should ensure that an impairment loss is not recognised on the initial recognition of an asset.

16.5.2.3 Interest Income after Impairment Recognition

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

16.5.2.4 Reversal of Impairment Loss on Debt Instrument

An entity is required to reverse the previously recognised impairment loss on loans and receivables or held-to-maturity investments either directly or by adjusting an allowance account if, in a subsequent period, the following two conditions are met:

1. The amount of the impairment loss decrease; and
2. The decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating) (IAS 39.65).

The amount of the reversal is recognised in profit or loss, but it must not result in a carrying amount of the financial asset that exceeds what the amortised cost would have been had the impairment not been recognised at the date the impairment is reversed (IAS 39.65).

16.5.3 Available-for-sale Financial Assets

For an available-for-sale financial asset carried at fair value, an entity recognises the impairment loss on it only when:

1. A decline in the fair value of an available-for-sale financial asset has been recognised directly in equity; and
2. There is objective evidence that the asset is impaired.

In recognising the impairment loss on an available-for-sale financial asset, an entity removes the cumulative loss that had been recognised directly in equity from equity and recognises the loss in profit or loss even though the financial asset has not been derecognised (IAS 39.67).

The amount of the cumulative loss that is removed from equity and recognised in profit or loss is the difference between

- the acquisition cost (net of any principal repayment and amortisation); and
- the current fair value, less any impairment loss on that financial asset previously recognised in profit or loss (IAS 39.68).

Example 16.30 In 2005, Tony Asia Finance Limited acquired an investment in equity instrument at \$1 million, and up to 31 March 2007 it had recognised in equity (the available-for-sale reserves) a net loss of fair value of \$300,000 for the instrument classified as an available-for-sale equity instrument. At 30 June 2008, the fair value of the instrument dropped to \$550,000.

1. Since the fair value of the financial asset is less than its cost and carrying amount, should the net loss recognised directly in equity be removed from equity and recognised in profit or loss?
2. If Tony has concluded that the decrease in fair value represented a significant and prolonged decline in the fair value of an investment in an equity instrument below its cost, should the net loss recognised directly in equity be removed from equity and recognised in profit or loss?

Answers

1. It is not necessary for Tony to remove the net loss recognised directly in equity from equity and recognise it in profit or loss. The relevant criterion is not whether the

fair value is less than the carrying amount, but whether there is objective evidence that a financial asset or group of assets is impaired. Tony should assess at each balance sheet date whether there is any objective evidence that a financial asset or group of assets may be impaired. A decline in the fair value of a financial asset below its carrying amount is not necessarily evidence of impairment. Tony would only be required to recognise the further changes in fair value $[(\$1,000,000 - \$300,000) - \$550,000 = \$150,000]$ directly in equity as follows:

Dr Available-for-sale reserves.....	\$150,000	
Cr Available-for-sale financial assets		\$150,000

2. If Tony has concluded that the decrease in fair value represented a significant and prolonged decline in the fair value of an investment in an equity instrument below its cost, that is an example of objective evidence of impairment (Example 16.23). Tony would then be required to remove the cumulative loss that had been recognised directly in equity from equity and recognises the loss in profit or loss (even though the financial asset has not been derecognised) as follows:

Dr Profit or loss.....	\$450,000	
Cr Available-for-sale reserves (\$300,000 + \$150,000)		\$450,000

Real-life**Case 16.18 Standard Chartered plc**

In its annual report of 2007, Standard Chartered plc determined that a significant or prolonged decline in the fair value was objective evidence of impairment for available-for-sale financial assets, and it stated the following:

- A significant or prolonged decline in the fair value of a security below its cost is considered, amongst other indicators of impairment, in determining whether an asset is impaired.
- If any such evidence exists for available-for-sale financial assets, the cumulative loss (measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement) is removed from equity and recognised in the income statement.

After an impairment loss is recognised on profit or loss, any reversal of the impairment loss through profit or loss will depend on whether the impaired financial asset is an available-for-sale equity instrument or an available-for-sale debt instrument.

16.5.3.1 Reversal of Impairment Loss on Available-for-sale Equity Instrument

Impairment losses on available-for-sale equity instruments cannot be reversed through profit or loss (IAS 39.69), i.e., any subsequent increase in fair value is recognised in equity. The IASB argued that it was difficult to find an acceptable way to distinguish reversals of impairment losses from other increases in fair value and that precluding reversals of impairment on available-for-sale equity instruments was the only appropriate solution.

Example 16.31 Based on Example 16.30, after the recognition of the impairment loss, the fair value of the investment in equity instrument held by Tony Asia Finance Limited increased from \$550,000 as at 30 June 2008 to \$600,000 as at 31 July 2008.

Discuss whether and how Tony should account for such an increase in fair value of the instrument.

Answers

Tony is not allowed to reverse the impairment loss on an available-for-sale equity instrument through profit or loss, and any increase in fair value of the instrument is recognised directly in equity as follows:

Dr Available-for-sale financial assets	\$50,000	
Cr Available-for-sale reserves		\$50,000

Real-life

Case 16.19

LVMH Moët Hennessy – Louis Vuitton (LVMH Group)

LVMH Group, a worldwide luxury goods producer and retailer, has adopted IFRS in preparing its financial statements and explained in its financial statements of 2007 about the available-for-sale financial assets as follows:

- Available-for-sale financial assets are measured at their listed value at the balance sheet date in the case of quoted investments, and at their net realisable value in the case of unquoted investments.
- Positive or negative changes in value are taken to equity within “revaluation reserves”.
- If an impairment loss is judged to be definitive, a provision for impairment is recognised and charged to net financial income/expense; the impairment is only reversed through the income statement at the time of sale of the corresponding available-for-sale financial assets.

The policy of LVMH Group implied that the available-for-sale financial assets only comprised available-for-sale equity instruments; otherwise, reversal of impairment loss may still be possible as explained in Section 16.5.3.2.

16.5.3.2 Reversal of Impairment Loss on Available-for-sale Debt Instrument

Reversal of the impairment loss on available-for-sale debt instruments through profit or loss is allowed, because this approach provides consistency with the requirements to reverse impairment losses on loans and receivables and held-to-maturity investments, and because the reversals of impairment on debt instruments are more objectively determinable than those on equity instruments.

After an impairment loss on an available-for-sale debt instrument is recognised in profit or loss, if (1) the fair value of such an instrument increases and (2) the increase can be objectively related to an event occurring after the recognition of impairment loss through profit or loss, an entity reverses the impairment loss, with the amount of the reversal recognised in profit or loss (IAS 39.70).

Real-life

Case 16.20

Standard Chartered plc

In its annual report of 2007, Standard Chartered plc further explained the reversal of impairment for available-for-sale financial assets as follows:

- If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised, the impairment loss is reversed through the income statement.
- Impairment losses recognised in the income statement on equity instruments are not reversed through the income statement.

16.6 Summary

To subsequently measure a financial asset, an entity is required under IAS 39 to classify its financial asset into different categories, namely, (1) financial assets at fair value through profit or loss, (2) available-for-sale financial assets, (3) loans and receivables, and (4) held-to-maturity investments. IAS 39 clearly gives the definition of each category and the category of the financial assets determines their subsequent measurement. In addition to these four categories, if a financial asset is an investment in equity instrument without a quoted active market price and reliably measured fair value, the asset can be stated at cost and regarded as an investment in equity instrument without fair value.

A financial asset must be classified as at fair value through profit or loss if it is held for trading. A financial asset can also be designated as at fair value through profit or loss if it can fulfil one of the three conditions for initial designation. An available-for-sale financial asset, similar to financial asset at fair value through profit or loss, is also subsequently measured at fair value but its gain or loss, except for impairment loss and foreign exchange differences, is recognised in equity. A non-derivative financial asset can be classified as an available-for-sale financial asset at initial designation and at the time when it is not classified into other categories.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not classified into other categories. Once a financial asset is classified as loans and receivables, it cannot be classified as a held-to-maturity investment. Held-to-maturity investments share a similar definition as loans and receivables but held-to-maturity investments must have a fixed maturity and require a positive intention and ability on the part of an entity to hold it to maturity. A strict tainting rule is also applied on held-to-maturity investments, and no assets can be classified as such if the tainting rule is triggered. Both loans and receivables and held-to-maturity investments are subsequently measured at amortised cost by using the effective interest method.

Explicitly, an entity is not allowed to reclassify financial assets into or out of financial assets at fair value through profit or loss. Implicitly, reclassification between categories is allowed only on investments in equity instruments without fair value, held-to-maturity investments and available-for-sale financial assets and is accounted for based on their respective classification.

At each balance sheet date, all financial assets, except for those classified as at fair value through profit or loss, are assessed to ensure whether there is any objective evidence of impairment. Impairment loss is recognised only if there is objective evidence that the asset is impaired. In particular, a two-stage assessment requirement, i.e., individual and collective assessment, is imposed on loans and receivables and held-to-maturity investments. Reversal of impairment loss recognised in profit or loss is allowed on debt instruments only when there is objective evidence to support the reversal.

Review Questions

1. What kinds of financial assets are not subsequently measured at fair value?
2. What is the importance of category or classification of financial assets in their subsequent measurement?
3. Which categories for subsequent measurement of financial assets are defined in IAS 39?
4. How can an entity carry a financial asset at cost?
5. How can an entity determine that a market is an active market for financial assets?
6. What is held for trading?
7. Discuss the conditions under which a financial asset can be designated as at fair value through profit or loss.
8. What is an accounting mismatch?
9. In order to measure a financial instrument managed and evaluated on a fair value basis at fair value through profit or loss, what conditions should an entity meet?
10. Define available-for-sale financial assets.
11. Define loans and receivables and discuss their measurement basis.

12. What is the effective interest method?
13. What is amortised cost?
14. What kinds of financial assets can be classified as held-to-maturity investments?
15. Discuss the similarities and differences between loans and receivables and held-to-maturity investments.
16. Discuss the tainting rule on held-to-maturity investments.
17. What are the requirements in recognising the gain or loss on available-for-sale financial assets?
18. Can a financial asset in a particular category be freely reclassified to another category?
19. When can an investment in equity instrument without fair value be reclassified to other categories, and what are the accounting requirements?
20. When will a held-to-maturity investment be reclassified, and what are the accounting requirements?
21. When can an available-for-sale financial asset be reclassified?
22. Discuss the accounting requirements in reclassifying an available-for-sale debt instrument as held-to-maturity investment.
23. Discuss the accounting requirements in reclassifying an available-for-sale equity instrument as investment in equity instrument without fair value.
24. Discuss the general impairment requirements on financial assets in IAS 39.
25. How does an entity perform impairment review on investment in equity instrument without fair value?
26. What are individual assessment and collective assessment on loans and receivables and held-to-maturity investments?
27. How does an entity measure and recognise the impairment loss on loans and receivables and held-to-maturity investments?
28. How does an entity assess and determine the impairment loss on available-for-sale financial assets?
29. What kinds of impairment losses recognised in profit or loss can be reversed?

Exercises

Exercise 16.1 Melody Finance Limited purchased a portfolio of debt and equity instruments issued by Knut Corporation. At the transaction date, the debt instruments with a variable interest rate had a fair value of \$2 million and the equity instruments had a fair value of \$3 million. No transaction costs on purchases were involved. Melody intended to hold the portfolio for long-term strategic purposes and intended to classify the portfolio as held-to-maturity and measured at cost. At year-end, the fair value of the debt instruments was \$2.5 million and the fair value of the equity instruments was \$1.8 million. Interest and dividend of \$100,000 were received before year-end.

Discuss and recommend an appropriate accounting treatment.

Exercise 16.2 At the beginning of the year, Melody Finance Limited made certain cash deposits amounting to \$2 million to a financial institution. The deposits had a term of 5 years, and the maturity value of the deposits would be \$3 million. No interest would be paid during the 5 years.

Calculate the effective interest rate and suggest journal entries for each year-end.

Exercise 16.3 In view of the sub-prime and credit crunch in the US and worldwide markets, the regulator of Country M requested its banks to provide additional impairment losses on its loans portfolio.

Following this instruction, JY Asia Bank proposed recognising impairment losses in excess of impairment losses that are determined on the basis of objective evidence about impairment in identified individually significant loans or identified groups of similar loans.

Discuss.

Problems

Problem 16.1 Based on Real-life Case 16.19, discuss the implication of LVMH's policy on reversal of impairment losses for both available-for-sale equity instruments and available-for-sale debt instruments and suggest a policy on the reversal of impairment losses for all kinds of available-for-sale financial assets.

Problem 16.2 In response to a market upturn, Tony Inc. sold a significant amount of financial assets classified as held-to-maturity investments on economically favourable terms. Tony Inc. has not classified any financial assets acquired after the date of the sale as held-to-maturity. However, it did not reclassify the remaining held-to-maturity investments since it maintained that it still intended to hold them to maturity.

Discuss.

Problem 16.3 On 2 January 2007, Bonnie Finance House Limited made a fixed-rate deposit of \$500,000 to a high-leveraged financial institution. The deposit had a term of 3 years, and the initial interest rate was 15% per annum paid at each year-end. At the beginning of 2008, after the first interest payment, the financial institution declared a liquidity problem because of the worldwide sentiment on sub-prime and credit crunch issues. While the financial institution was rescued by a central bank, the deposit-holder had to give up 80% of its interest and 20% of its principal.

Discuss and suggest journal entries for 2007 and the beginning of 2008.

Case Studies

Case Study 16.1 IASJ Inc. is an entity incorporated in Singapore with functional currency in US dollars. At year-end, it held the following financial instruments:

	\$
Investments in CD and bonds:	
5% US\$ certificate of deposits	300,000
Equity-linked deposits in UK	520,000
LIBOR GBP bonds listed in UK	200,000
Investments in equity securities:	
Strategic investments listed in HK	250,000
Trading securities listed in US	123,000
Unlisted in Europe	25,000
Trade and other receivables:	
Due from local customers in US\$	2,564,560
Due from overseas customers in HK\$	435,612
Due from overseas customers in euro	784,231
Bank deposits:	
Fixed deposits at UK banks	200,000
Fixed deposits in US\$	1,240,500
Cash at bank:	
Savings deposits in US\$	231,230

IASJ had not classified any financial instruments as held-to-maturity investments but taken advantage of the designation conditions in IAS 39 to designate those instruments with embedded derivatives as at fair value through profit or loss.

Required:

Discuss and explain the proper accounting classification or categories for the financial instruments held by IASJ.

Case Study 16.2 City Asia Corporation has financial difficulties. Its lender, Bank Asian Inc., is concerned that City Asia will not be able to make all principal and interest payments due on a loan in a timely manner. It negotiates a restructuring of the loan. Bank Asian Inc. expects that City Asia will be able to meet its obligations under the restructured terms.

Would Bank Asian Inc. recognise an impairment loss if the restructured terms were as reflected in any of the following cases?

1. City Asia will pay the full principal amount of the original loan in 2015, 5 years after the original due date in 2010, but none of the interest due under the original terms.

2. City Asia will pay the full principal amount of the original loan on the original due date in 2010, but none of the interest due under the original terms.
3. City Asia will pay the full principal amount of the original loan on the original due date in 2010 with interest, but at a lower interest rate than the interest rate inherent in the original loan.
4. City Asia will pay the full principal amount of the original loan in 2015, 5 years after the original due date in 2010, and all interest accrued during the original loan term, but no interest for the extended term from 2010 to 2015.
5. City Asia will pay the full principal amount of the original loan in 2015, 5 years after the original due date in 2010, and all interest, including interest for both the original term of the loan and the extended term from 2010 to 2015.

Case
Study 16.3

IAS 39 requires that impairment be recognised for financial assets carried at amortised cost. IAS 39 states that impairment may be measured and recognised individually or on a portfolio basis for a group of similar financial assets.

JY Bank finds that one asset in the group of similar financial assets is impaired but the fair value of another asset in the group is above its amortised cost. JY Bank proposes not recognising the impairment of the first asset.

Discuss.

Case
Study 16.4

Wader, a public limited company, is assessing the nature of its provisions for the year ended 31 May 2007. The impairment of trade receivables has been calculated using a formulaic approach that is based on a specific percentage of the portfolio of trade receivables. This general provision approach has been used by the company at 31 May 2007. At 31 May 2007, one of the credit customers, Tray, has come to an arrangement with Wader whereby the amount outstanding of \$4 million from Tray will be paid on 31 May 2008 together with a penalty of \$100,000. The total amount of trade receivables outstanding at 31 May 2007 was \$11 million, including the amount owed by Tray. The following is the analysis of the trade receivables:

Name of receivables	Balance \$ million	Cash expected \$ million	Due date
Tray.....	4	4.1	31 May 2008
Milk.....	2	2.0	31 July 2007
Other receivables	5	4.6	On average 31 July 2007
	<u>11</u>	<u>10.7</u>	

Wader has made an allowance of \$520,000 against trade receivables, which represents the difference between the cash expected to be received and the balance outstanding plus a 2% general allowance. Milk has a similar credit risk to the “other receivables”.

Discuss the accounting treatment. (In case necessary, the discount rate used is 5%.)

(ACCA 3.6 June 2007, adapted)

**Case
Study 16.5**

Wealth Credit Limited (WCL) is a finance company engaged in the provision of loans. As at 31 December 2006, WCL had an outstanding loan of \$20 million to Borrower A, who had financial difficulties. The details of the loan were as follows:

Principal amount	\$20,000,000
Original term	1 June 2004 to 30 November 2006
Original interest rate	12% per annum compound
Original repayment date of principal	On 30 November 2006
Original payment date of interest	On 30 November 2006

As Borrower A had not repaid the loan on 30 November 2006, WCL agreed to extend the credit for both the principal amount and interest due for another 2 years with no interest for the extended term.

Explain whether WCL should recognise an impairment loss in respect of the loan to Borrower A in its financial statements for the year ended 31 December 2006 and calculate the amount of impairment loss, if any.

(HKICPA QP A May 2007, adapted)

17

Financial Liabilities and Derecognition

Learning Outcomes

This chapter enables you to understand the following:

- 1 The subsequent measurement of financial liabilities
- 2 The classification of financial liabilities
- 3 The recognition and measurement of financial guarantee contracts
- 4 The derecognition of financial assets
- 5 The derecognition of financial liabilities

Real-life

Case 17.1

DBS Group Holdings Ltd

In its annual report of 2007, DBS Group Holdings Ltd., one of the leading banking groups in Singapore and Asia, briefly described its accounting policy on financial liabilities as below, and it served as a summary of some basic accounting treatments on financial liabilities:

- The group classifies its financial liabilities in the following categories: (a) financial liabilities at fair value through profit or loss; and (b) financial liabilities at amortised cost ...
- Financial liabilities are initially recognised at fair value, net of transaction costs incurred.
 - Financial liabilities classified at fair value through profit or loss are subsequently carried at fair value. Realised or unrealised gains or losses on financial liabilities held for trading and financial liabilities designated under the fair value option are taken to “net trading income” and “net income from financial instruments designated at fair value” respectively in the income statement in the period they arise.
 - All other financial liabilities are subsequently carried at amortised cost using the effective interest method.
- The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the group for similar financial instruments.
- A financial liability is removed or derecognised from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired.

Financial liability is one kind of financial instrument. It is defined to include a contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity.

Like a financial asset, financial liability is initially recognised at fair value plus transaction cost, except for financial asset at fair value through profit or loss. While the definition and initial recognition of a financial asset and financial liability are explained in Chapter 15 and the subsequent measurement of financial assets is explained in Chapter 16, this chapter explains the subsequent measurement requirements on financial liability.

This chapter also explains when and how a financial asset and a financial liability should be derecognised. In case a financial asset is transferred but cannot qualify for derecognition, an associated liability, being one kind of financial liability, is recognised.

17.1 Subsequent Measurement of Financial Liabilities

After initial recognition, an entity is required to measure all financial liabilities at amortised cost using the effective interest method, except for the following:

1. Financial liabilities at fair value through profit or loss;
2. Financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies;
3. Financial guarantee contracts; and
4. Commitments to provide a loan at a below-market interest rate (IAS 39.47).

Like financial assets, financial liabilities are subsequently measured in accordance with the entity's classification of the financial liabilities.

Real-life**Case 17.2****BASF Aktiengesellschaft**

The accounting policy of BASF Aktiengesellschaft (BASF Group) in its financial statement of 2007 provided a brief explanation on the initial recognition, initial measurement and subsequent measurement of financial liabilities as follows:

- Financial assets and financial liabilities are recorded on the balance sheet when the BASF Group becomes a party to a financial instrument.
- Financial liabilities which are not derivatives are initially valued at fair value. This normally corresponds to the amount received.
- Subsequent valuations are done at amortised cost under consideration of the effective interest method.

17.2 Classification of Financial Liabilities

For the purposes of this chapter, financial liabilities are classified into the following five categories:

1. Financial liabilities measured at amortised cost;
2. Financial liabilities at fair value through profit or loss;
3. Financial liabilities resulting from derecognition issues;
4. Financial guarantee contracts; and
5. Commitments to provide a loan at a below-market interest rate.

The measurement of each category is summarised in Figure 17.1 and further explained in the following sections. In addition to the above categories of financial liabilities, financial liabilities that are designated as hedged items are subject to hedge accounting requirements.

Real-life**Case 17.3****BP plc**

BP plc explained its accounting policy on financial liabilities in its financial statements of 2007 as follows:

- Financial liabilities are classified as
 - financial liabilities at fair value through profit or loss;
 - derivatives designated as hedging instruments in an effective hedge; or
 - financial liabilities measured at amortised cost, as appropriate.

**Real-life
Case 17.3**

(cont'd)

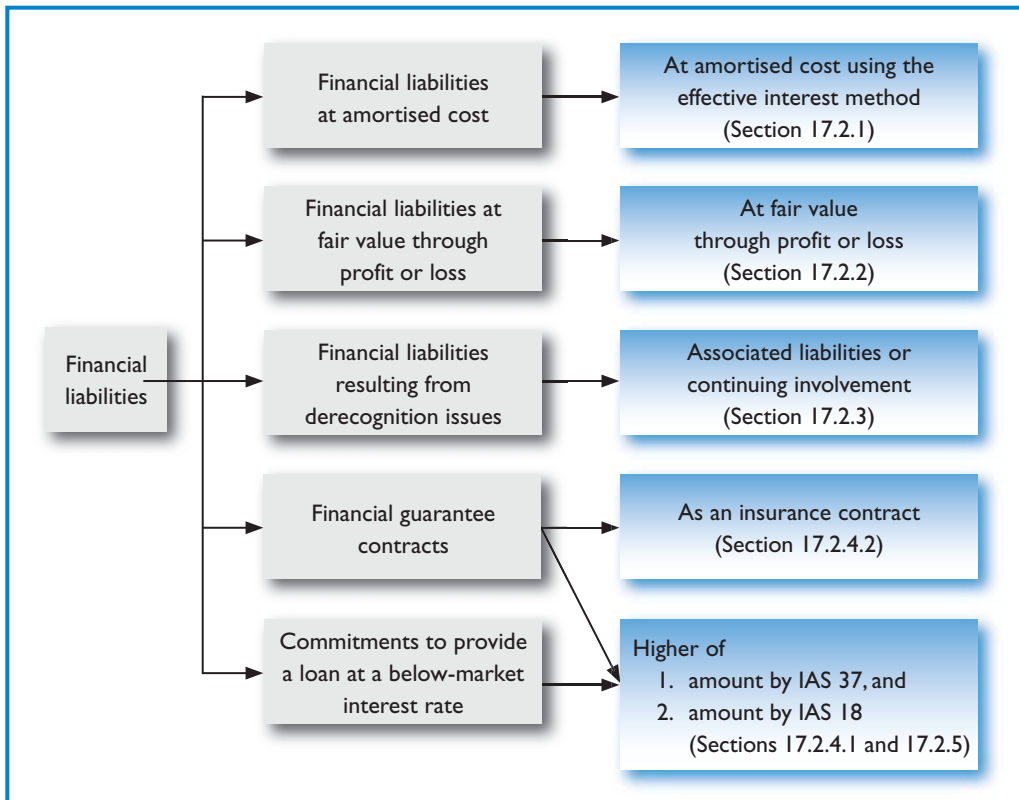
- Financial liabilities include trade and other payables, accruals, finance debt and derivative financial instruments.
- The group determines the classification of its financial liabilities at initial recognition.

The classification of financial liabilities also determines how their gains and losses are recognised.

- For a financial liability classified as at fair value through profit or loss that is not part of hedging relationship, a gain or loss arising from a change in its fair value is, as its name describes, recognised in profit or loss.
- For financial liabilities carried at amortised cost, a gain or loss is recognised in profit or loss when the financial liability is derecognised and through the amortisation process.
- The recognition of gains and losses on other categories is explained in the respective categories below.

FIGURE 17.1

Classification and subsequent measurement of financial liabilities



17.2.1 Financial Liabilities Measured at Amortised Cost

All financial liabilities, except for those categories of financial liabilities as discussed below, are subsequently measured at amortised cost using the effective interest method. The effective interest method, the effective interest rate and the amortised cost in measuring financial assets are explained in Chapter 16, and they are the same for financial liabilities.

Real-life

Case 17.4

LVMH Moët Hennessy – Louis Vuitton (LVMH Group)

LVMH Group explained its financial liabilities in its financial statements of 2007 as follows:

- Borrowings are measured at amortised cost, i.e., nominal value net of premium and issue expenses, which are charged progressively to net financial income/expense using the effective interest method.

Example 17.1 Advance Finance House Limited (AFH) issued a 3-year debt instrument at its fair value plus transaction costs at \$50,000 on 2 January 2007. The principal amount of the instrument is \$47,327, and the instrument carries fixed interest of 4% that will be paid annually. The effective interest rate as estimated is 6%.

Explain and calculate the amortised cost and interest expenses of the 3-year debt instrument for 2007.

Answers

While the initial amount of the 3-year debt instrument is \$47,327 and its principal (or maturity amount) is \$50,000, AFH had issued the instrument at a discount. Since the effective interest is accrued at 6% annually, the interest income for 2007 will be \$2,840 ($\$47,327 \times 6\%$) and the amortisation of the discount will be \$840 ($\$2,840 - \$2,000$). In consequence, the amortised cost of the 3-year debt instrument at the end of 2007 will be:

The amount at which the financial asset is measured at initial recognition.....	\$47,327
Minus principal repayments	0
Plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount.....	840
Amortised cost at the end of 2007	<u>\$48,167</u>

The amortised cost, interest income and cash flows of the debt instrument in each reporting period can be summarised as follows:

Year	Amortised cost at the beginning of the year \$	Interest expense \$	Cash inflows \$	Amortised cost at the end of the year \$
2007	47,327	2,840	2,000	48,167
2008	48,167	2,890	2,000	49,057
2009	49,057	2,943	52,000	–

For example, in 2007, the following journal entries should be recognised by AFH:

Dr Cash	\$47,327	
Cr Financial liability		\$47,327
Being the initial recognition of the 3-year debt instrument issued.		
Dr Profit and loss (interest expense)	\$2,840	
Cr Financial liability		\$2,840
To recognise the interest expense using the effective interest rate.		
Dr Financial liability	\$2,000	
Cr Cash		\$2,000
Being the cash received from the 2-year debt instrument at the end of 2007.		

The last two journal entries above may be combined and recognised as follows:

Dr Profit and loss (interest expense)	\$2,840	
Cr Cash		\$2,000
Financial liability		840
To recognise the interest income using the effective interest rate and the cash received from the 3-year debt instrument at the end of 2007.		

17.2.2 Financial Liabilities at Fair Value through Profit or Loss

A financial liability at fair value through profit or loss is defined the same as a financial asset at fair value through profit or loss. It implies that a financial liability is classified as a financial liability at fair value through profit or loss when it meets either of the following two conditions:

1. It is held for trading; and
2. Upon initial recognition, it is designated by the entity as at fair value through profit or loss as allowed under IAS 39.

The above two conditions that are also applied to a financial asset at fair value through profit or loss are explained in Chapter 16. Financial liabilities at fair value through profit or loss also include derivatives that are liabilities measured at fair value. However, a derivative liability, that is linked to and must be settled by delivery of an unquoted equity instrument whose fair value cannot be reliably measured, is measured at cost.

Example 17.2 A commercial or trading entity may not have financial liabilities held for trading in normal operation, except for derivatives; but nearly all financial institutions, including banks and insurance companies, may often have financial liabilities held for trading. Examples of financial liabilities held for trading include the following:

1. Derivative liabilities that are not accounted for as hedging instruments;
2. Obligations to deliver financial assets borrowed by a short seller (i.e., an entity that sells financial assets it has borrowed and does not yet own);
3. Financial liabilities that are incurred with the intention to repurchase them in the near term (e.g., a quoted debt instrument that the issuer may buy back in the near term depending on changes in its fair value); and
4. Financial liabilities that are part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking.

However, the fact that a liability is used to fund trading activities does not in itself make that liability one that is held for trading.

**Real-life
Case 17.5**

BP plc

BP plc explained its accounting policy on financial liabilities classified as at fair value through profit or loss in its financial statements of 2007 as follows:

- Derivatives, other than those designated as effective hedging instruments, are classified as held for trading and are included in this category.
- These liabilities are carried on the balance sheet at fair value with gains or losses recognised in the income statement.

17.2.3 Financial Liabilities Resulting from Derecognition Issues

Financial liabilities also arise from two derecognition issues of financial assets:

1. When a transfer of a financial asset does not qualify for derecognition (see Section 17.4.5.2); or
2. When the continuing involvement approach applies (see Section 17.4.5.3) (IAS 39.47b).

Specific requirements are set out in IAS 39 to address the measurement of the above financial liabilities that result from the two derecognition issues. Section 17.4 further explains the derecognition issues of financial assets and the associated liabilities arising from the issues.

17.2.4 Financial Guarantee Contracts

A financial guarantee contract is one kind of financial liability within the scope of IAS 39.

A **financial guarantee contract** is defined as a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument (IAS 39.9).

Financial guarantee contracts may have various legal forms, such as a guarantee, some types of letter of credit, or a credit default contract. Their accounting treatment perspective does not depend on their legal form. IAS 39 prescribes the requirements in accounting for the financial guarantee contract issued by an entity, but there is a choice for the issuer to account for it as an insurance contract in accordance with IFRS 4 *Insurance Contracts*. These requirements have not addressed the accounting treatment of a debtor who receives the financial guarantee from the issuer.

Example 17.3 Melody Limited issues a financial guarantee contract in connection with its sale of goods. Is Melody required to account for the financial guarantee contract in accordance with IAS 39?

Answers

If a financial guarantee contract was issued in connection with the sale of goods, the issuer applies IAS 18 *Revenue* in determining when it recognises the revenue from the guarantee and from the sale of goods (IAS 39.AG4).

17.2.4.1 Financial Guarantee Contract Accounted for as a Financial Liability

At initial recognition, IAS 39 requires a financial guarantee contract, as one kind of financial liability, to be initially recognised at fair value plus transaction cost, unless it is classified as at fair value through profit or loss.

IAS 39 further states that if the financial guarantee contract was issued to an unrelated party in a stand-alone arm's length transaction, its fair value at inception is likely to equal the premium received, unless there is evidence to the contrary.

After initial recognition, unless a financial guarantee contract is classified as a financial liability at fair value through profit or loss or a financial liability resulting from derecognition issue, an issuer of such a contract is required to measure the contract at the higher of

1. the amount determined in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*; and
2. the amount initially recognised (i.e., fair value plus transaction costs) less, when appropriate, cumulative amortisation recognised in accordance with IAS 18 *Revenue* (IAS 39.47c).

Real-life**Case 17.6****Recruit Holdings Limited**

In its annual report of 2007, Recruit Holdings Limited, a company listed in Hong Kong, had a concise explanation of its accounting policy on financial guarantee contracts under HKAS 39 (equivalent to IAS 39) as follows:

- Where the group issues a financial guarantee, the fair value of the guarantee is initially recognised as deferred income within trade and other payables.
 - Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the group's policies applicable to that category of asset.
 - Where no such consideration is received or receivable, an immediate expense is recognised in the income statement on initial recognition of any deferred income.
- The amount of the guarantee initially recognised as deferred income is amortised in the income statement over the term of the guarantee as income from financial guarantees issued.
 - In addition, provisions are recognised if and when it becomes probable that the holder of the guarantee will call upon the group under the guarantee and the amount of that claim on the group is expected to exceed the current carrying amount, i.e., the amount initially recognised less accumulated amortisation, where appropriate.

Example 17.4 Knut Holdings Limited adopted a similar policy as Recruit Holdings Limited (Real-life Case 17.6) in accounting for its financial guarantee contracts. On 4 July 2007, Knut issued two 3-year guarantee contracts of \$100,000 each to a third party and a related party. While Knut estimated that the fair value of each contract was \$1,500, it only demanded \$1,500 from the third party but nothing from the related party.

On 30 June 2008, Knut's balance sheet date, it was probable that a holder of its guarantee may demand Knut to pay \$20,000 for the guarantee to the third party. Knut

estimated that there were no other probable liabilities in respect of the guarantees at that date.

Discuss and suggest the journal entries for the year ended 30 June 2008.

Answers

On 4 July 2008, Knut issued two financial guarantee contracts, and the fair value of the guarantees – \$3,000 in total – should be initially recognised as financial liabilities. Since only the third party was demanded for payment, the fair value of guarantee issued to the related party should be recognised as an immediate expense.

Dr Cash	\$1,500	
Profit or loss	1,500	
Cr Financial guarantee contracts		\$3,000

On 30 June 2008, Knut measured the financial guarantee contract at the higher of the amount determined in accordance with IAS 37 and the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with IAS 18.

For the financial guarantee contract granted to the related party, as no probable liability was expected, Knut measured it at the amount initially recognised (i.e., \$1,500) less cumulative amortisation recognised in accordance with IAS 18 ($\$1,500 \div 3$ years = \$500). Thus, the following journal entry should be made:

Dr Financial guarantee contracts	\$500	
Cr Profit or loss		\$500

For the financial guarantee contract granted to the related party, as it was probable that a holder of its guarantee may demand Knut to pay \$20,000 for the guarantee, the financial guarantee contract should be measured at the amount determined in accordance with IAS 37, i.e., \$20,000. Thus, the following journal entry should be made:

Dr Profit or loss	\$18,500	
Cr Financial guarantee contracts (\$20,000 – \$1,500)		\$18,500

IAS 39 does not contain exemptions for parents, subsidiaries or other entities under common control. However, any differences are reflected only in the separate or individual financial statements of the parent, subsidiaries or common control entities. Alternatively, they may elect to apply insurance accounting to the financial guarantee contracts.

Real-life

Case 17.7

Westpac Banking Corporation

Determining the fair value of a financial guarantee contract may not be a financial reporting issue, but the 2007 financial statements of Westpac Banking Corporation and Hong Kong Exchanges and Clearing Limited provided some explanations.

- Westpac Banking Corporation stated the following:
 - The fair value of a financial guarantee contract is determined as the present value of the difference in net cash flows between the contractual payments under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.
 - Where guarantees in relation to loans or other payables of subsidiaries or associates are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.
- Hong Kong Exchanges and Clearing Limited
 - The fair values are based on the fees charged by financial institutions for granting such guarantees discounted using a 10-year Hong Kong government bond rate to perpetuity.

Westpac's explanation also indicates that the fair value of a financial guarantee contract given to subsidiaries and associates can be part of the costs of investments in these investments, and may not be required as an immediate expense in profit or loss.

17.2.4.2 Financial Guarantee Contract Accounted for as an Insurance Contract

Instead of accounting for a financial guarantee contract as a financial liability in accordance with IAS 39, an issuer of a financial guarantee contract is permitted to elect to apply either IAS 39 or IFRS 4 to its financial guarantee contract if the issuer has met the following two conditions:

1. The issuer has previously asserted explicitly that it regards a financial guarantee contract as an insurance contract; and
2. The issuer has used accounting applicable to insurance contracts (IAS 39.2e).

The issuer may make that election contract by contract, i.e., using IAS 39 and IFRS 4 for different contracts, but the election for each contract is irrevocable. If an issuer (including insurer and non-insurance entity) applies IFRS 4 to a financial guarantee contract, the contract will be disclosed as a contingent liability, and a liability is recognised only if payment for the contract becomes probable.

The issuer can make the assertions regarding a financial guarantee contract as insurance contract throughout the issuer's communications with customers and regulators, contracts, business documentation and financial statements.

Real-life

Case 17.8

Jardine Matheson Holdings Limited

Jardine Matheson Holdings Limited, an Asia-based conglomerate with primary share listing in London and secondary listings in Bermuda and Singapore, regarded its financial guarantee contracts as insurance contracts and stated in its financial statements of 2007 as follows:

- Financial guarantee contracts under which the group accepts significant risk from a third party by agreeing to compensate that party on the occurrence of a specified uncertain future event are accounted for in a manner similar to insurance contracts.
- Provisions are recognised when it is probable that the group has obligations under such guarantees and an outflow of resources embodying economic benefits will be required to settle the obligations.

17.2.5 Commitments to Provide a Loan at a Below-market Interest Rate

Loan commitments, as set out in Chapter 15, are generally not within the scope of IAS 39, except for the following loan commitments, which are specifically accounted for by IAS 39:

1. Loan commitments that the entity designates as financial liabilities at fair value through profit or loss;
2. Loan commitments that can be settled net in cash or by delivering or issuing another financial instrument. These loan commitments are derivatives that are also generally accounted for at fair value through profit or loss;
3. Commitments to provide a loan at a below-market interest rate (IAS 39.4).

At initial recognition, an issuer is required to measure commitments to provide a loan at a below-market interest rate at fair value plus transaction cost. After initial recognition, an issuer of such a commitment is required to measure it at the higher of

1. the amount determined in accordance with IAS 37; and
2. the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with IAS 18 (IAS 39.47d).

The subsequent measurement of commitments to provide a loan at a below-market interest rate is the same as that of a financial guarantee contract (see Section 17.2.4). In many cases, an issuer of these commitments receives no cash consideration on providing these commitments. In consequence, the IASB considered that, without such a subsequent measurement requirement on these commitments, liabilities that result from these commitments might not be recognised in the balance sheet.

17.3 Reclassification

The reclassification of a financial liability between different categories is infrequent or rare. On one hand, an entity is not allowed to reclassify a financial liability (as a

financial asset) into or out of the fair value through profit or loss category while it is issued (IAS 39.50). On the other hand, different categories of financial liabilities represent the different nature and circumstances of financial liabilities. Unless there are changes in such nature and circumstances, it is impossible to have reclassification between other categories.

In the rare circumstances when a reliable measure of fair value of financial liability may no longer be available, it becomes appropriate to carry such financial liability at amortised cost. Alternatively, when a reliable measure becomes available for a financial liability for which such a reliable measure was previously not available, the financial liability is then measured at fair value.

17.4 Derecognition of a Financial Asset

Derecognition of an asset or a liability is originally a simple concept. When an asset is disposed of or a liability is settled, it will be derecognised from the balance sheet. The derecognition of a financial asset or financial liability is also defined similarly in IAS 39.

Derecognition is the removal of a previously recognised financial asset or financial liability from an entity's balance sheet (IAS 39.9).

In practice, it is not that simple for financial assets and financial liabilities. Even if a financial asset or a financial liability has been transferred, either or both the risk and reward and control of the financial asset or the obligation of the financial liability might have not been transferred. IAS 39 sets out detailed derecognition criteria and requirements on financial assets and financial liabilities separately. This section addresses the derecognition of financial assets, and Section 17.5 explains the derecognition of financial liabilities.

17.4.1 General Derecognition Criteria

The derecognition criteria are applied at a consolidated level when an entity is a parent or a holding company. Before applying the derecognition on a financial asset, an entity is also required to consider whether, and to what extent, the derecognition is appropriate on all or only a part of a financial asset (or all or a part of a group of similar financial assets).

The general derecognition criteria in accordance with IAS 39 require an entity to derecognise a financial asset when, and only when:

1. The contractual rights to the cash flows from the financial asset expire; or
2. The entity transfers the financial asset that meets the conditions set out in IAS 39 (i.e., "asset transfer test") and the transfer qualifies for derecognition in accordance with IAS 39 (i.e., "risks and rewards test" and "control test") (IAS 39.17).

Real-life

Case 17.9

Aeon Credit Service (Asia) Company Limited

In applying the derecognition of HKAS 39 (equivalent to IAS 39), Aeon Credit Service (Asia) Company Limited, a listed financial entity in Hong Kong, made the following clarification in its annual report of 2006:

- HKAS 39 provides more rigorous criteria for the derecognition of financial assets than the criteria applied in previous years.
- Under HKAS 39, a financial asset is derecognised when, and only when, either the contractual rights to the asset's cash flows expire, or the asset is transferred and the transfer qualifies for derecognition in accordance with HKAS 39.
- The decision as to whether a transfer qualifies for derecognition is made by applying a combination of risks and rewards and control tests.

One critical criterion to qualify for derecognition in IAS 39 is the expiry of contractual rights to receive cash flows from a financial asset. If the rights to receive cash flows from a financial asset have expired, the financial asset should be derecognised. The second criterion for derecognition includes two (or three) tests, namely, asset transfer test, risks and rewards test and control test, as discussed below, and also refers to the contractual rights to receive cash flows.

Figure 17.2 summarises the derecognition criteria and tests in derecognition transactions.

17.4.2 Asset Transfer Test

In order to meet the asset transfer test, i.e., a financial asset is regarded as transferred, an entity either

1. transfers the contractual rights to receive the cash flows of the financial asset; or
2. retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients (the “eventual recipients”) in an arrangement that meets the conditions set out in IAS 39 (IAS 39.18).

Example 17.5 Melody City Bank sets up a special-purpose entity and sells all its investments in mortgage-backed securities to the entity. The entity in turn issues to investors beneficial interests in the underlying financial assets, i.e., mortgage-backed securities, and Melody provides servicing of those financial assets.

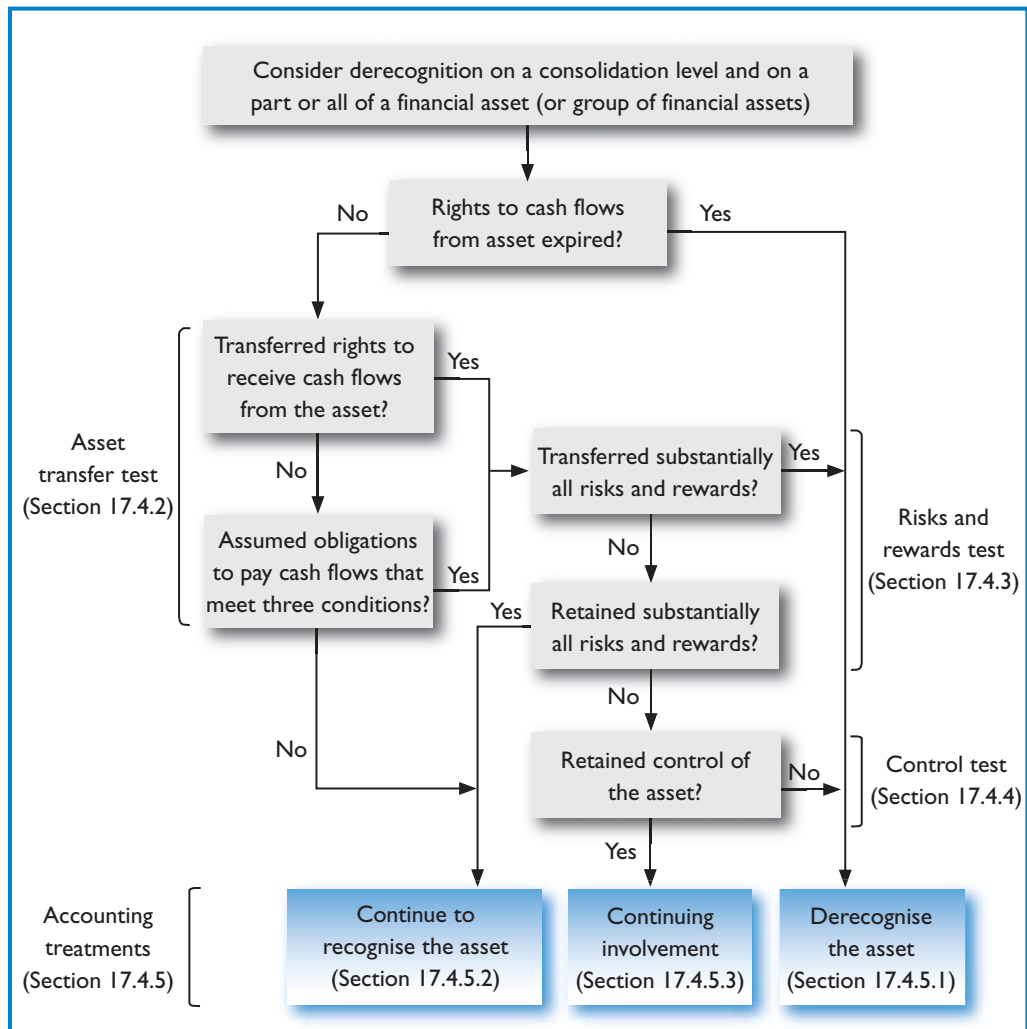
Can Melody derecognise the mortgage-backed securities?

Answers

Through its special-purpose entity, Melody has retained the contractual rights to receive the cash flows of the mortgage-backed securities. It cannot derecognise the mortgage-backed securities until it demonstrates that:

1. It has assumed a contractual obligation to pay the cash flows of the mortgage-backed securities to the investors; and
2. It has fulfilled the risks and rewards test (see Section 17.4.3), i.e., has not retained substantially all the risks and rewards of ownership of the mortgage-backed securities.

FIGURE 17.2 Derecognition criteria and tests



To be a qualified transfer, the transfer should involve the transfer of the rights to receive cash flows of a financial asset. If an entity has not transferred such rights but only assumed a contractual obligation to pay the cash flows, it has to meet all the following three conditions before it can test whether the risks and rewards test has been fulfilled:

1. The entity has no obligation to pay amounts to the eventual recipients unless it collects equivalent amounts from the original financial asset. Short-term advances by the entity with the right of full recovery of the amount lent plus accrued interest at market rates do not violate this condition.
2. The entity is prohibited by the terms of the transfer contract from selling or pledging the original financial asset other than as security to the eventual recipients for the obligation to pay them cash flows.
3. The entity has an obligation to remit any cash flows it collects on behalf of the eventual recipients without material delay. In addition, the entity is not entitled to reinvest such cash flows, except for investments in cash or cash equivalents (as defined in IAS 7 *Cash Flow Statements*) during the short settlement period from the collection date to the date of required remittance to the eventual recipients, and interest earned on such investments is passed to the eventual recipients (IAS 39.19).

17.4.3 Risks and Rewards Test

When an entity transfers a financial asset (i.e., fulfills the “asset transfer test”), the entity is required to evaluate the extent to which it retains the risks and rewards of ownership of the financial asset before it can derecognise the financial asset.

The transfer of risks and rewards is evaluated by comparing the entity’s exposure, before and after the transfer, with the variability in the amounts and timing of the net cash flows of the transferred asset.

Example 17.6 Evaluate the following two transactions of Melody City Bank to ascertain whether substantially all the risks and rewards of ownership of the assets have been transferred:

1. Melody has sold a debt instrument to a third party subject to an agreement to buy it back at a fixed price or at the sale price plus a lender’s return.
2. Melody has sold another debt instrument subject only to an option to buy it back at its fair value at the time of repurchase.
3. Melody has transferred a fully proportionate share of the cash flows from a portfolio of mortgage-backed loans in a loan sub-participation arrangement, and the transfer meets the conditions in the asset transfer test.

Answers

1. Melody has retained substantially all the risks and rewards of ownership of a financial asset because its exposure to the variability in the present value of the future net cash flows from the financial asset does not change significantly as a result of the transfer.
2. Melody has transferred substantially all the risks and rewards of ownership of a financial asset because its exposure to such variability is no longer significant in relation to the total variability in the present value of the future net cash flows associated with the financial asset.
3. Melody has transferred substantially all the risks and rewards of ownership of the group of the financial assets; because a fully proportionate share of cash flows has been transferred, its exposure to such variability is no longer significant in relation to the total variability in the present value of the future net cash flows associated with the financial assets.

Example 17.7 The following are examples of when an entity has transferred substantially all the risks and rewards of ownership:

1. An unconditional sale of a financial asset;
2. A sale of a financial asset together with an option to repurchase the financial asset at its fair value at the time of repurchase; and
3. A sale of a financial asset together with a put or call option that is deeply out of the money (i.e., an option that is so far out of the money it is highly unlikely to go into the money before expiry).

The following are examples of when an entity has retained substantially all the risks and rewards of ownership:

1. A sale and repurchase transaction where the repurchase price is a fixed price or a sale price plus a lender's return;
2. A securities lending agreement;
3. A sale of a financial asset together with a total return swap that transfers the market risk exposure back to the entity;
4. A sale of a financial asset together with a deep in-the-money put or call option (i.e., an option that is so far in the money that it is highly unlikely to go out of the money before expiry); and
5. A sale of short-term receivables in which the entity guarantees to compensate the buyer for any credit losses.

By using the risks and rewards test, an entity may conclude that it transfers or retains substantially all the risks and rewards of ownership of a financial asset. In addition, an entity may also conclude that it neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset.

17.4.4 Control Test

Based on the findings of the risk and rewards test, if an entity concludes that it neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, it will be required to determine whether it has retained control of the financial asset (i.e., the “control test”).

To determine whether the control of the transferred asset is retained, an entity ascertains whether the transferee has the ability to sell the asset. If the transferee has the practical ability to sell the asset in its entirety to an unrelated third party and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer, the entity has not retained control, because the entity does not control the transferee’s use of the asset. In all other cases, the entity has retained control.

IAS 39 clarifies that the evaluation of the transfer of risks and rewards of ownership (i.e., the risks and rewards test) precedes the evaluation of the transfer of control (i.e., the control test) for all derecognition transactions.

17.4.5 Accounting for Different Transfers

By applying the risks and rewards test together with the control test on a derecognition transaction, an entity may find the following four circumstances in respect of the transferred financial assets:

1. The entity transfers substantially all the risks and rewards of ownership of the financial asset.
2. The entity retains substantially all the risks and rewards of ownership of the financial asset.
3. The entity neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset and has not retained control of the financial asset.
4. The entity neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset but has retained control of the financial asset.

IAS 39 requires an entity to determine the accounting treatment for the transfer of a financial asset based on the above results of the risks and rewards test and control test. Table 17.1 summarises the possible results and the corresponding accounting treatments.

17.4.5.1 Transfers Qualified for Derecognition

If an entity transfers a financial asset in a transfer that qualifies for derecognition in its entirety and retains the right to service the financial asset for a fee, it is required to recognise either a servicing asset or a servicing liability for that servicing contract as follows:

- If the fee to be received is not expected to compensate the entity adequately for performing the servicing, a servicing liability for the servicing obligation is required to be recognised at its fair value.

- If the fee to be received is expected to be more than adequate compensation for the servicing, a servicing asset is required to be recognised for the servicing right at an amount determined on the basis of an allocation of the carrying amount of the larger financial asset in accordance with paragraph 27 (IAS 39.24).

If, as a result of a transfer, a financial asset is derecognised in its entirety but the transfer results in the entity obtaining a new financial asset or assuming a new financial liability or a servicing liability, the entity is required to recognise the new financial asset, financial liability or servicing liability at fair value.

On the derecognition of a financial asset in its entirety, an entity is required to recognise in profit or loss the difference between

1. the carrying amount of the financial asset; and
2. the sum of (a) the consideration received (including any new asset obtained less any new liability assumed) and (b) any cumulative gain or loss that had been recognised directly in equity, e.g., available-for-sale financial assets as explained in Chapter 16 (IAS 39.26).

TABLE 17.1 Accounting treatments based on the findings of risks and rewards test and control test

Findings of risks and rewards test and control test	Corresponding accounting treatments
1. The entity transfers substantially all the risks and rewards of ownership of the financial asset.	Transfer qualified for derecognition (Section 17.4.5.1) <ul style="list-style-type: none"> • To derecognise the financial asset • To recognise separately as assets or liabilities any rights and obligations created or retained in the transfer
2. The entity retains substantially all the risks and rewards of ownership of the financial asset.	Transfer not qualified for derecognition (Section 17.4.5.2) <ul style="list-style-type: none"> • To continue to recognise the financial asset
3. The entity neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset and has not retained control of the financial asset.	Transfer qualified for derecognition (Section 17.4.5.1) <ul style="list-style-type: none"> • To derecognise the financial asset • To recognise separately as assets or liabilities any rights and obligations created or retained in the transfer
4. The entity neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset but has retained control of the financial asset.	Continuing involvement in transferred asset (Section 17.4.5.3) <ul style="list-style-type: none"> • The entity is required to continue to recognise the financial asset to the extent of its continuing involvement in the financial asset.

If the transferred asset is part of a larger financial asset (e.g., when an entity transfers interest cash flows that are part of a debt instrument) and the part transferred qualifies for derecognition in its entirety, allocation is required between the part that continues to be recognised and the part that is derecognised. The allocation is based on the relative fair values of those parts on the date of the transfer.

17.4.5.2 Transfer Not Qualified for Derecognition

When an entity transfers a financial asset but retains substantially all the risks and rewards of ownership of the transferred asset, the entity cannot derecognise the financial asset but has to

- continue to recognise the transferred asset in its entirety; and
- recognise a financial liability for the consideration received (IAS 39.29).

In subsequent periods, the entity is required to recognise any income on the transferred asset and any expense incurred on the financial liability (IAS 39.29).

Example 17.8 Melody Finance Corporation has disposed of its debt instruments issued by FTT plc to Bonnie Group at \$350,000 and provided a guarantee to Bonnie for any default losses on the transferred debt instruments.

Discuss the implication of the transaction.

Answers

When a guarantee is provided by Melody for any default losses on the transferred asset, FTT’s debt instruments, to Bonnie, Melody has retained substantially all the risks and rewards of ownership of the debt instruments. The transfer does not qualify for derecognition, and it also prevents Melody from derecognising the debt instrument. The debt instrument continues to be recognised in its entirety in Melody’s balance sheet (i.e., no entry will be made on the transfer side) and instead, the consideration received from Bonnie should be recognised as a liability as follows:

Dr Cash	\$350,000	
Cr Financial liability		\$350,000

When an entity retains substantially all the risks and rewards of the transferred asset (e.g., in a sale and repurchase transaction), there are generally no special accounting considerations because the entity retains upside and downside exposure to gains and losses resulting from the transferred asset. In consequence, the transferred asset continues to be recognised in its entirety and the proceeds received from the transfer are recognised as a liability. Similarly, the entity continues to recognise any income from the asset along with any expense incurred on the associated liability.

Previously, IAS 39 did not provide guidance on how to account for a transfer of a financial asset that does not qualify for derecognition. The revised IAS 39 provides such guidance because, in order to ensure that the accounting reflects the rights and obligations that the transferor has in relation to the transferred asset, there is a need to consider the accounting for the asset as well as the accounting for the associated liability.

Real-life**Case 17.10****HSBC Holdings plc**

In its annual report of 2006, HSBC Holdings plc explained its accounting policy on accruing liabilities on the transfers of financial instruments not qualified for derecognition as follows:

- When securities are sold subject to a commitment to repurchase them at a predetermined price (“repos”), they remain on the balance sheet and a liability is recorded in respect of the consideration received.
- Securities purchased under commitments to sell (“reverse repos”) are not recognised on the balance sheet, and the consideration paid is recorded in “loans and advances to banks” or “loans and advances to customers” as appropriate.
- The difference between the sale and repurchase price is treated as interest and recognised over the life of the agreement.

Real-life**Case 17.11****China Life Insurance Company Limited**

In its annual report of 2006, China Life Insurance Company Limited also explained its accounting policy on accruing liabilities on the transfers of financial instruments not qualified for derecognition as follows:

- Securities sold under agreements to repurchase, which are classified as secured borrowings, generally mature within 180 days from the transaction date. The group may be required to provide additional collateral based on the fair value of the underlying securities.
- Securities sold under agreements to repurchase are recorded at their cost plus accrued interest at the balance sheet date.
- It is the group’s policy to maintain effective control over securities sold under agreements to repurchase, which includes maintaining physical possession of the securities. Accordingly, such securities continue to be carried on the consolidated balance sheet.

17.4.5.3 Continuing Involvement in Transferred Assets and Associated Liabilities

If an entity neither transfers nor retains substantially all the risks and rewards of ownership of a transferred asset, and retains control of the transferred asset, the

entity continues to recognise the “transferred asset” to the extent of its continuing involvement. Simultaneously, the entity also recognises an “associated liability”.

1. Transferred Assets

The extent of an entity’s continuing involvement reflects the transferor’s continuing exposure to the risks and rewards of the transferred asset and that this exposure is not related to the entire asset but is limited in amount, because the entity no longer retains all, but only some, upside and downside exposure to gains and losses resulting from the transferred asset. In consequence, IAS 39 requires the asset and the associated liability to be measured in a way that ensures that any changes in value of the transferred asset that are not attributed to the entity are not recognised by the entity.

The IASB argued that precluding derecognition to the extent of the continuing involvement is useful to users of financial statements in such cases, because it reflects the entity’s retained exposure to the risks and rewards of the financial asset better than full derecognition.

Example 17.9 The extent of an entity’s continuing involvement in the transferred asset is the extent to which it is exposed to changes in the value of the transferred asset, for example:

Manner of continuing involvement	Extent of continuing involvement
1. Takes the form of guaranteeing the transferred asset	The lower of <ul style="list-style-type: none"> • the amount of the asset; and • the maximum amount of the consideration received that the entity could be required to repay (“the guarantee amount”)
2. Takes the form of a written or purchased option (or both) on the transferred asset	The amount of the transferred asset that the entity may repurchase
3. Takes the form of a written or purchased option (or both) on the transferred asset and the written put option on the asset that is measured at fair value	Limited to the lower of <ul style="list-style-type: none"> • the fair value of the transferred asset; and • the option exercise price
4. Takes the form of a cash-settled option or similar provision on the transferred asset	Measured in the same way as that which results from non-cash settled options as set out in (2) above

Real-life

Case 17.12 Ping An Insurance (Group) Co. of China, Ltd.

Ping An Insurance (Group) Co. of China, Ltd., one of the largest listed China insurance companies, clarified the measurement of financial assets to the extent of continuing involvement in its annual report of 2006 as follows:

- When the group has transferred its right to receive cash flows from an asset and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognised to the extent of the group's continuing involvement in the asset.
- Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the group could be required to repay.
- When continuing involvement takes the form of a written and/or purchased option (including a cash settled option or similar provision) on the transferred asset, the extent of the group's continuing involvement is the amount of the transferred asset that the group may repurchase, except that in the case of a written put option (including a cash settled option or similar provision) on an asset measured at fair value, the extent of the group's continuing involvement is limited to the lower of the fair value of the transferred asset and the option exercise price.

2. Associated Liabilities

When an entity continues to recognise an asset to the extent of its continuing involvement, the entity also recognises an associated liability. Despite the other measurement requirements in IAS 39, the transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the entity has retained.

The associated liability is measured in such a way that the net carrying amount of the transferred asset and the associated liability is

1. the amortised cost of the rights and obligations retained by the entity, if the transferred asset is measured at amortised cost; or
2. equal to the fair value of the rights and obligations retained by the entity when measured on a stand-alone basis, if the transferred asset is measured at fair value (IAS 39.31).

Example 17.10 On 5 April 2008, Melody Financial Limited disposed of an equity instrument classified as an available-for-sale financial asset in the following manner:

- When the share price of Panda Group was at \$198, Melody disposed of its investments in Panda's shares at \$200 and simultaneously wrote a 1-year put

option to the buyer with an exercise price of \$205. At year-end, the market price of Panda's shares increased to \$210.

If Melody retained control over the transferred assets, discuss the implication of the disposal.

Answers

IAS 39 states that special measurement and income recognition issues arise if derecognition is precluded because the transferor has retained a call option or written a put option and the asset is measured at fair value. In those situations, in the absence of additional guidance, application of the general measurement and income recognition requirements for financial assets and financial liabilities in IAS 39 may result in accounting that does not represent the transferor's rights and obligations related to the transfer (IAS 39.BC69).

In that case, when Melody continued to recognise an asset to the extent of its continuing involvement, IAS 39 required that Melody also recognised an associated liability. Despite the other measurement requirements in IAS 39, the transferred asset and the associated liability would be measured on a basis that reflects the rights and obligations that the entity has retained.

While Melody disposed of Panda's share with a put option granted to the buyer, Melody had in substance made a secured loan. Melody should have the following entries:

Dr Cash	\$200	
Available-for-sale reserves	5	
Cr Associated liability		\$205

The difference of \$5 between the exercise price of \$205 and the selling price of Panda's share of \$200 represented the finance charges to be recognised over the term of the put option, in substance, the loan term.

Melody had no right to the appreciation in the fair value of the share above the option exercise price. It is appropriate to measure the share at the lower of (a) the option exercise price and (b) the fair value of the asset. At year-end, as the option exercise price was lower, it became the measurement of the share. In consequence, the following entries should be made:

Dr Available-for-sale financial asset (\$205 – \$198)	\$7	
Cr Available-for-sale reserves		\$7

While the market price of Panda's share exceeded the exercise price at year-end, the buyer would not exercise the put option and Melody in substance had no exposure

to the share and transfer. Below is an extract of the balance sheet at the transfer date and at year-end:

	5 April 2008	30 June 2008
	\$	\$
Available-for-sale financial asset (transferred asset)	198	205
Cash	200	200
	<u>398</u>	<u>405</u>
Associated liability	(205)	(205)
	<u>193</u>	<u>200</u>

3. Consequential Effects

An entity is required to continue to recognise any income arising on the transferred asset to the extent of its continuing involvement and is required to recognise any expense incurred on the associated liability (IAS 39.32).

For the purpose of subsequent measurement, an entity is required to recognise changes in the fair value of the transferred asset and the associated liability consistently with each other in accordance with the normal requirements in recognising gains and losses, and is not allowed to offset the transferred asset and the associated liability (IAS 39.33).

If an entity's continuing involvement is in only part of a financial asset, the entity allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. If the transferred asset is measured at amortised cost, the option in IAS 39 to designate a financial liability as at fair value through profit or loss is not applicable to the associated liability.

17.4.5.4 Requirements for All Transfers

If a transferred asset continues to be recognised, the asset and the associated liability cannot be offset. Similarly, the entity is not allowed to offset any income arising from the transferred asset with any expense incurred on the associated liability.

If a transferor provides non-cash collateral (such as debt or equity instruments) to the transferee, the accounting for the collateral by the transferor and the transferee depends on whether the transferee has the right to sell or repledge the collateral and on whether the transferor has defaulted. The transferor and transferee are required to account for the collateral as shown in Table 17.2 (IAS 39.37):

TABLE 17.2 Accounting for non-cash collateral by transferor and transferee

Circumstances for the collateral	Requirements for the transferor	Requirements for the transferee
1. The transferee has the right by contract or custom to sell or repledge the collateral	<ul style="list-style-type: none"> To continue to carry the collateral as its asset To reclassify that asset in its balance sheet (e.g., as a loaned asset, pledged equity instrument or repurchase receivable) separately from other assets 	<ul style="list-style-type: none"> Not to recognise the collateral as an asset
2. The transferee sells the collateral pledged to it	<ul style="list-style-type: none"> To continue to carry the collateral as its asset 	<ul style="list-style-type: none"> Not to recognise the collateral as an asset To recognise the proceeds from the sale and a liability measured at fair value for its obligation to return the collateral
3. The transferor defaults under the terms of the contract and is no longer entitled to redeem the collateral	<ul style="list-style-type: none"> To derecognise the collateral 	<ul style="list-style-type: none"> To recognise the collateral as its asset initially measured at fair value, or If it has already sold the collateral, to derecognise its obligation to return the collateral

17.5 Derecognition of a Financial Liability

An entity is required to remove a financial liability (or a part of a financial liability) from its balance sheet (i.e., derecognise a financial liability) when, and only when, it is extinguished. IAS 39 explains that a financial liability is extinguished when the obligation specified in the contract is discharged or cancelled or expires (IAS 39.39).

A financial liability or part of it is extinguished when the debtor either

- discharges the liability or part of it by paying the creditor, normally with cash, other financial assets, goods or services; or
- is legally released from primary responsibility for the liability (or part of it) either by process of law or by the creditor.

Real-life

Case 17.13 BASF Aktiengesellschaft

In its annual report of 2007, BASF Aktiengesellschaft (BASF Group) explained briefly its derecognition policy on financial instruments as follows:

**Real-life
Case 17.13**
(cont'd)

- Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire or when the financial asset, with all risks and rewards of ownership, is transferred.
- Financial liabilities are derecognised when the contractual obligation expires or is discharged or cancelled.

Example 17.11 Melody Corporation had issued several debt instruments to finance its operation and investments. It considered the following proposals to remove the debt instruments from its balance sheet while it had temporary funds from the investments:

1. Repurchasing its debt instrument in the open market and reselling it later;
2. Making a payment to a financial institution that would repay the debt instruments on behalf of Melody, and the holders of the instruments would not be informed; and
3. Making a payment to a third party that would repay the debt instruments on behalf of Melody, and a formal legal release would be obtained from the holders of the debt instruments.

Can Melody remove the debt instruments from the balance sheet by using the above alternatives?

Answers

1. Yes, the debt instrument can be derecognised as the debt would be extinguished (even if Melody intends to resell it in the near term).
2. No, the debt instrument cannot be derecognised, because the payment to a third party or a financial institution does not by itself relieve the debtor (Melody) of its primary obligation to the creditor, in the absence of legal release. Even if the creditor is notified without a legal release or a creditor's release, the debtor does not derecognise the debt obligation.
3. Yes, the debt instrument can be derecognised. If Melody pays a third party to assume an obligation and obtains a legal release from its creditor, the debtor has extinguished the debt. However, if the debtor agrees to make payments on the debt to the third party or direct to its original creditor, the debtor recognises a new debt obligation to the third party.

When there is an exchange between an existing borrower and lender of debt instruments with substantially different terms or a substantial modification of the terms of an existing financial liability or a part of it (whether or not attributable to the financial difficulty of the debtor), such an exchange of debt instruments or substantial modification of terms is accounted for as

- an extinguishment of the original financial liability; and
- the recognition of a new financial liability (IAS 39.40).

The recognition of a new financial liability implies that the new liability is measured at fair value plus transaction costs at the date of extinguishment. The difference between the carrying amount of a financial liability (or part of it) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss (IAS 39.41).

Example 17.12 In March 2008, in view of the credit crunch in the United States and worldwide, Melody Corporation considered refinancing its debt instruments earlier and negotiated with the holders of its debt instruments to modify the term of the existing debt instrument by extending the maturity terms and offering a higher yield to the existing holders.

Explain the following to Melody:

1. How would the modified terms be regarded as substantially different terms?
2. How would Melody account for the costs or fees incurred on the modification?

Answers

1. The modified terms of an existing financial liability are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability.
2. If a term modification (or exchange of debt instruments) is accounted for as an extinguishment, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. If the modification (or exchange) is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Example 17.13 Aileen Inc. releases Vincent Corporation from its present obligation to make payments by agreeing to receive the payment from a financial institution. However, Aileen requires Vincent to assume a guarantee obligation to pay if the financial institution assuming primary responsibility defaults.

Explain whether Vincent can derecognise the obligation, i.e., financial liability.

Answers

Since Aileen has released Vincent from the obligation and only requires it to guarantee the payment from the financial institution, Vincent is only required to

1. recognise a new financial liability based on the fair value of its obligation for the guarantee; and
2. recognise a gain or loss based on the difference between
 - a. any proceeds paid; and
 - b. the carrying amount of the original financial liability less the fair value of the new financial liability.

17.6 Summary

Financial liability is defined to include a contractual obligation to deliver cash or another financial asset or to exchange financial assets or financial liabilities that are potentially favourable to the entity. It is similar to a financial asset, initially measured at fair value plus transaction cost or at fair value for financial liability as at fair value through profit or loss.

Subsequent measurement of financial liabilities is normally at amortised cost using the effective interest method, except for financial liabilities carried at fair value through profit or loss, financial guarantee contracts, commitments to provide a loan at a below-market interest rate, and financial liabilities arisen because of derecognition issues. Reclassification between these categories is infrequent and rare.

The accounting treatments of financial liabilities carried at amortised cost and at fair value through profit or loss are similar to financial assets carried at amortised cost and at fair value through profit or loss discussed in Chapter 16.

Financial guarantee contracts and commitments to provide a loan at a below-market interest rate are subsequently measured by the issuers at the higher of (1) the amount determined in accordance with IAS 37 and (2) the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with IAS 18. An issuer of a financial guarantee contract can alternatively designate any financial guarantee contract as an insurance contract and apply either IAS 39 or IFRS 4 to the contract, only if it has previously made such an assertion explicitly and used accounting applicable to an insurance contract.

Financial liabilities may also arise from derecognition issues of financial assets. Under IAS 39, a financial asset is derecognised if its rights to the cash flows expire or a transfer of the asset qualifies for derecognition. The latter situation may have three separate but sequential tests together, namely, the asset transfer test, the risks and rewards test and the control test. A financial asset (even if transferred) cannot be derecognised when (1) the transferor has retained substantially all its risks and rewards of ownership or (2) the transferor neither transfers nor retains substantially all its risks and rewards of ownership but has retained control of it. An associated liability may be recognised accordingly or the financial asset is measured to the extent of continuing involvement.

A financial liability is derecognised when it is extinguished, i.e., it is discharged or cancelled or expires.

Review Questions

1. Briefly list the classification of financial liabilities for subsequent measurement.
2. What kinds of financial liabilities should be stated at fair value through profit or loss?
3. How would financial liabilities arise from derecognition of financial assets?
4. Define a financial guarantee contract.
5. How would the legal forms of financial guarantee contracts affect the accounting treatment?
6. What is the accounting treatment when a financial guarantee contract is classified as a financial liability?
7. When can a financial guarantee contract be classified and accounted for as an insurance contract?
8. State the accounting treatment when a financial guarantee contract is classified and accounted for as an insurance contract.
9. What is the accounting treatment of a commitment to provide a loan at a below-market interest rate?
10. When can a financial liability be reclassified?
11. Briefly state the general derecognition criteria for financial assets.
12. When is a transfer of a financial asset regarded as a transfer in accordance with IAS 39?
13. What are the risks and rewards test and control test in derecognising a financial asset?
14. State the consequences of the risks and rewards test and the control test and corresponding accounting treatments.
15. What is the accounting treatment when a transfer of a financial asset cannot qualify for derecognition?
16. What is the meaning of continuing involvement in measuring a financial asset?
17. When can a financial liability be removed from the balance sheet?

Exercises

Exercise 17.1 On 3 January 2007, Bonnie Singapore Investment Limited issued a 5% 5-year note with a principal of \$5 million in the market. The interest would be payable at each calendar year-end, and the principal would be payable at the end of 5 years. The market interest rate was 6% per annum at the issuance of the note. Bonnie proposed accounting for it as a financial liability at amortised cost.

Calculate the consideration received by Bonnie and suggest journal entries for 2007 and 2008.

Exercise 17.2 Based on Exercise 17.1, on 3 January 2007, Bonnie Singapore Investment Limited issued a 5% 5-year note with a principal of \$5 million in the market. The interest

would be payable at each calendar year-end, and the principal would be payable at the end of 5 years. The market interest rate was 6% at the issuance of the note. Bonnie proposed accounting for it as a financial liability at amortised cost. On 31 December 2007, after the first interest payment was made, the market interest rate dropped to 5% per annum.

Calculate the fair value of the outstanding financial liabilities on 31 December 2007 and discuss and suggest journal entries for 2007 and 2008.

Exercise 17.3 Tony Singapore Limited sells receivables to Bonnie Limited. The receivables, which are due in 6 months and have a carrying value of \$100,000, are sold for a cash payment of \$95,000 subject to full recourse. Under the right of recourse, Tony is obligated to compensate Bonnie for the failure of the debtors to pay when due. In addition to the recourse, Bonnie is entitled to sell the receivables back to Tony in the event of unfavourable changes in interest rates or the credit ratings of the underlying debtors. How should the transaction be accounted for by Tony?

Problems

Problem 17.1 The managing director of Croco Panda, Panda Lam, is of the opinion that IAS 39 requires fair value accounting on all financial instruments, including financial assets and financial liabilities. He feels quite concerned over the requirement to state the company's financial liabilities at fair value, since the central banks of many countries keep on reducing the interest rate to ease the credit crunch problem. Even though Croco Panda does not issue any financial guarantee contracts or commitments to provide a low-rate loan, if the financial liabilities are marked to fair value based on a lower yield, Croco Panda may sustain more financial liabilities in its balance sheet.

Briefly explain to Panda Lam the measurement requirements of IAS 39 on financial liabilities.

Problem 17.2 During early 2008, the market sentiment and the credit crunch in the United States and worldwide created a lot of pressure on the liquidity of KMTB Finance Company. Even though short-term interest rates dropped a lot, the long-term yield required on its new financial liabilities increased significantly. Simultaneously, the drop in the fair value of KMTB's mortgage-backed securities and adjustable-interest loan receivable required it to make a huge impairment loss. These securities had been financed by some low but fixed-rate financial liabilities sourced before 2008.

In order to offset with the impairment loss made in 2008, while KMTB still sustained a huge amount of those low but fixed-rate financial liabilities, it considered devaluing these financial liabilities based on the fact that the increase in long-term yield was significant.

Discuss whether the proposed treatment of KMTB is practicable.

Problem 17.3 On 5 April 2008, Melody Financial Limited disposed of another instrument classified as an available-for-sale financial asset in the following manner:

- When the share price of Knut Inc. was at \$110, Melody disposed of its investments in Knut's shares at \$100 but retained a 1-year call option from the buyer with an exercise price of \$106. At year-end 30 June 2008, the market price of Knut's shares decreased to \$103.

If Melody retained control over the transferred assets, discuss the implication of the disposal.

Problem 17.4 Tony Singapore Limited sells a financial asset to Bonnie. At the same time, Tony enters into a total return swap with Bonnie, whereby all of the interest payment cash flows from the underlying asset are remitted to the entity in exchange for a fixed payment or variable-rate payment and any increases or declines in the fair value of the underlying asset are absorbed by the entity. Can Tony derecognise the sale of the financial asset?

Case Studies

Case Study 17.1 IASJ Inc. is an entity incorporated in Singapore with functional currency in US dollars. At year-end, it held certain financial assets as stated in Case Study 16.1. Simultaneously, it also had the following financial liabilities:

	\$
Trade and other payables.....	4,045,670
Foreign forward contracts.....	250,000
Bank loans.....	1,489,000

IASJ had taken advantage of the designation conditions in IAS 39 to designate those instruments with embedded derivatives as at fair value through profit or loss.

Required:

Discuss and explain the proper accounting classification or categories for the financial instruments held by IASJ.

Case Study 17.2 Sloan Limited (Sloan) is considering the following strategy for obtaining external funds:

- The issue of a financial instrument for a principal amount of \$500 million. The interest rate would be 16% per annum for the first 10 years payable in arrears and 0% in subsequent periods. Sloan would have no obligation to repay the principal amount.

Required:

Determine how Sloan should account for the financial instruments to be issued under the proposal. Explain your answer by reference to relevant accounting standards.

HKICPA QP A September 2006, adapted

**Case
Study 17.3**

Tristate Holdings Limited, a listed garment manufacturer, stated the following in its annual report of 2006:

HKAS 39 and HKFRS 4 (Amendments) require issued financial guarantees, other than those previously asserted by the entity to be insurance contracts, to be initially recognised at their fair value, and subsequently measured at the higher of (i) the unamortised balance of the related fees received and deferred, and (ii) the expenditure required to settle the commitment at the balance sheet date. There is no financial guarantee contract issued at group level. For guarantees provided by the company for banking facilities granted to subsidiaries, the company regards such guarantees as insurance contracts and does not recognise liabilities for financial guarantees at inception, but performs a liability adequacy test at each reporting date and recognise any deficiency in the liabilities in the income statement.

Note: HKAS 39 and HKFRS 4 are equivalent to IAS 39 and IFRS 4.

Required:

- Discuss how and when Tristate can regard financial guarantees as insurance contracts and research and explain what “liability adequacy test” is.

**Case
Study 17.4**

Ping An Insurance (Group) Co. of China, Ltd. introduced its derecognition policy on financial assets in its 2006 annual report as follows:

A financial asset (or, when applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised when:

- The rights to receive cash flows from the asset have expired;
- The group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a “pass-through” arrangement; or
- The group has transferred its rights to receive cash flows from the asset and either
 - has transferred substantially all the risks and rewards of the asset; or
 - has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Required:

Discuss and evaluate Ping An’s derecognition policy on financial assets.

**Case
Study 17.5**

Andrew Finance House Corporation has a portfolio of prepayable loans whose coupon and effective interest rate is 10% and whose principal amount and amortised cost is \$10,000. It enters into a transaction in which, in return for a payment of \$9,115, the transferee obtains the right to \$9,000 of any collections of principal plus interest thereon at 9.5%.

Andrew retains rights to \$1,000 of any collections of principal plus interest thereon at 10%, plus the excess spread of 0.5% on the remaining \$9,000 of principal. Collections from prepayments are allocated between Andrew and the transferee proportionately in the ratio of 1:9, but any defaults are deducted from Andrew's interest of \$1,000 until that interest is exhausted. The fair value of the loans at the date of the transaction is \$10,100 and the estimated fair value of the excess spread of 0.5% is \$40.

Discuss the implication of the transactions and suggest an accounting treatment for the transactions.

18

Financial Instruments – Presentation and Disclosure

Learning Outcomes

This chapter enables you to understand the following:

- 1 The presentation of financial instruments from the perspective of the issuer
- 2 The classification of interests, dividends, losses and gains
- 3 The circumstances to offset financial assets and financial liabilities
- 4 The disclosure of the significance of financial instruments
- 5 The disclosure of the nature and extent of risks arising from financial instruments
- 6 The disclosure in respect of credit risk, liquidity risk and market risk

Real-life

Case 18.1

BP plc

BP plc repurchased its own shares and represented them in its annual report of 2007 in its note to the share capital as follows:

	Shares (thousands)	\$ million
Ordinary shares of 25 cents each		
At 1 January.....	21,457,301	5,364
Issue of new shares for employee share schemes.....	69,273	18
Repurchase of ordinary share capital.....	<u>(663,150)</u>	<u>(166)</u>
At 31 December.....	<u>20,863,424</u>	<u>5,216</u>

BP plc explained in its accounting policy as follows:

- The group's holding in its own equity instruments, including ordinary shares held by Employee Share Ownership Plans (ESOPs), is classified as "treasury shares" and shown as deductions from shareholders' equity at cost.
- Consideration received for the sale of such shares is also recognised in equity, with any difference between the proceeds from sale and the original cost being taken to the profit and loss account reserve.
- No gain or loss is recognised in the performance statements on the purchase, sale, issue or cancellation of equity shares.

The definition, recognition and measurement of financial instruments are explained in Chapters 15 to 17. This chapter addresses the presentation and disclosure aspects of financial instruments. The presentation of financial instruments includes the classification of financial instruments into financial liabilities and financial assets and the presentation of treasury shares. The disclosure aspect includes the significance of financial instruments and the nature and extent of risk arising from financial instruments.

18.1 Applicable Standard and Scope

The requirements for presenting information about financial instruments are set out in IAS 32 *Financial Instruments – Presentation*, which aims at establishing principles for presenting financial instruments as liabilities or equity and for offsetting financial assets and financial liabilities.

IAS 32 applies to all types of financial instruments, except for the following:

1. Those interests in subsidiaries, associates and joint ventures that are accounted for under IAS 27 *Consolidated and Separate Financial Statements*, IAS 28 *Investments in Associates* or IAS 31 *Interests in Joint Ventures*;

2. Employers' rights and obligations under employee benefit plans, to which IAS 19 *Employee Benefits* applies;
3. Contracts for contingent consideration in a business combination (see IFRS 3 *Business Combinations*). This exemption applies only to the acquirer;
4. Insurance contract as defined in IFRS 4 *Insurance Contracts*, other than (1) a derivative that is embedded in insurance contracts if IAS 39 applies to account it separately, and (2) a financial guarantee contract, which should be originally accounted for under IAS 39 but, by election, is accounted for under IFRS 4;
5. Financial instruments that are within the scope of IFRS 4 because they contain a discretionary participation feature. The separation of financial liabilities and equity instruments is not applied to such contracts but all other requirements of IAS 32 are still applicable;
6. Financial instruments, contracts and obligations under share-based payment transactions to which IFRS 2 *Share-based Payment* applies, except for contracts within the scope specified in IAS 32.

The requirements for disclosing information about financial instruments are set out in IFRS 7 *Financial Instruments – Disclosures*. It aims at enabling users to evaluate (1) the significance of financial instruments for an entity's financial position and performance, and (2) the nature and extent of risks arising from financial instruments to which an entity is exposed. IFRS 7 has a similar scope of application as that of IAS 32.

On comparison between the scope of IAS 39 (see Chapter 15) and the scope of IAS 32 and IFRS 7, it is clear that certain items or contracts that are excluded from the scope of IAS 39 have not been excluded from the scope of IAS 32 and IFRS 7. It implies that those items or contracts are not accounted for under IAS 39 but they are still subject to the presentation and disclosure requirements of IAS 32 and IFRS 7. These items or contracts include the following:

1. Rights and obligations under leases to which IAS 17 *Leases* applies;
2. Contracts between an acquirer and a vendor in a business combination to buy or sell an acquiree at a future date;
3. Loan commitments;
4. Rights to payments to reimburse the entity for expenditure it is required to make to settle a liability that it recognises as a provision in accordance with IAS 37.

IFRS 7 also specifically requires that it applies to both recognised and unrecognised financial instruments. Recognised financial instruments include financial assets and financial liabilities that are within the scope of IAS 39. Unrecognised financial instruments include some financial instruments that, although outside the scope of IAS 39, are within the scope of IFRS 7 (such as some loan commitments).

18.2 Presentation

The presentation of financial instruments is addressed in IAS 32 from the perspective of an issuer, ranging from distinguishing liabilities from equity, separating compound financial instruments into two elements, treasury shares, items in profit or loss and offsetting issues.

18.2.1 Liabilities and Equity

The issuer of a financial instrument is required to classify the instrument, or its component parts, on initial recognition as a financial liability, a financial asset or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability, a financial asset and an equity instrument (IAS 32.15).

As discussed in Chapter 15, IAS 32 specifically requires that when an issuer applies the definitions of financial instruments to determine whether a financial instrument is an equity instrument rather than a financial liability, the instrument is an equity instrument if, and only if, both of the following conditions are met:

1. The instrument includes no contractual obligation
 - a. to deliver cash or another financial asset to another entity; or
 - b. to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the issuer.
2. If the instrument will or may be settled in the issuer's own equity instruments, it is
 - a. a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or
 - b. a derivative that will be settled only by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments. For this purpose, the issuer's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the issuer's own equity instruments.

All contractual obligations that do not meet the above conditions are not equity instruments. Even if a contractual obligation, including one arising from a derivative financial instrument, that will or may result in the future receipt or delivery of the issuer's own equity instruments does not meet all the above conditions, it is still not an equity instrument. Figure 18.1 summarises the conditions that determine whether a contract is classified as an equity instrument or a financial liability.

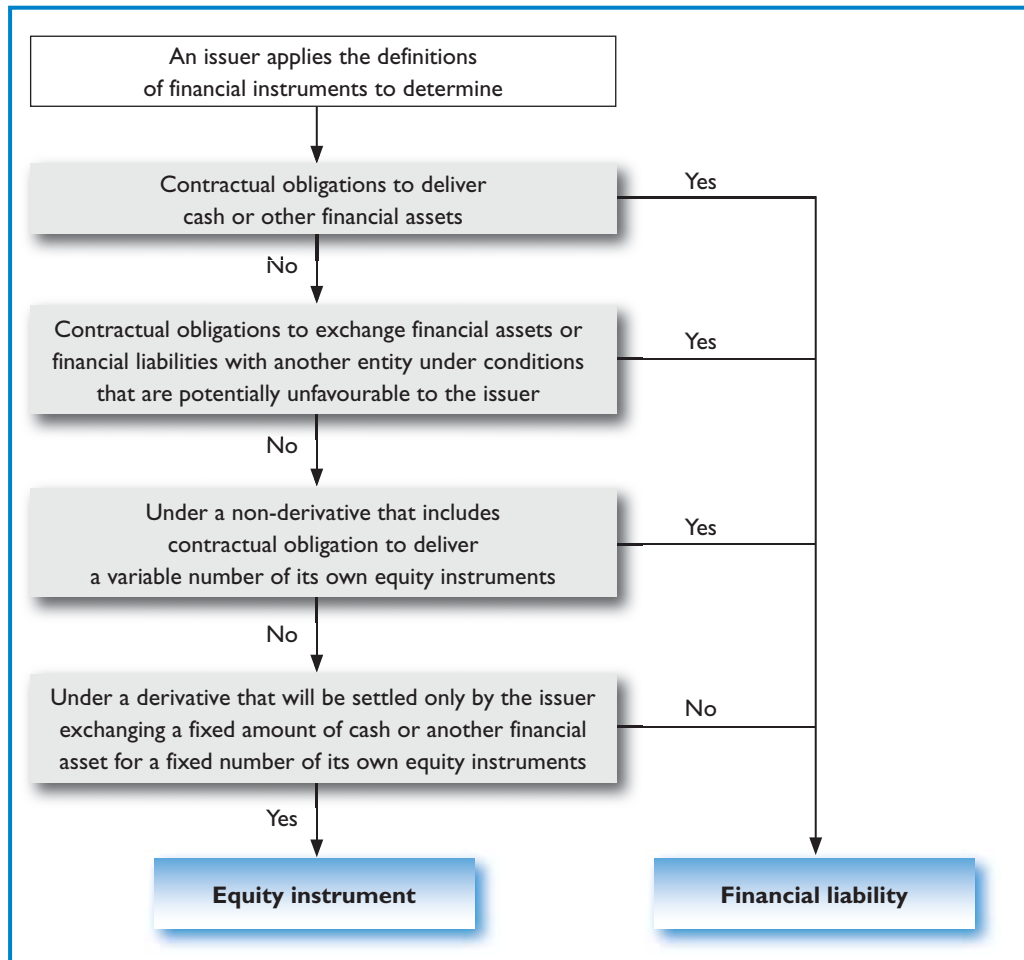
18.2.1.1 Contractual Obligation to Deliver Cash or Another Financial Asset

In differentiating a financial liability from an equity instrument, a critical feature is the existence of a contractual obligation of an issuer either

1. to deliver cash or another financial asset to the holder; or
2. to exchange financial assets or financial liabilities with the holder under conditions that are potentially unfavourable to the issuer. For equity instruments, an issuer has no such contractual obligation.

The substance of a financial instrument, rather than its legal form, governs its classification on the entity's balance sheet. Some financial instruments take the legal form of equity but are liabilities in substance.

FIGURE 18.1 Flowchart determining the classification of equity instrument and financial liability



Example 18.1 A preference share is a legal form of equity but it is a financial liability in financial reporting if:

1. It provides for mandatory redemption by the issuer for a fixed or determinable amount at a fixed or determinable future date.
2. It gives the holder the right to require the issuer to redeem the instrument at or after a particular date for a fixed or determinable amount.

If an entity does not have an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation, the obligation meets the definition of a financial liability. A financial instrument that does not explicitly establish a contractual

obligation to deliver cash or another financial asset may establish an obligation indirectly through its terms and conditions.

Example 18.2 The following circumstances indicate that an entity does not have the unconditional right to avoid delivering cash or another financial asset:

1. A restriction on the ability of an entity to satisfy a contractual obligation, such as lack of access to foreign currency or the need to obtain approval for payment from a regulatory authority; and
2. A contractual obligation that is conditional on a counterparty exercising its right to redeem.

18.2.1.2 Settlement in an Entity's Own Equity Instruments

A contract is not an equity instrument solely because it may result in the receipt or delivery of the entity's own equity instruments. An entity may have a contractual right or obligation to receive (or deliver) a number of its own shares (or other equity instruments) that varies so that the fair value of the entity's own equity instruments to be received (or delivered) equals the amount of the contractual right (or obligation).

Example 18.3 The following contracts require a delivery of an entity's own equity instrument, but they are not equity instruments:

1. A contract requires an entity to deliver as many of its own equity instruments as are equal in value to \$1 million.
2. A contract requires an entity to deliver as many of its own equity instruments as are equal in value to the value of 10,000 ounces of gold.

The entity can even settle its obligation by delivering its own equity instruments. The number of equity instruments to be delivered is not fixed and varies depending on the share price and the fair value of gold. These contracts are financial liabilities of the entity. The use of a variable number of its own equity instruments as a means to settle the contract implies that the contracts do not evidence a residual interest in the entity's assets after deducting all of its liabilities.

A contract that will be settled by the entity delivering or receiving a fixed number of its own equity instruments in exchange for a variable amount of cash or another financial asset is also a financial asset or financial liability.

Example 18.4 Knut Limited contracted to deliver 100 shares of its own equity instruments in return for an amount of cash calculated to equal the value of 1,000 ounces of gold. Is it an equity instrument?

Answers

The contract is not an equity instrument. Even though a fixed number of Knut's own equity instrument will be delivered, Knut will receive a variable amount of cash calculated to equal the value of 1,000 ounces of gold. Knut's fixed number of its own equity instrument is thus not exchanged for a fixed amount of cash or a fixed amount of another financial asset.

18.2.1.3 Contingent Settlement Provisions

A financial instrument may have "contingent settlement provisions" that require the entity to deliver cash or another financial asset in the event of the occurrence or non-occurrence of uncertain future events (or on the outcome of uncertain circumstances) that are beyond the control of both the issuer and the holder of the instrument. For example, an entity's preference shares will be redeemed when a change in a stock market index in a month is over 60%, or the consumer price index falls below 100, or the entity retains a net operating loss.

Even when there is a contingent settlement provision in an instrument, the issuer still does not have the unconditional right to avoid delivering cash or another financial asset. Therefore, it is a financial liability of the issuer unless:

1. The part of the contingent settlement provision that could require settlement in cash or another financial asset is not genuine; or
2. The issuer can be required to settle the obligation in cash or another financial asset only in the event of liquidation of the issuer.

18.2.1.4 Settlement Options

When a derivative financial instrument gives one party a choice over how it is settled (e.g., the issuer or the holder can choose settlement net in cash or by exchanging shares for cash), it is a financial asset or a financial liability unless all of the settlement alternatives would result in it being an equity instrument (IAS 32.26).

Example 18.5 Knut Limited entered into the following contracts:

1. A share option that Knut can decide to settle net in cash or by exchanging its own shares for cash;
2. A contract to sell a machine in exchange for Knut's own equity instruments and Knut can settle the obligation by delivery of its machine or net in cash.

Evaluate the substance of the above contracts.

Answers

The contracts represent derivative financial instruments with a settlement option, and they are financial liabilities (or financial assets if results are favourable).

1. A share option that Knut can decide to settle the obligation net in cash or by exchanging its own shares for cash is an example of a derivative financial instrument with a settlement option that is a financial liability.
2. Contracts to buy or sell a non-financial item in exchange for the entity's own equity instruments are within the scope of IAS 32 because they can be settled either by delivery of the non-financial item or net in cash or another financial instrument. Such contracts are financial assets or financial liabilities and not equity instruments.

18.2.2 Compound Financial Instruments

The issuer of a non-derivative financial instrument is also required to evaluate the terms of the financial instrument to determine whether it contains both a liability and an equity component. Such components are required to be classified separately as financial liabilities, financial assets or equity instruments in accordance with the substance of the instruments and the definitions of the financial instruments (IAS 32.28).

IAS 32 addresses the requirements on separating a compound financial instrument from the issuer's perspective, while IAS 39 sets out the requirements from the holder's perspective. Both are explained together in Section 15.5.

18.2.3 Treasury Shares

An entity's own equity instruments are not recognised as a financial asset regardless of the reason for which they are reacquired. Instruments reacquired by an entity are termed "treasury shares". When an entity reacquires its own equity instruments, those treasury shares are deducted from equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of an entity's own equity instruments. Such treasury shares may be acquired and held by the entity or by other members of the consolidated group. Consideration paid or received is recognised directly in equity (IAS 32.33).

Real-life

Case 18.2 Singapore Exchange Limited

Singapore Exchange Limited, the stock exchange in Singapore and one of the Straits Times Index composite stocks, adopted IFRS-equivalent Singapore Financial Reporting Standards and explained its policy on treasury shares in its annual report of 2007 as follows:

**Real-life
Case 18.2**
(cont'd)

- Ordinary shares are classified as equity.
- When any entity within the group purchases the company's ordinary shares (treasury shares), the consideration paid, including any directly attributable incremental costs, net of income taxes, is deducted from equity attributable to the company's equity holders and presented as "treasury shares" within equity, until they are cancelled, sold or reissued.
- When treasury shares are cancelled, the cost of the treasury shares is deducted against the share capital account, if the shares are purchased out of capital of the company, or against the retained profits of the company, if the shares are purchased out of profits of the company.
- When treasury shares are subsequently sold or reissued pursuant to the employee performance shares scheme, the cost of the treasury shares is reversed from the treasury share account and the realised gain or loss on sale or reissue, net of any directly attributable incremental transaction costs and related income tax, is taken to the share capital account of the company.

When an entity holds its own equity on behalf of others, for example a financial institution holding its own equity on behalf of a client, there is an agency relationship and as a result those holdings are not included in the entity's balance sheet.

The amount of treasury shares held is disclosed separately either on the face of the balance sheet or in the notes, in accordance with IAS 1 *Presentation of Financial Statements*. Real-life Case 18.1 sets out that BP plc disclosed the amount of treasury shares in the note to its share capital. An entity also provides disclosure in accordance with IAS 24 *Related Party Disclosures* if the entity reacquires its own equity instruments from related parties.

18.2.4 Interests, Dividends, Losses and Gains

The classification of a financial instrument as a financial liability or an equity instrument also determines the recognition of interests, dividends, losses and gains relating to that instrument as follows:

- Interest, dividends, losses and gains relating to a financial instrument or a component that is a financial liability are recognised as income or expense in profit or loss.
- Distributions to holders of an equity instrument are debited by the entity directly to equity, net of any related income tax benefit (IAS 32.35).

Transaction costs of an equity transaction are accounted for as a deduction from equity, net of any related income tax benefit (IAS 32.35).

In consequence, when shares are wholly recognised as liabilities, the dividend payments on those shares are also recognised as expenses in the same way as interest on a bond. Similarly, gains and losses associated with redemptions or refinancings of

financial liabilities are recognised in profit or loss, whereas redemptions or refinancings of equity instruments are recognised as changes in equity. Changes in the fair value of an equity instrument are not recognised in the financial statements.

Example 18.6 Melody Corporation issued two lots of preference shares as follows:

1. The first lot was non-cumulative preference shares, which would be mandatorily redeemable for cash in 5 years, but the dividends would be payable at the discretion of the entity before the redemption date.
2. The second lot was cumulative preference shares, which would be mandatorily redeemable for cash in 5 years, but the dividends would be payable as part of the redemption amount at the redemption date.

Discuss the accounting treatments for non-cumulative preference shares.

Answers

1. A redeemable non-cumulative preference share is a compound financial instrument, with a liability component and an equity component. The distribution of profit is recognised as follows:
 - The liability component is the present value of the redemption amount. The unwinding of the discount on this component is recognised in profit or loss and classified as interest expense.
 - Any dividends paid relate to the equity component and, accordingly, are recognised as a distribution of profit or loss.A similar treatment would apply
 - if the redemption was not mandatory but at the option of the holder, or
 - if the share was mandatorily convertible into a variable number of ordinary shares calculated to equal a fixed amount or an amount based on changes in an underlying variable (e.g., commodity).
2. However, if any unpaid dividends are added to the redemption amount, the entire instrument is a liability. In such a case, any dividends are classified as interest expense.

18.2.4.1 Transaction Costs

Costs to an entity in issuing or acquiring its own equity instruments might include registration and other regulatory fees, amounts paid to legal, accounting and other professional advisers, printing costs and stamp duties. The transaction costs of an equity transaction are accounted for as a deduction from equity (net of any related income tax benefit) to the extent they are incremental costs directly attributable to the equity transaction that otherwise would have been avoided. However, the costs of an equity transaction that is abandoned are recognised as an expense.

Real-life

Case 18.3

Standard Chartered plc

Standard Chartered plc stated in its annual report of 2006 as follows:

- Incremental costs directly attributable to the issue of new shares or options, or to the acquisition of a business, are shown in equity as a deduction, net of tax, from the proceeds.
- Dividends on ordinary shares are recognised in equity in the period in which they are declared.

Transaction costs that relate to the issue of a compound financial instrument are allocated to the liability and equity components of the instrument in proportion to the allocation of proceeds. Transaction costs that relate jointly to more than one transaction (for example, costs of a concurrent offering of some shares and a stock exchange listing of other shares) are allocated to those transactions using a basis of allocation that is rational and consistent with similar transactions.

18.2.5 Offsetting a Financial Asset and a Financial Liability

A financial asset and a financial liability are offset and the net amount presented in the balance sheet when, and only when, an entity

1. currently has a legally enforceable right to set off the recognised amounts; and
2. intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

In accounting for a transfer of a financial asset that does not qualify for derecognition, the entity is not allowed to offset the transferred asset and the associated liability (IAS 32.42).

Real-life

Case 18.4

China Construction Bank Corporation

China Construction Bank Corporation, one of the listed and largest commercial banks in China, explained in its annual report of 2006:

- Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet when the group has a legally enforceable right to set off the recognised amounts and the transactions are intended to be settled on a net basis, or by realising the asset and settling the liability simultaneously.

To offset a financial asset and a financial liability, an entity must have a currently enforceable legal right to set off the recognised amounts. An entity may have a conditional right to set off recognised amounts, such as in a master netting agreement

or in some forms of non-recourse debt, but such rights are enforceable only on the occurrence of some future event, usually a default of the counterparty. Thus, such an arrangement does not meet the conditions for offsetting.

Example 18.7 The conditions for offsetting are generally not satisfied and offsetting is usually inappropriate in the following situations:

1. Several different financial instruments are used to emulate the features of a single financial instrument (a “synthetic instrument”);
2. Financial assets and financial liabilities arise from financial instruments having the same primary risk exposure (for example, assets and liabilities within a portfolio of forward contracts or other derivative instruments) but involve different counterparties;
3. Financial or other assets are pledged as collateral for non-recourse financial liabilities;
4. Financial assets are set aside in trust by a debtor for the purpose of discharging an obligation without those assets having been accepted by the creditor in settlement of the obligation (for example, a sinking fund arrangement); or
5. Obligations incurred as a result of events giving rise to losses are expected to be recovered from a third party by virtue of a claim made under an insurance contract.

18.3 Disclosures – Classes and Significance

The users of an entity’s financial statements need information about the entity’s exposure to risks and how those risks are managed in order to assess the entity’s financial position and financial performance. IFRS 7 requires the disclosure of such information and applies to all risks arising from all financial instruments within its scope.

The IFRS applies to all entities, including entities that have few financial instruments (e.g., a manufacturer whose only financial instruments are accounts receivable and accounts payable) and those that have many financial instruments (e.g., a financial institution most of whose assets and liabilities are financial instruments).

No exemption from the disclosure requirements of IFRS 7 is granted to any entities, including small and medium-sized entities. The IASB was of the opinion that the extent of disclosures required by IFRS 7 would depend on the extent to which the entity uses financial instruments and the extent to which it has assumed associated risks. Entities with few financial instruments and few risks will give few disclosures. In addition, disclosures in IFRS 7 are mainly based on information provided internally to the entity’s key management personnel and may not impose unduly onerous requirements even on smaller entities.

18.3.1 Classes of Financial Instruments and Level of Disclosure

When IFRS 7 requires disclosures by class of financial instrument, an entity is required to

1. group financial instruments into classes that are appropriate to the nature of the information disclosed and that take into account the characteristics of those financial instruments; and
2. provide sufficient information to permit reconciliation to the line items presented in the balance sheet.

The classes described above are determined by the entity and are, thus, distinct from the categories of financial instruments specified in IAS 39 that determine how financial instruments are measured and where changes in fair value are recognised (Chapter 16). In determining classes of financial instrument, an entity is required, at a minimum, to

1. distinguish instruments measured at amortised cost from those measured at fair value; and
2. treat as a separate class or classes those financial instruments outside the scope of this IFRS.

Depending on its circumstances, an entity decides

- how much detail it provides to satisfy the requirements of IFRS 7;
- how much emphasis it places on different aspects of the requirements; and
- how it aggregates information to display the overall picture without combining information with different characteristics.

It is necessary to strike a balance between overburdening financial statements with excessive detail that may not assist users of financial statements and obscuring important information as a result of too much aggregation.

18.3.2 Significance of Financial Instruments for Financial Position and Performance

An entity is required to disclose information that enables users of its financial statements to evaluate the significance of financial instruments for its financial position and performance (IFRS 7.7). The disclosure requirements are divided into

1. balance sheet;
2. income statement and equity; and
3. other disclosures.

18.3.2.1 Balance Sheet

1. Categories of Financial Assets and Financial Liabilities

An entity is required to disclose the carrying amounts of each of the following categories, as defined in IAS 39, either in the balance sheet or in the notes:

- a. Financial assets at fair value through profit or loss, showing separately
 - i. those designated as such upon initial recognition; and
 - ii. those classified as held for trading in accordance with IAS 39;
- b. Held-to-maturity investments;
- c. Loans and receivables;
- d. Available-for-sale financial assets;
- e. Financial liabilities at fair value through profit or loss, showing separately
 - i. those designated as such upon initial recognition; and
 - ii. those classified as held for trading in accordance with IAS 39;
- f. Financial liabilities measured at amortised cost.

Real-life
Case 18.5 **BP plc**

In its annual report of 2007, BP plc disclosed the accounting classification of each category of financial instruments for 2007 and their carrying amounts (in million dollars) as follows:

	Loans and receivables \$ million	Available- for-sale financial assets \$ million	At fair value through profit and loss \$ million	Derivative hedging instruments \$ million	Financial liabilities measured at amortised cost \$ million	Total \$ million
Financial assets:						
Other investments – listed	–	1,617	–	–	–	1,617
Other investments – unlisted	–	213	–	–	–	213
Loans	1,164	–	–	–	–	1,164
Trade and other receivables	38,710	–	–	–	–	38,710
Derivative financial instruments	–	–	9,155	907	–	10,062
Cash at bank and in hand	2,996	–	–	–	–	2,996
Cash equivalents – listed	–	3	–	–	–	3
Cash equivalents – unlisted	–	563	–	–	–	563
Financial liabilities:						
Trade and other payables	–	–	–	–	(40,062)	(40,062)
Derivative financial instruments	–	–	(11,284)	(123)	–	(11,407)
Accruals	–	–	–	–	(7,599)	(7,599)
Finance debt	–	–	–	–	(31,045)	(31,045)
	<u>42,870</u>	<u>2,396</u>	<u>(2,129)</u>	<u>784</u>	<u>(78,706)</u>	<u>(34,785)</u>

The disclosures require entities to disclose financial assets and financial liabilities by the measurement categories in IAS 39 (Chapters 16 and 17). It will assist users in understanding the extent to which accounting policies affect the amounts at which financial assets and financial liabilities are recognised. Separate disclosure of the carrying amounts of financial assets and financial liabilities that are classified as held for trading and those designated as at fair value through profit or loss is also useful because such designation is at the discretion of the entity.

2. Financial Assets or Financial Liabilities at Fair Value through Profit or Loss

An entity can designate upon initial recognition a loan, a receivable or a financial liability as at fair value through profit or loss. Concerns have arisen over whether the users may misinterpret the profit or loss effects of changes in risks in the financial instruments, in particular credit risk. For example, an impairment loss on a loan receivable resulting from changes in credit risk may be hidden in the fair value changes when the loan receivable is only accounted for at fair value through profit or loss. In consequence, to alleviate such concerns, IFRS 7 imposes specific disclosure requirements for such a designation.

If an entity has designated a loan or receivable (or group of loans or receivables) as at fair value through profit or loss, it is required to disclose

- a. the maximum exposure to credit risk of the loan or receivable (or group of loans or receivables) at the reporting date;
- b. the amount by which any related credit derivatives or similar instruments mitigate that maximum exposure to credit risk;
- c. the amount of change, during the period and cumulatively, in the fair value of the loan or receivable (or group of loans or receivables) that is attributable to changes in the credit risk of the financial asset determined either
 - i. as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk; or
 - ii. using an alternative method the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of the asset.

Changes in market conditions that give rise to market risk include changes in an observed (benchmark) interest rate, commodity price, foreign exchange rate or index of prices or rates.

- d. the amount of change in the fair value of any related credit derivatives or similar instruments that has occurred during the period and cumulatively since the loan or receivable was designated.

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and other price risk.

If an entity has designated a financial liability as at fair value through profit or loss, it is required to disclose

- a. the amount of change, during the period and cumulatively, in the fair value of the financial liability that is attributable to changes in the credit risk of that liability determined either
 - i. as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk; or
 - ii. using an alternative method the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of the liability.

Changes in market conditions that give rise to market risk include changes in a benchmark interest rate, the price of another entity's financial instrument, a commodity price, a foreign exchange rate or an index of prices or rates. For contracts that include a unit-linking feature, changes in market conditions include changes in the performance of the related internal or external investment fund.

- b. the difference between the financial liability's carrying amount and the amount the entity would be contractually required to pay at maturity to the holder of the obligation.

An entity with the above designations and disclosures is required to disclose

- a. the methods used to comply with the above requirements; and
- b. if the entity believes that the disclosure it has given to comply with the above requirements does not faithfully represent the change in the fair value of the financial asset or financial liability attributable to changes in its credit risk, the reasons for reaching this conclusion and the factors it believes are relevant.

3. Reclassification

If an entity has reclassified a financial asset as one measured

- a. at cost or amortised cost, rather than at fair value; or
- b. at fair value, rather than at cost or amortised cost,

the entity is required to disclose

- a. the amount reclassified into and out of each category; and
- b. the reason for that reclassification.

The disclosure requirement extends to include the reason for reclassifications. Such information is useful because the categorisation of financial instruments has a significant effect on their measurement.

4. Derecognition

An entity may have transferred financial assets in such a way that part or all of the financial assets do not qualify for derecognition (Chapter 17). The entity is required to disclose the following for each class of such financial assets:

- a. The nature of the assets;
- b. The nature of the risks and rewards of ownership to which the entity remains exposed;
- c. When the entity continues to recognise all of the assets, the carrying amounts of the assets and of the associated liabilities; and
- d. When the entity continues to recognise the assets to the extent of its continuing involvement, the total carrying amount of the original assets, the amount of the assets that the entity continues to recognise, and the carrying amount of the associated liabilities.

5. Collateral

An entity is required to disclose

- a. the carrying amount of financial assets it has pledged as collateral for liabilities or contingent liabilities, including amounts that have been reclassified; and
- b. the terms and conditions relating to its pledge.

When an entity holds collateral (of financial or non-financial assets) and is permitted to sell or repledge the collateral in the absence of default by the owner of the collateral, it is required to disclose

- a. the fair value of the collateral held;
- b. the fair value of any such collateral sold or repledged, and whether the entity has an obligation to return it; and
- c. the terms and conditions associated with its use of the collateral.

6. Allowance Account for Credit Losses

When financial assets are impaired by credit losses and the entity records the impairment in a separate account (e.g., an allowance account used to record individual impairments or a similar account used to record a collective impairment of assets) rather than directly reducing the carrying amount of the asset, it is required to disclose a reconciliation of changes in that account during the period for each class of financial assets.

Real-life

Case 18.6

Hong Kong Exchanges and Clearing Limited

Hong Kong Exchanges and Clearing Limited disclosed the movements in provision for impairment losses of trade receivables in its annual report of 2007 as follows:

	2007 \$'000	2006 \$'000
At 1 January	4,679	4,329
(Reversal of provision for)/Provision for impairment losses of trade receivables	(71)	350
At 31 December	<u>4,608</u>	<u>4,679</u>

Analysts and other users should find the above information useful in assessing the adequacy of the allowance for impairment losses and when comparing one entity with another. IFRS 7 has not specified the components of the reconciliation and it allows entities flexibility in determining the most appropriate format for their needs.

7. Compound Financial Instruments with Multiple Embedded Derivatives

IAS 32 (Chapter 15) requires the separation of the liability and equity components of a compound financial instrument. This is more complicated for compound financial instruments with multiple embedded derivative features whose values are interdependent than for those without such features.

Example 18.8 A callable convertible debt instrument includes

- a conversion right of the holder (an equity conversion option feature); and
- a right of the issuer to call the instrument back from the holder (an embedded call option feature).

If the embedded equity and non-equity derivative features are interdependent, the sum of the separately determined values of the liability and equity components will not equal the value of the compound financial instrument as a whole.

In this callable convertible debt instrument, the values of an embedded call option feature and an equity conversion option feature depend in part on each other if the holder's equity conversion option is extinguished when the entity exercises the call option or vice versa.

If an entity has issued an instrument that contains both a liability and an equity component and the instrument has multiple embedded derivatives whose values are interdependent (such as the above callable convertible debt instrument), it is required to disclose the existence of those features. Such disclosure highlights the effect of multiple embedded derivative features on the amounts recognised as liabilities and equity.

8. Defaults and Breaches

For loans payable recognised at the reporting date, an entity is required to disclose

- a. details of any defaults during the period of principal, interest, sinking fund, or redemption terms of those loans payable;
- b. the carrying amount of the loans payable in default at the reporting date; and
- c. whether the default was remedied, or the terms of the loans payable were renegotiated, before the financial statements were authorised for issue.

If, during the period, there were breaches of loan agreement terms other than those described above, an entity is required to disclose the same information as above if those breaches permitted the lender to demand accelerated repayment (unless the breaches were remedied, or the terms of the loan were renegotiated, on or before the reporting date).

The above disclosures provide relevant information about the entity's creditworthiness and its prospects of obtaining future loans.

18.3.2.2 Income Statement and Equity

Complementing the balance sheet disclosure requirement addressed above, disclosure of income statement gains and losses is also by the measurement categories in IAS 39. The disclosure is needed for users to understand the financial performance of an entity's financial instruments, given the different measurement bases in IAS 39.

1. Items of Income, Expense, Gains or Losses

An entity is required to disclose the following items of income, expense, gains or losses either on the face of the financial statements or in the notes:

- a. Net gains or net losses on
 - i. financial assets or financial liabilities at fair value through profit or loss, showing separately those on financial assets or financial liabilities designated as such upon initial recognition, and those on financial assets or financial liabilities that are classified as held for trading in accordance with IAS 39;
 - ii. available-for-sale financial assets, showing separately the amount of gain or loss recognised in equity during the period and the amount reclassified from equity to profit or loss for the period;
 - iii. held-to-maturity investments;
 - iv. loans and receivables; and
 - v. financial liabilities measured at amortised cost;
- b. Total interest income and total interest expense (calculated using the effective interest method) for financial assets or financial liabilities that are not at fair value through profit or loss;
- c. Fee income and expense (other than amounts included in determining the effective interest rate) arising from
 - i. financial assets or financial liabilities that are not at fair value through profit or loss; and
 - ii. trust and other fiduciary activities that result in the holding or investing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions;
- d. Interest income on impaired financial assets accrued in accordance with IAS 39; and
- e. The amount of any impairment loss for each class of financial asset.

Disclosure of fee income and expense in (c) above addresses the fee income and expense from financial assets or financial liabilities and from trust and other fiduciary activities that result in the entity holding or placing assets on behalf of individuals, trusts, retirement benefit plans and other institutions. This information indicates the level of such activities and helps users to estimate possible future income of the entity.

18.3.2.3 Other Disclosures

1. Accounting Policies

In accordance with IAS 1 *Presentation of Financial Statements*, an entity discloses, in the summary of significant accounting policies, the measurement basis (or bases) used in preparing the financial statements and the other accounting policies used that are relevant to an understanding of the financial statements.

Disclosure of the measurement basis (or bases) used in preparing the financial statements and the other accounting policies used are relevant to an understanding of the financial statements.

Example 18.9 For financial instruments, disclosure of measurement basis and the other accounting policies may include the following:

1. For financial assets or financial liabilities designated as at fair value through profit or loss:
 - a. The nature of the financial assets or financial liabilities the entity has designated as at fair value through profit or loss;
 - b. The criteria for so designating such financial assets or financial liabilities on initial recognition; and
 - c. How the entity has satisfied the conditions in IAS 39 for such designation;
 - i. For instruments designated because of accounting mismatch, that disclosure includes a narrative description of the circumstances underlying the measurement or recognition inconsistency that would otherwise arise.
 - ii. For instruments designated because of documented risk management or investment strategy, that disclosure includes a narrative description of how designation at fair value through profit or loss is consistent with the entity's documented risk management or investment strategy.
2. The criteria for designating financial assets as available for sale;
3. Whether regular way purchases and sales of financial assets are accounted for at trade date or at settlement date;
4. When an allowance account is used to reduce the carrying amount of financial assets impaired by credit losses:
 - a. The criteria for determining when the carrying amount of impaired financial assets is reduced directly (or, in the case of a reversal of a write-down, increased directly) and when the allowance account is used; and

- b. The criteria for writing off amounts charged to the allowance account against the carrying amount of impaired financial assets;
5. How net gains or net losses on each category of financial instrument are determined, for example, whether the net gains or net losses on items at fair value through profit or loss include interest or dividend income;
6. The criteria the entity uses to determine that there is objective evidence that an impairment loss has occurred;
7. When the terms of financial assets that would otherwise be past due or impaired have been renegotiated, the accounting policy for financial assets that are the subject of renegotiated terms.

2. Hedge Accounting

An entity is required to disclose the following separately for each type of hedge (i.e., fair value hedges, cash flow hedges and hedges of net investments in foreign operations):

- a. A description of each type of hedge;
- b. A description of the financial instruments designated as hedging instruments and their fair values at the reporting date; and
- c. The nature of the risks being hedged.

For cash flow hedges, an entity is required to disclose the following:

- a. The periods when the cash flows are expected to occur and when they are expected to affect profit or loss;
- b. A description of any forecast transaction for which hedge accounting had previously been used, but which is no longer expected to occur;
- c. The amount that was recognised in equity during the period;
- d. The amount that was reclassified from equity to profit or loss for the period, showing the amount included in each line item in the income statement; and
- e. The amount that was removed from equity during the period and included in the initial cost or other carrying amount of a non-financial asset or non-financial liability whose acquisition or incurrence was a hedged highly probable forecast transaction.

An entity is required to disclose separately

- a. in fair value hedges, gains or losses:
 - i. on the hedging instrument; and
 - ii. on the hedged item attributable to the hedged risk.
- b. the ineffectiveness recognised in profit or loss that arises from cash flow hedges; and
- c. the ineffectiveness recognised in profit or loss that arises from hedges of net investments in foreign operations.

3. Fair Value

In addition to the following disclosures, IFRS 7 requires that when an entity does not measure a financial asset or financial liability in its balance sheet at fair value, it should provide fair value information through supplementary disclosures to assist users in comparing entities on a consistent basis.

General Disclosures

Except for those fair value disclosures not required as set out below, for each class of financial assets and financial liabilities, an entity is required to disclose the fair value of that class of assets and liabilities in a way that permits it to be compared with its carrying amount.

In disclosing fair values, an entity is required to group financial assets and financial liabilities into classes, but is required to offset them only to the extent that their carrying amounts are offset in the balance sheet. An entity is required to disclose

- a. the methods and, when a valuation technique is used, the assumptions (e.g., relating to prepayment rates, rates of estimated credit losses, and interest rates or discount rates) applied in determining fair values of each class of financial assets or financial liabilities;
- b. whether fair values are determined, in whole or in part, directly by reference to published price quotations in an active market or are estimated using a valuation technique;
- c. whether the fair values recognised or disclosed in the financial statements are determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument (i.e., without modification or repackaging) and not based on available observable market data. For fair values that are recognised in the financial statements, if changing one or more of those assumptions to reasonably possible alternative assumptions would change fair value significantly, the entity is required to state this fact and disclose the effect of those changes. For this purpose, significance is required to be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in equity, total equity;
- d. if (c) applies, the total amount of the change in fair value estimated using such a valuation technique that was recognised in profit or loss during the period.

Disclosures When Valuation Technique Is Used

If the market for a financial instrument is not active, an entity establishes its fair value using a valuation technique. Nevertheless, the best evidence of fair value at initial recognition is the transaction price (i.e., the fair value of the consideration given or received). It follows that there could be a difference between the fair value at initial recognition and the amount that would be determined at that date using the valuation technique. If such a difference exists, an entity is required to disclose, by class of financial instrument

- a. its accounting policy for recognising that difference in profit or loss to reflect a change in factors (including time) that market participants would consider in setting a price; and
- b. the aggregate difference yet to be recognised in profit or loss at the beginning and end of the period and a reconciliation of changes in the balance of this difference.

Disclosures Not Required

Disclosures of fair value are not required:

- a. When the carrying amount is a reasonable approximation of fair value, for example, for financial instruments such as short-term trade receivables and payables;
- b. For an investment in equity instruments that do not have a quoted market price in an active market, or derivatives linked to such equity instruments, that is measured at cost in accordance with IAS 39 because its fair value cannot be measured reliably; or
- c. For a contract containing a discretionary participation feature (as described in IFRS 4) if the fair value of that feature cannot be measured reliably.

In the cases described above, an entity is required to disclose information to help users of the financial statements make their own judgements about the extent of possible differences between the carrying amount of those financial assets or financial liabilities and their fair value, including the following:

- a. The fact that fair value information has not been disclosed for these instruments because their fair value cannot be measured reliably;
- b. A description of the financial instruments, their carrying amount, and an explanation of why fair value cannot be measured reliably;
- c. Information about the market for the instruments;
- d. Information about whether and how the entity intends to dispose of the financial instruments; and
- e. If financial instruments whose fair value previously could not be reliably measured are derecognised, that fact, their carrying amount at the time of derecognition, and the amount of gain or loss recognised.

Real-life Case 18.7

France Telecom Group

France Telecom Group disclosed the following principal methods and assumptions used to estimate the fair value of financial instruments in its consolidated financial statements of 2007:

- For cash and cash equivalents, negotiable debt securities, trade receivables and trade payables, France Telecom considers their carrying amount to be the best proxy for market value, due to the short-term maturity of these instruments.

Real-life
Case 18.7

(cont'd)

- The market values of non-consolidated investments in quoted companies and listed marketable securities have been estimated based on quoted market prices at year-end. Other securities are measured using available information based on factors such as transaction value, discounted future cash flows and comparable multiples.
- The market value of financial liabilities was determined using
 - the estimated value of future cash flows, discounted using rates available to France Telecom at the end of the period for instruments with similar terms and maturities; and
 - the quoted market value for convertible, exchangeable and indexed bonds.

	Year ended 31 December 2007		Year ended 31 December 2006	
	Book value € million	Estimated fair value € million	Book value € million	Estimated fair value € million
Financial liabilities at amortised cost excluding trade payables	41,226	42,222	45,463	47,915
Financial liabilities at fair value through profit or loss, excluding derivatives	78	78	30	30
Net derivatives	1,960	1,960	1,745	1,745
Assets included in the calculation of net financial debt, excluding derivatives . .	(5,499)	(5,499)	(5,136)	(5,136)
Effective portion of cash flow hedges	215	215	(85)	(85)
Net financial debt	<u>37,980</u>	<u>38,976</u>	<u>42,017</u>	<u>44,469</u>

18.4 Disclosures – Nature and Extent of Risks

An entity is required to disclose information that enables users of its financial statements to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date (IFRS 7.31).

The disclosure requirements in respect of the nature and extent of such risks include two types of disclosures:

1. Qualitative disclosures; and
2. Quantitative disclosures.

The disclosures require focus on the risks that arise from financial instruments and how they have been managed. These risks typically include, but are not limited to, credit risk, liquidity risk and market risk. This implies that the disclosure requirements apply not only to credit risk, liquidity risk and market risk but also to other risks that may be identified by the entity for its financial instruments.

The disclosures in respect of the nature and extent of risks arising from financial instruments can be either

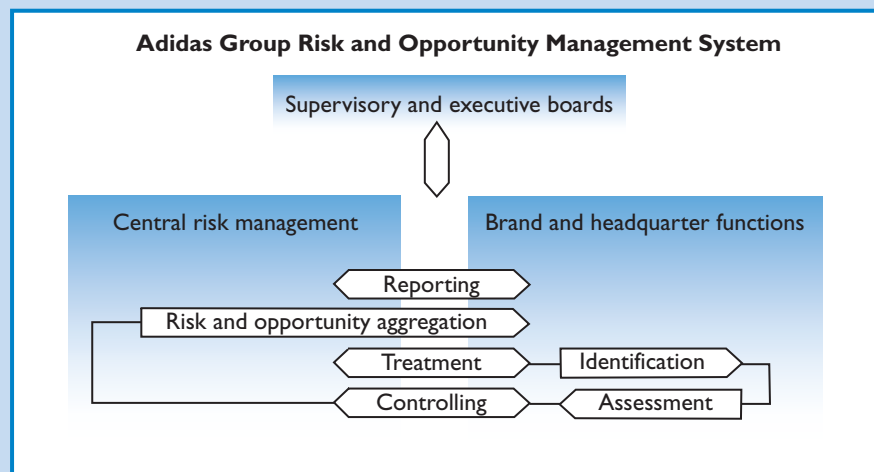
1. given in the financial statements; or
2. incorporated by cross-reference from the financial statements to some other statement, such as a management commentary or risk report, that is available to users of the financial statements on the same terms as the financial statements and at the same time. Without the information incorporated by cross-reference, the financial statements are incomplete (IFRS 7.BC46).

Real-life

Case 18.8

Adidas Group (Adidas AG Herzogenaurach) and HSBC Holdings plc

Adidas Group, a well-known worldwide brand in sport products, had a 13-page “Risk and Opportunity Report” disclosed separately from the financial statements in its annual report of 2007. The report analysed the entity’s risk and opportunity management principles and risk and opportunity management system, which was graphically summarised in the following figure:



Adidas’ analysis covered not only the financial risks but also the external and industry risks and strategic and operational risks, including macroeconomic risks, legal risks and personnel risks.

HSBC Holdings plc analysed its management of risk in the report of directors with nearly 100 pages in total. Its analysis not only covered the requirements of IFRS 7, but also extended to operational risk management, pension risk and reputational risk management. The capital management disclosure in compliance with IAS 1 was also enclosed in this section.

There are arguments that disclosures about risks arising from financial instruments in accordance with IFRS 7 should not be part of the financial statement for various reasons, for example, information would be difficult and costly to audit; the information is subjective, forward-looking and based on management's judgement; and the information does not meet the criteria of comparability, faithful representation and completeness. Concerns were also raised on the disclosure of sensitivity analysis because of reservations about its reliability and subjectivity. However, the IASB considered that financial statements would be incomplete and potentially misleading without disclosures about risks arising from financial instruments.

18.4.1 Qualitative Disclosures

Users of financial statements usually value information about the risks, such as credit risk, liquidity risk and market risk, arising from financial instruments to which entities are exposed, and the techniques used to identify, measure, monitor and control those risks. IFRS 7 thus requires that for each type of risk arising from financial instruments (i.e., credit risk, liquidity risk and market risk, see Section 18.4.2), an entity is required to disclose

1. the exposures to risk and how they arise;
2. its objectives, policies and processes for managing the risk and the methods used to measure the risk; and
3. any changes in the above two points from the previous period.

The type of qualitative information an entity might disclose to meet the above requirements includes, but is not limited to, a narrative description of

1. the entity's exposures to risk and how they arose. Information about risk exposures might describe exposures both gross and net of risk transfer and other risk-mitigating transactions;
2. the entity's policies and processes for accepting, measuring, monitoring and controlling risk, which might include
 - a. the structure and organisation of the entity's risk management functions, including a discussion of independence and accountability;
 - b. the scope and nature of the entity's risk reporting or measurement systems;
 - c. the entity's policies for hedging or mitigating risk, including its policies and procedures for taking collateral; and
 - d. the entity's processes for monitoring the continuing effectiveness of such hedges or mitigating devices.
3. The entity's policies and procedures for avoiding excessive concentrations of risk.

Entities are also required to disclose any change in the qualitative information from the previous period and explain the reasons for the change. Such changes may result from

1. changes in exposure to risk; or
2. changes in the way those exposures are managed.

Real-life

Case 18.9

Jardine Matheson Limited

In its financial statements of 2007, Jardine Matheson Limited, an entity listed in Singapore, explained its overall financial risk management as follows:

- The group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk.
- The group's treasury function coordinates, under the directions of the board of Jardine Matheson Limited, financial risk management policies and their implementation on a group-wide basis.
- The group's treasury policies are designed to manage the financial impact of fluctuations in interest rates and foreign exchange rates and to minimise the group's financial risks.
- The group uses derivative financial instruments, principally interest rate swaps, caps and collars, and forward foreign exchange contracts and foreign currency options, as appropriate for hedging transactions and managing the group's assets and liabilities in accordance with the group's financial risk management policies. Certain derivative transactions, while providing effective economic hedges under the group's risk management policies, do not qualify for hedge accounting under the specific rules in IAS 39. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting under IAS 39 are recognised immediately in the consolidated profit and loss account. It is the group's policy not to enter into derivative transactions for speculative purposes.

18.4.2 Quantitative Disclosures

For each type of risk, including credit risk, liquidity risk and market risk, arising from financial instruments, an entity is required to disclose:

1. Summary quantitative data about its exposure to that risk at the reporting date. This disclosure is required to be based on the information provided internally to key management personnel of the entity (as defined in IAS 24 *Related Party Disclosures*), for example, the entity's board of directors or chief executive officer;
2. The disclosures required below, to the extent not provided in (1), unless the risk is not material; and
3. Concentrations of risk if not apparent from (1) and (2).

Disclosures about an entity's exposure to risks arising from financial instruments should be required and based on how the entity views and manages its risks, i.e., using the information provided to key management personnel (for example, its board of directors or chief executive officer). This approach

1. provides a useful insight into how the entity views and manages risk;
2. results in information that has more predictive value than information based on assumptions and methods that management does not use, for instance, in considering the entity's ability to react to adverse situations;

3. is more effective in adapting to changes in risk measurement and management techniques and developments in the external environment;
4. has practical advantages for preparers of financial statements, because it allows them to use the data they need in managing risk; and
5. is consistent with the approach used in IFRS 8 *Operating Segments*.

When an entity (or its key management personnel) uses several methods to manage a risk exposure, the entity is required to disclose information using the method or methods that provide the most relevant and reliable information. IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* discusses relevance and reliability (see Chapter 20).

Concentrations of risk arise from financial instruments that have similar characteristics and are affected similarly by changes in economic or other conditions. The identification of concentrations of risk requires judgement taking into account the circumstances of the entity. Disclosure of concentrations of risk should include

1. a description of how management determines concentrations;
2. a description of the shared characteristic that identifies each concentration (e.g., counterparty, geographical area, currency or market); and
3. the amount of the risk exposure associated with all financial instruments sharing that characteristic.

Example 18.10 IFRS 7 requires disclosure of quantitative data about concentrations of risk. For example, concentrations of credit risk may arise from the following:

1. Industry sectors – If an entity’s counterparties are concentrated in one or more industry sectors (such as retail or wholesale), it would disclose separately exposure to risks arising from each concentration in terms of industry sections of counterparties;
2. Credit rating or other measure of credit quality – If an entity’s counterparties are concentrated in one or more credit qualities (such as secured loans or unsecured loans) or in one or more credit ratings (such as investment grade or speculative grade), it would disclose separately exposure to risks arising from each concentration in terms of credit rating or one or more credit ratings of counterparties;
3. Geographical distribution – If an entity’s counterparties are concentrated in one or more geographical markets (such as Asia or Europe), it would disclose separately exposure to risks arising from each concentration in terms of geographical distribution of counterparties;
4. A limited number of individual counterparties or groups of closely related counterparties.

Similar principles apply to identifying concentrations of other risks, including liquidity risk and market risk. For example:

- Concentrations of liquidity risk may arise from the repayment terms of financial liabilities, sources of borrowing facilities or reliance on a particular market in which to realise liquid assets.
- Concentrations of foreign exchange risk may arise if an entity has a significant net open position in a single foreign currency, or aggregate net open positions in several currencies that tend to move together.

If the quantitative data disclosed as at the reporting date are unrepresentative of an entity's exposure to risk during the period, an entity is required to provide further information that is representative. To meet this requirement, an entity might disclose the highest, lowest and average amount of risk to which it was exposed during the period.

Example 18.11 When an entity typically has a large exposure to a particular currency, but at year-end it unwinds the position, the entity might disclose a graph that shows the exposure at various times during the period, or disclose the highest, lowest and average exposures during the period.

18.5 Disclosures for Credit Risk

In addition to the qualitative disclosure and quantitative disclosure requirements on each type of risk arising from financial instruments, IFRS 7 specifically identifies and requires certain minimum disclosures on three kinds of risk arising from financial instruments – credit risk, liquidity risk and market risk. This section and the following two sections explain the relevant disclosure requirements for these three kinds of risk.

18.5.1 Maximum Exposure and Credit Quality

In order to provide users of financial statements with a consistent measure of an entity's exposure to credit risk, an entity is required to disclose the following by class of financial instrument:

1. The amount that best represents its maximum exposure to credit risk at the reporting date without taking account of any collateral held or other credit enhancements (e.g., netting agreements that do not qualify for offset in accordance with IAS 32);
2. In respect of the amount disclosed in (1) above, a description of collateral held as security and other credit enhancements;

3. Information about the credit quality of financial assets that are neither past due nor impaired; and
4. The carrying amount of financial assets that would otherwise be past due or impaired whose terms have been renegotiated.

Credit risk is defined as the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

A financial asset is **past due** when a counterparty has failed to make a payment when contractually due.

IFRS 7 requires an entity to disclose information about its exposure to credit risk by class of financial instrument. Financial instruments in the same class share economic characteristics with respect to the risk being disclosed, i.e., credit risk in this case. For example, an entity might determine that residential mortgages, unsecured consumer loans and commercial loans each have different economic characteristics.

Example 18.12 Activities that give rise to credit risk and the associated maximum exposure to credit risk include, but are not limited to, the following:

Credit risk exposure	Maximum exposure to credit risk
1. Granting loans and receivables to customers and placing deposits with other entities	• The carrying amount of the related financial assets
2. Entering into derivative contracts, e.g., foreign exchange contracts, interest rate swaps and credit derivatives	• The carrying amount (when the resulting asset is measured at fair value)
3. Granting financial guarantees	• The maximum amount the entity could have to pay if the guarantee is called on, which may be significantly greater than the amount recognised as a liability
4. Making a loan commitment that is irrevocable over the life of the facility or is revocable only in response to a material adverse change	• The full amount of the commitment (if the issuer cannot settle the loan commitment net in cash or another financial instrument, because it is uncertain whether the amount of any undrawn portion may be drawn upon in the future and this may be significantly greater than the amount recognised as a liability)

Information about credit quality gives a greater insight into the credit risk of assets and helps users assess whether such assets are more or less likely to become impaired in the future. Because this information will vary between entities, IFRS 7 does not specify a particular method for giving this information, but rather allows each entity to devise a method that is appropriate to its circumstances.

Example 18.13 In disclosing information about the credit quality of financial assets with credit risk that are neither past due nor impaired, an entity might disclose the following information:

1. An analysis of credit exposures using an external or internal credit grading system;
2. The nature of the counterparty;
3. Historical information about counterparty default rates; and
4. Any other information used to assess credit quality.

18.5.2 Financial Assets That Are Either Past Due or Impaired

An entity is required to disclose the following by class of financial asset:

1. An analysis of the age of financial assets that are past due as at the reporting date but not impaired;
2. An analysis of financial assets that are individually determined to be impaired as at the reporting date, including the factors the entity considered in determining that they are impaired; and
3. For the amounts disclosed in (1) and (2), a description of collateral held by the entity as security and other credit enhancements and, unless impracticable, an estimate of their fair value.

Example 18.14 Based on IFRS 7, Melody Limited uses its judgement to determine the following time bands:

1. Not more than 3 months;
2. More than 3 months and not more than 6 months;
3. More than 6 months and not more than 1 year; and
4. More than 1 year.

Separate disclosure required on financial assets that are past due or impaired can provide users with information about financial assets with the greatest credit risk as follows:

1. The analysis of age for financial assets that are past due but not impaired provides users with information about those financial assets that are more likely to become impaired and helps users to estimate the level of future impairment losses; and
2. The analysis of impaired financial assets (including analysis by factors) helps users to understand why the impairment occurred. Factors other than age include nature of the counterparty, or geographical analysis of impaired assets.

Real-life**Case 18.10 Hong Kong Exchanges and Clearing Limited**

Hong Kong Exchanges and Clearing Limited disclosed the age analysis of its trade receivables that were past due but not determined to be impaired according to the period past due in its annual report of 2007 as follows:

	At 31 December 2007 \$'000	At 31 December 2006 \$'000
Up to 6 months	271,196	186,359
Over 6 months to 1 year	1	–
Over 1 year to 3 years	2	–
Over 3 years*	8,651	8,651
Total	<u>279,850</u>	<u>195,010</u>

* No provision for impairment losses has been made against trade receivables amounting to \$8,510,000 (2006: \$8,510,000) as the balances can be recovered from the Clearing House Funds.

18.5.3 Collateral and Other Credit Enhancements Obtained

When an entity obtains financial or non-financial assets during the period by taking possession of collateral it holds as security or calling on other credit enhancements (e.g., guarantees), and such assets meet the recognition criteria in other IFRSs, an entity is required to disclose

1. the nature and carrying amount of the assets obtained; and
2. when the assets are not readily convertible into cash, its policies for disposing of such assets or for using them in its operations.

This provides information about the frequency of such activities and the entity's ability to obtain and realise the value of the collateral.

18.6 Disclosures for Liquidity Risk

In order to help the users of the financial statements assess the liquidity risk exposed to an entity, IFRS 7 requires disclosure of a maturity analysis for financial liabilities

showing the remaining earliest contractual maturities. The disclosure based on the earliest contractual maturity date is required because this disclosure shows a worst-case scenario.

Liquidity risk is defined as the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities.

Before IFRS 7, contractual maturity analysis together with effective interest rate analysis was required by IAS 32 for interest rate risk disclosure. IFRS 7 now requires an entity to disclose the following for liquidity risk disclosure:

1. A maturity analysis for financial liabilities that shows the remaining contractual maturities; and
2. A description of how it manages the liquidity risk inherent in (1).

Real-life

Case 18.11

Jardine Matheson Limited

In its financial statements of 2007, Jardine Matheson Limited had a concise description of its liquidity risk management and summary quantitative information for liquidity risk as follows:

- Prudent liquidity risk management includes managing the profile of debt maturities and funding sources, maintaining sufficient cash and marketable securities, and ensuring the availability of funding from an adequate amount of committed credit facilities and the ability to close out market positions.
- The group's ability to fund its existing and prospective debt requirements is managed by maintaining diversified funding sources with adequate committed funding lines from high-quality lenders.
- At 31 December 2007, total available borrowing facilities amounted to US\$6.5 billion (2006: US\$7.5 billion), of which US\$4 billion (2006: US\$5.4 billion) was drawn down. Undrawn committed facilities, in the form of revolving credit and term loan facilities, totalled US\$1.8 billion (2006: US\$1.6 billion).

In preparing the contractual maturity analysis for financial liabilities, an entity uses its judgement to determine an appropriate number of time bands. When a counterparty has a choice of when an amount is paid, the liability is included on the basis of the earliest date on which the entity can be required to pay. When an entity is committed to making amounts available in instalments, each instalment is allocated to the earliest period in which the entity can be required to pay.

Example 18.15 Melody Limited, based on the requirement to disclose contractual maturity for its financial liabilities, determines that the following time bands are appropriate:

1. Not later than 1 month;
2. Later than 1 month and not later than 3 months;
3. Later than 3 months and not later than 1 year; and
4. Later than 1 year and not later than 5 years.

Financial liabilities that Melody can be required to repay on demand (e.g., demand deposits) are included in the earliest time band, i.e., not later than 1 month. Its undrawn loan commitment is included in the time band containing the earliest date it can be drawn down.

Real-life

Case 18.12 BASF Aktiengesellschaft

In contrast to disclosing the time band, BASF Aktiengesellschaft, one of the largest chemical entities, disclosed its maturities of contractual cash flows (in millions of euro) from financial liabilities by exact maturity years in its annual report of 2007 as follows:

	Bond and other liabilities to the capital markets € million	Liabilities to credit institutions € million	Liabilities resulting from derivative financial instruments € million	Miscellaneous liabilities € million
2008	2,780.8	688.8	82.8	1,410.3
2009	845.4	95.6	7.3	161.3
2010	1,560.1	88.9	0.5	38.9
2011	1,194.9	87.7	18.4	45.1
2012	1,555.0	82.4	–	30.0
2013 and thereafter ..	2,695.9	247.4	1.8	370.0
	<u>10,632.1</u>	<u>1,290.8</u>	<u>110.8</u>	<u>2,055.6</u>

The amounts disclosed in the maturity analysis are the contractual undiscounted cash flows. Such undiscounted cash flows differ from the amount included in the balance sheet because the amount in the balance sheet is based on discounted cash flows. If appropriate, an entity is also required to disclose the analysis of derivative financial instruments separately from that of non-derivative financial instruments in the contractual maturity analysis for financial liabilities.

Example 18.16 The contractual undiscounted cash flows disclosed by Melody Limited in the maturity analysis include

1. gross finance lease obligations (before deducting finance charges);
2. prices specified in forward agreements to purchase financial assets for cash;
3. net amounts for pay-floating/receive-fixed interest rate swaps for which net cash flows are exchanged;
4. contractual amounts to be exchanged in a derivative financial instrument (e.g., a currency swap) for which gross cash flows are exchanged; and
5. gross loan commitments.

When the amount payable is not fixed, the amount disclosed is determined by reference to the conditions existing at the reporting date. For example, when the amount payable varies with changes in an index, the amount disclosed may be based on the level of the index at the reporting date.

18.7 Disclosures for Market Risk

Market risk is the most complicated kind of risk required for disclosure in IFRS 7. It comprises at least three other kinds of risk under the definition set out in IFRS 7.

Market risk is defined as

- being the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices; and
- comprising three types of risk:
 - Currency risk;
 - Interest rate risk; and
 - Other price risk.

The quantitative disclosure requirements of IFRS 7 in respect of market risk focus on the sensitivity analysis for the market risk. To disclose the sensitivity analysis, an entity can choose either one of the following two approaches:

1. Sensitivity analysis for each type of market risk (simple sensitivity analysis);
2. Sensitivity analysis reflecting interdependencies between risk variables (interdependency sensitivity analysis).

When both sensitivity analysis issues are still unrepresentative of a risk inherent in a financial instrument, the entity is required to disclose additional details.

18.7.1 Simple Sensitivity Analysis

An entity is required to have simple sensitivity analysis, unless it chooses to disclose interdependency sensitivity analysis. It is required to disclose

1. a sensitivity analysis for each type of market risk (i.e., simple sensitivity analysis) to which the entity is exposed at the reporting date, showing how profit or loss and equity would have been affected by changes in the relevant risk variable that were reasonably possible at that date;
2. the methods and assumptions used in preparing the sensitivity analysis; and
3. changes from the previous period in the methods and assumptions used, and the reasons for such changes.

Real-life**Case 18.13 Deutsche Telekom Group**

The Deutsche Telekom Group or Deutsche Telekom AG, Bonn, which named itself as one of the world's leading service providers in the telecommunications and information technology sector, adopted simple sensitivity analysis in addressing the market risk, mainly currency risk and interest rate risk. Its annual report of 2007 explains the sensitivity analysis on interest rate risk as follows:

- If the market interest rates had been 100 basis points higher (lower) at 31 December 2007, profit or loss would have been €170 million (31 December 2006: €254 million) lower (higher).
- The hypothetical effect of €170 million on income results from the potential effects of €113 million from interest rate derivatives and €57 million from non-derivative, variable-interest financial liabilities. If the market interest rates had been 100 basis points higher (lower) at 31 December 2007, shareholders' equity would have been €50 million (31 December 2006: €27 million) higher (lower).

IFRS 7 requires disclosure of a sensitivity analysis for each type of market risk because:

1. Users have consistently emphasised the fundamental importance of sensitivity analysis;
2. A sensitivity analysis can be disclosed for all types of market risk and by all entities, and it is relatively easy to understand and calculate; and
3. It is suitable for all entities (including non-financial entities) that have financial instruments. It is supported by disclosures of how the entity manages the risk. Thus, it is a simpler and more suitable disclosure than other approaches, including the disclosures of terms and conditions and the gap analysis of interest rate risk previously required by IAS 32.

In order to disclose the simple sensitivity analysis, an entity should

1. decide how many details it provides, how much emphasis it places and how it aggregates information to display as set out in Section 18.3.1;
2. identify each type of market risk to which the entity is exposed and the relevant risk variable at the reporting date;
3. judge the reasonably possible changes in the relevant risk variables at the reporting date; and

4. calculate and show how profit or loss and equity would be affected (by reasonably possible changes in the relevant risk variables) at the reporting date.

18.7.1.1 Decide How Many Details to Provide

In ascertaining the simple sensitivity analysis, an entity should decide how it aggregates information to display the overall picture without combining information with different characteristics about exposure to risk from significantly different economic environments.

Example 18.17 In separating information for sensitivity analysis, an entity that trades financial instruments might disclose this information separately for

- the financial instruments held for trading; and
- the financial instruments not held for trading.

In aggregating information for sensitivity analysis, an entity would not aggregate

- its exposure to market risks from areas of hyperinflation; and
- its exposure to the same market risks from areas of very low inflation.

If an entity has exposure to only one type of market risk in only one economic environment, it would not show disaggregated information.

18.7.1.2 Identify Each Type of Market Risk and Relevant Risk Variable

Market risk, as defined in IFRS 7, comprises at least three types of risk – currency risk, interest rate risk and other price risk. To disclose the simple sensitivity analysis, an entity should examine its financial instruments to identify “each type of market risk” involved in these financial instruments and the “relevant risk variables”.

1. Currency Risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

Currency risk (or foreign exchange risk) arises on financial instruments that are denominated in a foreign currency, i.e., in a currency other than the functional currency in which they are measured. For the purposes of IFRS 7, currency risk does not arise from financial instruments that are non-monetary items or from financial instruments denominated in the functional currency.

The relevant risk variable for currency risk is usually the foreign exchange rate for each currency. A sensitivity analysis is disclosed for each currency to which an entity has significant exposure.

2. Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

Interest rate risk arises on interest-bearing financial instruments recognised in the balance sheet (e.g., loans and receivables and debt instruments issued) and on some financial instruments not recognised in the balance sheet (e.g., some loan commitments).

The relevant risk variable for interest rate risk may include the prevailing market interest rates or the yield curve of market interest rates. In the yield curve, it may be necessary to consider both parallel and non-parallel shifts.

3. Other Price Risk

Other price risk is defined as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

Other price risk arises on financial instruments because of changes in, for example, commodity prices or equity prices. Other price risk may include risks such as equity price risk, commodity price risk, prepayment risk and residual value risk.

Example 18.18 The following financial instruments give rise to equity price risk:

1. A holding of equity instruments in another entity;
2. An investment in a trust that in turn holds investments in equity instruments;
3. A holding of forward contracts and options to buy or sell specified quantities of an equity instrument; and
4. A holding of swaps that are indexed to equity prices.

The fair values of these financial instruments are affected by changes in the market price of the underlying equity instruments.

The relevant risk variable for other price risk may depend on the type of other price risk involved and include prices of equity instruments and market prices of commodities. To comply with IFRS 7, an entity may disclose the effect of a decrease in a specified stock market index, commodity price or other risk variable. For example,

if an entity gives residual value guarantees that are financial instruments, the entity discloses an increase or decrease in the value of the assets to which the guarantee applies.

Financial instruments that an entity classifies as equity instruments are not re-measured. Neither profit or loss nor equity will be affected by the equity price risk of those instruments. Accordingly, no sensitivity analysis is required.

4. Risk Mapping

An entity often has various kinds of financial instruments, and these financial instruments may also be exposed to more than one kind of market risk. In order to identify each type of market risk exposure of its financial instruments, an entity may consider having a mapping of risk (risk mapping or market risk mapping) to identify and analyse its financial instruments and correlate them with the type of market risk involved.

Example 18.19 Melody Finance Limited, with a functional currency of US dollars, holds an equity investment in US dollars amounting to \$100,000 and a bond in euros with a variable interest rate amounting to \$240,000. To identify the relevant risk and risk variable involved, Melody adopted the following risk mapping:

Exposure	Carrying amount	Currency risk (euros)	Interest rate risk	Other price risk
Relevant risk variable		Exchange rate	Interest rate	Equity price
Equity instruments.	\$100,000	–	–	\$100,000
Bond in euros	\$320,000	€320,000	\$320,000	–
Total exposure.	\$420,000	€320,000	\$320,000	\$100,000

The risk mapping approach can also be employed to identify the credit risk and liquidity involved in financial instruments. The risk map can also help in ascertaining the final sensitivity calculation in Section 18.7.1.4 (see Example 18.23).

18.7.1.3 Judge Reasonably Possible Changes

In determining what a “reasonably possible change” in the relevant risk variable is, an entity should consider

1. the economic environments in which it operates; and
2. the time frame over which it is making the assessment.

A reasonably possible change should not include remote or “worst-case” scenarios or “stress tests”. If the rate of change in the underlying risk variable is stable, the entity need not alter the chosen reasonably possible change in the risk variable.

Example 18.20 In 2007, when the interest rate was 7%, Tony Limited determined that a fluctuation in interest rate of ± 100 basis points (or 1%) was reasonably possible. It would disclose the effect on profit or loss and equity if interest rates were to change to 6% or 8%.

At the end of 2007, interest rates decreased to 6%. Tony could continue to believe that interest rates might fluctuate by ± 100 basis points (i.e., that the rate of change in interest rates was stable). Tony would disclose the effect on profit or loss and equity if interest rates were to change to 5% or 7%. Tony would not be required to revise its assessment that interest rates might reasonably fluctuate by ± 100 basis points, unless there was evidence that interest rates had become significantly more volatile.

For the time frame, IFRS 7 requires that the sensitivity analysis shows the effects of changes that are considered to be reasonably possible over the period until the entity will next present these disclosures, which is usually its next annual reporting period or 1 year.

Real-life

Case 18.14 Reasonably Possible Changes Assessed by Different Entities

To determine the reasonably possible changes in the relevant risk variables, different entities may have different assessments. Below is an extract of the assessment of different entities for 2007:

Entity name	Location	Currency change	Interest rate change	Other price change
BASF	Germany	10%	1%	10%
BP plc	United Kingdom	–	–	10%
CLP Holdings Ltd.	Hong Kong	1%	0.5%	15%
DBS Group	Singapore	10%	0.25%	10%
Deutsche Telekom	Germany	10%	1%	Not material
France Telecom	France	10%	1%	Not material
Jardine Matheson Ltd.	Singapore	10%	1%	25%
Zijin Mining	China	10%	1%	Not material

18.7.1.4 Calculate How Profit or Loss and Equity May Be Affected

IFRS 7 requires the sensitivity analysis to show the effect on profit or loss and equity of reasonably possible changes in the relevant risk variable (e.g., prevailing market interest rates, currency rates, equity prices or commodity prices). For this purpose:

1. Entities are not required to determine what the profit or loss for the period would have been if relevant risk variables had been different. Instead, entities disclose the effect on profit or loss and equity at the balance sheet date assuming that a reasonably possible change in the relevant risk variable had occurred at the balance sheet date and had been applied to the risk exposures in existence at that date;
2. Entities are not required to disclose the effect on profit or loss and equity for each change within a range of reasonably possible changes of the relevant risk variable. Disclosure of the effects of the changes at the limits (i.e., the upper and lower limits) of the reasonably possible range would be sufficient.

Example 18.21 For interest rate risk, the sensitivity analysis might show separately the effect of a change in market interest rates on

1. interest income and expense;
2. other line items of profit or loss (such as trading gains and losses); and
3. when applicable, equity.

IFRS 7 requires separate disclosure on

- the sensitivity of profit or loss (that arises, for example, from instruments classified as at fair value through profit or loss and impairments of available-for-sale financial assets); and
- the sensitivity of equity (that arises, for example, from instruments classified as available-for-sale).

Example 18.22 In determining the sensitivity resulting from the relevant risk variables, the effect on profit or loss and on equity should be separated and calculated independently. For example, a price change may affect the fair value of equity instruments classified as at fair value through profit or loss and of equity instruments classified as available-for-sale financial assets.

A price change affecting the fair value of equity instruments classified as at fair value through profit or loss will impact the profit for the year and the equity balance simultaneously. However, a price change affecting the fair value of equity instruments classified as available-for-sale financial assets will impact the equity balance, but not the profit for the year (unless there is an ultimate effect on the impairment loss recognised).

Real-life

Case 18.15 Jardine Matheson Limited

Jardine Matheson Limited in its annual report of 2007 clarified a price change on available-for-sale equity investments with effect on equity only as follows:

- At 31 December 2007, if the price of listed and unlisted available-for-sale equity investments had been 25% higher/lower with all other variables held constant, total equity would have been US\$185 million (2006: US\$149 million) higher/lower. The sensitivity analysis has been determined based on a reasonable expectation of possible valuation volatility over the next 12 months.

In order to ascertain the final result of simple sensitivity analysis, the risk mapping approach illustrated in Section 18.7.1.2 can also help in correlating the individual exposure to each type of market risk with the reasonably possible changes in the relevant risk variables.

Example 18.23 Melody Finance Limited (based on Example 18.19), with a functional currency of US dollars, holds an equity investment in US dollars amounting to \$100,000 and a bond in euros with a variable interest rate amounting to \$240,000 (which is equal to the principal amount). Melody has performed the risk mapping in Example 18.9 and identified the relevant risk and risk variable involved in its financial instruments.

Melody has classified all its equity instruments as available-for-sale financial assets and bonds as loans and receivables. It is also subject to a corporate tax rate of 10% on all revenue and expenses. The current US dollar-euro exchange rate is US\$1.60 to €1. By assuming reasonably possible changes of the euro exchange rate and equity price at 10% and of interest rate at 50 basis points (or 0.5%), Melody has completed its risk mapping and ascertained the simple sensitivity of its financial instruments as follows:

Exposure	Carrying amount	Currency risk (euro)	Interest rate risk	Other price risk
Relevant risk variable		Exchange rate	Interest rate	Equity price
Equity instruments	\$100,000	–	–	\$100,000
Bond in euros	\$320,000	€320,000	\$320,000	–
Total exposure	\$420,000	€320,000	\$320,000	\$100,000
Reasonably possible change		10%	0.5%	10%
Sensitivity before tax		€32,000	\$1,600	\$10,000
Sensitivity after tax (tax rate at 10%)		€28,800	\$1,440	\$9,000
Impact of sensitivity		P/L and equity	P/L and equity	Equity only

Since Melody has classified its equity investments as available-for-sale financial assets, the sensitivity resulting from them will only impact equity, unless the downside risk triggers the recognition of an impairment loss.

18.7.1.5 Limitations of Simple Sensitivity Analysis

Information provided by a simple sensitivity analysis would not be comparable across entities. This is because the methodologies used to prepare the sensitivity analysis and the resulting disclosures would vary according to the nature of the entity and the complexity of its risk management systems.

The IASB also acknowledged that a simple sensitivity analysis that shows a change in only one variable has limitations. For example, the analysis may not reveal:

1. The effects of interdependencies between variables, or
2. The non-linearities in sensitivities.

To address the first concern, a more complex sensitivity analysis that takes into account the interdependencies between risks can be required. Although more informative, such an analysis is also more complex and costly to prepare. Accordingly, IFRS 7 does not require such an analysis, but only permits its disclosure as an alternative to the minimum requirement when it is used by management to manage risk (see Section 18.7.2).

To address the second concern, IFRS 7 requires additional disclosure when the sensitivity analysis is unrepresentative of a risk inherent in a financial instrument (see Section 18.7.3).

18.7.2 Interdependency Sensitivity Analysis

If an entity prepares a sensitivity analysis, such as value-at-risk, that reflects interdependencies between risk variables, e.g., interest rates and exchange rates (interdependency sensitivity analysis), and uses it to manage financial risks, it may use that sensitivity analysis in place of the sensitivity analysis for each type of market risk. The entity is required to also disclose

1. an explanation of the method used in preparing such a sensitivity analysis, and of the main parameters and assumptions underlying the data provided; and
2. an explanation of the objective of the method used and of limitations that may result in the information not fully reflecting the fair value of the assets and liabilities involved.

Example 18.24 Melody Limited uses value-at-risk in managing its financial risks and is required to disclose the following information in accordance with IFRS 7:

1. The type of value-at-risk model used (e.g., whether the model relies on variance-covariance, historical simulations or Monte Carlo simulations);
2. An explanation of how the model works and the main assumptions (e.g., the holding period and confidence level);
3. The historical observation period and weightings applied to observations within that period (e.g., if variance-covariance approach or historical simulation is used);
4. An explanation of how options are dealt with in the calculations; and
5. Which volatilities and correlations (or, alternatively, Monte Carlo probability distribution simulations) are used.

Real-life

Case 18.16 HSBC Holdings plc

In its director’s report, HSBC Holdings plc, one of the largest banking corporations, used almost 100 pages to explain its risk management. It also explained that it used a range of tools to monitor and limit market risk exposures. These included value-at-risk (VaR), sensitivity analysis and stress testing. The following table given by HSBC provides an overview of the tools used:

Risk type	Portfolio	
	Trading	Non-trading
Foreign exchange.....	VaR	VaR
Interest rate.....	VaR	VaR
Commodity.....	VaR	N/A
Equity.....	VaR	Sensitivity
Credit spread.....	Sensitivity	Sensitivity

Based on the above table, it is obvious that HSBC used the VaR model in most risk types, and HSBC further explained its VaR model predominantly based on historical simulation and its historical simulation models incorporating the following features:

- Potential market movements are calculated with reference to data from the past 2 years;
- Historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- VaR is calculated to a 99% confidence level; and
- VaR is calculated for a 1-day holding period.

**Real-life
Case 18.16**
(cont'd)

However, HSBC also stated that although it was a valuable guide to risk, VaR should always be viewed in the context of its limitations, for example:

- The use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those that are extreme in nature;
- The use of a 1-day holding period assumes that all positions can be liquidated or hedged in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a 1-day holding period may be insufficient to liquidate or hedge all positions fully;
- The use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence;
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- VaR is unlikely to reflect loss potential on exposures that arise only under significant market moves.

IFRS 7 permits an entity to use the interdependency sensitivity analysis so long as the entity uses such analysis to manage its exposure to financial risks. This applies even if such a methodology measures only the potential for loss and does not measure the potential for gain. For example, a value-at-risk amount would not show the effect on profit or loss or equity. Entities that manage on the basis of value-at-risk would not want to prepare a separate simple sensitivity analysis solely for the purpose of the disclosure of IFRS 7. Thus, the entities may choose to use such value-at-risk analysis as the alternative disclosure.

The objective of IFRS 7 is to require disclosures about sensitivity, not to mandate a particular form of sensitivity disclosure. Therefore, if an alternative disclosure of sensitivity is made, IFRS 7 does not require disclosure of the effects on profit or loss and equity.

An entity is required to provide sensitivity analyses for the whole of its business, but may still provide different types of sensitivity analysis for different classes of financial instruments.

**Real-life
Case 18.17**
Value-at-risk Analysis Used by Different Entities

Entities can use value-at-risk analysis in managing their financial risk in different manners with different assumptions and use different models or methods of value-at-risk analysis, including variance-covariance methodology (VS), historical simulation (HS) and Monte Carlo simulation (MC). Below is an extract of the manner and model of value-at-risk analysis for 2007:

Real-life
Case 18.16

(cont'd)

Entity name	Location	Time horizon	Confidence	Model	Coverage
BASF	Germany	1 day	95%	VC	Commodity
BMW	Germany	3 months	99%	HS	Interest
BP plc	United Kingdom	24 hours	95%	VC or HS	Market risk
CLP	Hong Kong	4 weeks	95%	VC	Energy price
DBS Group	Singapore	1 day	99%	HS	Trading market risk
HKEx	Hong Kong	10 days	95%	HS	Market risk
HSBC	United Kingdom	1 day	99%	HS	Market risk
Nokia	Finland	1 month	95%	VC or MC	Market risk
Shell	United Kingdom	24 hours	95%	VC or MC	Price risk

18.7.3 Other Market Risk Disclosures

When the sensitivity analyses disclosed in accordance with the above requirements (including sensitivity analysis) are unrepresentative of a risk inherent in a financial instrument (for example because the year-end exposure does not reflect the exposure during the year), the entity is required to disclose

1. that fact; and
2. the reason it believes the sensitivity analyses are unrepresentative.

Example 18.25 The sensitivity analysis disclosed for the following cases is unrepresentative of a risk inherent in the financial instruments:

1. A financial instrument contains terms and conditions whose effects are not apparent from the sensitivity analysis, e.g., options that remain out of (or in) the money for the chosen change in the risk variable;
2. Financial assets are illiquid, e.g., when there is a low volume of transactions in similar assets and an entity finds it difficult to find a counterparty;
3. An entity has a large holding of a financial asset that, if sold in its entirety, would be sold at a discount or premium to the quoted market price for a smaller holding.

Discuss the relevant additional information required for these cases.

Answers

1. For a financial instrument containing terms and conditions whose effects are not apparent from the sensitivity analysis, additional disclosure might include
 - a. the terms and conditions of the financial instrument (e.g., the options);

- b. the effect on profit or loss if the term or condition were met (i.e., if the options were exercised); and
 - c. a description of how the risk is hedged.
 2. For illiquid financial assets, additional disclosure might include
 - a. the reasons for the lack of liquidity; and
 - b. how the entity hedges the risk.
 3. For a large holding of a financial asset, additional disclosure might include
 - a. the nature of the security (e.g., entity name);
 - b. the extent of holding (e.g., 15% of the issued shares);
 - c. the effect on profit or loss; and
 - d. how the entity hedges the risk.

18.8 Summary

The presentation requirements of financial instruments are addressed in IAS 32, and their disclosure requirements are covered in IFRS 7. The issuer of a financial instrument is required to classify and present the instrument in accordance with the instrument's substance. Equity instruments can only be those instruments without a contractual obligation to deliver cash or a financial asset and to settle by a variable number of the issuer's own equity instrument. A compound financial instrument is also classified and presented in the same manner, and separation may thus be required.

Treasury shares represent an entity's purchase of its own equity instruments. They can only be recognised and presented in equity, and no gain or loss can be recognised in whatever manner. Interests, dividends, losses and gains (no matter how they have been named) relating to the financial liabilities are recognised in profit or loss, while distributions to holders of an equity instrument are debited to equity directly.

Disclosures of financial instruments can be largely divided into disclosure of the significance of financial instruments and disclosure of the nature and risk arising from financial instruments. The disclosures require a proper grouping of the financial instruments and proper reconciliation to the items presented in the balance sheet. The significance of financial instruments is divided into the significance for financial position, the significance for financial performance and other significance. The significance disclosure is aligned with the categories of measurement in IAS 39 and provides users with information to understand the impact of the measurement.

An entity is also required to disclose information to enable users to evaluate the nature and extent of risk arising from the financial instruments it exposed. The disclosures are divided into qualitative and quantitative disclosures, and the risks involved include credit risk, liquidity risk and market risk.

Qualitative disclosures require an entity to disclose the exposure to risk, the source of exposure and the entity's objective, policies and processes for managing

the risk. Quantitative disclosures require summary quantitative data for each risk and any concentration of risk. Specific quantitative disclosure requirements impose on credit risk (including maximum exposure), liquidity risk (contractual maturity analysis) and market risk (sensitivity analysis). Sensitivity analysis can be completed by simple sensitivity analysis or interdependency sensitivity analysis if an entity uses it to manage risks. If the disclosure is still unrepresentative of the risk exposed by an entity, additional disclosures are required.

Review Questions

1. What are the differences between IAS 32 and IAS 39 and their coverage?
2. When is a financial instrument classified as an equity instrument?
3. What is the implication when a contract requires a settlement of an entity's own equity instruments?
4. What is a treasury share?
5. State the accounting treatment for treasury shares.
6. When is a dividend declared by an entity recognised as the entity's expense?
7. Discuss the offsetting requirements for financial instruments.
8. State the disclosure requirements on the categories of financial assets and financial liabilities in the balance sheet.
9. What kinds of additional disclosure requirements are imposed on loans and receivables and financial liabilities designated as at fair value through profit or loss?
10. List the disclosure requirements for reclassification of financial instruments.
11. State the disclosure requirements for the income statement items relating to financial instruments.
12. What is the qualitative disclosure for the nature and risk arising from financial instruments?
13. What are the general quantitative disclosures for each type of risk arising from financial instruments?
14. What is the purpose of having quantitative disclosure?
15. What is concentration of risk?
16. Define credit risk and liquidity risk.
17. Define market risk.
18. Define currency risk, interest rate risk and other price risk.
19. What kinds of sensitivity analysis can an entity choose to disclose?
20. Discuss the approach to ascertain and disclose simple sensitivity analysis.
21. How does an entity determine a reasonably possible change in the relevant risk variable?
22. Discuss the limitation of simple sensitivity analysis.
23. What kinds of disclosure should be made when the sensitivity analysis is unrepresentative of a risk inherent in a financial instrument?

Exercises

Exercise 18.1 Mar-Co Singapore Limited adopted IFRS in preparing its financial statements. Its major shareholder, Mr Mar Cohan, provides a loan of \$20 million to Mar-Co as a backup fund for contingency use, and Mar-Co deposits the same amount of funds to a bank as a 24-hour call deposit. Mar-Co proposes to present the bank deposit together with the loan as the same line item in the balance sheet and only separately disclose them in the notes to the financial statements.

Evaluate the proposal of Mar-Co.

Exercise 18.2 Catherine Ho is preparing the risk analysis for her company and considers that no market risk analysis is required on the held-to-maturity investments owned by the company. She argues that the held-to-maturity investments are carried at cost and any changes in market price will not affect the sensitivity in profit or loss and equity.

Advise Catherine on the definition of market risk and evaluate her argument.

Exercise 18.3 After your explanation, Catherine is still not convinced of the disclosure of sensitivity analysis, in particular, the simple sensitivity analysis (i.e., analysis for each type of market risk), for its held-to-maturity as she considers that there are limitations to simple sensitivity analysis.

Advise Catherine on the limitations of simple sensitivity analysis and any alternatives to address the limitations.

Problems

Problem 18.1 The outstanding equity instruments of Advance Pioneer Limited (APL) amount to 10 million shares with \$100 million balance in the balance sheet. During the year, it acquired 500,000 shares of its own equity instruments from the open market at \$9 each, since APL considered that its equity instruments were undervalued by the market. APL proposes to hold the shares as financial assets in the balance sheet and to revalue them at fair value by using the current bid price in the open market.

Required:

Evaluate APL's proposal and suggest proper treatment for the transaction.

Problem 18.2 MoreDon Limited acquires a zero-cost interest rate collar that includes an out-of-the-money leveraged written option (e.g., the entity pays ten times the amount of the difference between a specified interest rate floor and the current market interest rate). It regards the collar as an inexpensive economic hedge against a reasonably possible increase in interest rates.

However, an unexpectedly large decrease in interest rates triggers payments under the written option that, because of the leverage, is significantly larger than the benefit of lower interest rates. Neither the fair value of the collar nor a sensitivity

analysis based on reasonably possible changes in market variables would indicate this exposure.

Discuss and identify what information for the collar should be disclosed.

Problem 18.3 In mid-2007, Pioneer Financial Engineering Inc. initialised a portfolio of mortgage-backed loans receivable with fixed-interest income and fixed-principal repayment at a fair value of \$2.35 million to its major customers. The properties of the customers were held by Pioneer as collateral to the loan portfolio.

For its financial reporting purposes, Pioneer considered whether the portfolio should be designated as at fair value through profit or loss or accounted for as loans and receivables. However, it expected that a significant impairment loss would be required on the portfolio due to the market sentiment in late 2007. In consequence, it considered that the treatment of the portfolio designated as at fair value through profit or loss might exempt it from the assessment of impairment and avoid other related disclosures.

Discuss the disclosure requirements if the portfolio is designated as at fair value through profit or loss.

Problem 18.4 Pioneer Financial Engineering Inc. in Problem 18.3 finally decided to account for the mortgage-backed portfolio as loans and receivables and made an impairment loss of \$500,000.

Discuss the disclosure requirements if the portfolio is accounted for as loans and receivables.

Case Studies

Case Study 18.1 IASJ Inc. is an entity incorporated in Singapore with a functional currency of US dollars. Based on Case Studies 16.1 and 17.1, IASJ held the following financial instruments:

Investments in CD and bonds:	
5% US\$ certificate of deposits	\$300,000
Equity-linked deposits in UK	520,000
LIBOR GBP bonds listed in UK	200,000
Investments in equity securities:	
Strategic investments listed in HK	250,000
Trading securities listed in US	123,000
Unlisted in Europe	25,000
Trade and other receivables:	
Due from local customers in US\$	2,564,560
Due from overseas customers in HK\$.	435,612
Due from overseas customers in euro.	784,231
Bank deposits:	
Fixed deposits at UK banks.	200,000
Fixed deposits in US\$.	1,240,500
Cash at bank:	
Savings deposits in US\$	231,230
Trade and other payables.	4,045,670
Foreign forward contracts (in credit)	250,000
Bank loans	1,489,000

IASJ had not classified any financial instruments as held-to-maturity investments but taken advantage of the designation conditions in IAS 39 to designate those instruments with embedded derivatives as at fair value through profit or loss. Other than such a designation, IASJ had not designated any financial instruments as at fair value through profit or loss or as available-for-sale financial assets.

Required:

1. Classify the financial instruments into categories in accordance with IAS 39.
2. Prepare a note to disclose the significance of the balances in the balance sheet (Hint: Similar to Real-life Case 18.5).

Case Study 18.2

IASJ evaluates the nature and extent of risk arising from its financial instruments as set out in Case Study 18.1. The corporate tax rate applicable to IASJ is 20%, and all its capital and revenue gains and losses are subject to the same tax rate.

The directors consider that a reasonably possible change in foreign exchange rate and equity price is 10% and the same on interest rate is 100 basis points (or 1%). The current exchange rates between US dollars and other currencies are US\$1:£0.60, US\$1:HK\$7.80 and US\$1:€0.60.

Required:

1. Identify the nature and extent of risks arising from IASJ's financial instruments.
2. Calculate the sensitivity of its financial instruments in profit or loss and equity.

(Hint: The risk mapping approach in Examples 18.19 and 18.23 can be used.)

Case Study 18.3

On 1 January 1999, AJS Inc. issued a 10% convertible debenture with a face value of \$1 million maturing on 31 December 2008. The debenture is convertible into ordinary shares of AJS at a conversion price of \$25 per share. Interest is payable half-yearly in cash. At the date of issue, AJS could have issued non-convertible debt with a 10-year term bearing a coupon interest rate of 11%.

In the financial statements of AJS, the carrying amount of the debenture was allocated on issue as follows:

Liability component:	
Present value of 20 half-yearly interest payments of \$50, discounted at 11%	597,000
Present value of \$1,000 due in 10 years, discounted at 11%, compounded half-yearly	343,000
	<u>940,000</u>
Equity component (difference between \$1 million total proceeds and \$940,000 allocated above)	60,000
Total proceeds	<u><u>1,000,000</u></u>

On 1 January 2004, the convertible debenture has a fair value of \$1,700,000. AJS makes a tender offer to the holder of the debenture to repurchase the debenture for \$1,700,000, which the holder accepts. At the date of repurchase, AJS could have issued non-convertible debt with a 5-year term bearing a coupon interest rate of 8%.

Required:

Prepare the journal entries for the transactions.

PART
V

Presentation of Financial Statements and Related Topics

- 19** Presentation of Financial Statements
- 20** Accounting Policies, Changes in Accounting Estimates and Errors
- 21** Events after the Reporting Period
- 22** Non-current Assets Held for Sale and Discontinued Operations
- 23** The Effects of Changes in Foreign Exchange Rates
- 24** Statement of Cash Flows



19

Presentation of Financial Statements

Learning Outcomes

This chapter enables you to understand the following:

- 1 The purpose and contents of a complete set of financial statements
- 2 The general features of financial statements
- 3 The structure and contents of financial statements
- 4 The contents of a statement of financial position
- 5 The contents of a statement of comprehensive income
- 6 The contents of a statement of change in equity
- 7 The minimum requirements on the notes to the financial statements

Real-life

Case 19.1

BASF Aktiengesellschaft (BASF Group)

In its annual report of 2005, BASF Group, one of the largest chemical companies in the world, began to use the new term “other comprehensive income” in its financial statements and explained as follows:

- In equity, the new item “other comprehensive Income” is presented to account for changes that do not affect income ...
- Certain expenses and income have been recorded according to IFRS outside of the income statement. Included among these are translation adjustments, valuation of securities at fair value and changes in the fair value of derivatives held to hedge future cash flows.

The requirements of reporting “comprehensive income” should be dated back to 1997, when the Financial Accounting Standards Board (FASB) in the United States issued the Statement of Financial Accounting Standards (SFAS) No. 130 *Reporting Comprehensive Income*. From 2009, an entity adopting the IFRSs in preparing and presenting its financial statements has to present its “other comprehensive income” and “total comprehensive income”. In its annual report of 2007, BASF Group explained the goal of the new requirement as follows:

- IAS 1 *Presentation of Financial Statements* was amended by the IASB as of 6 September 2007. The goal is to ease the analysis and comparison of financial statements.

Presentation of financial statements is a critical step in financial reporting. It assembles the recognised and measured transactions, events and balances and then reports them in an organised manner to users. “To ease the analysis and comparison of financial statements” as suggested by BASF Group is similar to the objective set out in IFRS, i.e., to ensure comparability, one of the qualitative characteristics set out in *Framework for Preparation and Presentation of Financial Statements* (see Chapter 2).

This chapter describes the basis for presentation of financial statements and explains the requirements for the presentation of financial statements in accordance with IAS 1 *Presentation of Financial Statements*, which was revised in September 2007. The names, structure and minimum requirements for the contents of the financial statements are also illustrated. One of the critical new requirements is the introduction of a new statement, statement of comprehensive income, which reports the non-owner changes in equity of an entity.

19.1 Applicable Standard and Scope

An entity is required to apply IAS 1 in preparing and presenting general purpose financial statements in accordance with International Financial Reporting Standards (IFRSs) (IAS 1.2).

General purpose financial statements can also be referred to as **financial statements** and are defined as those intended to meet the needs of users who are not in a position to require an entity to prepare reports tailored to their particular information needs (IAS 1.7).

International Financial Reporting Standards (IFRSs) are standards and interpretations adopted by the International Accounting Standards Board (IASB). They comprise

1. International Financial Reporting Standards;
2. International Accounting Standards; and
3. Interpretations developed by the International Financial Reporting Interpretations Committee (IFRIC) or the former Standing Interpretations Committee (SIC) (IAS 1.7).

IAS 1 formally defines the scope of financial statements and the IFRSs. Among all the IFRSs, only IAS 1 prescribes the requirements in preparing and presenting general purpose financial statements, and all other IFRSs set out the recognition, measurement and disclosure requirements for specific transactions and other events. The structure and content of condensed interim financial statements, however, are prescribed by IAS 34 *Interim Financial Reporting*, while some general requirements of IAS 1 are applicable to those interim statements.

19.2 Purpose and Complete Set of Financial Statements

Financial statements are a structured representation of the financial position and financial performance of an entity. Similar to the Framework, IAS 1 sets out the purpose of financial statements – “the objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions”. Financial statements also show the results of the management’s stewardship of the resources entrusted to it.

To meet this objective, financial statements provide information about an entity’s

1. assets;
2. liabilities;
3. equity;
4. income and expenses, including gains and losses;
5. contributions by and distributions to owners in their capacity as owners; and
6. cash flows.

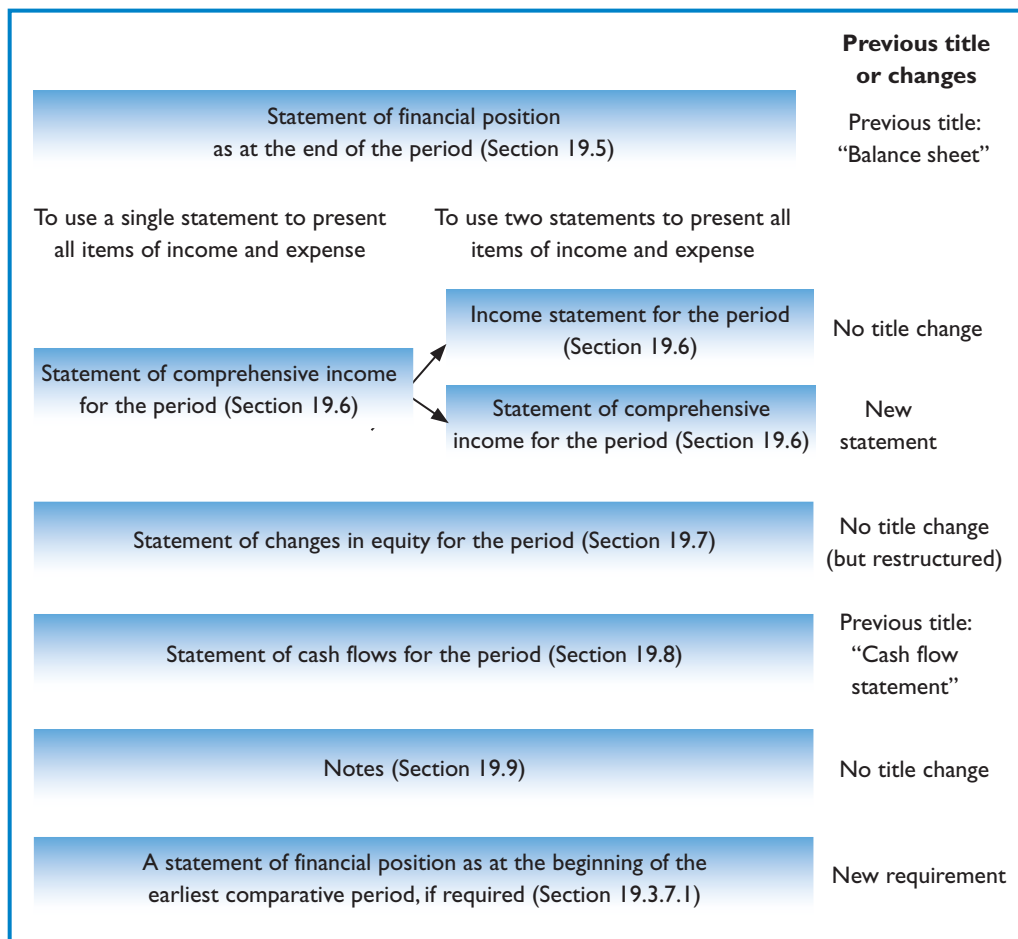
This information, along with other information in the notes, assists users of financial statements in predicting the entity’s future cash flows and, in particular, their timing and certainty. In consequence, IAS 1 requires that a complete set of financial statements comprise (IAS 1.10):

1. A statement of financial position as at the end of the period (see Section 19.5);
2. A statement of comprehensive income for the period (see Section 19.6);

3. A statement of changes in equity for the period (see Section 19.7);
4. A statement of cash flows for the period (see Section 19.8 and Chapter 24);
5. Notes, comprising a summary of significant accounting policies and other explanatory information (see Section 19.9); and
6. A statement of financial position as at the beginning of the earliest comparative period:
 - a. when an entity applies an accounting policy retrospectively;
 - b. when an entity makes a retrospective restatement of items in its financial statements; or
 - c. when it reclassifies items in its financial statements (see Section 19.3.7.1).

In case the components of profit or loss in a statement of comprehensive income are presented separately in a separate income statement, this separate income statement must be displayed immediately before the statement of comprehensive income. The two approaches may result in different complete sets of financial statements, illustrated in Figure 19.1.

FIGURE 19.1 Complete set of financial statements



A complete set of financial statements historically included a “balance sheet”, “income statement” and “cash flow statement”. IAS 1 was revised in September 2007, and it changed the title of “balance sheet” to “statement of financial position” and the title of “cash flow statement” to “statement of cash flows”. In addition, a new statement, “statement of comprehensive income”, was introduced to align with the new concept of “comprehensive income”.

Many were opposed to these title changes and pointed out that the previous titles had a long tradition and were well understood. However, the IASB considered that the new titles would better reflect the function of each financial statement. For example, the title of “balance sheet” simply reflects that double-entry bookkeeping requires debits to equal credits and does not identify the content or purpose of the statement. Instead, the “statement of financial position” not only refers to “financial position”, which is a well-known and accepted term, but also aligns with the function, content and purpose of the statement.

Taking into consideration the opposing views, the revised IAS 1 finally allows an entity to use titles for the statements other than those used in IAS 1 (IAS 1.10), but an entity is still required to present with equal prominence all of the financial statements in a complete set of financial statements (IAS 1.11). Except for the statements set out in IAS 1, other reports and statements presented outside financial statements are outside the scope of IFRSs.

19.3 General Features of Financial Statements

IAS 1 sets out certain general features that financial statements must possess. These include the following:

1. Fair presentation and compliance with IFRSs;
2. Going concern;
3. Accrual basis of accounting;
4. Materiality and aggregation;
5. Offsetting;
6. Frequency of reporting;
7. Comparative information; and
8. Consistency of presentation.

19.3.1 Fair Presentation and Compliance with IFRSs

To achieve the objective of the financial statements and adhere to the qualitative characteristics of financial information, IAS 1 requires that financial statements must present fairly the financial position, financial performance and cash flows of an entity. “Present fairly” or “fair presentation” requires the faithful representation of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in the Framework (see Chapter 2) (IAS 1.15).

A set of financial statements can be presumed to be a fair presentation of an entity’s financial position, financial performance and cash flows when the entity prepares the financial statements in compliance with the IFRSs with additional disclosure when necessary. A fair presentation also requires an entity

1. to select and apply accounting policies in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. IAS 8 sets out a hierarchy of authoritative guidance that management considers in the absence of an IFRS that specifically applies to an item (see Chapter 20).
2. to present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information.
3. to provide additional disclosures when compliance with the specific requirements in IFRSs is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance.

Real-life**Case 19.2****Vodafone Group plc and OAO Gazprom**

Vodafone Group plc declared in its annual report of 2007 that its financial statements comply with IFRSs and the IFRSs adopted by the European Union as follows:

- The Consolidated Financial Statements are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The Consolidated Financial Statements are also prepared in accordance with IFRS adopted by the European Union (EU), the Companies Act 1985 and Article 4 of the EU IAS Regulations.

Certain places and countries, including Australia, EU, Hong Kong and Singapore, have converged their local standards with the IFRSs. Financial statements prepared by the entities incorporated in these places and countries are in compliance with the IFRSs, and their respective local standards can achieve and declare a dual compliance, as Vodafone has done.

In Russia, companies have also begun to adopt IFRSs in preparing and presenting their financial statements, for example, OAO Gazprom (or simply Gazprom), the largest company in the Russian Federation and one of the largest extractors of natural gas in the world. Gazprom made the following statement in its financial statements of 2006:

- These consolidated financial statements are prepared in accordance with, and comply with, International Financial Reporting Standards, including International Accounting Standards and Interpretations issued by the International Accounting Standards Board.

An entity whose financial statements comply with IFRSs is required to make an explicit and unreserved statement of such compliance in the notes, like the statements of Vodafone and Gazprom in Real-life Case 19.2. An entity cannot describe financial statements as complying with IFRSs unless they comply with all the requirements of IFRSs (IAS 1.16). An entity cannot rectify inappropriate accounting policies either by disclosure of the accounting policies used or by notes or explanatory material (IAS 1.18).

19.3.1.1 Departure from IFRS

An entity may be allowed to depart from a requirement of an IFRS in preparing its financial statements, but only “in the extremely rare circumstances”. Such extremely rare circumstances are also restricted to the circumstances in which management concludes that compliance with a requirement in an IFRS would be so misleading that it would conflict with the objective of financial statements set out in the Framework (IAS 1.19).

An item of information conflicts with the objective of financial statements when it does not represent faithfully the transactions, other events and conditions that it either purports to represent or could reasonably be expected to represent and, consequently, it would be likely to influence economic decisions made by users of financial statements.

When assessing whether complying with a specific requirement in an IFRS would be so misleading that it would conflict with the objective of financial statements set out in the Framework, management considers

1. why the objective of financial statements is not achieved in particular circumstances; and
2. how the entity’s circumstances differ from those of other entities that comply with the requirement. If other entities in similar circumstances comply with the requirement, there is a rebuttable presumption that the entity’s compliance with the requirement would not be so misleading that it would conflict with the objective of financial statements set out in the Framework.

In case there are such extremely rare circumstances in which management concludes that compliance with a requirement in an IFRS would be so misleading that it would conflict with the objective of financial statements set out in the Framework, an entity has to determine:

1. Whether the relevant regulatory framework requires or does not prohibit such a departure from an IFRS; or
2. Whether the relevant regulatory framework prohibits such a departure from an IFRS.

Real-life Case 19.3

Societe Generale Group

In respect of its “unauthorised and concealed trading activities” as set out in Real-life Cases 1.2 and 2.1, Societe Generale Group departed from IFRS and specifically explained in its consolidated financial statements of 2007 that the departure was not prohibited by relevant regulatory entities:

- This treatment (the departure) has been submitted to the banking supervisory body (Secretariat general da la Commission bancaire) to the market authority (Autorite des Marches Financiers) to confirm its acceptability regarding the regulatory framework.

1. Departure from IFRS Required or Not Prohibited by Relevant Regulatory Framework

When the relevant regulatory framework requires or does not prohibit an entity to have such a departure in the extremely rare circumstances, the entity is required to depart from the requirement (IAS 1.19) and disclose

- a. that management has concluded that the financial statements present fairly the entity's financial position, financial performance and cash flows;
- b. that it has complied with applicable IFRSs, except that it has departed from a particular requirement to achieve a fair presentation;
- c. the title of the IFRS from which the entity has departed, the nature of the departure, including the treatment that the IFRS would require, the reason why that treatment would be so misleading in the circumstances that it would conflict with the objective of financial statements set out in the Framework, and the treatment adopted; and
- d. for each period presented, the financial effect of the departure on each item in the financial statements that would have been reported in complying with the requirement (IAS 1.20).

When an entity has departed from a requirement of an IFRS in a prior period, and that departure affects the amounts recognised in the financial statements for the current period, the entity is required to make the following disclosures:

- a. The title of the IFRS from which the entity has departed, the nature of the departure, including the treatment that the IFRS would require, the reason why that treatment would be so misleading in the circumstances that it would conflict with the objective of financial statements set out in the Framework, and the treatment adopted; and
- b. For each period presented, the financial effect of the departure on each item in the financial statements that would have been reported in complying with the requirement (IAS 1.21).

Example 19.1 IAS 40 *Investment Property* requires an entity adopting the fair value model to revalue all investment properties to reflect the market condition at the end of the reporting period. Even though Ever Property Limited (EPL) has adopted the fair value model to account for its investment properties, it did not revalue one of its investment properties in 2007. EPL argued that the property was the only property held with an undetermined purpose of usage and all other investment properties were held for rental purposes.

EPL's departure from IAS 40 in 2007 should also affect the opening balance of the investment property in 2008. Even if EPL decides to include the property in revaluation in 2008, the fair value changes recognised in profit or loss in 2008 may still be affected.

2. Departure from IFRS Prohibited by Relevant Regulatory Framework

Although there are extremely rare circumstances in which management concludes that compliance with a requirement in an IFRS would be so misleading, the relevant regulatory framework may prohibit a departure from an IFRS and the entity may still be unable to depart from the IFRS. Instead, IAS 1 requires the entity, to the maximum extent possible, to reduce the perceived misleading aspects of compliance by disclosing

- a. the title of the IFRS in question, the nature of the requirement, and the reason why management has concluded that complying with that requirement is so misleading in the circumstances that it conflicts with the objective of financial statements set out in the Framework; and
- b. for each period presented, the adjustments to each item in the financial statements that management has concluded would be necessary to achieve a fair presentation (IAS 1.23).

19.3.2 Going Concern

Financial statements must be prepared on the assumption of going concern, unless there is an intention to liquidate the entity or to cease trading, or there is no realistic alternative. In consequence, IAS 1 requires an entity's management to make an assessment of the entity's ability to continue as a going concern (IAS 1.25) by taking into account all available information about the future, at least (but not limited to) 12 months from the end of the reporting period. The degree of consideration depends on the facts in each case.

Example 19.2 When Future First Corporation (FFC) has a history of profitable operations and ready access to financial resources, FFC may reach a conclusion that the going concern basis of accounting is appropriate without detailed analysis.

In other cases, for example, where Secondary Future Corporation (SFC) has no history of profitable operations and Third Future Corporation (TFC) has no ready access to financial resources, the directors and management of SFC and TFC may need to consider a wide range of factors relating to current and expected profitability, debt repayment schedules and potential sources of replacement financing before they can satisfy themselves that the going concern basis for SFC and TFC is appropriate.

When management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, the entity is required to disclose those uncertainties in the financial statements (IAS 1.25).

When an entity does not prepare financial statements on a going concern basis, it is required to disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern (IAS 1.25).

19.3.3 Accrual Basis of Accounting

An entity is required to prepare its financial statements, except for cash flow information, using the accrual basis of accounting (IAS 1.27). When the accrual basis of accounting is used, an entity recognises items as assets, liabilities, equity, income and expenses (the elements of financial statements) when they satisfy the definitions and recognition criteria for those elements in the Framework.

19.3.4 Materiality and Aggregation

An entity is required to present separately

- each material class of similar items; and
- items of a dissimilar nature or function, unless they are immaterial (IAS 1.29).

IAS 1 defines and explains **material** as follows:

- Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the financial statements.
- Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor (IAS 1.7).

Financial statements result from processing large numbers of transactions or other events that are aggregated into classes according to their nature or function. If a line item is not individually material, it is aggregated with other items either in the financial statements or in the notes. An item that is not sufficiently material to warrant separate presentation in the financial statements may warrant separate presentation in the notes.

However, an entity is not required to provide a specific disclosure required by an IFRS if the information is not material (IAS 1.31). Strictly speaking, this materiality consideration is applicable to disclosure only.

19.3.5 Offsetting

An entity is not allowed to offset assets and liabilities or income and expenses, unless required or permitted by an IFRS (IAS 1.32). Except when offsetting reflects the substance of the transaction or other event, offsetting in the statements of comprehensive income or financial position detracts from the ability of users both to understand the transactions and events and to assess the entity's future cash flows. In consequence, an entity should report separately both assets and liabilities, and income and expenses. However, there are certain circumstances under which offsetting may still be allowed:

1. Measuring assets net of valuation allowances is not offsetting, for example, obsolescence allowances on inventories and doubtful debts allowances on receivables.

2. An entity may undertake transactions other than ordinary activities that do not generate revenue (as defined in IAS 18 *Revenue*, see Chapter 11) but are incidental to the main revenue-generating activities. The entity presents the results of such transactions, when this presentation reflects the substance of the transaction or other event, by netting any income with related expenses arising on the same transaction.
3. An entity presents on a net basis gains and losses arising from a group of similar transactions, for example, foreign exchange gains and losses or gains and losses arising on financial instruments held for trading. However, an entity presents such gains and losses separately if they are material.

Example 19.3 Sonic Melody Corporation is an LCD and LED monitor manufacturer and disposes of its old manufacturing machines at \$1 million. The carrying amount of the machines is \$600,000, since the transaction is not ordinary activities but is incidental to the main revenue-generating activities.

In consequence, Sonic Melody Corporation can present the result of the transaction, the gain on the disposal of machines, by netting the proceeds on disposal (i.e., \$1 million) with the carrying amount of the asset (i.e., \$600,000).

19.3.6 Frequency of Reporting

An entity is required to present a complete set of financial statements (including comparative information) at least annually. When an entity changes the end of its reporting period and presents financial statements for a period longer or shorter than one year, the entity is required to disclose, in addition to the period covered by the financial statements

1. the reason for using a longer or shorter period; and
2. the fact that amounts presented in the financial statements are not entirely comparable (IAS 1.36).

Normally, an entity consistently prepares financial statements for a one-year period. However, for practical reasons, some entities prefer to report, for example, for a 52-week period, and IAS 1 does not preclude this practice.

19.3.7 Comparative Information

Comparative information can enhance the comparability of financial statements. In consequence, IAS 1 requires that, unless IFRSs permit or require otherwise, an entity disclose comparative information in respect of the previous period for all amounts reported in the current period's financial statements (IAS 1.38). The requirement of comparative information covers only the amounts reported in the current period and does not extend to the amounts reported in the previous period's financial statements.

For narrative and descriptive information, an entity is required to include comparative information only when it is relevant to an understanding of the current period's financial statements (IAS 1.38).

Example 19.4 Even if Tony Corporation disclosed a legal dispute in the financial statements of 2007, it would still disclose in the financial statements of 2008 the details of a legal dispute whose outcome was uncertain at the end of 2007 and that was yet to be resolved.

Users benefit from information that the uncertainty existed at the end of 2007, and about the steps that have been taken during the period to resolve the uncertainty.

19.3.7.1 Statement of Financial Position as at the Beginning of the Earliest Comparative Period

In normal cases, an entity disclosing comparative information is required to present, at a minimum, two statements of financial position, two of each of the other statements, and related notes. However, an entity has to present, at a minimum, three statements of financial position when:

1. The entity applies an accounting policy retrospectively in its financial statements;
2. The entity makes a retrospective restatement of items in its financial statements; or
3. The entity reclassifies items in its financial statements.

These three statements are the statements of financial position as at

1. the end of the current period;
2. the end of the previous period (which is the same as the beginning of the current period), i.e., the comparative information for the current period; and
3. the beginning of the earliest comparative period, i.e., the new required statement of financial position.

Originally, the IASB proposed that such a statement of financial position as at the beginning of the earliest comparative period should be presented as part of a complete set of financial statements. It would provide a basis for investors and creditors to evaluate information about the entity's performance during the period. However, there were many comments that the requirement would unnecessarily increase disclosures in financial statements, or would be impracticable, excessive and costly. Considering that financial statements from prior years are readily available for financial analysis, IAS 1 finally requires only two statements of financial position, except when the financial statements have been affected by retrospective application or retrospective restatement (see IAS 8, Chapter 22), or when a reclassification has been made. In those circumstances, three statements of financial position are required.

19.3.7.2 Changes in Presentation or Classification of Items

When an entity changes the presentation or classification of items in its financial statements, the entity is required to reclassify comparative amounts unless reclassification is impracticable. When the entity reclassifies comparative amounts, the entity is required to disclose

1. the nature of the reclassification;
2. the amount of each item or class of items that is reclassified; and
3. the reason for the reclassification (IAS 1.41).

Enhancing the inter-period comparability of information assists users in making economic decisions, especially by allowing the assessment of trends in financial information for predictive purposes. In some circumstances, it is impracticable to reclassify comparative information for a particular prior period to achieve comparability with the current period.

As defined in IAS 1, applying a requirement is **impracticable** when the entity cannot apply it after making every reasonable effort to do so (IAS 1.7).

An entity may consider it impracticable to reclassify comparative information when, for example, it has not collected data in the prior period in a way that allows reclassification, and it is also impracticable to recreate the information. When it is impracticable to reclassify comparative amounts, an entity is required to disclose

1. the reason for not reclassifying the amounts; and
2. the nature of the adjustments that would have been made if the amounts had been reclassified (IAS 1.42).

Instead of changing the presentation or classification of items in the financial statement, an entity may also change an accounting policy or correct an error. In such a case, it has to comply with the requirements in IAS 8, which sets out the adjustments required to its comparative information (see Chapter 20).

19.3.8 Consistency of Presentation

An entity is required to retain the presentation and classification of items in the financial statements from one period to the next unless:

1. It is apparent, following a significant change in the nature of the entity's operations or a review of its financial statements, that another presentation or classification would be more appropriate having regard to the criteria for the selection and application of accounting policies in IAS 8; or
2. An IFRS requires a change in presentation (IAS 1.45).

A more appropriate presentation requires the changed presentation to provide information that is reliable but more relevant to users of the financial statements and the revised structure is likely to continue, so that comparability is not impaired. When making such changes in presentation, an entity reclassifies its comparative information (see Section 19.3.7).

19.4 Structures and Content of Financial Statements

IAS 1 requires specific disclosures in the different statements and in the notes of the financial statements. The following sections of this chapter illustrate the requirements. IAS 1 sometimes uses the term “disclosure” in a broad sense, encompassing items presented in the financial statements. Disclosures are also required by other IFRSs.

19.4.1 Identification of Financial Statements

When an entity publishes financial statements, it may publish them together with other statements or information, for example, chairman’s statement, directors’ report, and management discussion and analysis, as a single set of published documents.

In order to distinguish the financial statements from other information in the same published document, an entity is required to clearly identify the financial statements and distinguish these two types of information (IAS 1.49). In addition, an entity is required to clearly identify each financial statement and the notes. It is also required to display the following information prominently, and repeat it when necessary for the information presented to be understandable:

1. The name of the reporting entity or other means of identification, and any change in that information from the end of the preceding reporting period;
2. Whether the financial statements are of an individual entity or a group of entities;
3. The date of the end of the reporting period or the period covered by the set of financial statements or notes;
4. The presentation currency, as defined in IAS 21; and
5. The level of rounding used in presenting amounts in the financial statements (IAS 1.51).

To meet these requirements, an entity may present appropriate headings for pages, statements, notes, columns and the like. Judgement is required in determining the best way of presenting such information. An entity can also make financial statements more understandable by presenting information in thousands or millions of units of the presentation currency. This is acceptable as long as the entity discloses the level of rounding and does not omit material information.

19.5 Statement of Financial Position

The statement of financial position was previously known as the balance sheet. IAS 1 revised its title to align with the contents and function of the statement, but an entity can still choose to use a title other than the one used in IAS 1. Certain minimum line items are required to be presented on the face of the statement of financial position, while other items can be presented either on the face or in the notes to the statement.

19.5.1 Information Presented in the Statement of Financial Position

The following line items, at a minimum, have to be presented with their amounts on the face of the statement of financial position:

1. Property, plant and equipment;
2. Investment property;
3. Intangible assets;
4. Financial assets (excluding amounts under investment accounted for using the equity method, trade and other receivables and cash and cash equivalents);
5. Investments accounted for using the equity method;
6. Biological assets;
7. Inventories;
8. Trade and other receivables;
9. Cash and cash equivalents;
10. The total of assets classified as held for sale and assets included in disposal groups classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*;
11. Trade and other payables;
12. Provisions;
13. Financial liabilities (excluding amounts shown under trade and other payables and provisions);
14. Liabilities and assets for current tax, as defined in IAS 12 *Income Taxes*;
15. Deferred tax liabilities and deferred tax assets, as defined in IAS 12;
16. Liabilities included in disposal groups classified as held for sale in accordance with IFRS 5;
17. Non-controlling interests (previously termed “minority interest”), presented within equity; and
18. Issued capital and reserves attributable to owners of the parent (IAS 1.54).

An entity can present additional line items, headings and subtotals on the face of the statement of financial position when such presentation is relevant to an understanding of the entity’s financial position (IAS 1.55). IAS 1 simply lists items that are sufficiently different in nature or function to warrant separate presentation in the statement of financial position and IAS 1 does not prescribe the order or format in which an entity presents the items. Depending on the nature of the entity and its transactions, the descriptions used and the ordering of items or aggregation of similar items may be amended in order to provide information that is relevant to an understanding of the entity’s financial position.

Real-life

Case 19.4

Royal Dutch Shell plc

While Royal Dutch Shell plc did not early adopt IAS 1 as revised in 2007, its consolidated balance sheet for 31 December 2007, set out below, should be in the format of the statement of financial position as set out in IAS 1 revised in 2007. Royal Dutch Shell plc may still use the name “consolidated balance sheet” after 2009.

Real-life
Case 19.4
(cont'd)

	31 December 2007 US\$ million	31 December 2006 US\$ million
ASSETS		
Non-current assets:		
Intangible assets	5,366	4,808
Property, plant and equipment	101,521	100,988
Investments:		
Equity-accounted investments	29,153	20,740
Financial assets	3,461	4,493
Deferred tax	3,253	2,968
Prepaid pension costs	5,559	3,926
Other	5,760	5,468
	<u>154,073</u>	<u>143,391</u>
Current assets:		
Inventories	31,503	23,215
Accounts receivable	74,238	59,668
Cash and cash equivalents	9,656	9,002
	<u>115,397</u>	<u>91,885</u>
Total assets	<u>269,470</u>	<u>235,276</u>
LIABILITIES		
Non-current liabilities:		
Debt	12,363	9,713
Deferred tax	13,039	13,094
Retirement benefit obligations	6,165	6,096
Other provisions	13,658	10,355
Other	3,893	4,325
	<u>49,118</u>	<u>43,583</u>
Current liabilities:		
Debt	5,736	6,060
Accounts payable and accrued liabilities	75,697	62,556
Taxes payable	9,733	6,021
Retirement benefit obligations	426	319
Other provisions	2,792	1,792
	<u>94,384</u>	<u>76,748</u>
Total liabilities	<u>143,502</u>	<u>120,331</u>
EQUITY		
Ordinary share capital	536	545
Treasury shares	(2,392)	(3,316)
Other reserves	14,148	8,820
Retained earnings	111,668	99,677
Equity attributable to shareholders of		
Royal Dutch Shell plc	123,960	105,726
Minority interest	2,008	9,219
Total equity	<u>125,968</u>	<u>114,945</u>
Total liabilities and equity	<u>269,470</u>	<u>235,276</u>

An entity makes the judgement about whether to present additional items separately on the basis of an assessment of

1. the nature and liquidity of assets;
2. the function of assets within the entity; and
3. the amounts, nature and timing of liabilities.

The use of different measurement bases for different classes of assets suggests that their nature or function differs. In consequence, an entity presents the assets with different measurement bases as separate line items.

Example 19.5 In accordance with IAS 16 *Property, Plant and Equipment*, Croco Panda Limited adopts the revaluation model on its properties held for own use (with a carrying amount of \$1 million) and the cost model on all other property, plant and equipment (with a carrying amount of \$500,000). Because different classes of property, plant and equipment use different measurement bases (i.e., carried by using the revaluation model and cost model), Croco Panda should present the property, plant and equipment with different measurement bases as separate line items in the statement of financial position. An extract of the statement of financial position is set out as follows:

Statement of financial position (extract) of Croco Panda Limited

	\$
Property, plant and equipment, at cost	500,000
Property, plant and equipment, at revalued amount	1,000,000

19.5.2 Current/Non-current Distinction

In presenting assets and liabilities on the face of the statement of financial position, an entity is required to present current and non-current assets, and current and non-current liabilities, as separate classifications in accordance with IAS 1. However, when a presentation of assets and liabilities in the statement of financial position based on liquidity provides information that is reliable and more relevant, an entity is required to present all assets and liabilities in order of liquidity in the statement.

Example 19.6 For an entity that supplies goods or services within a clearly identifiable operating cycle, separate classification of current and non-current assets and liabilities in the statement of financial position provides useful information by distinguishing the net assets that are continuously circulating as working capital from those used in the entity's long-term operations. It also highlights assets that are expected to be realised within the current operating cycle, and liabilities that are due for settlement within the same period.

For some entities, such as financial institutions, a presentation of assets and liabilities in increasing or decreasing order of liquidity provides information that is reliable and more relevant than a current/non-current presentation because the entity does not supply goods or services within a clearly identifiable operating cycle.

Theoretically, an entity is permitted to present some of its assets and liabilities using a current/non-current classification and others in order of liquidity when this provides information that is reliable and more relevant. The need for a mixed basis of presentation might arise when an entity has diverse operations.

When an entity presents current and non-current assets, and current and non-current liabilities, as separate classifications in its statement of financial position, it is not allowed to classify deferred tax assets and liabilities as current assets and liabilities (IAS 1.56).

19.5.2.1 Amount Expected to Be Recovered or Settled after More Than 12 Months

Whichever method of presentation is adopted, an entity is required to disclose the amount expected to be recovered or settled after more than 12 months for each asset and liability line item that combines amounts expected to be recovered or settled

1. no more than 12 months after the reporting period; and
2. more than 12 months after the reporting period (IAS 1.61).

Information about expected dates of realisation of assets and liabilities is useful in assessing the liquidity and solvency of an entity. IFRS 7 *Financial Instruments – Disclosures* (see Chapter 18) requires disclosure of the maturity dates of financial assets and financial liabilities. Financial assets include trade and other receivables, and financial liabilities include trade and other payables.

Information on the expected date of recovery of non-monetary assets, such as inventories, and expected date of settlement for liabilities, such as provisions, is also useful, whether assets and liabilities are classified as current or as non-current.

19.5.3 Current Assets

In classifying an asset as a current asset, an entity must ensure that one of the following conditions can be fulfilled:

1. The entity expects to realise the asset, or intends to sell or consume it, in its normal operating cycle;
2. It holds the asset primarily for the purpose of trading;
3. It expects to realise the asset within 12 months after the reporting period; or
4. The asset is cash or a cash equivalent (as defined in IAS 7) unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period (IAS 1.66).

Example 19.7 Cash at bank and deposits at bank may not be classified as current assets if they are pledged to the bank or other parties and are restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Except for those assets that meet the above conditions and are classified as current assets, all other assets are classified as non-current assets (IAS 1.66). IAS 1 uses the term “non-current” to include tangible, intangible and financial assets of a long-term nature. It does not prohibit the use of alternative descriptions as long as the meaning is clear.

The operating cycle of an entity is the time between the acquisition of assets for processing and their realisation in cash or cash equivalents. Even if some operating items, such as inventories, trade receivables and prepayments, are realised more than 12 months after the reporting period, they are still classified as current assets so long as they are expected to realise in an entity’s operating cycle. When the entity’s normal operating cycle is not clearly identifiable, it is assumed to be 12 months. This assumption is also used in the classification of liabilities.

Example 19.8 Current assets include

1. assets (such as inventories and trade receivables) that are sold, consumed or realised as part of the normal operating cycle even when they are not expected to be realised within 12 months after the reporting period;
2. assets held primarily for the purpose of trading (financial assets within this category are classified as held for trading in accordance with IAS 39); and
3. the current portion of non-current financial assets.

19.5.4 Current Liabilities

In classifying a liability as a current liability, an entity must ensure that one of the following conditions can be fulfilled:

1. The entity expects to settle the liability in its normal operating cycle;
2. The entity holds the liability primarily for the purpose of trading;
3. The liability is due to be settled within 12 months after the reporting period;
or
4. The entity does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting period (IAS 1.69).

Except for those liabilities that meet the above conditions and are classified as current liabilities, all other liabilities are classified as non-current liabilities (IAS 1.69).

19.5.4.1 Normal Operating Cycle, Trading Purpose and Settlement within 12 Months

An entity's working capital used in its normal operating cycle normally includes some current liabilities, for example, trade payables, accruals for salaries and wages, and accruals for other operating costs. These items are classified as current liabilities even if they are due to be settled more than 12 months after the reporting period, since they are settled in an entity's normal operating cycle, which applies to the classification of both assets and liabilities. As with the classification of assets, when an entity's normal operating cycle is not clearly identifiable, it is assumed to be 12 months.

Other current liabilities are not settled as part of the normal operating cycle but are due for settlement within 12 months after the reporting period or held primarily for the purpose of trading.

Example 19.9 Liabilities that are due for settlement within 12 months after the reporting period or held primarily for the purpose of trading include the following:

1. Financial liabilities classified as held for trading in accordance with IAS 39, for example, trading equity instruments and derivatives;
2. Bank overdrafts;
3. The current portion of non-current financial liabilities;
4. Dividends payable;
5. Income taxes; and
6. Other non-trade payables.

19.5.4.2 Reclassification of Non-current Liabilities as Current Liabilities

Financial liabilities that provide financing on a long-term basis (i.e., are not part of the working capital used in the entity's normal operating cycle) and are not due for settlement within 12 months after the reporting period are non-current liabilities. However, an entity has to reclassify its non-current financial liabilities as current when they are due to be settled within 12 months after the reporting period, even if:

1. The original term was for a period longer than 12 months; and
2. An agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the financial statements are authorised for issue.

1. Refinancing or Rollover after End of Reporting Period

The end of the reporting period is a cut-off point to consider whether liabilities have to be classified as current. Even if an entity has refinanced or rolled over a loan to a

longer term after the end of the reporting period but before the issuance of financial statements, the loan should still be classified as current because, at the end of the period, the entity has expected the loan to be settled within 12 months. In other words, the entity does not have an unconditional right to defer settlement of the loan for at least 12 months after the reporting period.

In order to classify such a loan as non-current, the entity has to expect and has the sole discretion to refinance or roll over the loan for at least 12 months after the reporting period under an existing loan facility. Then, the loan can be classified as non-current. In other cases, however, when refinancing or rolling over the obligation is not at the discretion of the entity, the entity does not consider the potential to refinance the obligation and classifies the obligation as current.

2. Breach of Loan Provision

An entity may breach a provision or clause of a long-term loan. If the breach occurs on or before the end of the reporting period and it results in the loan due for payable on demand, the entity has to reclassify the long-term loan as a current liability. Even if the lender of the loan might have agreed not to demand payment as a consequence of the breach after the reporting period and before the authorisation of the financial statements for issue, the loan should still be classified as a current liability, because the entity does not have an unconditional right at the end of the reporting period to defer its settlement for at least 12 months after that date.

Real-life Case 19.5

TCL Multimedia Technology Holdings Limited

TCL Multimedia Technology Holdings Limited (TCL) which named itself as a leading multimedia consumer electronics manufacturer with a global sales network, stated in its annual report of 2006 as follows:

- As at 31 December 2006, in respect of syndication loans with an aggregate carrying amount of HK\$1,114,831,000 (2005: HK\$1,538,300,000), the group breached certain of the financial covenants of the relevant loan agreements, which are primarily related to the value of the group's consolidated tangible net worth, interest cover ratio and current ratio.
- On discovery of the breach, the directors of the company informed the lenders, but no renegotiation of the terms of the syndication loans was initiated since the group is planning to settle the syndication loans in full in July 2007.
- Since the lenders have not agreed to waive their right to demand immediate payment as at the balance sheet date, the syndication loans have been classified as current liabilities in these financial statements at 31 December 2006.

As at 31 December 2006, TCL sustained net current liabilities of HK\$1,010,019,000.

Example 19.10 Loan Refinancing House (LRH) had the following loans and balances at the end of 2007 and considered whether they could be classified as non-current liabilities:

1. 5-year term loan to mature in 2008 – LRH has the discretion to roll it over for another 5 years before the issuance of the financial statements, and it has begun to review its liquidity before it can decide to roll it over.
2. 2-year term loan to mature in 2008 and 2009 equally.
3. A forward contract to buy foreign currency at negative fair value.
4. 3-year term loan to mature in 2009 – LRH has to repay the loan on demand if it has breached the loan provision. Before the end of the reporting period, there was no indication that LRH had breached the loan, but after the end of the reporting period, the lender sent a demand note to LRH that, since LRH has not given a renewal guarantee of 2008 to the lender, LRH had breached the loan provision and was demanded to repay the loan.

Can the loans and balances be classified as non-current liabilities?

Answers

1. The 5-year term loan cannot be classified as a non-current liability. Even though LRH has the discretion to roll over the loan, it has not decided to roll it over yet.
2. Half of the 2-year term loan should be classified as a current liability, as half is due for settlement within 12 months after the reporting period.
3. Derivatives (other than financial guarantee contracts and designated and effective hedging instruments) are classified as held for trading in accordance with IAS 39 (see Chapter 15) and should be classified as current liabilities.
4. Strictly speaking, LRH had not breached the loan provision on or before the end of the reporting period. In consequence, the loan can be classified as a non-current liability. However, the demand note occurring after the end of the reporting period should be considered as a non-adjusting event (see Section 19.5.4.3).

19.5.4.3 Events after the Reporting Period

In respect of loans classified as current liabilities, if the following events occur between the end of the reporting period and the date the financial statements are authorised for issue, those events are disclosed as non-adjusting events in accordance with IAS 10 *Events after the Reporting Period* (see Chapter 21):

1. Refinancing on a long-term basis;
2. Rectification of a breach of a long-term loan arrangement; and
3. The granting by the lender of a period of grace to rectify a breach of a long-term loan arrangement ending at least 12 months after the reporting period.

19.5.5 Information Can Be Presented in the Notes

An entity is required to disclose, either in the statement of financial position or in the notes, further sub-classifications of the line items presented, classified in a manner appropriate to the entity's operations (IAS 1.77). The detail provided in sub-classifications depends on the requirements of IFRSs and on the size, nature and function of the amounts involved.

Example 19.11 Additional disclosures on further sub-classification of the line items in the notes to the statement of financial position vary for each item. Examples of such sub-classification disclosed in the notes include the following:

1. Items of property, plant and equipment are disaggregated into classes in accordance with IAS 16;
2. Receivables are disaggregated into amounts receivable from trade customers, receivables from related parties, prepayments and other amounts;
3. Inventories are disaggregated, in accordance with IAS 2 *Inventories*, into classifications such as merchandise, production supplies, materials, work-in-progress and finished goods;
4. Provisions are disaggregated into provisions for employee benefits and other items; and
5. Equity capital and reserves are disaggregated into various classes, such as paid-in capital, share premium and reserves.

IAS 1 requires an entity to disclose, at a minimum, the following, either in the statement of financial position or the statement of changes in equity, or in the notes:

1. For each class of share capital:
 - a. The number of shares authorised;
 - b. The number of shares issued and fully paid, and issued but not fully paid;
 - c. Par value per share, or that the shares have no par value;
 - d. A reconciliation of the number of shares outstanding at the beginning and at the end of the period;
 - e. The rights, preferences and restrictions attaching to that class, including restrictions on the distribution of dividends and the repayment of capital;
 - f. Shares in the entity held by the entity or by its subsidiaries or associates; and
 - g. Shares reserved for issue under options and contracts for the sale of shares, including terms and amounts; and
2. A description of the nature and purpose of each reserve within equity (IAS 1.79).

An entity without share capital, such as a partnership or trust, is required to disclose information equivalent to that required above, showing changes during the period in each category of equity interest, and the rights, preferences and restrictions attaching to each category of equity interest (IAS 1.80).

If an entity has reclassified the following items between financial liabilities and equity, it is required to disclose the amount reclassified into and out of each category (financial liabilities or equity), and the timing and reason for that reclassification (IAS 1.80A):

1. A puttable financial instrument classified as an equity instrument; or
2. An instrument that imposes on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation and is classified as an equity instrument.

19.6 Statement of Comprehensive Income

IAS 1, as revised in 2007, has restructured the presentation of items of income and expense and changes in equity. Historically, IAS 1 required the presentation of an “income statement” that included items of income expense recognised in profit or loss. The items of income and expense not recognised in profit or loss and the items of owner changes in equity, for example, the dividend distribution, were presented in “statement of changes in equity”. The statement of changes in equity in substance included profit or loss for a period, other items of income and expense not recognised in profit or loss during a period, the effects of changes in accounting policies and correction of errors, and items of owner changes in equity.

As part of the improvement project in presenting financial performance of an entity, IAS 1, as revised in 2007, first separates changes in equity (like changes in net assets) of an entity during a period into two categories:

1. Owner changes in equity – represent changes arising from transactions with owners in their capacity as owners; and
2. Non-owner changes in equity – represent all other changes in equity that are also the items of income and expense recognised during a period.

Owners are holders of instruments classified as equity (IAS 1.7).

Then, IAS 1 requires that all owner changes in equity must be presented separately from non-owner changes in equity and presented in the statement of changes in equity. Most comments view this amendment as an improvement in financial reporting, by increasing the transparency of those items recognised in equity that are not reported as part of profit or loss.

In respect of non-owner changes in equity (i.e., items of income and expense recognised) during a period, the 2007 IAS 1 revision separates them into two categories:

1. Components of “profit or loss” (see Section 19.6.1); and
2. Components of “other comprehensive income” (see Section 19.6.2).

“Other comprehensive income” is a new term introduced by IAS 1 in 2007. The total of the components of “profit or loss” and the components of “other comprehensive income” is also newly termed “total comprehensive income”. In other words, “total comprehensive income” comprises all components of “profit or loss” and “other comprehensive income”. The definitions of these terms are summarised below:

Profit or loss is the total of income less expenses, excluding the components of other comprehensive income.

Other comprehensive income comprises items of income and expense (including reclassification adjustments) that are not recognised in profit or loss as required or permitted by other IFRSs.

Total comprehensive income is the change in equity during a period resulting from transactions and other events, other than those changes resulting from transactions with owners in their capacity as owners (IAS 1.7).

Interestingly, no definition of “comprehensive income” can be found in IAS 1. Although IAS 1 uses the terms “other comprehensive income”, “profit or loss” and “total comprehensive income”, an entity may use other terms to describe the totals as long as the meaning is clear. For example, an entity may use the term “net income” to describe “profit or loss”.

With these new terms and structure, IAS 1 now requires an entity to present such non-owner changes in equity in a period, i.e., all items of income and expense recognised in a period, in the statement of comprehensive income by using one of the following two approaches:

1. Single statement approach – present all items of income and expense recognised in a period in a single statement of comprehensive income; or
2. Two-statement approach – present all items of income and expense recognised in a period in two statements:
 - a. A statement displaying components of profit or loss (i.e., a separate income statement); and
 - b. A second statement beginning with profit or loss and displaying components of other comprehensive income (i.e., a statement of comprehensive income) (IAS 1.81).

Figure 19.2 summarises the presentation of changes in equity in a period by using the single statement approach and two-statement approach.

The requirements imply that the components of profit or loss can be presented either as part of a single statement of comprehensive income or in a separate income statement, while the components of other comprehensive income are displayed in the statement of comprehensive income. When an income statement is separately presented as part of a complete set of financial statements, the income statement must be displayed immediately before the statement of comprehensive income. IAS 1 also introduces the requirement to present the total comprehensive income in the financial statements.

FIGURE 19.2 Presentation of changes in equity in a period by using two different approaches

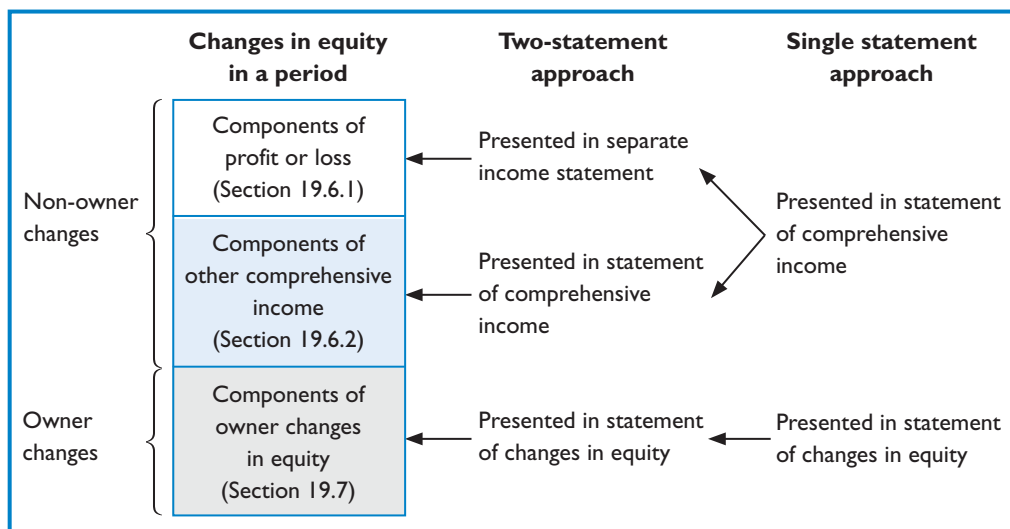


Figure 19.3 compares the current approach required by IAS 1 (as amended in 2007) and the previous approach required by IAS 1 before 2007 in presenting the changes in equity in a period in the statement of comprehensive income and the statement of changes in equity.

19.6.1 Profit or Loss for the Period

An entity is required to recognise all items of income and expense in a period in profit or loss unless an IFRS requires or permits otherwise (IAS 1.88). Minimum line items to be disclosed in the statement of comprehensive income in respect of the component of profit or loss (see Section 19.6.3) include

1. revenue;
2. finance costs;
3. share of the profit or loss of associates and joint ventures accounted for using the equity method;
4. tax expense;
5. a single amount comprising the total of
 - a. the post-tax profit or loss of discontinued operations; and
 - b. the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and
6. profit or loss.

Some IFRSs specify circumstances when an entity recognises particular items outside profit or loss in the current period. IAS 8 specifies two such circumstances: (1) the correction of errors and (2) the effect of changes in accounting policies. Other IFRSs require or permit components of other comprehensive income that meet the Framework's definition of income or expense to be excluded from profit or loss.

FIGURE 19.3 Presentation of changes in equity in statement of comprehensive income and statement of changes in equity

		Changes in equity in a period	Presentation after IAS 1 amended in 2007		Presentation before IAS 1 amended in 2007
			Two-statement approach	Single statement approach	
Non-owner changes	Components of profit or loss (Section 19.6.1)	Income statement	Statement of comprehensive income	Income statement	
	Components of other comprehensive income (Section 19.6.2)	Statement of comprehensive income		Statement of changes in equity	
Owner changes	Components of owner changes in equity (Section 19.7)	Statement of changes in equity	Statement of changes in equity		

19.6.2 Other Comprehensive Income for the Period

IAS 1 defines other comprehensive income as comprising items of income and expense, including reclassification adjustments, that are not recognised in profit or loss as required or permitted by other IFRSs.

Example 19.12 The components of other comprehensive income include the following:

1. Changes in revaluation surplus recognised in accordance with IAS 16 *Property, Plant and Equipment* (see Chapter 3);
2. Changes in revaluation surplus recognised in accordance with IAS 38 *Intangible Assets* (see Chapter 6);
3. Actuarial gains and losses on defined benefit plans recognised in accordance with IAS 19 *Employee Benefits* (see Chapter 12);
4. Gains and losses arising from translating the financial statements of a foreign operation in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates*;
5. Gains and losses on re-measuring available-for-sale financial assets in accordance with IAS 39 *Financial Instruments – Recognition and Measurement* (see Chapter 16); and
6. The effective portion of gains and losses on hedging instruments in a cash flow hedge recognised in accordance with IAS 39.

An entity is required to report the components of other comprehensive income classified by nature in the statement of comprehensive income. IAS 1 allows an entity to choose to present the statement of comprehensive income in a single statement approach or a two-statement approach (see Section 19.6.3). In the statement of comprehensive income, an entity may present components of other comprehensive income either

1. net of related tax effects; or
2. before related tax effects, with one amount shown for the aggregate amount of income tax relating to those components.

Example 19.13 The presentation of components of other comprehensive income in a single statement approach is illustrated in IAS 1 net of tax effects or before tax effects with one amount shown as an item as follows:

1. Net of related tax effects

	2007	2006
	\$	\$
Other comprehensive income for the year, after tax:		
Exchange differences on translating foreign operations	4,000	8,000
Available-for-sale financial assets	(18,000)	20,000
Cash flow hedges	(500)	(3,000)
Gains on property revaluation	600	2,700
Actuarial gains (losses) on defined benefit pension plans	(500)	1,000
Share of other comprehensive income of associates	400	(700)
Other comprehensive income for the year, net of tax	<u>(14,000)</u>	<u>28,000</u>

2. Before related tax effects with one amount shown for the aggregate amount of income tax relating to those components

	2007	2006
	\$	\$
Other comprehensive income:		
Exchange differences on translating foreign operations	5,334	10,667
Available-for-sale financial assets	(24,000)	26,667
Cash flow hedges	(667)	(4,000)
Gains on property revaluation	933	3,367
Actuarial gains (losses) on defined benefit pension plans	(667)	1,333
Share of other comprehensive income of associates	400	(700)
Income tax relating to components of other comprehensive income	4,667	(9,334)
Other comprehensive income for the year, net of tax	<u>(14,000)</u>	<u>28,000</u>

The amounts in the above two methods can be reconciled to each component of other comprehensive income in Example 19.14.

IAS 1 also requires an entity to disclose income tax relating to each component of other comprehensive income. For other comprehensive income presented in the statement of comprehensive income, an entity is required to disclose the amount of income tax relating to each component of other comprehensive income, including reclassification adjustments, either

1. in the statement of comprehensive income; or
2. in the notes (IAS 1.90).

Example 19.14 Disclosure of tax effects relating to each component of other comprehensive income can be made in the statement of comprehensive income or in the notes. IAS 1 sets out an example to disclose the tax effects relating to each comprehensive income as follows:

	2007			2006		
	Before-tax amount \$	Tax (expense) benefit \$	Net-of-tax amount \$	Before-tax amount \$	Tax (expense) benefit \$	Net-of-tax amount \$
Exchange differences on translating foreign operations . . .	5,334	(1,334)	4,000	10,667	(2,667)	8,000
Available-for-sale financial assets . .	(24,000)	6,000	(18,000)	26,667	(6,667)	20,000
Cash flow hedges	(667)	167	(500)	(4,000)	1,000	(3,000)
Gains on property revaluation	933	(333)	600	3,367	(667)	2,700
Actuarial gains (losses) on defined benefit pension plans	(667)	167	(500)	1,333	(333)	1,000
Share of other comprehensive income of associates	400	—	400	(700)	—	(700)
Other comprehensive income	<u>(18,667)</u>	<u>4,667</u>	<u>(14,000)</u>	<u>37,334</u>	<u>(9,334)</u>	<u>28,000</u>

The amounts in the example can be reconciled to each component of other comprehensive income in Example 19.13.

The previous version of IAS 1 did not include such a tax effect disclosure requirement. The purpose is to provide users with tax information relating to these components because the components often have tax rates different from those applied to profit or loss.

19.6.2.1 Reclassification Adjustments

Other comprehensive income also comprises “reclassification adjustments”. Other IFRSs specify whether and when amounts previously recognised in other comprehensive income are reclassified to profit or loss. Such reclassifications are referred to in IAS 1 as reclassification adjustments.

Reclassification adjustments are defined as amounts reclassified to profit or loss in the current period that were recognised in other comprehensive income in the current or previous periods (IAS 1.7).

A reclassification adjustment is included with the related component of other comprehensive income in the period that the adjustment is reclassified to profit or loss. The IASB decided that adjustments are necessary to avoid double-counting items in total comprehensive income when those items are reclassified to profit or loss in accordance with IFRSs.

Example 19.15 IAS 39 requires that gains realised on the disposal of available-for-sale financial assets are included in profit or loss of the current period. These amounts may have been recognised in other comprehensive income as unrealised gains in the current or previous period.

Those unrealised gains must be deducted from other comprehensive income in the period in which the realised gains are reclassified to profit or loss, to avoid including them in total comprehensive income twice.

An entity is required to disclose reclassification adjustments relating to components of other comprehensive income (IAS 1.92). It may present reclassification adjustments in the statement of comprehensive income or in the notes. An entity presenting reclassification adjustments in the notes presents the components of other comprehensive income after any related reclassification adjustments on the face of the statement of comprehensive income.

Example 19.16 Reclassification adjustments arise, for example:

1. On disposal of a foreign operation (see IAS 21);
2. On derecognition of available-for-sale financial assets in accordance with IAS 39 (see Chapter 17); and
3. When a hedged forecast transaction affects profit or loss in accordance with IAS 39 in relation to cash flow hedges.

Reclassification adjustments do not arise

1. on changes in revaluation surplus recognised in accordance with IAS 16 or IAS 38; or
2. on actuarial gains and losses on defined benefit plans recognised in accordance with IAS 19.

These two components are recognised in other comprehensive income and are not reclassified to profit or loss in subsequent periods. Changes in revaluation surplus may be transferred to retained earnings in subsequent periods as the asset is used or when it is derecognised. Actuarial gains and losses are reported in retained earnings in the period that they are recognised as other comprehensive income.

The purpose of disclosing reclassification adjustments is to provide users with information to assess the effect of such reclassifications on profit or loss. Separate presentation of reclassification adjustments is essential to inform users of those amounts that are included as income and expenses in different periods, i.e., as income or expenses in other comprehensive income in previous periods and as income or expenses in profit or loss in the current period. Without such information, users may find it difficult to assess the effect of reclassifications on profit or loss and to calculate the overall gain or loss associated with available-for-sale financial assets, cash flow hedges and translation or disposal of foreign operations.

19.6.3 Information Presented in the Statement of Comprehensive Income

No matter which approach an entity chooses to present the items of income and expense recognised in a period, IAS 1 requires minimum line items on the face of the statement of comprehensive income and separate income statement (if presented).

19.6.3.1 Minimum Line Items Using Single Statement Approach

In the statement of comprehensive income (i.e., single statement approach), an entity is required to include line items that present at least the following amounts for the period:

1. Revenue;
2. Finance costs;
3. Share of the profit or loss of associates and joint ventures accounted for using the equity method;
4. Tax expense;
5. A single amount comprising the total of
 - a. the post-tax profit or loss of discontinued operations; and
 - b. the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation;

6. Profit or loss;
7. Each component of other comprehensive income classified by nature (excluding share of the other comprehensive income of associates and joint ventures accounted for using the equity method as set out in point 8 below);
8. Share of the other comprehensive income of associates and joint ventures accounted for using the equity method; and
9. Total comprehensive income (IAS 1.82).

Presentation of total comprehensive income is required in IAS 1. Total comprehensive income comprises all components of “profit or loss” and “other comprehensive income”, i.e., representing the non-owner changes in equity during a period.

An entity is also required to disclose the following items in the statement of comprehensive income as allocations of profit or loss for the period:

1. Profit or loss for the period attributable to
 - a. non-controlling interests; and
 - b. owners of the parent.
2. Total comprehensive income for the period attributable to
 - a. non-controlling interests; and
 - b. owners of the parent (IAS 1.83).

Example 19.17 In reporting items of income and expense, an entity may choose to use a single statement approach or a two-statement approach. IAS 1 illustrates the statement of comprehensive income using the single statement approach as follows:

Statement of comprehensive income

	2007	2006
	\$	\$
Revenue	390,000	355,000
Cost of sales	<u>(245,000)</u>	<u>(230,000)</u>
Gross profit	145,000	125,000
Other income	20,667	11,300
Distribution costs	(9,000)	(8,700)
Administrative expenses	(20,000)	(21,000)
Other expenses	(2,100)	(1,200)
Finance costs	(8,000)	(7,500)
Share of profit of associates	35,100	30,100
Profit before tax	161,667	128,000
Income tax expense	<u>(40,417)</u>	<u>(32,000)</u>
Profit for the year from continuing operations	121,250	96,000
Loss for the year from discontinued operations	—	<u>(30,500)</u>
Profit for the year	121,250	65,500

Other comprehensive income:		
Exchange differences on translating foreign operations.....	5,334	10,667
Available-for-sale financial assets.....	(24,000)	26,667
Cash flow hedges.....	(667)	(4,000)
Gains on property revaluation.....	933	3,367
Actuarial gains (losses) on defined benefit pension plans.....	(667)	1,333
Share of other comprehensive income of associates.....	400	(700)
Income tax relating to components of other comprehensive income ..	4,667	(9,334)
Other comprehensive income for the year, net of tax.....	<u>(14,000)</u>	<u>28,000</u>
Total comprehensive income for the year.....	<u>107,250</u>	<u>93,500</u>
Profit attributable to:		
Owners of the parent.....	97,000	52,400
Minority interest.....	24,250	13,100
	<u>121,250</u>	<u>65,500</u>
Total comprehensive income attributable to:		
Owners of the parent.....	85,800	74,800
Minority interest.....	21,450	18,700
	<u>107,250</u>	<u>93,500</u>
Earnings per share:		
Basic and diluted.....	<u>0.46</u>	<u>0.30</u>

The expenses within profit are classified by function (see Section 19.6.4.2), and the amounts within other comprehensive income can be reconciled to each component of other comprehensive income in Examples 19.13 and 19.14.

The statement of comprehensive income using the two-statement approach is illustrated in Example 19.18.

19.6.3.2 Minimum Line Items Using Two-statement Approach

If an entity chooses to use the two-statement approach, it may present in a separate income statement the following line items (IAS 1.84):

1. Revenue;
2. Finance costs;
3. Share of the profit or loss of associates and joint ventures accounted for using the equity method;
4. Tax expense;
5. A single amount comprising the total of
 - a. the post-tax profit or loss of discontinued operations; and

- b. the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and
6. Profit or loss.

Items not presented in the separate income statement are presented in the separate statement of comprehensive income under the two-statement approach. This implies that the components of profit or loss for a period are presented in a separate income statement while the separate statement of comprehensive income presents the profit or loss for the period and the components of other comprehensive income for the period.

Example 19.18 In reporting items of income and expense, an entity may choose to use a single statement approach or a two-statement approach. IAS 1 illustrates the separate income statement using the two-statement approach as follows:

Income statement

	2007	2006
	\$	\$
Revenue	390,000	355,000
Other income	20,667	11,300
Changes in inventories of finished goods and work-in-progress	(115,100)	(107,900)
Work performed by the entity and capitalised	16,000	15,000
Raw material and consumables used	(96,000)	(92,000)
Employee benefits expense	(45,000)	(43,000)
Depreciation and amortisation expense	(19,000)	(17,000)
Impairment of property, plant and equipment	(4,000)	–
Other expenses	(6,000)	(5,500)
Finance costs	(15,000)	(18,000)
Share of profit of associates	35,100	30,100
Profit before tax	161,667	128,000
Income tax expense	(40,417)	(32,000)
Profit for the year from continuing operations	121,250	96,000
Loss for the year from discontinued operations	–	(30,500)
Profit for the year	121,250	65,500
Profit attributable to:		
Owners of the parent	97,000	52,400
Minority interest	24,250	13,100
	121,250	65,500
Earnings per share:		
Basic and diluted	0.46	0.30

Statement of comprehensive income

	2007	2006
	\$	\$
Profit for the year.....	121,250	65,500
Other comprehensive income:		
Exchange differences on translating foreign operations.....	5,334	10,667
Available-for-sale financial assets.....	(24,000)	26,667
Cash flow hedges.....	(667)	(4,000)
Gains on property revaluation.....	933	3,367
Actuarial gains (losses) on defined benefit pension plans.....	(667)	1,333
Share of other comprehensive income of associates.....	400	(700)
Income tax relating to components of other comprehensive income... ..	4,667	(9,334)
Other comprehensive income for the year, net of tax.....	(14,000)	28,000
Total comprehensive income for the year.....	107,250	93,500
Total comprehensive income attributable to:		
Owners of the parent.....	85,800	74,800
Minority interest.....	21,450	18,700
	107,250	93,500

Expenses in the income statement are classified by nature (see Section 19.6.4.1). The amounts in the statement of comprehensive income can be reconciled to each component of other comprehensive income in Examples 19.13 and 19.14.

The income statement and statement of comprehensive income in this example can be combined and presented as a single statement of comprehensive income (single statement approach) that is illustrated in Example 19.17.

In the separate income statement (i.e., using the two-statement approach), an entity is also required to disclose the allocation of profit or loss for the period attributable to (a) non-controlling interests; and (b) owners of the parent. The allocation of total comprehensive income for the period attributable to (a) non-controlling interests; and (b) owners of the parent is disclosed in the separate statement of comprehensive income under the two-statement approach.

Real-life

Case 19.6

Hong Kong Exchanges and Clearing Limited

Hong Kong Exchanges and Clearing Limited adopted HKAS 1 (equivalent to IAS 1), revised in 2007, and used the two-statement approach to report its items of income and expenses. The consolidated statement of comprehensive income of 2007 is as follows:

**Real-life
Case 19.6**
(cont'd)

	2007 HK\$'000	2006 HK\$'000
Profit attributable to shareholders	6,169,278	2,518,569
Other comprehensive income:		
Available-for-sale financial assets:		
Change in fair value	63,421	31,356
Realisation of change in fair value on maturity and disposal ...	(9,951)	17,941
Deferred tax arising from change in fair value	(8,460)	(2,094)
	<u>45,010</u>	<u>47,203</u>
Cash flow hedges:		
Fair value gains of hedging instruments	132	475
Less: Reclassification adjustments:		
Gains reclassified to profit or loss as information technology and computer maintenance expenses	(70)	(475)
Gains reclassified to profit or loss as net investment income..	(62)	—
	<u>—</u>	<u>—</u>
Leasehold buildings:		
Change in valuation	(44)	502
Deferred tax arising from change in valuation	7	(87)
Deferred tax arising from reclassification of a leasehold building to "Non-current assets held for sale"	552	—
	<u>515</u>	<u>415</u>
Share of other comprehensive income of an associate	—	37
Less: Reclassified to profit or loss on disposal of associate	(58)	—
	<u>(58)</u>	<u>37</u>
Other comprehensive income attributable to shareholders, net of tax	45,467	47,655
Total comprehensive income attributable to shareholders	<u>6,214,745</u>	<u>2,566,224</u>

**19.6.3.3 Applicable to Both Single Statement Approach and
Two-statement Approach**

When presentation of additional lines, item headings and subtotals in the statement of comprehensive income and the separate income (if presented) is relevant to an understanding of an entity's financial performance, the entity is required to make such presentation (IAS 1.85). Because the effects of an entity's various activities, transactions and other events differ in frequency, potential for gain or loss and predictability, disclosing the components of financial performance assists users in understanding the financial performance achieved and in making projections of future financial performance.

In addition to including additional line items, an entity may amend the descriptions used and the ordering of items when this is necessary to explain the elements of financial performance. An entity considers factors including materiality and the nature and function of the items of income and expense. However, IAS 1 specifically prohibits an entity from presenting any items of income or expense as extraordinary items in all statements and notes (IAS 1.87).

19.6.4 Information Can Be Presented in the Notes

In addition to the minimum line items presented on the face of the statement of comprehensive income and separate income statement (if presented), when items of income or expense are material, an entity is required to disclose their nature and amount separately (IAS 1.97).

Example 19.19 Circumstances that would give rise to the separate disclosure of items of income and expense include

1. write-downs of inventories to net realisable value or of property, plant and equipment to recoverable amount, as well as reversals of such write-downs;
2. restructurings of the activities of an entity and reversals of any provisions for the costs of restructuring;
3. disposals of items of property, plant and equipment;
4. disposals of investments;
5. discontinued operations;
6. litigation settlements; and
7. other reversals of provisions.

An entity is required to present an analysis of expenses recognised in profit or loss using a classification based on either their nature (i.e., nature of expense method) or their function (i.e., function of expense method) within the entity, whichever provides information that is reliable and more relevant (IAS 1.99). Entities are encouraged (but not required) to present such analysis in the statement of comprehensive income or in the separate income statement (if presented), rather than in the notes.

The choice between the nature of expense method (see Section 19.6.4.1) and the function of expense method (see Section 19.6.4.2) depends on historical and industry factors and the nature of the entity. Both methods provide an indication of those costs that might vary, directly or indirectly, with the level of sales or production of the entity. Because each method of presentation has merit for different types of entities, IAS 1 requires management to select the presentation that is reliable and more relevant. However, because information on the nature of expenses is useful in predicting future cash flows, additional disclosures are required when the function of expense classification is used (see Section 19.6.4.2).

19.6.4.1 Analysis of Expenses by Nature (Nature of Expense Method)

To present an analysis of expenses recognised in profit or loss, the first form of analysis is the nature of expense method. An entity aggregates expenses within profit or loss according to their nature (for example, depreciation, purchases of materials, transport costs, employee benefits and advertising costs), and does not reallocate them among functions within the entity. This method may be simple to apply because no allocations of expenses to functional classifications are necessary.

Example 19.20 Classification using the nature of expense method in the income statement is as follows:

	\$	\$
Revenue		100,000
Other income		20,000
Changes in inventories of finished goods and work-in-progress	10,000	
Raw materials and consumables used	25,000	
Employee benefits expense	22,000	
Depreciation and amortisation expense	8,000	
Other expenses	2,000	
Total expenses		(67,000)
Profit before tax		<u>53,000</u>

Real-life

Case 19.7

Telstra Corporation Limited

Telstra Corporation Limited, an Australian telecommunications company, described its income statement of 2007 as follows:

- Under the requirements of AASB 101 *Presentation of Financial Statements* (equivalent to the previous version of IAS 1), we must classify all of our expenses (apart from any finance costs and our share of net gain/loss from jointly controlled and associated entities) according to either the nature (type) of the expense or the function (activity to which the expense relates). We have chosen to classify our expenses using the nature classification as it more accurately reflects the type of operations we undertake.

**Real-life
Case 19.7**
(cont'd)

The consolidated income statement of Telstra in 2007 is as follows:

	2007	2006
	A\$ million	A\$ million
Income:		
Revenue (excluding finance income)	23,709	22,734
Other income	251	328
	<u>23,960</u>	<u>23,062</u>
Expenses:		
Labour	4,017	4,364
Goods and services purchased	5,151	4,701
Other expenses	4,924	4,427
	<u>14,092</u>	<u>13,492</u>
Share of net loss/(gain) from jointly controlled and associated entities	7	(5)
	<u>14,099</u>	<u>13,487</u>
Earnings before interest, income tax expense, depreciation and amortisation (EBITDA)	9,861	9,575
Depreciation and amortisation	(4,082)	(4,078)
Earnings before interest and income tax expense (EBIT)	<u>5,779</u>	<u>5,497</u>
Finance income	57	74
Finance costs	(1,144)	(1,007)
Net finance costs	<u>(1,087)</u>	<u>(933)</u>
Profit before income tax expense	4,692	4,564
Income tax expense	(1,417)	(1,381)
Profit for the year	<u>3,275</u>	<u>3,183</u>
Attributable to:		
Equity holders of Telstra Entity	3,253	3,183
Minority interest	22	–
	<u>3,275</u>	<u>3,183</u>

19.6.4.2 Analysis of Expenses by Function (Function of Expense Method)

The second form of analysis is the function of expense or cost of sales method, which classifies expenses according to their function as part of cost of sales or, for example, the costs of distribution or administrative activities. At a minimum, an entity discloses its cost of sales under this method separately from other expenses. This method can provide more relevant information to users than the classification of expenses by nature, but allocating costs to functions may require arbitrary allocations and involve considerable judgement.

Example 19.21 Classification using the function of expense method in the income statement is as follows:

	\$	\$
Revenue		100,000
Cost of sale.....		<u>(49,000)</u>
Gross profit.....		51,000
Other income		<u>20,000</u>
		71,000
Distribution costs	9,000	
Administrative expenses	7,000	
Other expenses.....	2,000	
Total expenses.....		<u>(18,000)</u>
Profit before tax.....		<u><u>53,000</u></u>

Real-life

Case 19.8

Rolls-Royce Group plc

Rolls-Royce Group plc, which names itself as a world-leading provider of power systems and services for use on land, at sea and in the air, used the function of expense method in reporting its consolidated income statement of 2007 as follows:

	2007 £ million	2006 £ million
Revenue	7,435	7,156
Cost of sales.....	<u>(6,003)</u>	<u>(5,566)</u>
Gross profit.....	1,432	1,590
Other operating income.....	50	57
Commercial and administrative costs	(653)	(632)
Research and development costs.....	(381)	(370)
Share of profit of joint ventures	<u>66</u>	<u>47</u>
Operating profit	514	692
(Loss)/profit on sale or termination of businesses	<u>(2)</u>	<u>1</u>
Profit before financing.....	512	693
Financing income.....	718	1,196
Financing costs.....	<u>(497)</u>	<u>(498)</u>
Net financing	<u>221</u>	<u>698</u>
Profit before taxation.....	733	1,391
Taxation	<u>(133)</u>	<u>(397)</u>
Profit for the year.....	<u><u>600</u></u>	<u><u>994</u></u>
Attributable to:		
Equity holders of the parent.....	606	998
Minority interests	<u>(6)</u>	<u>(4)</u>
Profit for the year.....	<u><u>600</u></u>	<u><u>994</u></u>

An entity classifying expenses by function is required to disclose additional information on the nature of expenses, including depreciation and amortisation expense and employee benefits expense (IAS 1.104).

19.7 Statement of Changes in Equity

A statement of changes in equity is a statement of a complete set of financial statements. The name has been used for a while, but the coverage and contents of the statements have been revised. In the past, the statement of changes in equity comprised items of income and expense not recognised in profit or loss, together with owner changes in equity and the effects of changes in accounting policies and correction of errors.

However, IAS 1, as revised in 2007, revises the coverage and contents of the statement of changes in equity and clarifies that all changes in equity arising from transactions with owners in their capacity as owners (i.e., owner changes in equity) should be presented separately from non-owner changes in equity. An entity is not permitted to present components of comprehensive income (i.e., non-owner changes in equity) in the statement of changes in equity. The purpose is to provide better information by aggregating items with shared characteristics and separating items with different characteristics. IAS 1 now requires an entity to present the following items in its statement of changes in equity:

1. Total comprehensive income for the period, showing separately the total amounts attributable to owners of the parent and to non-controlling interest;
2. For each component of equity, the effects of retrospective application or retrospective restatement recognised in accordance with IAS 8; and
3. For each component of equity, a reconciliation between the carrying amount at the beginning and the end of the period, separately disclosing changes resulting from
 - a. profit or loss;
 - b. each item of other comprehensive income; and
 - c. transactions with owners in their capacity as owners, showing separately contributions by and distributions to owners and changes in ownership interests in subsidiaries that do not result in a loss of control (IAS 1.106).

The components of equity include, for example, each class of contributed equity, the accumulated balance of each class of other comprehensive income, and retained earnings. Changes in an entity's equity between the beginning and the end of the reporting period also reflect the increase or decrease in its net assets during the period.

Example 19.22 Statement of changes in equity is illustrated in IAS 1 (revised in 2007) as follows:

	Share capital \$	Retained earnings \$	Available- for-sale financial assets \$	Revaluation surplus \$	Total \$
Balance at 1 January 2006	600,000	118,100	1,600	–	719,700
Changes in accounting policy	–	400	–	–	400
Restated balance	600,000	118,500	1,600	–	720,100
Changes in equity for 2006:					
Dividends	–	(10,000)	–	–	(10,000)
Total comprehensive income for the year	–	53,200	16,000	1,600	70,800
Balance at 31 December 2006	600,000	161,700	17,600	1,600	780,900
Changes in equity for 2007:					
Issue of share capital	50,000	–	–	–	50,000
Dividends	–	(15,000)	–	–	(15,000)
Total comprehensive income for the year	–	96,600	(14,400)	800	83,000
Transfer to retained earnings	–	200	–	(200)	–
Balance at 31 December 2007	650,000	243,500	3,200	2,200	898,900

19.7.1 Effects of Retrospective Adjustments or Retrospective Restatements

In applying a change in accounting policy, IAS 8 requires an entity to have retrospective adjustments to effect the change (i.e., retrospective application). In correcting an error, IAS 8 requires an entity to have restatements to correct errors retrospectively (i.e., retrospective restatement). Chapter 20 illustrates the retrospective application of a change in accounting policy and retrospective restatement to correct errors.

IAS 1 clearly states that retrospective adjustments and retrospective restatements are not changes in equity but are adjustments to the opening balance of retained earnings, except when an IFRS requires retrospective adjustment of another component of equity. IAS 1 requires disclosure in the statement of changes in equity of the total adjustment to each component of equity resulting from changes in accounting policies and from corrections of errors separately. These adjustments are disclosed for each prior period and the beginning of the period.

Even though IAS 1 specifies that the effects of retrospective application or retrospective restatement are included in the statement of changes in equity, there are views that these effects should be regarded as non-owner changes in equity. The IASB clarified that the effects of retrospective application or retrospective restatement are not changes in equity in the period, but provide a reconciliation between the

previous period's closing balance and the opening balance in the statement of changes in equity.

19.7.2 Presentation of Dividends

An entity is also required to present, either in the statement of changes in equity or in the notes, the amount of dividends recognised as distributions to owners during the period, and the related amount per share (IAS 1.107). While dividends are distributions to owners in their capacity as owners and the statement of changes in equity presents all owner changes in equity, an entity is not allowed to present dividends in the statement of comprehensive income because that statement presents non-owner changes in equity. The purpose is to ensure that owner changes in equity (in this case, distributions to owners in the form of dividends) are presented separately from non-owner changes in equity (presented in the statement of comprehensive income).

19.8 Statement of Cash Flows

Cash flow information provides users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents and the needs of the entity to utilise those cash flows. An entity is required to present a statement of cash flows, and IAS 7 sets out requirements for the presentation and disclosure of cash flow information. Chapter 24 illustrates the requirements of presenting a statement of cash flows.

19.9 Notes

Notes are one of the integral parts of financial statements. All IFRSs require certain information and details to be disclosed in the notes, while IAS 1 specifies the overall structure of the notes and some other minimum disclosures that are not listed in any specific IFRS, including

1. disclosure of accounting policies;
2. management judgements (apart from those involving estimations);
3. sources of estimation uncertainty;
4. capital disclosure; and
5. other disclosures.

IAS 1 defines **notes** as

- containing information in addition to that presented in the statement of financial position, statement of comprehensive income, separate income statement (if presented), statement of changes in equity and statement of cash flows; and
- providing narrative descriptions or disaggregations of items presented in those statements and information about items that do not qualify for recognition in those statements (IAS 1.7).

19.9.1 Structure of Notes

In general, an entity is required to have notes to present or disclose the following information that is not required in any specific IFRS:

1. Present information about the basis of preparation of the financial statements and the specific accounting policies used in accordance with IAS 1;
2. Disclose the information required by IFRSs that is not presented elsewhere in the financial statements; and
3. Provide information that is not presented elsewhere in the financial statements but is relevant to an understanding of any of them (IAS 1.112).

For the structure and order of the notes, an entity is required to, as far as practicable, present notes in a systematic manner and is required to cross-reference each item in all the statements of the financial statements to any related information in the notes (IAS 1.113).

An entity normally presents notes in the following order, to assist users to understand the financial statements and to compare them with financial statements of other entities:

1. Statement of compliance with IFRSs (see Section 19.3.1);
2. Summary of significant accounting policies applied (see Section 19.9.2);
3. Supporting information for items presented in all statements of the financial statements in the order in which each statement and each line item is presented; and
4. Other disclosures, including
 - a. contingent liabilities (see IAS 37, Chapter 14) and unrecognised contractual commitments; and
 - b. non-financial disclosures, e.g., the entity's financial risk management objectives and policies (see IFRS 7, Chapter 18).

In some circumstances, it may be necessary or desirable to vary the order of specific items within the notes. Nevertheless, an entity retains a systematic structure for the notes as far as practicable. An entity may also present notes providing information about the basis of preparation of the financial statements and specific accounting policies as a separate section of the financial statements.

19.9.2 Disclosure of Accounting Policies

An entity is required to disclose a summary of significant accounting policies in the notes of the financial statements, and certain IFRSs also require specific disclosures of accounting policies.

Example 19.23 Certain IFRSs require specific disclosures of accounting policies:

1. IAS 2 *Inventories* requires the disclosure of the accounting policies adopted in measuring inventories, including the cost formula used (see Chapter 9); and

2. IAS 18 *Revenue* requires the disclosure of the accounting policies adopted for the recognition of revenue, including the methods adopted to determine the stage of completion of transactions involving the rendering of services (see Chapter 11).

IAS 1 specifically requires an entity to disclose in a summary of significant accounting policies

1. the measurement basis or bases used in preparing the financial statements; and
2. the other accounting policies used that are relevant to an understanding of the financial statements (IAS 1.117).

The measurement basis or bases include historical cost, net realisable value, fair value and recoverable amount. Since the measurement basis or bases used in the financial statements significantly affect users' analysis of the financial statements, it is important for an entity to disclose such basis or bases.

Example 19.24 Innova-Manufacture Limited uses the historical cost or cost model in measuring its assets and liabilities, including property, plant and equipment, except for manufacturing machinery. It uses the revaluation model in measuring the machines (see IAS 16, Chapter 3).

In addition to the specific requirements in different IFRSs, for example, IAS 16 on using the revaluation model, IAS 1 also requires Innova-Manufacture Limited to disclose the measurement bases (including historical cost and revaluation model) used in preparing its financial statements. While it uses more than one measurement basis in the financial statements, i.e., the manufacturing machinery is revalued and other assets and liabilities are stated at cost, it is sufficient for Innova-Manufacture Limited to provide an indication of the categories of assets and liabilities to which each measurement basis (i.e., cost and revaluation model) is applied.

**Real-life
Case 19.9**

Sberbank (Savings Bank of the Russian Federation)

Sberbank, one of the largest banks in the Russian Federation and principally owned by the Central Bank of the Russian Federation, made the following statement of compliance and measurement bases in its financial statements of 2006:

- These financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) under the historical cost convention, as modified by the revaluation of premises, revaluation of available-for-sale financial assets, financial assets held at fair value through profit or loss and all derivative contracts.

In deciding whether an accounting policy should be disclosed in the notes, an entity should consider

1. whether disclosure would assist users in understanding how transactions, other events and conditions are reflected in reported financial performance and financial position; and
2. the nature of its operations and the policies that the users of its financial statements would expect to be disclosed for that type of entity.

Disclosure of particular accounting policies is especially useful to users when those policies are selected from alternatives allowed in IFRSs. In addition, an accounting policy may be significant because of the nature of the entity's operations even if amounts for current and prior periods are not material. It is also appropriate to disclose each significant accounting policy that is not specifically required by IFRSs but the entity selects and applies in accordance with IAS 8.

Example 19.25 Some balances and transactions can be accounted for by different alternatives in accordance with IFRS, including the following:

1. IAS 16 *Property, Plant and Equipment* allows an entity to measure different classes of property, plant and equipment by using either the cost model or the revaluation model (see Chapter 3);
2. IAS 38 *Intangible Assets* allows an entity to measure different classes of intangible assets by using either the cost model or the revaluation model (if there is an active market to ascertain the fair value of the intangible assets, see Chapter 6);
3. IAS 39 *Financial Instruments – Recognition and Measurement* allows an entity (if conditions are met) to measure financial assets at amortised cost or at fair value (see Chapter 16); and
4. IAS 40 *Investment Property* allows an entity to measure investment properties by using either the cost model or the fair value model (see Chapter 5).

Disclosure of the measurement bases used for the above assets and accounting policies helps users to understand how the balances and transactions are reflected in the financial statements and to compare the financial positions and results of an entity over time and with other entities.

19.9.3 Management Judgements and Accounting Estimates

In the process of applying the entity's accounting policies, management makes various judgements and estimations that can significantly affect the amounts it recognises in the financial statements. An entity has to distinguish between (1) management judgements apart from those involving estimations and (2) judgements involving estimations. The entity is then required to separately disclose (1) management judgements apart from those involving estimations and (2) the sources of the estimation uncertainty that require management's judgements.

19.9.3.1 Management Judgements Apart from Those Involving Estimations

In the summary of significant accounting policies or other notes, IAS 1 requires an entity to disclose the judgements (apart from those involving estimations) that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements (IAS 1.122).

Example 19.26 Management may make judgements (apart from those involving estimations) in applying accounting policies and preparing financial statements. They include the following:

1. Classifying a financial asset as a held-to-maturity investment (see IAS 39, Chapter 16);
2. Classifying the properties as investment property (IAS 40), owner-occupied property (IAS 16) and property held for sale in the ordinary course of business (IAS 2);
3. Determining when substantially all the significant risks and rewards of ownership of lease assets and financial assets are transferred to other entities (IAS 17 and 39); and
4. Determining whether, in substance, particular sales of goods are financing arrangements and therefore do not give rise to revenue (IAS 18 and 39).

IAS 1 requires the disclosure of such judgements, while other IFRSs may require specific disclosures, for example, IAS 40 requires disclosure of the criteria developed by the entity to distinguish the classification of investment property from owner-occupied property and from property held for sale in the ordinary course of business, when classification of the property is difficult.

The disclosure of management's judgements involves particular judgements that management made in the process of applying the entity's accounting policies, and these judgements do not relate to sources of estimation uncertainty that require management's judgements. Separate disclosures of sources of estimation uncertainty (see Section 19.3.2) are also required in IAS 1. However, in practice, many entities disclose the judgements together with the assumptions and sources of estimation uncertainty under the notes of "critical accounting estimates and judgements" or "key estimates and judgements".

Real-life

Case 19.10 Foster's Group Limited

Foster's Group Limited, an Australia-based drinks company, is one of the few entities that has clearly separated the disclosure of judgements from key sources of estimation uncertainty. Its annual report of 2007 disclosed a note of "critical judgements in applying the entity's accounting policies", with the details in respect of the useful life of intangible assets as follows:

Real-life
Case 19.10
(cont'd)

- The useful lives of intangible assets are assessed to be either finite or indefinite.
- Brand names that have indefinite lives are not amortised.
- Management uses judgement in determining whether an individual brand will have a finite life or an indefinite life. In making this determination, management makes use of information on the long-term strategy for the brand, the level of growth or decline of the markets that the brand operates in, and the history of the market and the brand's position within that market.
- If a brand is assessed to have a finite life, management will use judgement in determining the useful life of the brand and will consider the period over which expected cash flows will continue to be derived in making that decision.

Chapter 6 illustrates the accounting requirements on intangible assets, including intangible assets with finite and indefinite useful lives.

19.9.3.2 Assumptions and Sources of Estimation Uncertainty

In the notes of the financial statements, an entity is required to disclose information about the assumptions it makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. In respect of those assets and liabilities, the notes have to include details of

1. their nature; and
2. their carrying amount as at the end of the reporting period (IAS 1.125).

Example 19.27 In the absence of recently observed market prices, an entity may be required to have future-oriented estimates to measure

- the recoverable amount of classes of property, plant and equipment;
- the effect of technological obsolescence on inventories;
- provisions subject to the future outcome of litigation in progress; and
- long-term employee benefit liabilities such as pension obligations.

These estimates involve assumptions about such items as the risk adjustment to cash flows or discount rates, future changes in salaries and future changes in prices affecting other costs.

In determining the carrying amounts of some assets and liabilities, an entity requires estimation of the effects of uncertain future events on those assets and liabilities at the end of the reporting period. The disclosures should relate mainly to the estimates that require management's most difficult, subjective or complex judgements and help users of financial statements to understand the judgements and other sources of estimation uncertainty.

Real-life**Case 19.11****Rolls-Royce Group plc**

Rolls-Royce Group plc explained its key sources of estimation uncertainty in preparing its financial statements of 2007 to include forecasts and discount rates, assessment of long-term contractual arrangement, post-retirement benefits, provisions, taxation and contingent liabilities. It then further explained each area, for example, addressing forecasts and discount rates as follows:

- The carrying value of a number of items on the balance sheet is dependent on the estimates of future cash flows arising from the group's operations:
 - The impairment tests for goodwill are dependent on forecasts of the cash flows of the cash-generating units that give rise to the goodwill and the discount rate applied. No impairment resulted from the annual impairment tests in 2007 (carrying value at 31 December 2007: £801 million; at 31 December 2006: £735 million).
 - If the assessment of development, participation, certification and recoverable engine costs recognised as intangible assets indicates the possibility of impairment, a detailed impairment test is undertaken. No impairment resulted from the assessment in 2007 (carrying value at 31 December 2007: £880 million; at 31 December 2006: £674 million).
 - The financial liabilities arising from financial risk and revenue sharing partnerships are valued at each reporting date using the amortised cost method (carrying value at 31 December 2007: £315 million; 31 December 2006: £324 million). This involves calculating the present value of the forecast cash flows of the arrangement using the internal rate of return at the inception of the arrangement as the discount rate.
 - The realisation of the deferred tax assets (carrying value at 31 December 2007: £81 million; at 31 December 2006: £141 million) recognised is dependent on the generation of sufficient future taxable profits. The group recognises deferred tax assets where it is more likely than not that the benefit will be realised.

The nature and extent of the disclosure and information provided vary according to the nature of the assumption and other circumstances. The types of disclosure may include

1. the nature of the assumption or other estimation uncertainty;
2. the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, including the reasons for the sensitivity;
3. the expected resolution of an uncertainty and the range of reasonably possible outcomes within the next financial year in respect of the carrying amounts of the assets and liabilities affected; and
4. an explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

Real-life

Case 19.12 OJSC KAMAZ

OJSC KAMAZ (or KAMAZ Group), the largest Russian vehicle manufacturer, has adopted IFRSs in preparing its financial statements. It is one of the few entities that provides the effects of changes (or sensitivity) in assumptions of estimates. Its notes of the financial statements of 2006 included the explanation of property, plant and equipment valuation under the note heading of “Critical accounting estimates and judgements in applying accounting policies” as follows:

- Property, plant and equipment were valued by an independent appraiser using a variety of methods based on information available at 1 January 2005, including replacement cost, discounted cash flows and market price methods. The most appropriate method was selected for each asset.
- Assumptions used in the discounted cash flow models included a discount rate of 14.3% p.a., average growth rate of sales of 6.4% p.a. during 2005–2010, with no change in subsequent periods, and forecasts of price changes published by the Ministry of Economy and Development of the Russian Federation.
- Summary of effects of change in assumptions of valuation:

	Applied assumption % per annum	Increase (decrease) in fair value of property, plant and equipment Millions of Russian roubles (RR)
Discount rate:		
10% lower than applied discounted rate.....	12.9	4,134
10% higher than applied discounted rate.....	15.7	(3,251)
Growth rate:		
10% higher than applied growth rate.....	7.0	1,061
10% lower than applied growth rate.....	5.8	(976)

Other IFRSs also require the disclosure of some assumptions that would otherwise be required in IAS 1. When it is impracticable to disclose the extent of the possible effects of an assumption or another source of estimation uncertainty at the end of the reporting period, an entity discloses the reasonably possible outcomes within the next financial year and the nature and carrying amount of the specific asset or liability affected by the assumption.

IAS 1 does not require an entity to disclose budget information or forecasts in making the disclosures. The disclosures are also not required for the information relating to assets and liabilities measured at fair value based on recently observed market prices, because the future changes in the carrying amounts would not arise from assumptions or other sources of estimation uncertainty at the end of the reporting period.

19.9.4 Capital Disclosure

The level of an entity's capital and how it manages capital are important factors for users to consider in assessing the risk profile of an entity and its ability to withstand unexpected adverse events. The level of capital may also affect the entity's ability to pay dividends. In consequence, IAS 1 requires an entity to disclose information that enables users of its financial statements to evaluate the entity's objectives, policies and processes for managing capital (IAS 1.134). This is termed the capital disclosure requirement.

Based on IAS 1 in respect of capital, an entity can have a view of capital that differs from what IFRSs define as equity. For the purposes of the disclosure, capital can equate with equity as defined in IFRSs. It may also include or exclude some other components. The disclosure is intended to give entities the opportunity to describe how they view the components of capital they manage, if it is different from what IFRSs define as equity. In addition, an entity may manage capital in a number of ways and be subject to a number of different capital requirements, for example, externally imposed capital requirements by the relevant authorities or lenders or internal capital management targets.

To comply with the capital disclosure requirement, an entity depends on the information provided internally to key management personnel to disclose the following:

1. Qualitative information about its objectives, policies and processes for managing capital, including
 - a. a description of what it manages as capital;
 - b. when an entity is subject to externally imposed capital requirements, the nature of those requirements and how those requirements are incorporated into the management of capital; and
 - c. how it is meeting its objectives for managing capital;
2. Summary quantitative data about what it manages as capital. Some entities regard some financial liabilities (e.g., some forms of subordinated debt) as part of capital. Other entities regard capital as excluding some components of equity (e.g., components arising from cash flow hedges);
3. Any changes in (1) and (2) from the previous period;

4. Whether during the period it complied with any externally imposed capital requirements to which it is subject;
5. When the entity has not complied with such externally imposed capital requirements, the consequences of such non-compliance.

Real-life

Case 19.13

China Communications Construction Company Limited

In complying with the new capital disclosure requirements of IAS 1, China Communications Construction Company Limited, the largest port construction and design company in China and the world's largest container crane manufacturer, disclosed the following capital risk management note in its annual report of 2007:

- The group's objectives when managing capital are to safeguard the group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.
- In order to maintain or adjust the capital structure, the group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.
- The group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings as shown in the consolidated balance sheet, less cash and cash equivalents. Total capital is calculated as total equity as shown in the consolidated balance sheet plus net debt.
- The group aims to maintain the gearing ratio at a reasonable level.

	2007 RMB million	2006 RMB million
Total borrowings	34,461	30,689
Less: Cash and cash equivalents	(22,473)	(30,793)
Net debt/(cash)	11,988	(104)
Total equity	53,962	36,727
Total capital	65,950	36,623
Gearing ratio	18%	—

- The increase in the gearing ratio during 2007 resulted primarily from the significant decrease in cash and cash equivalents, which is mainly due to the increase in cash used in investing activities.

19.9.5 Other Disclosures

Some disclosures not covered in other IFRSs are also set out in IAS 1. For puttable financial instruments classified as equity instruments, an entity is required to disclose (to the extent not disclosed elsewhere):

1. Summary quantitative data about the amount classified as equity;
2. Its objectives, policies and processes for managing its obligation to repurchase or redeem the instruments when required to do so by the instrument holders, including any changes from the previous period;
3. The expected cash outflow on redemption or repurchase of that class of financial instruments; and
4. Information about how the expected cash outflow on redemption or repurchase was determined (IAS 1.136A).

An entity is also required to disclose in the notes:

1. The amount of dividends proposed or declared before the financial statements were authorised for issue but not recognised as a distribution to owners during the period, and the related amount per share; and
2. The amount of any cumulative preference dividends not recognised (IAS 1.137).

If not disclosed elsewhere in information published with the financial statements, an entity is required to disclose the following corporate information:

1. The domicile and legal form of the entity, its country of incorporation and the address of its registered office (or principal place of business, if different from the registered office);
2. A description of the nature of the entity's operations and its principal activities;
3. The name of the parent and the ultimate parent of the group; and
4. If it is a limited life entity, information regarding the length of its life (IAS 1.38).

Real-life

Case 19.14 Sberbank (Savings Bank of the Russian Federation)

Sberbank disclosed detailed corporate information in its notes of the financial statements of 2006 that were prepared in accordance with IFRSs and included the following information:

- The bank is a joint stock commercial bank established in 1841 and has operated in various forms since then. The bank was incorporated and is domiciled in the Russian Federation. The bank's principal shareholder, the Central Bank of the Russian Federation (the Bank of Russia), owns 63.8% of ordinary shares or 60.6% of the issued and outstanding shares at 31 December 2006.
- The bank's principal business activity is corporate and retail banking operations within the Russian Federation. The bank has operated under a full banking licence issued by the Bank of Russia since 1991.
- The bank's registered address is: Vavilova str., 19, Moscow, Russian Federation.

19.10 Summary

In preparing and presenting financial statements, an entity is required to apply IAS 1 *Presentation of Financial Statements*, which was revised in 2007 to impose new requirements in presenting the financial position and financial performance of an entity. A complete set of financial statements now comprises a statement of financial position, a statement of comprehensive income, a statement of changes in equity, a statement of cash flows, notes, and a statement of financial position as at the beginning of the earliest comparative period if conditions are met. Some of these titles were newly introduced in IAS 1 in 2007, but an entity can choose to use other titles to describe the statements.

Fair presentation of financial statements first requires the full compliance of IFRSs. Departure from any IFRS is feasible only in extremely rare circumstances where the management concludes that compliance with a requirement in an IFRS would be so misleading that it would conflict with the objective of financial statements. Then, adequate and sufficient disclosures are required.

Comparative information is also required to enhance the comparability of financial statements. In case there is retrospective adjustment on any change in accounting policy, retrospective restatement of errors, and reclassification, a statement of financial position as at the beginning of the earliest comparative period will be further required.

There are certain minimum information and line items to be presented in a statement of financial position. A distinction between current and non-current items in the statement is also required unless presentation of assets and liabilities based on liquidity can provide reliable and more relevant information. IAS 1 clearly defines current assets and current liabilities, and all other items are classified as non-current items.

The statement of comprehensive income presents items of income and expense. An entity can choose to present the statement in one statement (single statement approach) or two statements (two-statement approach). However, only non-owner changes in equity can be presented in the statement(s). Non-owner changes in equity are further divided into: (1) components of profit or loss and (2) components of other comprehensive income, representing those items of income and expense that are not recognised in profit or loss as required or permitted by other IFRSs. If the two-statement approach is chosen, the components of profit or loss are presented in the income statement and the components of other comprehensive income are presented in the statement of comprehensive income. Reclassification adjustments should also be separately disclosed, either in the statement of comprehensive income or in the notes.

The statement of changes in equity now presents only those owner changes in equity, including presentation of dividend. Statements of cash flows and notes are also part of a complete set of financial statements. The structure and the minimum contents of the notes are required in IAS 1. In particular, an entity is required to disclose its view of capital as well as qualitative and quantitative information about its objectives, policies and processes for managing capital.

Review Questions

1. What are general purpose financial statements?
2. Define the objective of financial statements and correlate it to the contents of financial statements.
3. What are the components of a complete set of financial statements under IAS 1?
4. How does an entity fairly present its financial position, financial performance and cash flows?
5. When and how can an entity depart from an IFRS in preparing and presenting its financial statements?
6. What is the implication if a departure from an IFRS in preparing and presenting financial statements is not prohibited in a regulatory framework?
7. Explain the frequency requirements in reporting financial statements.
8. What are the requirements in presenting comparative information?
9. When is an entity required to present an additional statement of financial position as at the beginning of the earliest comparative period?
10. What are the minimum line items in the statement of financial position?
11. How does an entity present its current and non-current items in the statement of financial position?
12. Define current assets and current liabilities.
13. Define non-current assets and non-current liabilities.
14. When can a non-current asset be reclassified as a current asset?
15. When can a non-current liability be reclassified as a current liability?
16. What are owner changes in equity and non-owner changes in equity?
17. Define other comprehensive income and total comprehensive income.
18. Explain the approaches in presenting a statement of comprehensive income.
19. List some examples of the components of comprehensive income.
20. What are reclassification adjustments?
21. What should be presented in a statement of comprehensive income using the single statement approach?
22. What should be presented in a statement of comprehensive income using the two-statement approach?
23. What should be presented in a statement of changes in equity?
24. How does an entity present dividends?
25. How does an entity structure the notes of financial statements?
26. What kinds of minimum disclosure should be made in the notes of financial statements?
27. Describe the capital disclosure requirements in accordance with IAS 1.

Exercises

- Exercise 19.1** In preparing its financial statement to comply with the IFRSs, an entity can choose to depart from a particular IFRS so long as it has proper disclosure. Evaluate and comment.
- Exercise 19.2** Tony Holdings Limited adopts the revaluation model in measuring its property, plant and equipment and the fair value model in measuring its investment properties. During the year, Tony revalued all properties and investment properties and disposed of certain properties and investment properties.
Illustrate the reporting requirements of the above revaluation in the statement of comprehensive income and statement of changes in equity.
- Exercise 19.3** Bonnie Group declared a dividend of \$2.5 million out of the current year's profit of \$10 million. Before the end of the reporting period, a dividend of \$1.5 million was paid to the shareholders of Bonnie. The remaining unpaid dividend of \$1 million was recognised as dividend payable in the statement of financial position. In the statement of comprehensive income, the total dividend declared of \$2.5 million was deducted from profit for the year and the net figure after the dividend was reported as "profit available for distribution".
Comment on Bonnie's presentation.

Problems

- Problem 19.1** Excellence Hotel Group, a listed group in Country Arthur, considers the regular revaluation of its properties, owner-managed hotels and investment property, as being costly. It has proposed to the board to have a revaluation once every 3 years and prepared its financial statements accordingly. The same proposal has also been provided to its supervisory authority in Country Arthur for comment. The authority has not given any comment on the proposal before the issuance of the financial statements.
Evaluate the proposal and discuss whether it is permitted in IAS 1.
- Problem 19.2** Excellence Hotel Group, a listed group in Country Arthur, considers the regular revaluation of its properties, owner-managed hotels and investment property, as being costly. It has proposed to the board to have a revaluation once for 3 years and prepared its financial statements accordingly. The same proposal has also been provided to its supervisory authority in Country Arthur for comment. The authority has finally given a comment that Excellence Hotel Group should not be allowed to depart from the accounting requirements.
Evaluate the proposal and discuss the implication of the authority's decision.

Problem 19.3 During the year, Melody Limited placed a 24-hour deposit of \$3 million in a bank to secure a 3-year term loan of \$2 million and other banking facilities granted by the same bank. Melody is required to roll over the deposit until prior approval is obtained from the bank. Otherwise, the deposit should first be offset with the bank loan before Melody can terminate the rollover of the deposit.

The management of Melody considered that the deposit was a back-to-back position to the bank loan and also considered that it should offset the deposit for reporting in the statement of financial position as current assets.

Discuss and evaluate the proposal by Melody's management.

Problem 19.4 During the year, Melody Limited placed a 24-hour deposit of \$3 million in a bank to secure a 3-year term loan of \$2 million and other banking facilities granted by the same bank. Melody is required to roll over the deposits until prior approval is obtained from the bank. Otherwise, the deposit should first be offset with the bank loan before Melody can terminate the rollover of the deposit.

Before the 3-year term loan matures, Melody begins to negotiate a refinancing plan of the loan with the bank. The bank officer has verbally advised Melody that a refinancing plan can be approved after the end of the reporting period but before the issuance of its financial statements. He also told Melody that Melody should consider it as a non-current loan and present it in the statement of financial position to be submitted to the bank for an annual review.

Discuss and evaluate the suggestion of the bank officer.

Case Studies

Case Study 19.1 Deutsche Telekom AG, Bonn, explained one of the new requirements of IAS 1, revised in 2007, as follows:

The amendment to IAS 1 requires entities to disclose comparative information in respect of the previous period. The revised standard also stipulates the presentation of a further financial statement (statement of financial position) at the beginning of the first comparative period presented if the entity changes its accounting policies retrospectively or makes retrospective restatements.

Discuss the requirements of a complete set of financial statements in IAS 1 and evaluate and comment on the explanation of Deutsche Telekom AG, Bonn.

Case Study 19.2 Based on Real-life Case 19.3, Societe Generale Group departed from IFRS and specifically explained in its consolidated financial statements of 2007 that the departure was not prohibited by relevant regulatory entities. Societe Generale Group explained, "This treatment (the departure) has been submitted to the banking supervisory body (Secretariat general da la Commission bancaire) to the market authority (Autorite des Marches Financiers) to confirm its acceptability regarding the regulatory framework."

What are the consequences if:

1. Secretariat general da la Commission bancaire or Autorite des Marches Financiers has not confirmed the acceptability of the departure of IFRS?
2. Secretariat general da la Commission bancaire or Autorite des Marches Financiers has not agreed to the departure from IFRS?

Case
Study 19.3

The summarised draft financial statements of Wellmay are shown below.

Income statement year ended 31 March 2007

	\$'000
Revenue (Note (i))	4,200
Cost of sales (Note (ii))	(2,700)
Gross profit	1,500
Operating expenses	(470)
Investment property rental income	20
Finance costs	(55)
Profit before tax	995
Income tax	(360)
Profit for the period	635

Balance sheet as at 31 March 2007

	\$'000	\$'000
ASSETS		
Non-current assets:		
Property, plant and equipment (Note (iii))	4,200	
Investment property (Note (iii))	400	
		4,600
Current assets		1,400
Total assets		6,000
EQUITY AND LIABILITIES		
Equity:		
Equity shares of 50 cents each (Note (vii))		1,200
Reserves:		
Revaluation reserve	350	
Retained earnings (Note (iv))	2,850	
		4,400
Non-current liabilities:		
8% convertible loan note (2010) (Note (v))	600	
Deferred tax (Note (vi))	180	
		780
Current liabilities		820
Total equity and liabilities		6,000

The following information is relevant to the draft financial statements:

- (i) Revenue includes \$500,000 for the sale on 1 April 2006 of maturing goods to Westwood. The goods had a cost of \$200,000 at the date of sale. Wellmay can repurchase the goods on 31 March 2008 for \$605,000 (based on achieving a lender's return of 10% per annum), at which time the goods are estimated to have a value of \$750,000.
- (ii) Past experience shows that in the post-balance sheet period the company often receives unrecorded invoices for materials relating to the previous year. As a result of this, an accrued charge of \$75,000 for contingent costs has been included in cost of sales and as a current liability.
- (iii) Non-current assets:
Wellmay owns two properties. One is a factory (with office accommodation) used by Wellmay as a production facility, and the other is an investment property that is leased to a third party under an operating lease. Wellmay revalues all its properties to current value at the end of each year and uses the fair value model in IAS 40 *Investment Property*. Relevant details of the fair values of the properties are given below:

	Factory \$'000	Investment property \$'000
Valuation 31 March 2006	1,200	400
Valuation 31 March 2007	1,350	375

The valuations at 31 March 2007 have not yet been incorporated into the financial statements. Factory depreciation for the year ended 31 March 2007 of \$40,000 was charged to cost of sales. As the factory includes some office accommodation, 20% of this depreciation should have been charged to operating expenses.

- (iv) The balance of retained earnings is made up of:

	\$'000
Balance b/f 1 April 2006	2,615
Profit for the period	635
Dividends paid during year ended 31 March 2007	(400)
	2,850

- (v) On 1 April 2006, an 8% convertible loan note with a nominal value of \$600,000 was issued at par. It is redeemable on 31 March 2010 at par, or it may be converted into equity shares of Wellmay on the basis of 100 new shares for each \$200 of loan note. An equivalent loan note without the conversion option would

have carried an interest rate of 10%. Interest of \$48,000 has been paid on the loan and charged as a finance cost.

The present value of \$1 receivable at the end of each year, based on discount rates of 8% and 10%, are as follows:

End of year	8%	10%
1	0.93	0.91
2	0.86	0.83
3	0.79	0.75
4	0.73	0.68

(vi) The carrying amounts of Wellmay's net assets at 31 March 2007 are \$600,000 higher than their tax base. The rate of taxation is 35%. The income tax charge of \$360,000 does not include the adjustment required to the deferred tax provision, which should be charged in full to the income statement.

(vii) Bonus/scrip issue:

On 15 March 2007, Wellmay made a bonus issue from retained earnings of one share for every four held. The issue has not been recorded in the draft financial statements.

Required:

Redraft the financial statements of Wellmay, including a statement of changes in equity, for the year ended 31 March 2007 reflecting the adjustments required by Notes (i) to (vii) above.

Note: Calculations should be made to the nearest \$'000.

(ACCA 2.5 June 2007, adapted)

20

Accounting Policies, Changes in Accounting Estimates and Errors

Learning Outcomes

This chapter enables you to understand the following:

- 1 The difference between accounting policies and accounting estimates
- 2 The criteria for selecting and applying accounting policies
- 3 The nature of and accounting for changes in accounting policies
- 4 The nature of and accounting for changes in accounting estimates
- 5 The nature of and accounting for corrections of prior period errors



Real-life

Case 20.1

Singapore Airlines Limited

Consistency in accounting should be maintained, but changes in accounting policies may still be required in some circumstances, for example, when there is a new or amended accounting standard. In adopting several new or amended Singapore Financial Reporting Standards (FRSs) as aligned with IFRSs, Singapore Airlines Limited explained in its annual report of 2006 as follows:

- The main accounting policies of the group, which have been consistently applied except where indicated otherwise, are described in the following paragraphs ...
- On 1 April 2005, the group and the company adopted all new or revised FRS that are applicable in the current financial year. The 2004–05 financial statements have been amended as required, in accordance with the relevant transitional provisions in the respective FRS.

In respect of those changes, Singapore Airlines Limited had some further explanations:

- FRS 16 (equivalent to IAS 16 *Property, Plant and Equipment*) has been revised to require major inspection costs to be capitalised ... The revised treatment is applied prospectively ...
- FRS 102 requires the group to recognise an expense in the profit and loss account with a corresponding increase in equity for share options granted after 22 November 2002 and not vested by 1 April 2005 ... The application of FRS 102 is retrospective and accordingly, the comparative financial statements are restated ...

Singapore Airlines Limited has used different methods in adopting the new or revised FRS and the consequential changes in accounting policies. The methods stated by Singapore Airlines Limited include “applied prospectively” (or prospective application) and the “application” being “retrospective” (or retrospective application).

In accounting for an element in the financial statements, an entity is required to make a judgement to select and apply the accounting policies and to make appropriate estimates in applying its accounting policy. Changes in accounting policy and changes in accounting estimate may be required in certain circumstances, and errors may sometimes occur.

This chapter aims at explaining and contrasting the accounting policies, accounting estimates and errors, and illustrating the accounting treatments for changes in accounting policies, changes in accounting estimates and correction of errors, including “retrospective application” and “prospective application” as stated in Real-life Case 20.1.

20.1 Applicable Standard and Scope

An entity is required to apply IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* in

1. electing and applying accounting policies; and
2. accounting for
 - a. changes in accounting policies;
 - b. changes in accounting estimates; and
 - c. corrections of prior period errors (IAS 8.3).

The accounting for the adjustments made to apply changes in accounting policies and the accounting for corrections of prior period errors are set out in IAS 8, but their respective tax effect should be accounted for and disclosed in accordance with IAS 12 *Income Taxes*.

Except for the disclosure requirements in IAS 8 to be discussed in this chapter, the disclosure requirements for accounting policies are set out in IAS 1 *Presentation of Financial Statements* (see Chapter 19).

20.2 Accounting Policy and Accounting Estimate

Since accounting requirements are not the same between accounting policy and accounting estimates, their differences should be properly identified. Accounting policy is clearly defined in IAS 8, but accounting estimate is not defined in any accounting standards. IAS 8 only defines changes in accounting estimates.

Accounting policies are the specific principles, base, conventions, rules and practice applied by an entity in preparing and presenting financial statements (IAS 8.5).

Preparing and presenting financial statements implies the recognition, measurement and presentation of elements, i.e., assets, liabilities, equity, income and expenses, in the financial statements. In consequence, the accounting policy selected by an entity on a particular element should determine the following:

1. Recognition: When and whether the element is recognised;
2. Measurement: How much of the element is recognised; and
3. Presentation: How the element is presented in financial statements.

IAS 8 specifically states that a change in the measurement basis applied is a change in an accounting policy and is not a change in an accounting estimate. It implies that the entity's selected measurement basis on a particular element, for example, the fair value model selected in subsequently measuring an investment property, is an accounting policy on the entity's investment property.

Accounting estimates represent an entity's estimates that may affect the elements in financial statements. Estimation should involve an entity's judgements based on the latest available, reliable information. Many items affecting the elements in the financial statements cannot be measured with precision but can only be estimated, because of

the uncertainties inherent in business activities. The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.

Example 20.1 List the accounting policies and accounting estimates that may be used in subsequently measuring

- a motor vehicle,
- an investment in a bond without a quote in an active market, and
- freehold land held for undermined future use.

Answers

A motor vehicle is subsequently measured under IAS 16 *Property, Plant and Equipment* (see Chapter 3):

- Accounting policies – To subsequently measure the motor vehicle by the cost model or the revaluation model
- Accounting estimates – To estimate the depreciation method, useful lives and residual value for the motor vehicle

An investment in a bond without a quote in an active market is subsequently measured under IAS 39 *Financial Instruments – Recognition and Measurement* (see Chapter 16):

- Accounting policies – To classify the bond as available-for-sale financial assets or loans and receivables
- Accounting estimates – To estimate the fair value of the bond

Freehold land held for undermined future use is subsequently measured under IAS 40 *Investment Property* (see Chapter 5):

- Accounting policies – To subsequently measure the land by the cost model or the fair value model
- Accounting estimates – To estimate the fair value of the land

20.3 Selection and Application of Accounting Policies

In determining an accounting policy in preparing and presenting financial statements, an entity has no choice but to comply with the following sources or requirements in descending order:

1. The entity should apply the applicable accounting standard or its interpretation; and
2. In case of no such applicable accounting standard or interpretation, the entity should develop and apply an accounting policy that results in information that is relevant and reliable.

20.3.1 Application of Accounting Standard

A particular accounting standard or interpretation may apply to a specific transaction or item. It is a general understanding and also a clear position that the accounting policies developed by applying the applicable accounting standard or interpretation can result in financial statements containing relevant and reliable information.

In consequence, when there is such an accounting standard or interpretation for a particular transaction or item, an entity must develop and apply its accounting policy for this item by

1. applying the accounting standard or interpretation; and
2. considering any relevant Implementation Guidance issued by the IASB for the accounting standard or interpretation (IAS 8.7).

Example 20.2 Melody Inc. holds two freehold properties in the same building. One property is held for Melody's own use and the other is held to earn rental from a third party. Except for the usage, the two properties are nearly the same in terms of size, price and other details. Melody Inc. even claims that both properties are held for long-term purposes and the rental property will be used by Melody for future expansion.

In consequence, Melody Inc. suggests using the revaluation model in IAS 16 *Property, Plant and Equipment* to subsequently measure the two identical properties. Discuss.

Answers

IAS 40 *Investment Property* specifically requires an entity to subsequently measure a freehold property held for rental by using the cost model or the fair value model. Even though property for its own use can be subsequently measured by using the revaluation model of IAS 16, the entity cannot use the same model to subsequently measure for the freehold property held to earn rental. Instead, Melody Inc. can choose either the cost model or the fair value model to subsequently measure the freehold property held to earn rental.

If Melody Inc. prefers to use the same model in subsequently measuring the two properties, it should consider choosing the cost model as IAS 40 requires an entity that chooses the cost model to measure the investment properties in accordance with IAS 16's requirements for the cost model.

20.3.1.1 Materiality

Materiality can also be considered in applying an accounting policy. IAS 8 specifically clarifies that accounting policies developed by applying the applicable accounting standard or interpretation need not be applied when the effect of applying them is immaterial.

However, when the materiality becomes an argument for a departure of an accounting standard or interpretation in order to achieve a particular presentation, for example, earning management, IAS 8 takes a different position. It states that:

- It is inappropriate to make, or leave uncorrected, immaterial departures from the accounting standards to achieve a particular presentation, for an entity's financial position, financial performance or cash flows (IAS 8.8).

20.3.1.2 Implementation Guidance

The relevancy of the Implementation Guidance for accounting standards is not as restrictive as the accounting standards or interpretations, since it does not form part of the accounting standards and does not contain requirements for financial statements.

In developing an accounting policy, an entity has to determine it by “applying” the accounting standards or interpretation, but only by “considering” the Implementation Guidance for the accounting standards or interpretation.

20.3.2 Judgement in the Absence of Accounting Standard

Even if a comprehensive set of accounting standards has been developed, some transactions or items will still fall outside the scope of that set of accounting standards.

Example 20.3 IFRSs or their Interpretation have not specifically addressed the following transactions or items:

- IFRS 3 does not apply to business combinations in which separate entities or businesses are brought together to form a reporting entity by contract alone without the obtaining of an ownership interest;
- IFRS 6 does not apply to the expenditure in obtaining the legal rights to explore a specific area for mineral resources; and
- IAS 20 does not address whether grants or assistance from non-government agencies or other parties are included within its scope.

In the absence of an accounting standard or an interpretation that specifically applies to a transaction, IAS 8 requires the management of an entity to use its judgement in developing and applying an accounting policy that results in information that is

1. relevant to the economic decision-making needs of users; and
2. reliable, in that the financial statements
 - a. represent faithfully the financial position, financial performance and cash flows of the entity;
 - b. reflect the economic substance of transaction, other events and conditions, and not merely the legal form;
 - c. are neutral, i.e., free from bias;
 - d. are prudent; and
 - e. are complete in all material respects (IAS 8.10).

20.3.2.1 Accounting Standards for Similar Issues and Framework

In making the above judgement, the management is required to refer to, and consider the applicability of, the following sources in descending order:

1. The requirements and guidance in accounting standards and interpretations dealing with similar and related issues; and
2. The definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the *Framework for the Preparation and Presentation of Financial Statements* (see Chapter 2) (IAS 8.11).

20.3.2.2 Pronouncement of Other Standard-setting Bodies

In making the above judgement, the management is not required to, but may also consider, the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, to the extent that they are not in conflict with the sources in Section 20.3.2.1 (IAS 8.12).

20.3.3 Consistency of Accounting Policies

When accounting policies are selected and applied, an entity is required to apply these accounting policies consistently for similar transactions, other events and conditions, unless an accounting standard or interpretation specifically requires or permits categorisation of items for which different policies may be appropriate.

If an accounting standard or interpretation requires or permits such categorisation, an appropriate accounting policy should be selected and applied consistently to each category (IAS 8.13).

Example 20.4 The entity is required to choose either the cost model or the fair value model in subsequently measuring all its investment properties, with the following exceptions:

1. An entity may choose
 - a. either the fair value model or the cost model for all investment property backing liabilities that pay a return linked directly to the fair value of, or returns from, specified assets including that investment property; and
 - b. either the fair value model or the cost model for all other investment property, regardless of the choice made in (a).
2. An entity is required to use the cost model in IAS 16 in measuring an investment property for which there is clear evidence, when the entity first acquires an investment property, that the fair value of the investment property is not reliably determinable on a continuing basis.

The user of financial statements should be able to compare the financial statements of an entity over time, and therefore the same accounting policies are applied within

each period and from one period to the next. In case the entity proposes or is required to change its accounting policy, it must observe the restrictions and requirements in IAS 8.

20.4 Changes in Accounting Policies

An accounting policy selected by an entity on an element of the financial statements determines its recognition, measurement and presentation of this element in the financial statements. Thus, a change of accounting policy occurs where there is any change to any one of the components of (1) recognition criteria, (2) measurement basis and (3) method of presentation. Any change that does not affect any of these three components is not a change in accounting policy and may only be a change in accounting estimates.

IAS 8 also clarifies that when it is difficult to distinguish a change in accounting policy from a change in an accounting estimate, the change is treated as a change in an accounting estimate (see Section 20.5).

20.4.1 Circumstances for a Change in Accounting Policy

In order to achieve consistency in accounting policies, changes in accounting policies are not allowed unless the requirements in IAS 8 are fulfilled. An entity should change an accounting policy only if one of the two following circumstances is fulfilled:

1. **Initial application of accounting standard or interpretation.** The change is required by an accounting standard or an interpretation.
2. **Voluntary change.** The change results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows (IAS 8.14). It should normally be a change voluntarily initiated by the entity itself.

Real-life

Case 20.2

Hong Kong Exchanges and Clearing Limited

In its annual report of 2006, Hong Kong Exchanges and Clearing Limited (HKEx) explained that it changed its accounting policies because of the initial application of an amended accounting standard and a new interpretation as follows:

1. The adoption of the revised HKAS 27 *Consolidated and Separate Financial Statements* (equivalent to IAS 27);
2. The early adoption of HK (IFRIC) Interpretation 10 *Interim Financial Reporting and Impairment* (equivalent to IFRIC Interpretation 10).

Example 20.5 Bonnie Limited has not capitalised any borrowing costs but has written off all such costs to the income statements. In redeveloping its head office building, Bonnie Limited incurred a significant amount of interest on a bank loan that is designated to finance the redevelopment.

By adopting IAS 23 *Borrowing Costs*, its finance director, Ms Hung, now proposes to capitalise the interest expenses as the cost of the head office.

Is it a change in accounting policy or a change in accounting estimate?

Answers

Ms Hung's proposal involves a change in both recognition (recognising borrowing costs as part of the cost of head office) and presentation (presenting the costs in the balance sheet rather than the income statement). In consequence, the proposed change represents a change in accounting policy.

20.4.1.1 Excluded from Changes in Accounting Policies

The following are not changes in accounting policies:

1. The application of an accounting policy for transactions, other events or conditions that differ in substance from those previously occurring; and
2. The application of a new accounting policy for transactions, other events or conditions that did not occur previously or were immaterial (IAS 8.16).

20.4.1.2 Specific Changes in Accounting Policies

Certain changes are changes in accounting policies, but they are specifically not dealt with in accordance with IAS 8.

For example, the initial application of a policy to revalue assets in accordance with IAS 16 *Property, Plant and Equipment* or IAS 38 *Intangible Assets* is a change in an accounting policy. However, such changes are dealt with as a revaluation in accordance with IAS 16 or IAS 38, rather than in accordance with IAS 8 (IAS 8.17).

20.4.2 Applying Changes in Accounting Policies

In accounting for a change in accounting policy, an entity should distinguish whether the change has occurred under either of the following two circumstances:

1. The change has resulted from an initial application of an accounting standard or an interpretation and there are specific transitional provisions in the accounting standard or the interpretation.
2. Other circumstances, including
 - a. the initial application of an accounting standard or an interpretation, but the accounting standard or the interpretation has no specific transitional provisions; and

- b. voluntary changes in accounting policy (but early application of an accounting standard or an interpretation is not a voluntary change in accounting policy).

Obviously, if there are specific transitional provisions in the accounting standard or the interpretation for the change resulted from the initial application of the accounting standard or the interpretation, the entity is required to apply the change in accordance with the specific transitional provisions.

Other than the above circumstances, an entity is required to apply the change resulting from other circumstances retrospectively, i.e., retrospective application (IAS 8.19).

Real-life

Case 20.3

Hong Kong Exchanges and Clearing Limited

As stated in Real-life Case 20.2, Hong Kong Exchanges and Clearing Limited (HKEx) changed its accounting policies and it further explained the application of the changes as follows:

- The adoption of the revised HKAS 27 requires retrospective application to prior year comparatives.
- According to the specific transitional provisions of HK(IFRIC)-INT 10, the adoption of the interpretation in relation to goodwill and available-for-sale equity financial assets should be applied prospectively from the date the group first applied HKAS 36 *Impairment of Assets* (i.e., 1 January 2003) and the measurement criteria of HKAS 39 *Financial Instruments – Recognition and Measurement* (i.e., 1 January 2004) respectively.

Compared to the adoption of HKAS 27, which required retrospective application, the specific transitional provisions of HK(IFRIC) Interpretation 10 adopted by HKEx did not require retrospective application but instead required prospective application from the date at which an entity first applied HKAS 36 *Impairment of Assets* (equivalent to IAS 36).

20.4.3 Retrospective Application

When an entity is required to apply the change in accounting policy retrospectively, it is required to adjust

- the opening balance of each affected component of equity for the earliest prior period presented; and
- the other comparative amounts disclosed for each prior period presented as if the new accounting policy had always been applied (IAS 8.22).

Retrospective application is defined in IAS 8 as applying a new accounting policy to transactions, other events and conditions as if that policy had always been applied (IAS 8.5).

The adjustment to opening balance of each affected component of equity of the earliest prior period presented is usually made to retained earnings. However, the adjustment may be made to other components of equity, for example, to comply with an accounting standard or interpretation. Any other information about prior periods, such as historical summaries of financial data, is also adjusted as far back as is practicable.

Example 20.6 NCA Inc. used to classify its leasehold land under a lease term over 50 years as property, plant and equipment by using the revaluation model. After the adoption of IAS 17 *Leases* in 2005, NCA is required to reclassify the land as leasehold land and amortise the land over the lease term on a straight-line basis. At the beginning of 2005, NCA had the following statement of changes in equity and information in its financial statements:

	Share capital \$	Revaluation reserves \$	Retained earnings \$	Total \$
Balance at 31 December 2003	20,000	12,400	30,000	62,400
Profit for the year	—	—	15,000	15,000
Balance at 31 December 2004	<u>20,000</u>	<u>12,400</u>	<u>45,000</u>	<u>77,400</u>

- Revaluation of the land was made on 31 December 2003.
- Depreciation for the land for 2004 was \$1,400, and it was provided on a straight-line basis over the estimated useful life of 50 years as well.
- Land was classified as property, plant and equipment at a carrying amount of \$42,000 with a remaining term of 30 years and original cost of \$50,000 at 1 January 2005.

In 2005, NCA had no other movement in equity, except for the profit after tax but before depreciation amounting to \$8,900.

Reconcile the movement of the land account from 2003 to 2004, calculate the carrying amount of the land at 31 December 2005 and prepare the statement of changes in equity for NCA for the year ended 31 December 2005.

Answers

Original movement of the land from 2003 to 2004:

	\$
Original carrying amount at 31 December 2004	42,000
Add: Depreciation charge in 2004	<u>1,400</u>
Carrying amount at 31 December 2003	43,400
Less: Revaluation reserves at 31 December 2003	<u>(12,400)</u>
Depreciated cost at 31 December 2003	<u><u>31,000</u></u>

By using retrospective application, carrying amount of the land at 31 December 2004 and 2005 should be:

	\$
Original cost	50,000
Less: Accumulated depreciation ($\$50,000 \div 50 \text{ years} \times 20 \text{ years}$)	<u>(20,000)</u>
Carrying amount at 31 December 2004	30,000
Less: Depreciation for the year ($\$50,000 \div 50 \text{ years}$)	<u>(1,000)</u>
Depreciated cost at 31 December 2005	<u><u>(29,000)</u></u>

Since revaluation of the land was made on 31 December 2003, it had no effect on the depreciation of and before 2003. Depreciation for 2004 would be reduced from \$1,400 per year to \$1,000. The reduction affects the profit of 2004 and the retained earning brought forward to 2005.

NCA Inc. – Statement of Changes in Equity

	Share capital \$	Revaluation reserves \$	Retained earnings \$	Total \$
Balance at 31 December 2003	20,000	12,400	30,000	62,400
Retrospective application of change in accounting policy	—	<u>(12,400)</u>	—	<u>(12,400)</u>
Balance at 31 December 2003 as restated	20,000	—	30,000	50,000
Profit for the year as restated	—	—	15,400	15,400
Balance at 31 December 2004	<u>20,000</u>	<u>—</u>	<u>45,400</u>	<u>65,400</u>
Balance at 31 December 2004	20,000	12,400	45,000	77,400
Retrospective application of change in accounting policy	—	<u>(12,400)</u>	400	<u>(12,000)</u>
Balance at 31 December 2004 as restated	20,000	—	45,400	65,400
Profit for the year	—	—	8,900	8,900
Balance at 31 December	<u><u>20,000</u></u>	<u><u>—</u></u>	<u><u>54,300</u></u>	<u><u>74,300</u></u>

Real-life

Case 20.4

Hysan Development Company Limited

Hysan's annual report of 2005 stated the change in accounting policy as a result of the adoption of HKAS 17 *Leases* (equivalent to IAS 17) as follows:

**Real-life
Case 20.4**
(cont'd)

- In previous years, owner-occupied leasehold land and buildings were included in property, plant and equipment and measured using the revaluation model. In the current year, the group has applied HKAS 17 *Leases*.
- Under HKAS 17, the land and buildings elements of a lease of land and buildings are considered separately for the purposes of lease classification. To the extent that the allocation of the lease payments between the land and buildings elements can be made reliably, the leasehold interests in land are reclassified to prepaid lease payments under operating leases (except for property interest under operating leases previously accounted for as investment property under the fair value model, which is transferred to owner-occupied property), which are carried at cost and amortised over the lease term on a straight-line basis.
- The surplus on revaluation in respect of the land interests accounted for as property, plant and equipment previously recognised in the asset revaluation reserve was adjusted retrospectively.
- Comparative figures for 2004 have been restated.

20.4.4 Limitations on Retrospective Application

There are cases when the retrospective application of a change in accounting policy is impracticable because of the difficulties in determining either:

1. The period-specific effects of the change; or
2. The cumulative effect of the change.

In such cases, the retrospective application of the change in accounting policy is applied except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the change (IAS 8.23). The nature and details of impracticability are set out in Section 20.7.

When it is impracticable to determine the period-specific effects of changing an accounting policy on comparative information for one or more prior periods presented, the entity is required

- to apply the new accounting policy to the carrying amounts of assets and liabilities as at the beginning of the earliest period for which retrospective application is practicable, which may be the current period; and
- to make a corresponding adjustment to the opening balance of each affected component of equity for that period (IAS 8.24).

When it is impracticable to determine the cumulative effect, at the beginning of the current period, of applying a new accounting policy to all prior periods, the entity is required to adjust the comparative information to apply the new accounting policy prospectively from the earliest date practicable, i.e., prospective application (IAS 8.25).

Prospective application of a change in accounting policy and of recognising the effect of a change in an accounting estimate are, respectively,

- applying the new accounting policy to transactions, other events and conditions occurring after the date as at which the policy is changed; and
- recognising the effect of the change in the accounting estimate in the current and future periods affected by the change (IAS 8.5).

20.4.5 Disclosure for Initial Application of Accounting Standard

When initial application of an accounting standard or an interpretation has an effect on the current period or any prior period, would have such an effect except that it is impracticable to determine the amount of the adjustment, or might have an effect on future periods, an entity is required to disclose

1. the title of the accounting standard or interpretation;
2. when applicable, that the change in accounting policy is made in accordance with its transitional provisions;
3. the nature of the change in accounting policy;
4. when applicable, a description of the transitional provisions;
5. when applicable, the transitional provisions that might have an effect on future periods;
6. for the current period and each prior period presented, to the extent practicable, the amount of the adjustment
 - a. for each financial statement line item affected; and
 - b. if IAS 33 *Earnings per Share* applies to the entity, for basic and diluted earnings per share;
7. the amount of the adjustment relating to periods before those presented, to the extent practicable; and
8. if retrospective application required is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.

Financial statements of subsequent periods need not repeat these disclosures (IAS 8.28).

20.4.6 Disclosure for Voluntary Change in Accounting Policy

When a voluntary change in accounting policy has an effect on the current period or any prior period, would have an effect on that period except that it is impracticable to determine the amount of the adjustment, or might have an effect on future periods, an entity is required to disclose

1. the nature of the change in accounting policy;
2. the reasons why applying the new accounting policy provides reliable and more relevant information;

3. for the current period and each prior period presented, to the extent practicable, the amount of the adjustment
 - a. for each financial statement line item affected; and
 - b. if IAS 33 applies to the entity, for basic and diluted earnings per share;
4. the amount of the adjustment relating to periods before those presented, to the extent practicable; and
5. if retrospective application is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.

Financial statements of subsequent periods need not repeat these disclosures (IAS 8.29).

20.4.7 Disclosure for Accounting Standard Issued but Not Yet Effective

When an entity has not applied a new accounting standard or interpretation that has been issued but is not yet effective, the entity is required to disclose

1. this fact; and
2. known or reasonably estimable information relevant to assessing the possible impact that application of the new accounting standard and interpretation will have on the entity's financial statements in the period of initial application (IAS 8.30).

In complying with the above disclosure requirements, an entity considers disclosing

1. the title of the new accounting standard or interpretation;
2. the nature of the impending change or changes in accounting policy;
3. the date by which application of the accounting standard or interpretation is required;
4. the date as at which it plans to apply the accounting standard or interpretation initially; and
5. either
 - a. a discussion of the impact that initial application of the accounting standard or interpretation is expected to have on the entity's financial statements; or
 - b. if that impact is not known or reasonably estimable, a statement to that effect.

Real-life Case 20.5

The Bank of East Asia, Limited

The annual report of the Bank of East Asia, Limited in 2006 stated in its Note 50 "Proposed Impact of Amendments, New Standards and Interpretations Issued but Not Yet Effective for the year ended 31 December, 2006" as follows:

Real-life
Case 20.5

(cont'd)

- Up to the date of issue of these accounts, the HKICPA has issued a number of amendments, new standards and interpretations, and the Hong Kong Monetary Authority has recommended additional disclosures, which are not yet effective for the accounting year ended 31 December, 2006 and which have not been adopted in these accounts.
- The group is in the process of making an assessment of what the impact of these amendments, new standards, new interpretations and additional disclosures is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the bank's results of operations and financial position.
- In addition, the following developments may result in new or amended disclosures in the accounts:

	Effective for accounting periods beginning on or after
HKFRS 7 <i>Financial Instruments – Disclosures</i>	1 January 2007
Amendment to HKAS 1 <i>Presentation of Financial Statements – Capital Disclosures</i>	1 January 2007
Banking (Disclosure) Rules	1 January 2007

HKFRS 7 is equivalent to IFRS 7, and Amendment to HKAS 1 is equivalent to Amendment to IAS 1.

Real-life
Case 20.6

Singapore Exchange Limited

Singapore Exchange Limited clarified in the notes to its financial statements of 2007 that new or revised accounting standards that have been issued but are not yet effective also included the equivalent Singapore Financial Reporting Standards (FRS) of IFRS 7 and Amendment to IAS 1, but it also had a brief description on their impact as follows:

- Certain new standards, amendments and interpretations to existing standards which have been published, and not early adopted by the group, are mandatory for the group's accounting periods beginning on or after 1 January 2007 or later periods.

**Real-life
Case 20.6**

(cont'd)

- The group's assessment of the impact of adopting those standards, amendments and interpretations that are relevant to the group is set out below:
FRS 107 Financial Instruments – Disclosures, and a complementary Amendment to *FRS 1 Presentation of Financial Statements – Capital Disclosures*
 - The group has adopted FRS 107 on 1 July 2007.
 - FRS 107 introduces new disclosures to improve the information about financial instruments. It requires the disclosure of qualitative and quantitative information about exposure to risks arising from financial instruments, including minimum disclosures about credit risk, liquidity risk and market risk (including sensitivity analysis to market risk). It replaces the disclosure requirements in *FRS 32 Financial Instruments – Disclosure and Presentation*.
 - The amendment to FRS 1 introduces disclosures about the level of an entity's capital and how it manages capital.
 - The group has assessed the impact of FRS 107 and the amendment to FRS 1 and concluded that the main additional disclosures will be the sensitivity analysis to market risk and the capital disclosures required by the amendment of FRS 1.

20.5 Changes in Accounting Estimates

Estimation involves an entity's judgements based on the latest available, reliable information. Hence, reversion on the accounting estimate is required if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience.

A **change in accounting estimate** is defined in IAS 8 as an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities. Changes in accounting estimates result from new information or new developments and, accordingly, are not corrections of errors (IAS 8.5).

By its nature, the revision of an estimate does not relate to prior periods and is not the correction of an error. In other words, retrospective application and retrospective restatement (see Section 20.6) are not allowed in accounting for a change in accounting estimate.

Example 20.7 HS Tony Group adopts the following accounting policies in depreciating its property, plant and equipment and investment property:

- Plant and machinery: 5 years on a straight-line basis
- Furniture and fixture: 30% by diminishing balance method
- Investment property: 40 years on a straight-line method

In order to align the policies on different assets, Mr Ton, the CFO of HS Tony Group, proposes to change the depreciation policy on furniture and fixture to the straight-line basis over the estimated useful lives of 5 years. Discuss.

Answers

IAS 8 specifically clarifies that accounting estimates include the estimation on the expected pattern of consumption of the future economic benefits embodied in depreciable assets (IAS 8.32d). Thus, a change in depreciation pattern or method (i.e., from diminishing balance method to straight-line basis) is a change in accounting estimate.

In addition, this proposal does not involve a change in all of the following three key areas:

1. Recognition: The assets are still recognised by the same criteria.
2. Measurement: The assets are still stated at cost less accumulated depreciation and accumulated impairment.
3. Presentation: The presentation of the assets should still be the same.

In short, the proposed change is only a change in accounting estimate but not a change in accounting policy.

20.5.1 Applying Changes in Accounting Estimates

A change in an accounting estimate may affect

1. the carrying amount of the related assets, liabilities and/or an item of equity; and
2. the income and expenses recognised in the income statement.

An entity is required to recognise such effect of a change in an accounting estimate prospectively as follows:

1. To the extent that a change in an accounting estimate gives rise to changes in assets and liabilities, or relates to an item of equity, an entity is required to recognise the change by adjusting the carrying amount of the related asset, liability or equity item in the period of the change (IAS 8.37).
2. Other than a change to which the above requirement applies, the effect of a change in an accounting estimate should be recognised prospectively by including it in the income statement in
 - a. the period of the change, if the change affects that period only; or
 - b. the period of the change and future periods, if the change affects both (IAS 8.36).

Prospective recognition of the effect of a change in an accounting estimate means that the change is applied to transactions, other events and conditions from the date of the change in estimate.

Real-life**Case 20.7****China Petroleum & Chemical Corporation (Sinopec Corp.)**

Sinopec Corp. stated in its annual report of 2006 as follows:

- The estimates and underlying assumptions are reviewed on an ongoing basis.
- Revisions to accounting estimates are recognised
 - in the period in which the estimate is revised if the revision affects only that period; or
 - in the period of the revision and future periods if the revision affects both current and future periods.

Example 20.8 Melody Inc. owns a fleet of Mercedes-Benz SLK automotive vehicles for rental and resale purposes. Since several new models of such vehicles have been launched during the previous and current years and the market demand for its fleet is dropping, Sugar Tong, the CFO of Melody Inc., estimates that a revision of the useful lives of the fleet and of the net realisable value of the vehicles held for resale is required. The required revision and relevant information are set out below:

- Carrying amount of the fleet for rental: \$4.5 million (cost \$12 million)
- Carrying amount of the vehicles held for resale: \$5 million
- Estimated useful lives: 3 remaining years (current estimate)
- Estimated net realisable value of the vehicles held for resale: \$3 million

Illustrate the effect on the income statement and balance sheet.

Answers

The change in the estimated net realisable value of the vehicles held for resale only affects the income statement of Melody for the year, and the loss of \$2 million (\$5 million – \$3 million) should be charged to the current year's income statement.

The change in the estimated useful lives of the motor vehicles held for rental purposes affects depreciation expense for the current year and for each future year during the vehicles' remaining useful lives (2 remaining years), and the depreciation expense should then be revised to \$1.5 million per year.

In both cases, the effect of the change relating to the current year is recognised as expense in the current year. The effect on future years is recognised as expense in those future years.

Real-life

Case 20.8

Airport Authority Hong Kong

Standard & Poor's, in its report of June 2003, "Corporate Financial Disclosure in Greater China – Taking a Closer Look", commented as follows on the accounting policy of Airport Authority Hong Kong (AAHK):

- The company changed its depreciation policy in fiscal 1999/2000 by extending the life of some of its fixed assets. This resulted in a net reduction in depreciation charges of about HK\$538 million in 2000, which in turn increased AAHK's net income.
- EBIT (earnings before interest and tax) for fiscal 1999/2000 was HK\$291 million but would have been negative under the previous depreciation policy.

20.5.2 Disclosure for a Change in an Accounting Estimate

An entity is required to disclose the nature and amount of a change in an accounting estimate that

- has an effect in the current period; or
- is expected to have an effect in future periods, except for the disclosure of the effect on future periods when it is impracticable to estimate that effect.

If the amount of the effect in future periods is not disclosed because estimating it is impracticable, an entity is required to disclose that fact (IAS 8.39 and 8.40).

20.6 Prior Period Errors

Errors can arise in respect of the recognition, measurement, presentation or disclosure of elements of financial statements. Financial statements cannot be regarded as fully compliant with the accounting standards if they contain either of the following:

- Material errors;
- Immaterial errors made intentionally to achieve a particular presentation of an entity's financial position, financial performance or cash flows.

Current period errors discovered in a period should be corrected before the financial statements are authorised for issue. However, material errors are sometimes not discovered until a subsequent period, and these prior period errors are corrected in the comparative information presented in the financial statements for that subsequent period.

Prior period errors are omissions from, and misstatements in, the entity's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that

- was available when financial statements for those periods were authorised for issue; and

- could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.

Such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversight or misinterpretations of facts and fraud (IAS 8.5).

20.6.1 Correction of Prior Period Errors by Retrospective Restatement

An entity is required to correct material prior period errors retrospectively (i.e., retrospective restatement) in the first set of financial statements authorised for issue after their discovery by

1. restating the comparative amounts for the prior period(s) presented in which the error occurred; or
2. restating the opening balances of assets, liabilities and equity for the earliest prior period presented, if the error occurred before the earliest prior period presented.

Retrospective restatement is correcting the recognition, measurement and disclosure of amounts of elements of financial statements as if a prior period error had never occurred (IAS 8.5).

When the prior period error is discovered in a particular year, the correction of the error is excluded from the profit or loss for that year and the error should instead be restated by using retrospective restatement. Any information presented about prior periods, including any historical summaries of financial data, is also restated as far back as is practicable.

Corrections of errors are distinguished from changes in accounting estimates. Accounting estimates by their nature are approximations that may need revision when additional information becomes known. Errors indicate that the information should have been originally available (and should have been reasonably expected) but may have been neglected or omitted for some reason. For example, the gain or loss recognised on the outcome of a contingency is not the correction of an error.

Example 20.9 In 2007, AJ Fashion Limited reported the following income statement:

	\$
Sales	73,500
Cost of goods sold	(53,500)
Profit before income taxes	20,000
Income taxes	(6,000)
Profit	<u>14,000</u>

During 2008, AJ discovered that some products that had been sold during 2007 were incorrectly included in inventory at 31 December 2007 at \$6,500. AJ's accounting records for 2008 show sales of \$104,000, cost of goods sold of \$86,500 (including \$6,500 for the error in opening inventory) and income taxes of \$5,250. Its opening retained earnings in 2007 was \$20,000 and closing retained earnings was \$34,000. Its income tax rate was 30% for 2008 and 2007. It had no other income or expenses.

AJ had \$5,000 of share capital throughout, and no other components of equity except for retained earnings. Its shares are not publicly traded, and it does not disclose earnings per share.

Based on the latest information, prepare AJ's income statement, statement of changes in equity and notes to the errors for the year ended 31 December 2008 (Guidance on Implementing IAS 8).

Answers

AJ Limited – Income statement for the year ended 31 December 2008

	2008 \$	2007 (restated) \$
Sales	104,000	73,500
Cost of goods sold (note).....	<u>(80,000)</u>	<u>(60,000)</u>
Profit before income taxes.....	24,000	13,500
Income taxes.....	<u>(7,200)</u>	<u>(4,050)</u>
Profit.....	<u><u>16,800</u></u>	<u><u>9,450</u></u>

AJ Limited – Statement of changes in equity for the year ended 31 December 2008

	Share capital \$	Retained earnings \$	Total \$
Balance at 31 December 2000	5,000	20,000	25,000
Profit for the year ended 31 December 2007 as restated	<u>–</u>	<u>9,450</u>	<u>9,450</u>
Balance at 31 December 2007 as restated	<u><u>5,000</u></u>	<u><u>29,450</u></u>	<u><u>34,450</u></u>
Balance at 31 December 2007	5,000	34,000	39,000
Correction of error (note)	<u>–</u>	<u>(4,550)</u>	<u>(4,550)</u>
Balance at 31 December 2007 as restated	5,000	29,450	34,450
Profit for the year ended 31 December 2008.....	<u>–</u>	<u>16,800</u>	<u>16,800</u>
Balance at 31 December 2008	<u><u>5,000</u></u>	<u><u>46,250</u></u>	<u><u>51,250</u></u>

Extracts from the notes to the financial statements

Some products that had been sold in 2007 were incorrectly included in inventory at 31 December 2007 at \$6,500. The financial statements of 2007 have been restated to correct this error. The effect of the restatement on those financial statements is summarised below. There is no effect in 2008.

	Effect on 2007
	\$
Increase in cost of goods sold	(6,500)
Decrease in income tax expense	1,950
Decrease in profit	<u>(4,550)</u>
Decrease in inventory	(6,500)
Decrease in income tax payable	1,950
Decrease in equity	<u>(4,550)</u>

20.6.2 Limitations on Retrospective Restatement

A prior period error should be corrected by retrospective restatement except to the extent that it is impracticable to determine either

1. the period-specific effects; or
2. the cumulative effect of the error (IAS 8.43).

When it is impracticable to determine the period-specific effects of an error on comparative information for one or more prior periods presented, the entity is required to restate the opening balances of assets, liabilities and equity for the earliest period for which retrospective restatement is practicable (which may be the current period) (IAS 8.44).

When it is impracticable to determine the cumulative effect, at the beginning of the current period, of an error on all prior periods, the entity is required to restate the comparative information to correct the error prospectively from the earliest date practicable (IAS 8.45). The nature and details of impracticability are set out in Section 20.7.

20.6.3 Disclosure for Prior Period Errors

In applying the above requirements on correcting a material prior error retrospectively, an entity is required to disclose the following:

1. The nature of the prior period error;
2. For each prior period presented, to the extent practicable, the amount of the correction

- a. for each financial statement line item affected; and
 - b. if IAS 33 applies to the entity, for basic and diluted earnings per share;
3. The amount of the correction at the beginning of the earliest prior period presented; and
 4. If retrospective restatement is impracticable for a particular prior period, the circumstances that led to the existence of that condition and a description of how and from when the error has been corrected.

Financial statements of subsequent periods need not repeat these disclosures (IAS 8.49).

20.7 Impracticability in Respect of Retrospective Application and Retrospective Restatement

Both retrospective application of a new accounting policy and retrospective restatement to correct a prior period error include adjustments on comparative information for one or more prior periods. It may be impracticable to have such adjustments because of the difficulties in determining the period-specific effects and cumulative effects.

Impracticable is defined in IAS 8 as follows:

- Applying a requirement is impracticable when the entity cannot apply it after making every reasonable effort to do so. For a particular prior period, it is impracticable to apply a change in an accounting policy retrospectively or to make a retrospective restatement to correct an error if:
 - The effects of the retrospective application or retrospective restatement are not determinable;
 - The retrospective application or retrospective restatement requires assumptions about what management's intent would have been in that period; or
 - The retrospective application or retrospective restatement requires significant estimates of amounts and it is impossible to distinguish objectively information about those estimates that
 - provided evidence of circumstances that existed on the date(s) as at which those amounts are to be recognised, measured or disclosed; and
 - would have been available when the financial statements for that prior period were authorised for issue from other information (IAS 8.5).

Impracticability may result from the following situations:

1. Data for adjustments may not have been collected in the prior periods in a way that allows such adjustments;

2. When the data for adjustments is not kept, it may be impracticable to recreate the information for adjustments; or
3. It is often necessary to use estimation in applying an accounting policy. Developing estimates is potentially more difficult if a long period of time has elapsed since the affected transaction, other event or condition occurred.

20.7.1 Difficulties in Estimation

The objective of estimates related to prior periods is the same as for estimates made in the current period. The estimate should thus reflect the circumstances that existed when the transaction, other event or condition occurred.

Therefore, retrospective application or retrospective restatement requires distinguishing other information (for example, the latest information) from the information that

1. provides evidence of circumstances that existed on the date or dates as at which the transaction, other event or condition occurred; and
2. would have been available when the financial statements for that prior period were authorised for issue.

For some types of estimates (e.g., an estimate of fair value not based on an observable price or observable inputs), it is impracticable to distinguish these two types of information. When retrospective application or retrospective restatement would require making a significant estimate for which it is impossible to distinguish these two types of information, it is impracticable to apply the new accounting policy or correct the prior period error retrospectively.

Hindsight, for example, events after the financial statements authorised for issue, should not be used when applying a new accounting policy to, or correcting amounts for, a prior period, either in

- making assumptions about what management's intentions would have been in a prior period; or
- estimating the amounts recognised, measured or disclosed in a prior period.

Example 20.10 When an entity corrects a prior period error in measuring financial assets previously classified as held-to-maturity investments in accordance with IAS 39 *Financial Instruments – Recognition and Measurement*, it does not change their basis of measurement for that period if management decided later not to hold them to maturity.

Example 20.11 When an entity corrects a prior period error in calculating its liability for employees' accumulated sick leave in accordance with IAS 19 *Employee Benefits*, it disregards information about an unusually severe influenza season during the next period that became available after the financial statements for the prior period were authorised for issue.

The fact that significant estimates are frequently required when amending comparative information presented for prior periods does not prevent reliable adjustment or correction of the comparative information.

20.8 Summary

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity to preparing and presenting financial statements. They affect the recognition, measurement and presentation of the elements in the financial statements.

An entity has to follow the applicable accounting standard and interpretation to select, develop and apply its accounting policies. If there is no specific accounting standard or interpretation for an issue, the entity has to develop its accounting policy with the aim of providing reliable and relevant information.

A change in an accounting policy should have a change in the recognition, measurement and presentation of an element in the financial statements. In order to maintain consistency in the accounting policies, all changes in accounting policies should only be made when it is required by the accounting standard or interpretation or when reliable and more relevant information can be obtained.

Changes in accounting policies should be made by using the transitional provisions of the accounting standard or interpretation, if any. Otherwise, the changes should be made by using retrospective application, unless it is impracticable to do so.

Many items in the financial statements require estimation. Changes in such estimates are not the same as changes in accounting policies. The changes in accounting estimates should be made by prospective application.

Prior period errors should be corrected during the current period. The comparative information would then be affected, and retrospective restatement is required to correct such prior period errors, unless it is impracticable to do so.

Impracticability may result due to various reasons, particularly difficulty in having appropriate estimates.

Review Questions

1. What is an accounting policy?
2. State the effect of an accounting policy.
3. What is an accounting estimate?
4. How does an entity select and apply an accounting policy?
5. If there is no applicable accounting standard or interpretation for an issue, how does an entity select and apply an accounting policy?
6. What is the purpose of maintaining consistency of accounting policies?
7. When can accounting policies be changed?
8. How can an entity account for changes in accounting policies?

9. What is retrospective application, and how can it be performed?
10. If it is impracticable to perform retrospective application, what can an entity do?
11. List the disclosure requirements on changes in accounting policies.
12. What are the disclosure requirements on an accounting standard or interpretation issued but not effective?
13. What is a change in an accounting estimate?
14. How can an entity account for changes in accounting estimates?
15. List the disclosure requirements on changes in accounting estimates.
16. How can an entity correct prior period errors?
17. What is retrospective restatement, and how can it be performed?
18. If it is impracticable to perform retrospective restatement, what can an entity do?
19. List the disclosure requirements on correction of prior period errors.
20. Why can it be impracticable to retrospectively apply the changes in accounting policies or retrospectively correct prior period errors?

Exercises

- Exercise 20.1** Distinguish and contrast change in accounting policy and change in accounting estimates, and explain the differences in the accounting treatments for these two changes.
- Exercise 20.2** Distinguish and contrast retrospective application and retrospective restatement, and explain the circumstances in which they should be used.
- Exercise 20.3** Discuss the following statement: “All errors in prior years’ financial statements must be corrected in the current year’s financial statements.”
- (HKICPA QP A September 2006, adapted)*
- Exercise 20.4** Ada Lau, the managing director of Ever Changing Group, is considering changing the company’s accounting treatments as follows:
- a. Change from first-in-first-out to weighted average method in accounting for inventories;
 - b. Change from cost model to fair value model in accounting for investment property; and
 - c. The borrowing costs attributable to qualifying expenditure to be capitalised, instead of expensed.

Discuss and explain the accounting treatments for the above changes.

Problems

- Problem 20.1** A trainee accountant has been reading some literature written by a qualified surveyor on the values of leasehold property located in the area where Toogood owns leasehold

property. The main thrust is that historically, annual increases in property prices more than compensate for the fall in the carrying amount caused by annual amortisation until a leasehold property has less than 10 years of remaining life. Therefore, the trainee accountant suggests that the company should adopt a policy of carrying its leasehold properties at cost until their remaining lives are 10 years and then amortising them on a straight-line basis over 10 years. This would improve the company's reported profit and cash flows as well as showing a faithful representation of the value of the leasehold properties.

Required:

Comment on the validity and acceptability of the trainee accountant's suggestion.

(ACCA 2.5 June 2000, adapted)

Problem 20.2 It is concluded that, after reviewing HPC's accounting records, the prepayment of RMB 5 million recognised in HPC's consolidated balance sheet at 31 December 2003 should have been expensed in accordance with relevant accounting standards.

How should this error be classified according to relevant accounting standards, and how should it be reflected in HPC's financial statements for the year ending 31 December 2004?

(HKICPA FE December 2004, adapted)

Problem 20.3 Router has a number of film studios and office buildings. The office buildings are in prestigious areas, whereas the film studios are located in "out of town" locations. The management of Router wish to apply the revaluation model to the office buildings and the "cost model" to the film studios in the year ended 31 May 2007. At present, both types of buildings are valued using the revaluation model. One of the film studios has been converted to a theme park. In this case only, the land and buildings on the park are leased on a single lease from a third party.

The lease term was 30 years in 1990. The lease of the land and buildings was classified as a finance lease even though the financial statements purport to comply with IAS 17 *Leases*. The terms of the lease were changed on 31 May 2007. Router is now going to terminate the lease early in 2015 in exchange for a payment of \$10 million on 31 May 2007 and a reduction in the monthly lease payments. Router intends to move from the site in 2015. The revised lease terms have not resulted in a change of classification of the lease in the financial statements of Router.

Required:

Discuss how the above items should be dealt with in the financial statements of Router for the year ended 31 May 2007.

(ACCA 3.6 June 2007, adapted)

Case Studies

Case Study 20.1 Based on Real-life Case 20.8, Airport Authority Hong Kong (AAHK) changed its depreciation policy in 1999/2000.

Required:

1. Discuss the possible reasons for AAHK making such a depreciation policy change.
2. Consider whether it meets the qualitative characteristics as explained in the *Framework for Preparation and Presentation of Financial Statements* (see Chapter 2).
3. Evaluate the pros and cons of the depreciation policy changes.
4. State the proper disclosure under the current requirements of IAS 8.

Case Study 20.2 Carrefour Group clarified its changes in estimates for the financial statements of 2006 as follows:

In 2005, the group decided to make a change in estimate as to the duration of the depreciation of its buildings, increasing it from 20 to 40 years.

The change in estimate, reflected in a prospective change in the duration of depreciation as of 1 January 2005, can be justified by the fact that the contribution values of the stores, as determined by expert assessors as part of plans to create the European property company, Carrefour Property, demonstrated in 2005 that the buildings still have significant market value after 20 years. Following the creation of Carrefour Property, the group decided to engage in an overall review of the useful economic life of its assets. AFREXIM (an association of property experts) thus conducted a sectoral study of the economic life span of a building. The property expert's report concluded in 2005 that the economic life span of a building within the group is 40 years.

Discuss the implication of the changes.

Case Study 20.3 Gear Software, a public limited company, develops and sells computer games software. The revenue of Gear Software for the year ended 31 May 2003 is \$5 million, the balance sheet total is \$4 million, and the company has 40 employees. There are several elements in the financial statements for the year ended 31 May 2003 on which the directors of Gear require advice.

1. Gear has two cost centres relating to the development and sale of the computer games. The indirect overhead costs attributable to the two cost centres were allocated in the year to 31 May 2002 in the ratio 60:40 respectively.

Also in that financial year, the direct labour costs and attributable overhead costs incurred on the development of original games software were carried forward as work-in-progress and included with the balance sheet total for inventory of computer games. Inventory of computer games includes directly attributable overheads.

In the year to 31 May 2003, Gear has allocated indirect overhead costs in the ratio 50:50 to the two cost centres and has written the direct labour and overhead costs incurred on the development of the games to the income statement.

Gear has stated that it cannot quantify the effect of this write-off on the current year's income statement. Further, it proposes to show the overhead costs relating to the sale of computer games within distribution costs. In prior years these costs were shown in cost of sales.

2. In prior years, Gear has charged interest incurred on the construction of computer hardware as part of cost of sales. It now proposes to capitalise such interest and to change the method of depreciation from the straight-line method over 4 years to the reducing balance method at 30% per year. Depreciation will now be charged as cost of sales rather than administrative expenses as in previous years.

Gear currently recognises revenue on contracts in proportion to the progression and activity on the contract. The normal accounting practice within the industrial sector is to recognise revenue when the product is shipped to customers. The effect of any change in accounting policy to bring the company in line with accounting practice in the industrial sector would be to increase revenue for the year by \$500,000.

The directors have requested advice on the changes in accounting practice for inventories and tangible non-current assets that they have proposed.

(ACCA 3.6 June 2003, adapted)

Case Study 20.4

Derringdo sells carpets from several retail outlets. In previous years, the company has undertaken responsibility for fitting the carpets in customers' premises. Customers pay for the carpets at the time they are ordered. The average length of time from a customer ordering a carpet to its fitting is 14 days. In previous years, Derringdo had not recognised a sale in income until the carpet had been successfully fitted, as the rectification costs of any fitting error would be expensive. From 1 April 2002, Derringdo changed its method of trading by subcontracting the fitting to approved contractors. Under this policy, the subcontractors are paid by Derringdo and they (the subcontractors) are liable for any errors made in the fitting. Because of this, Derringdo is proposing to recognise sales when customers order and pay for the goods, rather than when they have been fitted. Details of the relevant sales figures are as follows:

	\$'000
Sales made in retail outlets for the year to 31 March 2003.....	23,000
Sales value of carpets fitted in the 14 days to 14 April 2002.....	1,200
Sales value of carpets fitted in the 14 days to 14 April 2003.....	1,600

Note: The sales value of carpets fitted in the 14 days to 14 April 2002 is not included in the annual sales figure of \$23 million, but that for the 14 days to 14 April 2003 is included.

Required:

Discuss whether the above represents a change of accounting policy, and, based on your discussion, calculate the amount that you would include in sales revenue for carpets in the year to 31 March 2003.

(ACCA 2.5 June 2003, adapted)

21

Events after the Reporting Period

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of events after the reporting period (the definition)
- 2 The recognition and measurement of adjusting and non-adjusting events
- 3 The specific treatment for dividends declared after the reporting period
- 4 The issue of going concern as an event after the reporting period
- 5 The disclosure requirement for adjusting and non-adjusting events
- 6 The disclosure requirement for the date of authorisation for issue

Real-life

Case 21.1

SCUD Group Limited

SCUD Group and its subsidiaries are principally engaged in the distribution and marketing of rechargeable battery packs and related accessories for mobile phones, notebook computers, digital cameras and other electrical appliances. In its public announcement issued on 1 June 2007, the company stated the following:

- The company regrets to announce that in the late afternoon of Thursday, 31 May 2007, there was a serious fire in its production plant in Fuzhou. Most, if not all, of the group's inventory has been destroyed, whilst most of its production lines were unaffected. Regardless, however, as most (if not all) of the inventory has been destroyed, the group's production will be materially disrupted. The group expects to be able to resume partial production and supply to its material customers within a month.
- The group has reported the matter to its insurers. However, it is uncertain how much of the group's losses (which would not be limited to inventory but would also reflect some lost sales pending resumption of normal production and possible claims from customers for late deliveries, although initial enquiries by the group of such customers is that they have no intentions of making any such claims) would not be completely covered by the insurer as the insurance is primarily for loss of inventory and products from fire and not subsequent business disruption or other losses.
- The company estimates that the loss to the group could range from RMB 200 million to RMB 250 million before taking into account any possible compensation from insurers. As such, this loss amount would be reduced to the extent of any compensation from its insurer. As part of the estimated loss, the portion attributable to the cost of inventory based on the group's management accounts as at 30 April 2007 was approximately RMB 190 million.
- The group has not yet been able to confirm the cause of the fire, and this will be subject to further investigation by both the group and the relevant regulatory authorities in Fuzhou. The group will also be reviewing its emergency procedures and fire prevention policies in light of this incident. It is, however, relieved to report that there were no fatalities in connection with the fire.
- Investors are advised to exercise extreme caution when dealing in the shares of the company.

After reading the above public announcement issued by the SCUD Group, you may be interested to know what accounting implication this unfortunate event would have on the company. Is it an event after the reporting period (or the balance sheet date)? Is it an adjusting or non-adjusting event? Would there be a different answer if SCUD's financial year-end were not 31 December 2006 but, say, 30 April 2007?

Would there be a different answer if SCUD's directors had not authorised the 2006 financial statements on 27 March 2007 – say, they had not authorised the financial statements for issue before the fire? All these questions will be answered in this chapter.

21.1 Applicable Standard and Scope

IAS 10 *Events after the Reporting Period*¹ prescribes the accounting treatment for, and disclosure of, events after the balance sheet date. In particular, IAS 10 deals with when an entity should adjust its financial statements for events after the balance sheet date, and the disclosures that an entity should give about the date when the financial statements were authorised for issue and about events after the balance sheet date.

21.2 What Are Events after the Balance Sheet Date?

Events after the balance sheet date include all events up to the date when the financial statements are authorised for issue, even if those events occur after the public announcement of profit or of other selected financial information. These events are either adjusting or non-adjusting events. Adjusting events, whether favourable or unfavourable, provide evidence of conditions that existed at the balance sheet date, thus affecting the amounts recognised in the financial statements. Non-adjusting events, however, are indicative of conditions that arose after the balance sheet date, thus not affecting the amounts recognised in the financial statements (see Figure 21.1).

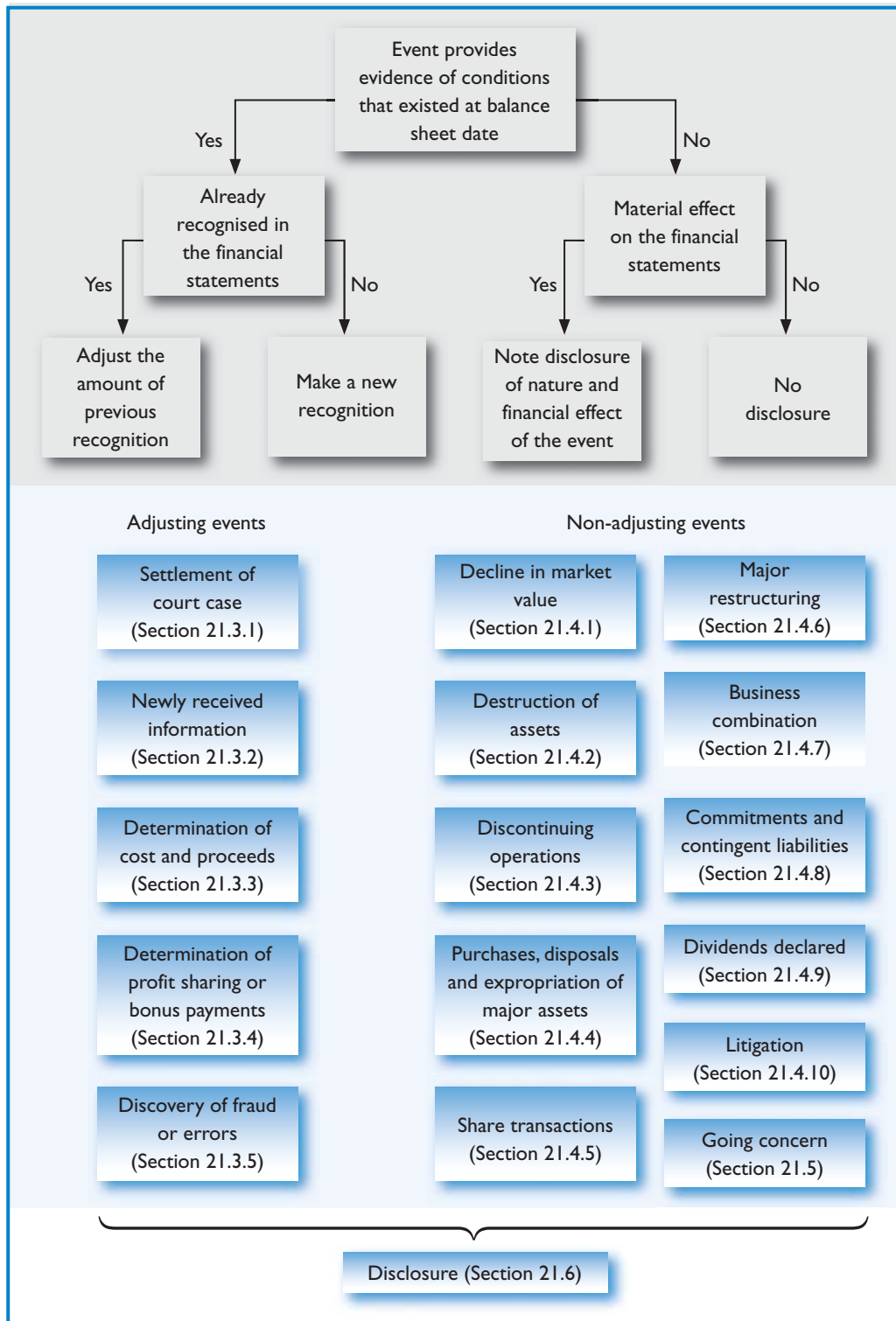
Events after the balance sheet date are those events, favourable and unfavourable, that occur between the balance sheet date and the date when the financial statements are authorised for issue. Two types of events can be identified:

1. Those that provide evidence of conditions that existed at the balance sheet date (adjusting events after the balance sheet date); and
2. Those that are indicative of conditions that arose after the reporting period (non-adjusting events after the balance sheet date).

Real-life Case 21.2 relates to an example of disclosing a non-adjusting event in the financial statements of Sinopec Shanghai Petrochemical Company Limited regarding passing the new enterprise income tax rates after the balance sheet date in China.

¹ In September 2007 the IASB amended the title of IAS 10 from *Events after the Balance Sheet Date* to *Events after the Reporting Period* as a consequence of the revision of IAS 1 *Presentation of Financial Statements* in 2007. The terms “balance sheet” and “balance sheet date” are used in this chapter because they are still very popular terms understood and used by users of the financial statements.

FIGURE 21.1 Adjusting vs. non-adjusting events



Real-life

Case 21.2

Sinopec Shanghai Petrochemical Company Limited

Sinopec Shanghai Petrochemical Company is one of the largest petrochemical enterprises as well as one of the largest producers of ethylene in China. Its annual report of 2006 disclosed the following:

- Pursuant to the enterprise income tax passed by the Fifth Plenary Session of the Tenth National People's Congress on 16 March 2007, the new enterprise income tax rates for domestic and foreign enterprises are unified at 25% and will be effective from 1 January 2008.
- The impact of such change of enterprise income tax on the group's consolidated financial statements will depend on detailed pronouncements that are subsequently issued.
- Since implementation and transitional guidance applicable to the group have not yet been announced, the group cannot reasonably estimate the financial impact of the new law at this stage.

Different entities may have different authorisation processes for issuing financial statements because management structure, statutory requirements and procedures followed in preparing and finalising the financial statements vary from entity to entity. Some entities are required to submit financial statements to the shareholders for approval after the financial statements have been issued. In these situations, the financial statements are authorised for issue on the date of issue, not the date when shareholders approve the financial statements (see Example 21.1).

Example 21.1 On 3 March 2008, the management of an entity completed draft financial statements for the year ended 31 December 2007. On 10 March 2008, the board of directors reviewed the financial statements and authorised them for issue. The entity announced its profit and selected other financial information on 11 March 2008. The financial statements were made available to shareholders and others on 20 March 2008. The shareholders approved the financial statements at their annual meeting on 7 April 2008, and the approved financial statements were then filed with a regulatory body on 9 April 2008.

When were the financial statements authorised for issue?

Answers

The financial statements were authorised for issue on 10 March 2008 (date of board authorisation for issue).

Other entities are required to submit their financial statements to a supervisory board (made up mainly of non-executives) for approval. In these situations, the financial statements are authorised for issue when the management authorises them for issue to the supervisory board (see Example 21.2).

Example 21.2 The management of an entity completed draft financial statements for the year ended 31 December 2007 on 15 March 2008. The management then authorised the financial statements for issue to its supervisory board on 18 March 2008. The supervisory board was made up of six non-executives and two representatives of employees. The supervisory board approved the financial statements on 24 March 2008. The financial statements were made available to shareholders and others on 8 April 2008. The shareholders approved the financial statements at their annual meeting on 28 April 2008, and the financial statements were then filed with a regulatory body on 2 May 2008.

When were the financial statements authorised for issue?

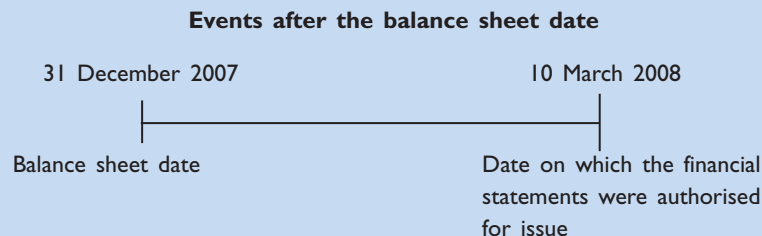
Answers

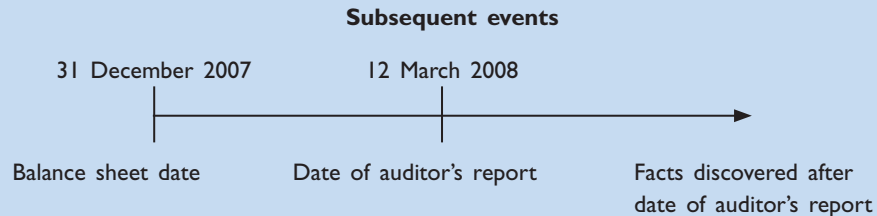
The financial statements were authorised for issue on 18 March 2008 (date of management authorisation for issue to the supervisory board).

A certain individual is taking an auditing course. He is wondering whether “events after the balance sheet date” are the same as “subsequent events”, which he has just learnt about in his auditing class. The answer is “no”. Events after the balance sheet date are not the same as subsequent events. First, “events after the balance sheet date” is an accounting concept, while “subsequent events” is an auditing concept. Second, the date of the auditor’s report is not necessarily the same as the date when the financial statements are authorised for issue. Third, even when the date of the auditor’s report is the same as the date when the financial statements are authorised for issue, “events after the balance sheet date” cover events occurring up to the date when the financial statements are authorised for issue, but subsequent events also cover facts discovered after the date of the auditor’s report, which could be many years after the date of the auditor’s report (see Example 21.3).

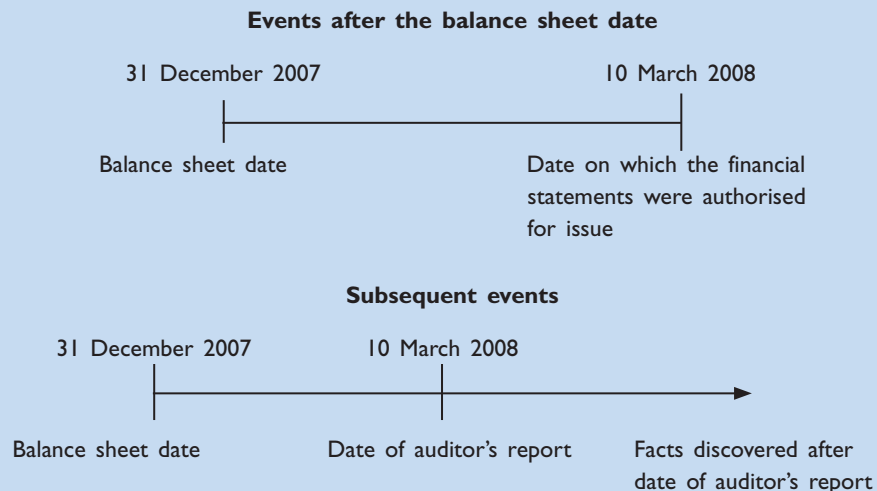
Example 21.3 Scenario 1

The time period for “events after the balance sheet date” is not the same as the one for events occurring between the balance sheet date and date of auditor’s report of “subsequent events”. In this case, the auditor has to review adjusting and non-adjusting events up to 12 March 2008.



**Scenario 2**

The time period for “events after the balance sheet date” is the same as the one for events occurring between the balance sheet date and date of auditor’s report of “subsequent events”. In this case, the auditor reviews adjusting and non-adjusting events up to 10 March 2008.



He then asks why, in practice, the date of the auditor’s report in almost all cases is the same as the date when the financial statements are authorised for issue. For example, Hang Seng Bank’s financial statements for the year ended 31 December 2007 were approved and authorised for issue by the board of directors of the bank on 3 March 2008; and KPMG Certified Public Accountants, the bank’s external auditor, also used 3 March 2008 as the date of the independent auditor’s report. The answer is that on one hand, auditing standards require the external auditor to date the independent auditor’s report as of the completion date of the audit, and the date of the report should not be earlier than the date on which the financial statements were approved for issue. This is reasonable, because it is undesirable for the external auditor to express an audit opinion on the truth and fairness of the financial statements that the directors can still amend later on before the financial statements are approved and authorised for issue. On the other hand, it is also undesirable to date the independent auditor’s report too long after the financial statements have been approved and authorised for issue. This is because auditing standards require the external auditor to review all subsequent

events up to the date of the auditor's report, and so the longer the time lag between the approval date of the financial statements and date of the auditor's report, the more the additional audit work the auditor has to perform (i.e., higher audit cost and less audit efficiency) (see Example 21.3).

Subsequent events refer to both

- events occurring between the period end and the date of the auditor's report; and
- facts discovered after the date of the auditor's report.

21.3 Recognition and Measurement – Adjusting Events

An entity adjusts the amounts recognised in its financial statements to reflect adjusting events after the balance sheet date. The following sections discuss some examples of adjusting events after the balance sheet date that require an entity to adjust the amounts recognised in its financial statements, or to recognise items that were not previously recognised (see Figure 21.1).

21.3.1 Settlement of a Court Case after the Balance Sheet Date

Settlement of a court case after the balance sheet date confirms that the entity had a present obligation at the balance sheet date. In this case, IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* requires the entity to

- adjust any previously recognised provision related to the court case; or
- recognise a new provision.

Merely disclosing a contingent liability is not appropriate, because the settlement provides additional evidence that the entity had a present obligation at the balance sheet date (see Example 21.4).

Example 21.4 Gold is principally engaged in the manufacture of children's toys. One of its popular and best-selling products is called Gold Robot. The company was facing a lawsuit in relation to a fatal accident involving Gold Robot when the management was preparing the financial statements for the year ended 31 December 2007. Mr Sad was claiming \$10 million compensation from Gold on the grounds that his only son was suffocated to death by a small plastic part of Gold Robot that was accidentally "eaten" by his son. A few days before the directors authorised the 2007 financial statements for issue, the judge made a decision on the case. As a result of the court decision, Gold had to pay compensation of \$5 million to Mr Sad.

Determine whether the above event is adjusting or non-adjusting and the amount of provision, if any, to be recognised in Gold's balance sheet (i.e., statement of financial position) as at 31 December 2007.

Answers

The sale of the goods (Gold Robot) to Mr Sad and the fatal accident (death of Mr Sad's son) were events that occurred before the balance sheet date (31 December 2007), and the lawsuit against Gold existed as at the balance sheet date (31 December 2007). Although the court decision took place after 31 December 2007, the decision actually confirmed that Gold had a present obligation as at 31 December 2007 and thus required Gold to revise the 2007 financial statements to recognise a provision of \$5 million.

21.3.2 Newly Received Information after the Balance Sheet Date

Newly received information after the balance sheet date indicates that an asset was impaired at the balance sheet date, or that the amount of a previously recognised impairment loss for that asset needs to be adjusted. For example, the sale of inventories after the balance sheet date may give evidence about their net realisable value as at the balance sheet date (see Chapter 9). Another common example is related to the financial status of major customers. The bankruptcy of a customer that occurs after the balance sheet date usually confirms that a loss existed as at the balance sheet date on a trade receivable and that the entity needs to adjust the carrying amount of the trade receivable (see Example 21.5).

Example 21.5 Silver Limited is reviewing certain events that occurred since its year-end of 31 December 2007. The financial statements were authorised for issue on 10 March 2008. The following event is relevant to the financial statements for the year ended 31 December 2007:

- Sunshine Limited, a major customer of Silver Limited, declared bankruptcy on 14 January 2008. Outstanding trade receivable from Sunshine Limited is material and was in the amount of \$3 million as at 31 December 2007. No provision has been made, as Sunshine Limited maintained a very good track record of payment and the amount owing is not overdue. Now, it is very unlikely that Silver Limited will recover anything from Sunshine Limited since Silver Limited is only a general creditor of Sunshine Limited.

Determine whether the above is an adjusting or non-adjusting event. Explain your answer. What, if any, is the impact on Silver Limited's financial statements for the year ended 31 December 2007?

Answers

This is an adjusting event, because Sunshine's bankruptcy represents the receipt of new information after the balance sheet date that indicates that an impairment loss existed as at the balance sheet date of 31 December 2007 on a trade receivable. An impairment loss of \$3 million should be recognised by Silver Limited.

21.3.3 Determination of Cost and Proceeds

The determination after the balance sheet date of the cost of assets purchased, or the proceeds from assets sold, before the balance sheet date constitutes an adjusting event. For example, ABC Limited acquired a shopping mall from XYZ Limited before the balance sheet date (31 December 2007), and the agreed considerations were \$300 million plus three times the percentage rent XYZ Limited collected from the tenants of the shopping mall in 2007. Before ABC Limited approved the financial statements, it was determined that the percentage rent XYZ Limited collected from the tenants in 2007 amounted to \$50 million. Accordingly, the acquisition cost could now be determined to be \$450 million (i.e., \$300 million + $3 \times$ \$50 million).

21.3.4 Determination of Profit Sharing or Bonus Payments

The determination after the balance sheet date of the amount of profit sharing or bonus payments is an adjusting event if the entity had a present legal or constructive obligation at the balance sheet date to make such payments as a result of events before that date (see Example 21.6 and Chapter 12 for further discussion).

Example 21.6 A profit sharing plan requires ABC Limited to pay 10% of its profit before taxes, excluding the amount of profit sharing payments, for the year to employees who serve throughout the year. If no employees leave during the year, the total profit sharing payments for the year will be 10%. ABC Limited estimates that staff turnover will reduce the payments to 8%. The audited profit before taxes, excluding the amount of profit sharing payments, for the year was determined to be \$50 million after the balance sheet date but before the financial statements were authorised for issue.

Determine the expected cost of profit sharing and bonus payments for the year.

Answers

ABC Limited should recognise a liability and an expense of \$4 million (i.e., $8\% \times$ \$50 million).

21.3.5 Discovery of Fraud or Errors

Another indication of the occurrence of an adjusting event is related to misstated financial statements due to the discovery of fraud or errors after the balance sheet date. For example, discovery of fraud after the balance sheet date relating to misappropriation of assets involving the theft of an entity's assets (e.g., cash and inventories) that existed as at the balance sheet date is an adjusting event (see Example 21.7).

Example 21.7 A few days before the directors of DEF Limited approved the financial statements for the year ended 31 December 2007, Mr Chan, DEF Limited's managing director, discovered that the general manager of one of the subsidiaries of DEF Limited had misappropriated cash of \$10 million, which represents a material amount of assets of DEF Limited. Further investigation of the matter indicates that the money was stolen in December 2007.

Determine whether the above is an adjusting or non-adjusting event. Explain your answer. What, if any, is the impact on DEF Limited's financial statements for the year ended 31 December 2007?

Answers

This is an adjusting event, because the misappropriation of \$10 million occurred before the balance sheet date. Since the amount of \$10 million is material, DEF Limited is required to adjust the misappropriated amount in its financial statements for the year ended 31 December 2007.

Fraud is defined as an intentional act by one or more individuals among management, those charged with governance, employees or third parties, involving the use of deception to obtain an unjust or illegal advantage (ISA 240.6).

Fraud could be management fraud or employee fraud. Misstatements could be due to fraudulent financial reporting or misappropriation of assets.

21.4 Recognition and Measurement – Non-adjusting Events

An entity does not adjust the amounts recognised in its current period's financial statements to reflect non-adjusting events after the balance sheet date. Since the impact of a material non-adjusting event will be reflected in next year's interim and annual financial statements, why is an entity still required to disclose the nature of the event and its financial effects in the notes to this year's financial statements? This is because disclosing such information will provide useful information to the users of the financial statements so that they can take appropriate action, if necessary, on a timely basis. The following sections discuss some examples of non-adjusting events after the balance sheet date that require an entity to disclose the nature of the event and its financial effects in the notes to the financial statements (see Figure 21.1).

21.4.1 A Decline in Market Value of Investments

A decline in market value of investments between the balance sheet date and the date when the financial statements are authorised for issue is a typical example of a non-adjusting event after the balance sheet date. A drop in market value normally reflects circumstances that have occurred after the balance sheet date and does not normally relate to the condition of the investments at the balance sheet date (see Example 21.8).

Example 21.8 ABC Company's financial assets include 1 million ordinary shares of XYZ Company Limited (XYZ), which is categorised under "Financial assets at fair value through profit or loss". XYZ is a high-technology company listed on the stock exchange and was trading actively in the range of \$10–\$10.50 per share on 31 December 2007, ABC Company's balance sheet date. Subsequently, on 3 January 2008, XYZ's shares dropped significantly to about \$5 per share due to a competitor's launching of a technological breakthrough product that makes the company's major product obsolete immediately.

Determine whether it is necessary to adjust ABC Company's financial statements for the year ended 31 December 2007.

Answers

This is a non-adjusting event, because the significant decline in market value of ABC Company's investment in XYZ shares was due to circumstances that occurred after the balance sheet date and does not relate to the condition of the investments at the balance sheet date. ABC Company should not adjust the amounts recognised for the investments in shares in its financial statements. Similarly, ABC Company need not update the amounts disclosed for the investment as at 31 December 2007, although it may need to give additional disclosure of the decline in value under the disclosure requirements of IAS 10.

21.4.2 Destruction of Assets

Though not occurring frequently, the destruction of a major production plant or inventories by a fire after the balance sheet date is a non-adjusting event. Let's consider Real-life Case 21.1, SCUD Group Limited, presented at the beginning of the chapter. Since SCUD's directors approved the 2006 financial statements for issue on 27 March 2007 and the fire occurred on 31 May 2007 (i.e., after the approval date of the financial statements), the fire was not an event after the balance sheet date.

Now assume SCUD's financial year-end were 30 April and SCUD's directors had not approved the financial statements for issue before the fire on 31 May 2007. Under this assumption, the fire was a non-adjusting event that warranted disclosure of the nature of the fire and an estimate of the fire's financial effect in a note to the financial statements. Although the impact of the fire would be reflected in the 2007 financial statements and in the 2007 interim financial report, SCUD was required to disclose the nature of the fire and its impact in the 2006 financial statements because disclosing such information would provide useful information to the readers of the financial statements and enable them to take appropriate action, if necessary, on a timely basis.

In accordance with the Interim Report 2007 issued by the group, SCUD reported a loss for the 6 months ended 30 June 2007 amounting to RMB 125 million, which was due mainly to the RMB 220 million losses from the fire. Since the loss for the interim period did not take into account any possible compensation to be received

from the insurers in relation to the losses from fire, SCUD disclosed a subsequent event on the possible compensation from the insurers in its Interim Report 2007 (see Real-life Case 21.3).

**Real-life
Case 21.3**

SCUD Group Limited

The Interim Report 2007 disclosed the following:

- The group has reported the fire (see Note 5) to its insurers. The insurance is primarily for loss of inventories and products from fire up to RMB 100 million and not subsequent business disruption or other losses. Up to the date of approval of the interim condensed consolidated financial statements, the group has not yet been able to conclude the amount of compensation receivable from the insurers as investigation is still pending.
- The impairment loss in respect of inventories, property, plant and equipment and other damages amounting to RMB 220,222,000 in aggregate, reflected at the balance sheet dated 30 June 2007, does not take into account any possible compensation from insurers. Any amounts eventually recoverable from the insurers will be recognised in future periods only when they are certain to be received.

21.4.3 Discontinuing Operations

Another category of non-adjusting event relates to announcing a plan to discontinue an operation. If an entity announces its plan to discontinue a significant part of its business after the balance sheet date, it is treated as a non-adjusting event. Whether the decision to discontinue was passed in a board meeting held before or after the balance sheet date does not make any difference. Real-life Case 21.4 is related to COL Capital Limited's disclosure of ceasing its mobile phone distribution business.

**Real-life
Case 21.4**

COL Capital Limited

COL Capital is principally engaged in mobile phone distribution, trading and investment in financial securities, money lending business, and investment in investment properties. Its annual report of 2006 disclosed the following event of discontinued operation after the balance sheet date:

- The group ceased the business operation of mobile phone distribution in March 2007.

21.4.4 Purchases, Disposals and Expropriation of Major Assets

Another category of non-adjusting events is related to an entity's major purchases of assets, classification of assets as held for sale in accordance with IFRS 5 *Non-current*

Assets Held for Sale and Discontinued Operations, other disposals of assets, or expropriation of major assets by government after the balance sheet date. Expropriation of major assets by government could be related to non-compliance with laws and regulations, but might also occur more frequently in politically unstable countries. Major purchases and disposal of assets are common types of non-adjusting events (see Real-life Case 21.5).

Real-life**Case 21.5****Mandarin Oriental International Limited**

Mandarin Oriental International is an international hotel investment and management entity operating 34 deluxe and first-class hotels and resorts worldwide. The group has equity interests in many of its properties and had net assets of approximately US\$1.7 billion as at 31 December 2006. Its annual report of 2006 disclosed the following event of disposal of assets after the balance sheet date:

- On 21 December 2006, the group announced that it had entered into an agreement to sell half of its investment in Mandarin Oriental, New York. This sale reduces the group's interest in the hotel from 50% to 25%.
- Mandarin Oriental, New York was valued at US\$340 million for the purposes of the sale. On disposal of its 25% interest, the group will receive after-tax proceeds of US\$29 million with a post-tax gain of approximately US\$16 million, which will be recognised in 2007. As part of the transaction, the group will also receive repayment of its outstanding mezzanine loan to the hotel of US\$40 million, for a total proceeds of US\$69 million. The sale was completed on 1 March 2007.
- The group's 25% interest in the property, which is being sold, was classified as a non-current asset held for sale as at 31 December 2006. The group will continue to manage the hotel under a long-term agreement.

21.4.5 Share Transactions

An entity treats major ordinary share transactions and potential ordinary share transactions after the balance sheet date as non-adjusting events. An entity can make an exception when such transactions involve capitalisation or bonus issues, share splits or reverse share splits, all of which are required to be adjusted under IAS 33 *Earnings per Share*. Real-life Case 21.6 is related to major ordinary share transactions after the balance sheet date by Yue Yuen Industrial (Holdings) Limited.

Real-life**Case 21.6****Yue Yuen Industrial (Holdings) Limited**

Yue Yuen Industrial is principally engaged in the manufacture and sales of footwear products and the retailing business. Its annual report of 2006 disclosed the following major ordinary share transactions after the balance sheet date:

**Real-life
Case 21.6**
(cont'd)

- On 20 October 2006, the company, Wealthplus Holdings Limited (the “vendor”, a substantial shareholder of the company) and Merrill Lynch Far East Limited (the “bookrunner”) entered into a placing agreement, whilst the company and the vendor entered into a top-up subscription agreement in relation to the placing of 43,880,000 existing shares by the vendor and the conditional subscription of 43,880,000 new shares in the company by the vendor, both at the price of HK\$23.05 per share. Details of these are disclosed in an announcement of the company dated 20 October, 2006.

21.4.6 Major Restructuring

An entity also accounts for announcing, or commencing the implementation of, a major restructuring after the balance sheet date as a non-adjusting event (see IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* and Chapter 14 for further discussion). Such events do not occur frequently. An example is shown in Example 21.9.

Example 21.9 Albert Wong is the financial controller of Telesense Company Limited (Telesense). He is in the process of finalising the financial statements of Telesense as of and for the year ended 30 September 2008. In October 2008, he was informed by the managing director of Telesense, George Sun, that the board of Telesense and its headquarter management in the United States had decided to terminate the employment of certain employees with effect from 11 November 2008. George Sun indicated that a board meeting had been held in September 2008 at which the decision was made. George Sun indicated that management intended to communicate with the relevant employees about the redundancy plan on the morning of 11 November 2008. George Sun requested Albert Wong to calculate the termination payments relating to the relevant employees and instructed Albert Wong to make the relevant provision in the financial statements as of and for the year ended 30 September 2008. Albert Wong estimated the amount involved to be approximately \$800,000.

Discuss and provide Albert Wong with an explanation of the proper accounting treatment for the above provision.

Answers

The relevant provision for termination payments for Telesense should not be recorded in its financial statements as of and for the year ended 30 September 2008, for the following reasons:

1. As of 30 September 2008, the constructive obligation did not exist, as management of Telesense had not communicated to the relevant employees

(its termination/redundancy plan) even though the board decision was concluded before 30 September 2008. A management or board decision does not give rise to a present obligation, unless it is communicated to those affected by it in a sufficiently specific manner to raise a valid expectation in them that Telesense will discharge its responsibilities.

2. As of 30 September 2008, legal obligation did not exist. The settlement of termination benefits can only be enforced by law upon the actual termination of employment of the relevant employees in accordance with the relevant employment laws and regulations. As the actual termination of the employees would not take place until November 2008, no legal obligations existed as of 30 September 2008 and thus the relevant provision should not be made as of 30 September 2008.

In addition, Telesense should make relevant disclosures in the financial statements regarding such a redundancy programme after year-end as an event after the balance sheet date. The redundancy programme launched after year-end constituted an event after the balance sheet date, and this is an event that is indicative of conditions that arise after the balance sheet date (i.e., a non-adjusting event after the balance sheet date). As this is a non-adjusting event, Albert Wong should make the relevant and proper disclosures in the financial statements rather than adjust the amounts recognised in the financial statements for the year ended 30 September 2008.

Source: HKICPA QP A October 2002, adapted

21.4.7 Business Combination

Rather than restructuring, an entity may engage in a major business combination after the balance sheet date (see IFRS 3 *Business Combinations*) or dispose of a major subsidiary. An interesting example is found in the annual report of 2006 issued by the Hong Kong and China Gas Company Limited (see Real-life Case 21.7).

Real-life

Case 21.7

The Hong Kong and China Gas Company Limited

The Hong Kong and China Gas Company is principally engaged in the production, distribution and marketing of gas, water and related activities in Hong Kong and Mainland China. Its annual report of 2006 disclosed the following business combinations and disposal of subsidiaries after the balance sheet date:

- On 4 December 2006, the company and Hong Kong & China Gas (China) Limited (HK&CG (China)) entered into an agreement with Panva Gas Holdings Limited (Panva Gas) pursuant to which Panva Gas conditionally agreed to purchase eight wholly owned subsidiaries (“target companies”) from HK&CG (China) and to take assignment of the outstanding loans due from the target companies to HK&CG (China) as at the date of

**Real-life
Case 21.7**
(cont'd)

completion (“shareholder loans”). HK&CG (China) is a wholly owned subsidiary of the company.

- In consideration for this transaction, Panva Gas agreed to allot and issue 772,911,729 of its ordinary shares of HK\$0.10 each (each credited as fully paid), representing 45% of the share capital of Panva Gas as at the date of the agreement as enlarged by the issue of these shares, to HK&CG (China). The acquisition was completed on 1 March 2007. Immediately upon the completion, the target companies ceased to be subsidiaries of the group. The company, through HK&CG (China), owns approximately 43.97% of the enlarged issued share capital of Panva Gas and becomes the largest shareholder of Panva Gas. Panva Gas is treated as an associated company at an initial carrying value of approximately HK\$2.9 billion, which represents the fair value of the Panva Gas shares issued, and the post-acquisition consolidated results of Panva Gas will be accounted for by the company by the equity method of accounting. The company will determine the amount of goodwill arising from the acquisition ... which will be included in the investment in the associated company ...
- The group has recorded a gain on disposal of approximately HK\$2.2 billion as a result of the disposal of its interest in the target companies in 2007. The disposal gain is determined based on the difference in the fair value of the Panva Gas shares issued as the consideration as at 1 March 2007 of HK\$3.77 per Panva Gas share over the aggregate net assets value of the target companies attributable to the company as at the date of completion, the carrying amount of shareholder loans and the related transaction costs. The exchange reserve attributable to the disposed subsidiaries has also been recognised in the gain on disposal.

21.4.8 Commitments and Contingent Liabilities

An entity may also enter into significant commitments or contingent liabilities after the balance sheet date, for example, by issuing significant guarantees or signing a memorandum of understanding (see Real-life Case 21.8).

**Real-life
Case 21.8**
Century City International Holdings Limited

Century City International Holdings is principally engaged in property development and investment, construction and building related services, and other investments. Its 2006 annual report disclosed the group had signed the following memorandum of understanding after the balance sheet date:

- On 29 March 2007, the group entered into a memorandum of understanding with an independent third party for a possible investment

**Real-life
Case 21.8**
(cont'd)

in a natural gas project in Utah, the United States. The memorandum of understanding is non-legally binding, and further negotiations with respect to this possible investment are subject to, among other factors, satisfactory results of the due diligence to be undertaken by the group.

21.4.9 Dividends Declared

If an entity declares dividends to holders of equity instruments (as defined in IAS 32 *Financial Instruments – Presentation*) after the balance sheet date, the entity does not recognise those dividends as a liability at the balance sheet date. If an entity maintains a good record of ordinary dividend payments and adopts a stable dividend strategy, can the entity recognise a provision for the dividends declared? The answer is “no”, because the existence of a good record of dividend payments and an established dividend policy do not create a valid expectation or an obligation.

Even though dividends are declared (i.e., the dividends are appropriately authorised and no longer at the discretion of the entity) after the balance sheet date but before the financial statements are authorised for issue, an entity cannot recognise such dividends as a liability at the balance sheet date because they do not meet the criteria of a present obligation under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (see Chapter 14). An entity is required to disclose such dividends in the notes to the financial statements in accordance with IAS 1 *Presentation of Financial Statements*.

21.4.10 Litigation

The final category of non-adjusting events described in IAS 10 relates to commencing major litigation arising solely out of events that occurred after the balance sheet date of an entity (see Real-life Case 21.9).

**Real-life
Case 21.9**
Wah Nam International Holdings Limited

Wah Nam International Holdings is principally engaged in the operation of toll roads and bridges in China (PRC). Its annual report of 2006 disclosed that the group was involved in a litigation after the balance sheet date:

- Subsequent to the year ended 31 December 2006, the group had obtained legal opinion from a PRC lawyer. As advised by the lawyer, a civil petition was submitted to the PRC court against the Hangzhou City government for judgement on the government compensation.

21.5 Going Concern

The going concern assumption states that an entity is ordinarily expected to continue to operate for the foreseeable future without any intention or necessity of liquidation, ceasing trading or seeking protection from creditors pursuant to laws or regulations. Accordingly, the values of assets and liabilities are based on the assumption that the entity will be able to realise its assets and discharge its liabilities in the normal course of business.

IAS 1 *Presentation of Financial Statements* requires management to make an assessment of an entity's ability to continue as a going concern. An entity considers the appropriateness of the going concern assumption if there is deterioration in operating results and financial position after the balance sheet date. If the going concern assumption is no longer appropriate and the effect is so pervasive, IAS 10 requires a fundamental change in the basis of accounting, rather than an adjustment to the amounts recognised within the original basis of accounting. Therefore, IAS 10.14 requires an entity not to prepare its financial statements on a going concern basis if its management determines after the balance sheet date either that it intends to liquidate the entity or to cease trading, or that it has no realistic alternative but to do so.

Disclosure in the financial statements is required under IAS 1 if:

1. The financial statements are not prepared on a going concern basis; or
2. Management is aware of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern. The events or conditions requiring disclosure may arise after the balance sheet date.

21.6 Disclosure

21.6.1 Date of Authorisation for Issue

An entity is required to disclose (1) the date when the financial statements were authorised for issue and (2) who gave that authorisation. An example can be found in the 2007 annual report of Hang Seng Bank (see Real-life Case 21.10).

Real-life Case 21.10

Hang Seng Bank

Hang Seng Bank and its subsidiaries and associates are engaged in the provision of banking and related financial services. Its 2007 annual report disclosed the following:

- The financial statements were approved and authorised for issue by the board of directors on 3 March 2008.

It is important for users to know when the financial statements were authorised for issue, because the financial statements do not reflect events after this date. If the entity's owners or others have the power to amend the financial statements after issue, IAS 10 requires the entity to disclose that fact.

21.6.2 Updating Disclosure about Conditions at the Balance Sheet Date

If an entity receives information after the balance sheet date about conditions that existed at the balance sheet date, IAS 10 requires the entity to update disclosures that relate to those conditions, in the light of the new information. For example, there is a need to update disclosures when evidence becomes available after the balance sheet date about a contingent liability that existed at the balance sheet date. In addition to determining the need to recognise or change a provision under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, an entity updates its disclosures about the contingent liability in the light of that evidence.

21.6.3 Non-adjusting Events after the Balance Sheet Date

Since non-disclosure of material non-adjusting events could influence the economic decisions that users make on the basis of the financial statements, IAS 10 requires an entity to disclose (1) the nature of the event and (2) an estimate of its financial effect, or a statement that such an estimate cannot be made for each material category of non-adjusting event after the balance sheet date.

21.7 Summary

Events after the balance sheet date are those events that occur between the balance sheet date and the date when the financial statements are authorised for issue. They are categorised into adjusting and non-adjusting events.

An entity adjusts the amounts recognised in its financial statements to reflect adjusting events, or to recognise items that were not previously recognised. An entity does not adjust the amounts recognised in its financial statements to reflect non-adjusting events.

Dividends declared to holders of equity instruments after the balance sheet date are not recognised as a liability at the balance sheet date. It is inappropriate for an entity to prepare its financial statements on a going concern basis if the management determines after the balance sheet date either that it intends to liquidate the entity or to cease trading, or that it has no realistic alternative but to do so.

An entity discloses (1) the date when the financial statements were authorised for issue and (2) who gave that authorisation. If an entity receives new information after the balance sheet date about conditions that existed at the balance sheet date, the entity is required to update disclosures that relate to those conditions.

An entity discloses the nature of the event and an estimate of its financial effect, or a statement that such an estimate cannot be made for each material category of non-adjusting events.

Review Questions

1. Define events after the balance sheet date.
2. What are the differences between adjusting and non-adjusting events?

3. How are events after the balance sheet date different from subsequent events?
4. How should one determine the date of authorising financial statements for issue?
5. Give some examples of adjusting events.
6. What is the accounting treatment for dividends declared after the balance sheet date?
7. Why is the going concern assumption so important when considering events after the balance sheet date?
8. Describe the disclosure requirements for the date of authorisation for issue.
9. Give some examples of non-adjusting events that would generally require disclosure in financial statements.

Exercises

Exercise 21.1 The management of Lee Company Limited (Lee) completed the draft financial statements for the year ended 31 December 2007 on 5 February 2008. On 15 February 2008, Lee's board of directors reviewed the financial statements and authorised them for issue. Lee announced its profit and selected other financial information on 18 February 2008. The financial statements were made available to Lee's shareholders and others on 22 February 2008. Lee's shareholders approved the financial statements at their annual meeting on 14 March 2008, and the approved financial statements were then filed with the Companies Registry on 18 March 2008.

Required:

Determine when the financial statements of Lee were authorised for issue.

Exercise 21.2 Categorise the following events after the balance sheet date into adjusting and non-adjusting events:

1. Settlement of a court case that was reported at the balance sheet date;
2. Commencing major litigation arising solely out of events that occurred after the balance sheet date;
3. Disposal of a major asset; and
4. Determination of the proceeds from assets sold before the balance sheet date.

Exercise 21.3 Categorise the following events after the balance sheet date into adjusting and non-adjusting events:

1. Announcement of a plan to discontinue an operation;
2. Significant decline in market value of an investment;
3. Newly received information indicating that an asset was impaired at the balance sheet date;
4. Disposal of a major subsidiary; and
5. Announcement of a major restructuring.

Exercise 21.4 A profit sharing plan requires Jubilee Limited to pay 10% of its profit before taxes, excluding the amount of profit sharing payments, for the year to employees who serve throughout the year. If no employees leave during the year, the total profit sharing payments for the year will be 10%. Jubilee Limited estimates that staff turnover will reduce the payments to 9%. The audited profit before taxes, excluding the amount of profit sharing payments, for the year was determined to be \$40 million after the balance sheet date but before the financial statements were authorised for issue.

Required:

Determine the expected cost of profit sharing and bonus payments for the year.

Exercise 21.5 When DEF Limited was in the process of finalising the financial statements for the year ended 31 December 2007 in early February 2008, Mr Lau, managing director of DEF Limited, discovered that the general manager of one of the subsidiaries of DEF Limited had misappropriated cash of \$5 million, which represented a material amount of assets of DEF Limited. Further investigation of the matter indicated that the money was stolen in early January 2008.

Required:

Determine whether the above is an adjusting or non-adjusting event. Explain your answer. What, if any, is the impact on DEF Limited's financial statements for the year ended 31 December 2007?

Problems

Problem 21.1 Alpha Company Limited (Alpha) is engaged in the property development business and is involved in a claim by its contractors for the late handover of the construction site. A contractor filed a claim against Alpha for an amount of \$10 million in the high court during the year ended 31 March 2008. The management of Alpha has assessed the likelihood of the claim's success and considered the claim of no merit. It intends to defend its position rigorously. Alpha has disclosed this fact as a note to the financial statements.

Alpha's financial statements were authorised for issue on 15 June 2008 and were laid before the shareholders on 31 July 2008.

On 10 June 2008, a judgement was awarded in favour of the contractor by the court. On 12 June 2008, Alpha paid the contractor an amount of \$8 million as a final and full settlement.

Required:

Explain the accounting treatment for the above event after the balance sheet date by reference to relevant accounting standards.

(HKICPA QP C September 2004, adapted)

Problem 21.2 Value Manufacturing Holding Limited (VMHL) is a company engaging in the manufacture and sale of computers and related accessory products. Patrick Cheung is newly employed as the finance director of VMHL. Patrick noted the following matter when he was in the process of closing the financial statements of VMHL for the year ended 30 September 2008:

The 2008 financial statements will be approved for issue in December 2008. Dividends declared in November 2008 were recorded as dividend payable in the financial statements for the year ended 30 September 2008.

Required:

Discuss and provide Patrick Cheung with an explanation of the proper accounting treatment for the above circumstance.

(HKICPA QP A October 2002, adapted)

Problem 21.3 Ryder, a public limited company, is reviewing certain events that have occurred since its year-end of 31 October 2005. The financial statements were authorised on 12 December 2005.

Ryder has a good record of ordinary dividend payments and has adopted a recent strategy of increasing its dividend per share annually. For the last 3 years the dividend per share has increased by 5% per annum. On 20 November 2005, the board of directors proposed a dividend of 10 cents per share for the year ended 31 October 2005. The shareholders were expected to approve it at a meeting on 10 January 2006, and a dividend amount of \$20 million would be paid on 20 February 2006, having been provided for in the financial statements at 31 October 2005. The directors felt that a provision should be made because a “valid expectation” had been created through the company’s dividend record.

Required:

Discuss the accounting treatment of the above event in the financial statements of the Ryder Group for the year ended 31 October 2005, taking into account the implications of events occurring after the balance sheet date.

(ACCA 3.6 December 2005, adapted)

Problem 21.4 Ryder, a public limited company, is reviewing certain events that have occurred since its year-end of 31 October 2005. The financial statements were authorised on 12 December 2005.

Ryder disposed of a wholly owned subsidiary, Krup, a public limited company, on 10 December 2005 and made a loss of \$9 million on the transaction in the group financial statements. As at 31 October 2005, Ryder had no intention of selling the subsidiary, which was material to the group. The directors of Ryder have stated that there were no significant events that have occurred since 31 October 2005 which could have resulted in a reduction in the value of Krup. The carrying value of the net assets and purchased goodwill of Krup at 31 October 2005 were \$20 million and \$12 million respectively. Krup had made a loss of \$2 million in the period 1 November 2005 to 10 December 2005.

Required:

Discuss the accounting treatment of the above event in the financial statements of the Ryder Group for the year ended 31 October 2005, taking into account the implications of events occurring after the balance sheet date.

(ACCA 3.6 December 2005, adapted)

Case Studies**Case
Study 21.1**

Hutchison Whampoa Limited is a listed company in Hong Kong. Subsequent to its financial year ended 31 December 2006, the group announced a major disposal of assets through Hutchison Telecommunications International Limited (HTIL). In particular, HTIL announced on 12 February 2007 that it had entered into an agreement to sell its entire interest in its mobile business in India for a consideration of approximately US\$11,080 million (approximately HK\$86,570 million). The transaction was subject to certain completion conditions, including regulatory approval, and was targeted to be completed in the first half of 2007. The group's share of HTIL's profit from disposal on completion of the transaction was estimated to be approximately HK\$36,500 million.

Required:

Assume you are responsible for the preparation of the Hutchison Group's consolidated financial statements for the year ended 31 December 2006. Draft an appropriate note to the financial statements for the above proposed major disposal of assets by reference to relevant accounting standards.

**Case
Study 21.2**

In preparing the financial statements of Lam Company Limited (Lam) for the year ended 31 December 2007, Nelson, the financial controller of Lam, identified the following material events that took place after the balance sheet date. The board of directors of Lam approved the financial statements for issue on 20 March 2008.

- a. On 3 January 2008, Lam announced its plan to discontinue the retail business operation in China. The decision to discontinue this operation was passed in the board of directors meeting held on 28 December 2007.
- b. On 9 January 2008, Lam entered into a sale and purchase agreement with an independent third party to dispose of a building at a consideration of \$100 million. The sale and purchase agreement was subsequently duly completed on 9 February 2008, resulting in a gain on disposal of appropriately \$48 million.
- c. On 25 January 2008, a major production plant in China was destroyed by a flood.
- d. On 23 February 2008, Lam was sued by a customer for \$20 million damages. The customer claimed that his son had been suffocated by a small part of a toy product sold by Lam. The suffocation resulted in permanent damage to the boy's

brain, and the boy was still in a coma. According to the assessment of the doctor in charge, it was very likely that the boy would need intensive care for the remainder of his life. The case will not be heard until September 2008, and the verdict cannot be predicted.

- e. On 10 March 2008, as a result of a court judgement, Lam had to pay damages of \$6 million to a vendor for breach of contract occurring between May and November 2007.

Required:

Explain the accounting treatment for the above events after the balance sheet date by reference to relevant accounting standards.

**Case
Study 21.3**

Alpha Electronics Limited (Alpha) is a company engaged in the manufacture and trade of computer accessories and devices.

A week prior to the balance sheet date, a shipment of Alpha's goods to Brazil via Florida was held by US Customs, who received a complaint about Alpha's infringement of intellectual property rights owned by a US manufacturer, PKG Inc. (PKG). Alpha's management considered the allegation groundless and indicated that the company would strenuously defend its position. A defence against PKG's writ has been filed with the relevant court in the United States by Alpha's US attorney, who in his letter to the management asserted that he was "unable to formulate any opinion on whether PKG's claim had any merit at all". Based on the attorney's opinion, Alpha's directors considered that no provision for any potential liability in respect of this litigation needed to be made in the financial statements.

Required:

Discuss the accounting treatment of the above event in the financial statements of Alpha for the year ended 31 October 2008, taking into account the implications of events occurring after the balance sheet date.

(HKICPA QP C June 2001, adapted)

**Case
Study 21.4**

As at 31 December 2006, MAL was a defendant in a patent infringement lawsuit of its driving control system (DCS) that has a high probability of making a loss of \$120 million. If MAL loses the case, the management will take legal action to claim the loss from the DCS developer. The company's lawyers advise that it is also highly probable that MAL will be successful in recovering \$100 million from the DCS developer.

Required:

1. Determine (a) whether a provision should be made; (b) the amount of the provision, if any, in MAL's balance sheet (i.e., statement of financial position) at 31 December 2006; and (c) the required disclosure by reference to the relevant accounting standards.
2. Would your answer in part (1) be different if the estimates of loss of \$120 million and the recovery of \$100 million from the DCS developer were wholly based on

newly available information received after the balance sheet date but before the financial statements were authorised for issue?

3. Would your answer in part (1) be different if the patent infringement occurred after the balance sheet date?

(HKICPA QP A September 2006, adapted)

Case
Study 21.5

Ryder, a public limited company, is reviewing certain events that have occurred since its year-end of 31 October 2005. The financial statements were authorised on 12 December 2005. The following events are relevant to the financial statements for the year ended 31 October 2005:

- a. Ryder acquired a wholly owned subsidiary, Metalic, a public limited company, on 21 January 2004. The consideration payable in respect of the acquisition of Metalic was 2 million ordinary shares of \$1 of Ryder plus a further 300,000 ordinary shares if the profit of Metalic exceeded \$6 million for the year ended 31 October 2005. Metalic's profit for the year was \$7 million, and the ordinary shares were issued on 12 November 2005. The annual profits of Metalic had averaged \$7 million over the last few years, and therefore Ryder had included an estimate of the contingent consideration in the cost of the acquisition at 21 January 2004. The fair value used for the ordinary shares of Ryder at this date, including the contingent consideration, was \$10 per share. The fair value of the ordinary shares on 12 November 2005 was \$11 per share. Ryder also made a one-for-four bonus issue on 13 November 2005, which was applicable to the contingent shares issued. The directors are unsure of the impact of the above on earnings per share and the accounting for the acquisition.
- b. The company acquired a property on 1 November 2004 that it intended to sell. The property was obtained as a result of a default on a loan agreement by a third party and was valued at \$20 million on that date for accounting purposes, which exactly offset the defaulted loan. The property is in a state of disrepair, and Ryder intends to complete the repairs before it sells the property. The repairs were completed on 30 November 2005. The property was sold after costs for \$27 million on 9 December 2005. The property was classified as "held for sale" at the year-end under IFRS5 *Non-current Assets Held for Sale and Discontinued Operations* but shown at the net sale proceeds of \$27 million. The property is depreciated at 5% per annum on a straight-line basis, and no depreciation has been charged in the year.
- c. The company granted share appreciation rights (SARs) to its employees on 1 November 2003 based on 10 million shares. The SARs provide employees at the date the rights are exercised with the right to receive cash equal to the appreciation in the company's share price since the grant date. The rights vested on 31 October 2005, and payment was made on schedule on 1 December 2005. The fair value of the SARs per share at 31 October 2004 was \$6, at 31 October 2005 it was \$8, and at 1 December 2005 it was \$9. The company has recognised a liability for the SARs as at 31 October 2004 based upon IFRS2 *Share-based Payment*, but the liability was stated at the same amount at 31 October 2005.

Required:

Discuss the accounting treatment of the above events in the financial statements of the Ryder Group for the year ended 31 October 2005, taking into account the implications of events occurring after the balance sheet date.

(ACCA 3.6 December 2005, adapted)

22

Non-current Assets Held for Sale and Discontinued Operations

Learning Outcomes

This chapter enables you to understand the following:

- 1 The general requirements in reclassifying non-current assets as current assets
- 2 The meaning of non-current assets held for sale and disposal group
- 3 The specific criteria to effect a reclassification of non-current assets to current assets
- 4 The measurement basis of non-current assets classified as held for sale
- 5 The presentation and disclosure of non-current assets held for sale
- 6 The meaning of discontinued operations
- 7 The presentation and disclosure of discontinued operations

**Real-life
Case 22.1**
COSCO International Holdings Limited

The 2006 annual report of COSCO International Holdings Limited presented its current assets and current liabilities as follows:

	2006 HK\$'000	2005 HK\$'000
Current assets:		
Completed properties held for sale	79,687	81,956
Properties under development for sale	220,674	267,343
Inventories	279,979	163,944
Trade and other receivables	723,760	455,841
Financial assets at fair value through profit or loss	616	350
Current income tax recoverable	1,372	–
Cash and cash equivalents	862,187	1,274,085
	<u>2,168,275</u>	<u>2,243,519</u>
Assets held for sale	145,854	9,179
	<u>2,314,129</u>	<u>2,252,698</u>
Current liabilities:		
Trade and other payables	1,033,331	933,681
Current income tax liabilities	18,684	7,038
Short-term borrowing	78,521	10,570
	<u>1,130,536</u>	<u>951,289</u>
Liabilities directly associated with assets held for sale	114,404	–
	<u>1,244,940</u>	<u>951,289</u>

In the financial statements of COSCO stated in Real-life Case 22.1 above, a balance sheet item, “assets held for sale”, is separately presented in current assets, and simultaneously another item, “liabilities directly associated with assets held for sale”, is also separately presented in current liabilities. This presentation is related to a new practice in accounting on an international level: When non-current assets together with their directly associated liabilities are reclassified as current, they must be held for sale and separately presented in the balance sheet.

**Real-life
Case 22.2**
Newcastle United plc

Newcastle United plc, one of the well-known football clubs in the England, has adopted IFRSs in preparing its financial statements. It not only clarified the accounting treatment for its acquired players’ registration, but also stated that the registration as an asset can be held for sale as follows:

**Real-life
Case 22.2**
(cont'd)

- Acquired players' registrations are classified as "assets held for sale" on the balance sheet if, at any time, it is considered that the carrying amount of a registration will be recovered principally through a sale transaction rather than through continuing use of the value of that registration.
- At the time of reclassification, the measurement of the registration is the lower of (a) fair value (less costs to sell) and (b) carrying value. Amortisation of the asset is suspended at the time of reclassification, although impairment charges still need to be made if applicable.

From a financial reporting perspective, a player can be "an asset" and can be "held for sale". Newcastle's case in Real-life Case 22.2 gives a good summary of the latest accounting treatment on "assets held for sale". This chapter addresses when and how non-current assets can be classified and measured as current and how these assets and the discontinued operations should be presented and disclosed.

22.1 Applicable Standard and Scope

IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* sets out the accounting for non-current assets held for sale and the presentation and disclosure of discontinued operations.

While the classification and presentation requirements of IFRS 5 apply to all recognised non-current assets and to all disposal groups of an entity, the measurement requirements of IFRS 5 do not have the same scope of coverage.

The measurement requirements of IFRS 5 apply to all recognised non-current assets and disposal groups, except for some identified assets, which should continuously be measured in accordance with other applicable accounting standards. Those assets and their applicable accounting standards include the following:

1. Deferred tax assets (IAS 12 *Income Taxes*);
2. Assets arising from employee benefits (IAS 19 *Employee Benefits*);
3. Financial assets within the scope of IAS 39 *Financial Instruments – Recognition and Measurement*;
4. Non-current assets that are accounted for in accordance with the fair value model in IAS 40 *Investment Property*;
5. Non-current assets that are measured at fair value less estimated point-of-sale costs in accordance with IAS 41 *Agriculture*;
6. Contractual rights under insurance contracts as defined in IFRS 4 *Insurance Contracts*.

The measurement provisions of IFRS 5 do not apply to the above assets either as individual assets or as part of a disposal group.

22.1.1 Reclassification Prohibited Unless Meeting the Criteria

Assets should be classified as current or non-current based on their definitions set out in IAS 1 (see Chapter 19). However, the reclassification issues of non-current assets to current assets are not addressed in IAS 1 but in IFRS 5.

IFRS 5 precisely requires that non-current assets cannot be reclassified as current assets until they meet the criteria to be classified as held for sale in accordance with IFRS 5.

A more restrictive situation is when an entity has acquired an asset exclusively with a view to resale. This asset cannot be classified as current if this asset should belong to a class that the entity would normally class as non-current. Unless the asset also meets the criteria to be classified as held for sale in accordance with IFRS 5, the entity cannot classify the asset as current.

Real-life Case 22.3

Li & Fung Limited

It is worth discussing whether the scope of IFRS 5 should be extended to the following case. Li & Fung Limited stated in its 2006 annual report as follows:

- Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless management intends to dispose of the investment within 12 months of the balance sheet date.

Example 22.1 Evaluate the following cases and consider whether the assets can be classified as current assets without referring to the criteria in IFRS 5:

- A property received by a bank as a consideration to settle the bank's loans receivable from its customers;
- A motor car acquired by a trading company and disposed of 3 months after year-end;
- A property purchased by a property developer for refurbishment and resale;
- A subsidiary in hotel business purchased by a holding company, which intended to dispose of it within 6 months after year-end.

Answers

Except for the property purchased by a property developer for refurbishment and resale, all the other assets cannot be classified as current assets unless they meet the criteria to be classified as held for sale in accordance with IFRS 5, because all the assets are of a class that the entities involved would normally regard as non-current. In consequence, even if they are acquired with a view to resale, they are required to meet the criteria in IFRS 5.

Real-life

Case 22.4

Hang Seng Bank Limited

By applying HKFRS 5 (equivalent to IFRS 5), Hang Seng Bank Limited classified its repossessed assets as held for sale and stated in its annual report of 2006 as follows:

- Non-financial assets acquired in exchange for loans in order to achieve an orderly realisation are reported under “Assets held for sale”.

22.2 Disposal Group

The criteria in IFRS 5 are applicable not only to individual non-current assets, but also to groups of assets, together with their directly associated liabilities, goodwill and reserves. The term “disposal group” is introduced in IFRS 5.

Disposal group is defined as

- a group of assets to be disposed of, by sale or otherwise, together as a group in a single transaction; and
- liabilities directly associated with those assets that will be transferred in the transaction.

The group includes goodwill acquired in a business combination:

- If the group is a cash-generating unit to which goodwill has been allocated in accordance with the requirements of IAS 36 *Impairment of Assets*; or
- If it is an operation within such a cash-generating unit.

Real-life

Case 22.5

COSCO International Holdings Limited

The interim report of COSCO in 2005 clearly states the effect of HKFRS 5 (equivalent to IFRS 5) as follows:

- The adoption of HKFRS 5 has resulted in the reclassification of certain assets which the group had the intention to sell as non-current assets classified as held for sale and certain liabilities as liabilities directly associated with non-current assets classified as held for sale.

When an entity disposes of a group of assets, possibly with some directly associated liabilities, together in a single transaction, these assets and liabilities together are termed a “disposal group”. A disposal group may be in the following groupings:

- A group of cash-generating units (see Chapter 8);
- A single cash-generating unit;

- A part of a cash-generating unit; and
- A group of any assets and any liabilities of the entity, including current assets, current liabilities and assets excluded from the measurement requirements of IFRS as discussed above.

Like a non-current asset, a disposal group should be measured at the lower of carrying amount and fair value less costs to sell in accordance with IFRS 5, but such measurement requirements should apply to the disposal group as a whole.

Example 22.2 Croco Panda Limited, a garment manufacturing company, acquired a property holding company, Property Holding Limited (PHL), for \$6 million.

At the date of acquisition, PHL held two properties with the same fair value at \$4 million each, and it also had two separate outstanding bank loans of \$2 million each to finance the purchase of its two properties. The loans were secured by the properties. PHL had no other assets and liabilities.

Identify and calculate the cost of the disposal group if Croco Panda intended to dispose of one of the properties of PHL and classify it as a disposal group. Assume the criteria in IFRS 5 have been met.

Answers

The goodwill resulting from the acquisition:

	\$ million
Cost of acquisition	6
Less: Fair value of net assets	(4)
Goodwill	<u>2</u>

Disposal group to Croco Panda:

	\$ million
Property held for sale	4
Directly associated liabilities	(2)
Goodwill (\$2 million ÷ 2)	<u>1</u>
Cost of the disposal group	<u>3</u>

In accordance with IFRS 5, if the criteria for reclassification can be met, the disposal group is classified as a current asset and the whole group should be measured at the lower of its carrying amount and fair value less costs to sell.

A disposal group may also be composed of assets and liabilities that are not measured in accordance with IFRS 5. For example, a disposal group may include a deferred tax asset or investment property measured at fair value under IAS 40. The measurement of such a disposal group is complicated. It is set out in Section 22.4.

22.3 Classification of Assets Held for Sale

An entity is required to classify a non-current asset or disposal group as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use (IFRS 5.6).

Based on this requirement of IFRS 5, such a classification seems to be a compulsory requirement to an entity when the asset or disposal group is recovered principally through a sale transaction. However, for this to be the case, IFRS 5 further requires that the asset or disposal group should fulfil both of the following criteria:

1. The asset or disposal group must be available for immediate sale; and
2. Its sale must be highly probable (IFRS 5.7).

22.3.1 Available for Immediate Sale

The asset or disposal group to be classified as held for sale must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets or disposal groups.

Example 22.3 PN Resort Limited, a resort operator, is committed to a plan to sell its existing resort and has initiated actions to locate a buyer. PN has two plans on hand as follows:

1. PN will transfer the resort to the buyer after it vacates the resort. The time necessary to vacate the resort is usual and customary for sales of similar assets.
2. PN will continue to use the resort and will not transfer it to a buyer until construction of a new resort is completed.

Evaluate whether the two plans can meet the criteria in IFRS 5 to be available for immediate sale.

Answers

1. As the resort is sold at usual and customary conditions, the criteria stated in IFRS 5 would be met at the plan commitment date.
2. The delay in the timing of the transfer of the existing resort imposed by PN demonstrates that the resort is not available for immediate sale. The criteria in IFRS 5 would not be met until construction of the new resort is completed, even if a firm purchase commitment for the future transfer of the existing resort is obtained earlier.

22.3.2 Highly Probable

“Probable” is used as one of the recognition criteria in many accounting standards and is defined as “more likely than not”. IFRS 5 further introduces a stricter criterion, “highly probable”, in classifying assets or a disposal group as held for sale and requires that their sales must be highly probable.

Highly probable is defined as “significantly more likely than probable”.

For the sale to be highly probable, IFRS 5 requires all the following five conditions to be fulfilled:

1. The appropriate level of management must be committed to a plan to sell the asset (or disposal group).
2. An active programme to locate a buyer and complete the plan must have been initiated.
3. The asset (or disposal group) must be actively marketed for sale at a price that is reasonable in relation to its current fair value.
4. The sale should be expected to qualify for recognition as a completed sale within 1 year from the date of classification, except as permitted under IFRS 5 (see Section 22.3.3).
5. Actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn (IFRS 5.8).

The above conditions set out some rules for an entity to comply with before its assets are classified as held for sale. However, a certain level of subjective judgement is involved since the conditions include, for example, “appropriate level”, “committed”, “active programme”, “actively marketed” and/or “unlikely”. There are arguments that it is easy for the management to choose not to classify an asset or a disposal group as held for sale, but it is difficult for the management to choose to classify an asset or a disposal group as held for sale.

Example 22.4 Bonnie Leasing Group, a commercial leasing and finance company, owns two classes of property, plant and equipment:

1. A fleet of BMW motor vehicles held as leasing vehicles – Bonnie has recently ceased to lease out the vehicles for long terms, and all vehicles are available for immediate sale. However, Bonnie has not determined the ultimate form of the future transaction.
2. Two properties – Bonnie has been committed to a plan to sell its properties but will lease them back for its own use. The lease is probably a finance lease.

Evaluate whether the two plans can meet the criteria in IFRS 5.

Answers

Neither plan can be classified as held for sale, because of the following reasons:

1. Even though the fleet of BMW motor vehicles is available for immediate sale, Bonnie has not committed to a sale (and the sale cannot be highly probable). In consequence, the assets cannot be classified as held for sale.
2. Bonnie has committed to a sale, but the transfer of the properties can only be accounted for as “a sale and finance leaseback” in accordance with IAS 17 (see Chapter 4).

22.3.3 Exceptions for Sale to Be Completed beyond 1 Year

One of the conditions to meet the criterion of “highly probable” is that the sale should be expected to qualify for recognition as a completed sale within 1 year from the date of classification. However, events or circumstances may extend the period to complete the sale beyond 1 year. An extension of the period required to complete a sale does not preclude an asset or disposal group from being classified as held for sale if:

1. The delay is caused by events or circumstances beyond the entity’s control; and
2. There is sufficient evidence that the entity remains committed to its plan to sell the asset or disposal group.

Example 22.5 The exception to the 1-year requirement in the criterion of “highly probable” may apply in the following situations:

1. Before CHL Inc. commits itself to a plan to sell its telecommunications facilities, it reasonably expects that the relevant government authority will impose conditions on the transfer of the asset that will extend the period required to complete the sale (say, to know the name and background of the buyer). The telecommunications facilities may still be classified as held for sale if:
 - a. Actions necessary to respond to those conditions cannot be initiated until after a firm purchase commitment is obtained; and
 - b. A firm purchase commitment is highly probable within 1 year.
2. CHL Inc. obtains a firm purchase commitment, but the buyer (or others) unexpectedly imposes conditions on the transfer of a non-current asset previously classified as held for sale that will extend the period required to complete the sale. For example, the buyer requests that CHL Inc. have an environmental survey and confirm that no environment issues are involved in

the wireless facilities before the buyer will complete the purchase. The facilities can still be classified as held for sale if:

- a. Timely actions necessary to respond to the conditions have been taken; and
 - b. A favourable resolution of the delaying factors is expected.
3. During the initial 1-year period, circumstances arise that were previously considered unlikely, and as a result, a non-current asset previously classified as held for sale is not sold by the end of that period. For example, while CHL Inc. tried to solicit the buyer, the demand for telecommunications services became uncertain in the region. The buyer cannot be ascertained after 1 year. The facilities can still be classified as held for sale if:
- a. During the initial 1-year period, the entity took action necessary to respond to the change in circumstances;
 - b. The non-current asset is being actively marketed at a price that is reasonable, given the change in circumstances; and
 - c. The criteria of “available for immediate sale” and “highly probable” in accordance with IFRS 5 are met.

Firm purchase commitment is defined as

- an agreement with an unrelated party, binding on both parties and usually legally enforceable, that:
 - Specifies all significant terms, including the price and timing of the transactions; and
 - Includes a disincentive for non-performance that is sufficiently large to make performance highly probable.

22.3.4 Exchange of Assets and Assets Acquired with a View to Disposal

Sale transactions should include exchanges of non-current assets for other non-current assets when the exchange has commercial substance in accordance with IAS 16 *Property, Plant and Equipment* (see Chapter 3).

Real-life Case 22.6

HSBC Holdings plc

HSBC's annual report of 2006 sets out its accounting policy on assets acquired in exchange for loans as follows:

- Non-financial assets acquired in exchange for loans as part of an orderly realisation are recorded as assets held for sale and reported in “Other assets”.

When an entity acquires a non-current asset or disposal group exclusively with a view to its subsequent disposal, it is required to classify the non-current asset or disposal group as held for sale at the acquisition date only if:

1. The 1-year requirement is met; and
2. It is highly probable that any other criteria that are not met at that date will be met within a short period following the acquisition (usually within 3 months).

22.3.5 Assets to Be Abandoned

If the criteria for a non-current asset or a disposal group to be classified as held for sale are met after the balance sheet date, an entity is not allowed to classify such an asset or disposal group as held for sale in the current financial statements. However, the entity is required to disclose the details of such events or circumstances in the financial statements.

A non-current asset or disposal group that is to be abandoned should not be classified as held for sale, since the carrying amount of such an asset will be recovered principally through continuing use, not through a sale transaction.

Even though a disposal group to be abandoned cannot be classified as held for sale, such a group may be classified as a discontinued operation, because if a disposal group to be abandoned meets certain criteria of an operation, an entity is required to present the results and cash flows of this disposal group as discontinued operations at the date on which it ceases to be used. Further details and relevant disclosure requirements are discussed in Section 22.6.

Example 22.6 In February 2007, Melody Garment Limited decided to abandon all of its garment factories, which constitute a major line of business, and ceased all its manufacturing operations in the factories during the year ended 30 April 2008.

In the financial statements for the year ended 30 April 2007, results and cash flows of the cotton mills should be treated as continuing operations.

In the financial statements for the year ended 30 April 2008, the results and cash flows of the cotton mills should be treated as discontinued operations and Melody should make the disclosures as required under IFRS 5 (see Section 22.5).

Non-current assets or disposal groups to be abandoned include non-current assets or disposal groups that

- are to be used to the end of their economic life; and
- are to be closed rather than sold.

An entity is not allowed to account for a non-current asset that has been temporarily taken out of use as if it had been abandoned.

Example 22.7 Tony Manufacturing Group ceases to use a manufacturing plant because demand for its product has declined. However, the plant is maintained in workable condition, and it is expected that it will be brought back into use if demand picks up. Tony's plant is not regarded as abandoned.

22.4 Measurement of Assets Held for Sale

When a non-current asset or disposal group meets the criteria to be classified as held for sale, an entity is required to measure it at the lower of its carrying amount and fair value less costs to sell (IFRS 5.15).

Like other accounting standards, **fair value** is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Costs to sell is defined as the incremental costs directly attributable to the disposal of an asset or disposal group, excluding finance costs and income tax expense.

Depreciation or amortisation on a non-current asset should be ceased while the asset is classified as held for sale or while it is part of a disposal group classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale should continuously be recognised.

The write-down to fair value less costs to sell for an asset or a disposal group held for sale implies an impairment loss on the asset or the disposal group similar to those under IAS 36 *Impairment of Assets* (see Chapter 8). However, in IAS 36 the benchmark for write-down is recoverable amount, i.e., the lower of value in use and fair value less costs to sell. Value in use of the asset or disposal group classified as held for sale is not considered, since the carrying amount of the asset or disposal group will be recovered principally from "sale", not from "use".

22.4.1 Measurement for Specific Assets Held for Sale

If a newly acquired asset or disposal group meets the criteria to be classified as held for sale, applying the above measurement requirement results in the asset or disposal group being measured on initial recognition at the lower of its carrying amount had it not been so classified (for example, cost) and fair value less costs to sell.

In other words, if the asset or disposal group is acquired as part of a business combination, it shall be measured at fair value less costs to sell, instead of at fair value as required in IFRS 3 *Business Combinations*.

When the sale transaction of assets held for sale is expected to occur beyond 1 year, the entity is required to measure the costs to sell at their present value. In this situation, the asset held for sale would be stated at the lower of its carrying amount and fair value less present value of the costs to sell. Any increase in the present value

of the costs to sell that arises from the passage of time is required to be presented in the income statement as a financing cost.

22.4.2 Measurement under Other Standards

Immediately before the initial classification of the asset or disposal group as held for sale, an entity is required to measure the carrying amounts of the asset or all the assets and liabilities in the disposal group in accordance with applicable accounting standards or interpretations.

On subsequent re-measurement of a disposal group, an entity is required to do the following:

1. First, identify whether any assets and liabilities included in the disposal group are composed of assets and liabilities that are not within the scope of the measurement requirements of IFRS 5. For example, deferred tax assets or investment property measured at fair value under IAS 40 *Investment Property* are not within the scope of measurement requirements of IFRS 5 because those assets and liabilities should be re-measured in accordance with applicable accounting standards or interpretations.
2. Then, re-measure those identified assets and liabilities not within the scope of the measurement requirements of IFRS 5 in accordance with their corresponding applicable accounting standards or interpretations.
3. Finally, re-measure the whole disposal group at the lower of carrying amount and fair value less costs to sell.

Example 22.8 Tony Manufacturing Group has a manufacturing company meeting the criteria of IFRS 5 to be classified as held for sale. The group retains all the current assets and liabilities of the company and proposes to dispose of the following as a disposal group:

	\$
Goodwill.....	20,400
Property, plant and equipment.....	56,000
Intangible assets.....	32,000
Investment property.....	16,980
Carrying amount of the disposal group.....	<u>125,380</u>

After the classification of the disposal group, if the investment property is subsequently measured by using the fair value model, Tony has to

- first re-measure the investment property in accordance with IAS 40; and
- then measure the whole disposal group at the lower of its carrying amount and fair value less costs to sell.

The measurement requirements of IFRS 5 do not extend to investment property carried at fair value. Thus, investment property should be re-measured in accordance with IAS 40.

After this re-measurement of investment property, the carrying amount of the investment property should be included in the disposal group. Then, the whole disposal group is re-measured in accordance with IFRS 5. If the disposal group's fair value less costs to sell is lower than its carrying amount, an impairment loss will be recognised.

22.4.3 Recognition of Impairment Losses and Reversals

If the fair value less costs to sell of an asset or a disposal group classified as held for sale is lower than its carrying amount, an entity is required to recognise an impairment loss for any initial or subsequent write-down of the asset or disposal group to fair value less costs to sell. The impairment loss should be recognised to the extent that it has not been recognised in accordance with other accounting standards, in particular IAS 36 *Impairment of Assets*.

Example 22.9 ESL Tong Company considers a restructuring plan to commit a disposal of its garment machine and its financial implication.

The carrying amount of the machine is \$235,789. The machine's value in use before the reclassification is \$225,000. ESL expects the fair value of the machine is \$230,000 while its cost to sell is \$30,000.

Determine whether an impairment loss is required.

Answers

In accordance with IAS 36, when ESL considers a restructuring plan, including a disposal of its garment machine, it is probably an indication of impairment loss. ESL has to assess the impairment loss as follows:

	\$
Value in use.....	225,000
Fair value less costs to sell (\$230,000 – \$30,000)	200,000
Recoverable amount (the higher of value in use and fair value less costs to sell)	225,000
Carrying amount.....	(235,789)
Impairment loss under IAS 36.....	10,789

When the machine is reclassified as held for sale, the machine is re-measured to the lower of its carrying amount or fair value less costs to sell as follows:

	\$
Fair value less costs to sell	200,000
Carrying amount less accumulated impairment loss (\$235,789 – \$10,789)	(225,000)
Impairment loss under IAS 36.....	<u>25,000</u>

In case there is any subsequent increase in fair value less costs to sell of an asset, an entity is required to recognise a gain for such subsequent increase. However, such a gain should not be recognised over the cumulative impairment loss that has been recognised either in accordance with IFRS 5 or previously in accordance with IAS 36.

As in the case of an asset, in case there is any subsequent increase in fair value less costs to sell of a disposal group, an entity is required to recognise a gain for such a subsequent increase:

1. To the extent that it has not been recognised in accordance with other accounting standards; but
2. Not in excess of the cumulative impairment loss that has been recognised, either in accordance with IFRS 5 or previously in accordance with IAS 36, on the non-current assets that are within the scope of the measurement requirements of IFRS 5.

Real-life

Case 22.7

HSBC Holdings plc

Further to Real-life Case 22.6, HSBC's annual report of 2006 elaborates its accounting policy on assets acquired in exchange for loans and provides a summary of the measurement requirements of IFRS 5 as follows:

- Non-financial assets acquired in exchange for loans as part of an orderly realisation are recorded as assets held for sale and reported in "Other assets". The asset acquired is recorded at the lower of its fair value (less costs to sell) and the carrying amount of the loan (net of impairment allowance) at the date of exchange.
- No depreciation is charged in respect of assets held for sale.
- Any subsequent write-down of the acquired asset to fair value less costs to sell is recognised in the income statement, in "Other operating income".

**Real-life
Case 22.7**

(cont'd)

- Any subsequent increase in the fair value less costs to sell, to the extent this does not exceed the cumulative write-down, is also recognised in “Other operating income”, together with any realised gains or losses on disposal.

22.4.4 Recognition of Impairment Losses on Disposal Group

Both the impairment loss and subsequent gain recognised for a disposal group are a total amount, and the amount should be allocated to individual non-current assets in the disposal group. The order of allocation in IFRS 5 is referred back to IAS 36 to follow the same order in allocating impairment loss or reversal of impairment loss to the individual assets in a cash-generating unit (see Chapter 8).

By referring back to the requirements in IAS 36, an entity is required to allocate the impairment loss to reduce the carrying amount of the non-current assets in the group (that are within the scope of the measurement requirements of IFRS 5) in the following order of allocation:

1. First, to reduce the carrying amount of any goodwill allocated to the group; and
2. Then, to the other non-current assets of the group (that are within the scope of the measurement requirements of IFRS 5) pro rata on the basis of the carrying amount of each asset in the group.

In case of a subsequent gain, an entity is not allowed to increase the amount of goodwill but is required to increase the carrying amount of other non-current assets in the group (that are within the scope of the measurement requirements of IFRS 5) pro rata with the carrying amounts of those assets.

Example 22.10 Based on the information in Example 22.8, Tony Manufacturing Group has a disposal group held for sale with the following details:

	\$
Goodwill	20,400
Property, plant and equipment	56,000
Intangible assets	32,000
Investment property	16,980
Carrying amount of the disposal group	<u>125,380</u>

The investment property is measured by using the fair value model, and its fair value is \$15,000 at the date of the disposal group being reclassified as held for sale under IFRS 5. Other assets have already been re-measured in accordance with the applicable accounting standards before the reclassification as held for sale.

The fair value less costs to sell of the disposal group is \$100,000.

Evaluate the financial implication of the reclassification of the disposal group as held for sale.

Answers

	Carrying amount as re-measured immediately before classification as held for sale \$	Allocated impairment loss \$	Carrying amount after allocation of impairment loss \$
Goodwill	20,400	(20,400)	0
Property, plant and equipment . .	56,000	(1,909)	54,091
Intangible assets	32,000	(1,091)	30,909
Investment property	15,000	0	15,000
Total	<u>123,400</u>	<u>(23,400)</u>	<u>100,000</u>

First, Tony is required to re-measure investment property carried at fair value in accordance with IAS 40. In other words, a loss of \$1,980 (\$16,980 – \$15,000) should be recognised before the re-measurement in IFRS 5. As a result, the carrying amount of the disposal group is reduced to \$123,400 (\$125,380 – \$1,980).

Then, this carrying amount is compared with the fair value less costs to sell of the disposal group, and a further impairment loss of \$23,400 (\$123,400 – \$100,000) is identified.

The loss is first to reduce the carrying amount of goodwill (\$20,400) and then to reduce other non-current assets in the group that are within the scope of the measurement requirements of IFRS 5 pro rata based on the carrying amounts of those assets. It implies that the loss should not be allocated to investment property, which is not within the scope of the measurement requirements of IFRS 5. The loss after the reduction of goodwill amounting to \$23,400 is allocated between property, plant and equipment and intangible assets pro rata on their respective carrying amounts (\$56,000 and \$32,000).

Example 22.11 Aileen Vincent Company (AVC) plans to dispose of a group of its assets as an asset sale. The assets form a disposal group and are measured as follows:

	Carrying amount at the reporting date before classification as held for sale \$	Carrying amount as re-measured immediately before classification as held for sale \$
Goodwill.....	1,500	1,500
Property, plant and equipment (carried at revalued amounts).....	4,600	4,000
Property, plant and equipment (carried at cost).....	5,700	5,700
Inventory.....	2,400	2,200
Available-for-sale financial assets.....	1,800	1,500
Total.....	<u>16,000</u>	<u>14,900</u>

AVC recognises the loss of \$1,100 (\$16,000 – \$14,900) immediately before classifying the disposal group as held for sale. Pursuant to the classification of the group of assets as a disposal group, AVC estimates that fair value less costs to sell of the disposal group amounts to \$13,000.

Since AVC measures a disposal group classified as held for sale at the lower of its carrying amount and fair value less costs to sell, AVC recognises an impairment loss of \$1,900 (\$14,900 – \$13,000) when the group is initially classified as held for sale.

The loss is allocated to the other assets in the order of allocation set out in IFRS 5 and IAS 36, and the allocation can be illustrated as follows:

	Carrying amount as re-measured immediately before classification as held for sale \$	Allocated impairment loss \$	Carrying amount after allocation of impairment loss \$
Goodwill.....	1,500	(1,500)	0
Property, plant and equipment (carried at revalued amounts) ..	4,000	(165)	3,835
Property, plant and equipment (carried at cost).....	5,700	(235)	5,465
Inventory.....	2,200	0	2,200
AFS financial assets.....	1,500	0	1,500
Total.....	<u>14,900</u>	<u>(1,900)</u>	<u>13,000</u>

First, the impairment loss reduces any amount of goodwill. Then, the residual loss is allocated to other assets pro rata based on the carrying amounts of those assets. The impairment loss is allocated to non-current assets to which the measurement requirements of other accounting standards are applicable. Therefore, no impairment loss is allocated to inventory and available-for-sale financial assets.

A gain or loss not previously recognised by the date of the sale of a non-current asset or disposal group shall be recognised at the date of derecognition. The requirements relating to derecognition are set out in IAS 16 *Property, Plant and Equipment* for property, plant and equipment and IAS 38 *Intangible Assets* for intangible assets.

22.4.5 Changes to a Plan of Sale

Subsequent to an asset or a disposal group being classified as held for sale in accordance with IFRS 5, an entity should cease this classification if the criteria for this classification are no longer met.

The entity is then required to measure the non-current asset that ceases to be classified as held for sale or ceases to be included in a disposal group classified as held for sale at the lower of

1. its carrying amount before the asset or disposal group was classified as held for sale, adjusted for any depreciation, amortisation or revaluations that would have been recognised had the asset or disposal group not been classified as held for sale; and
2. its recoverable amount at the date of the subsequent decision not to sell.

Recoverable amount is defined as the higher of an asset's fair value less costs to sell and its value in use.

Value in use is defined as the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life.

Example 22.12 On 1 January 2007, ATA Group acquired a motor vehicle with an estimated useful life of 10 years at \$800,000 (with no residual value and depreciated on a straight-line basis). After the receipt of the vehicle 5 days later, ATA decided to sell it. The planned disposal fulfilled the criteria under IFRS 5, and the fair value less estimated costs to sell is also around \$800,000.

At year-end of 2007, ATA decided to withdraw the sale and use the vehicle for its own use. At that date, ATA estimated that the recoverable amount may be (1) \$750,000 or (2) \$600,000.

Calculate the different financial implications from the two estimates of the recoverable amount.

Answers

The motor vehicle is carried at \$800,000 before year-end of 2007 as it is classified as a non-current asset held for sale. If depreciation is provided, the depreciated cost of the vehicle should be \$720,000 ($\$800,000 - (\$800,000 \div 10 \text{ years})$). Given the estimates of the recoverable amount, the write-down on the vehicle should be as follows:

1. If the recoverable amount of the vehicle is \$750,000, which is higher than the depreciated cost of the vehicle, the carrying amount of the vehicle should be stated at the depreciated cost of \$720,000. The adjustment to the income statement is \$80,000 ($\$800,000 - \$720,000$).
2. If the recoverable amount of the vehicle is \$600,000, which is lower than the depreciated cost of the vehicle, the carrying amount of the vehicle should be stated at the recoverable amount of \$600,000. The adjustment to the income statement is \$200,000 ($\$800,000 - \$600,000$).

Except for those adjustments relating to revaluation surplus or deficit under IAS 16 and 38, the adjustments required on the cessation of held-for-sale classification should be included in income from continuing operations in the period in which the criteria on assets to be classified as held for sale are no longer met.

The entity is required to present that adjustment in the same income statement caption used to present a gain or loss, if any, recognised in accordance with gains or losses relating to continuing operations.

If an entity removes an individual asset or liability from a disposal group classified as held for sale, the remaining assets and liabilities of the disposal group to be sold shall continue to be measured as a group only if the group meets the criteria for assets to be classified as held for sale.

Otherwise, the remaining non-current assets of the group that individually meet the criteria to be classified as held for sale shall be measured individually at the lower of their carrying amounts and fair values less costs to sell at that date. Any non-current assets that do not meet the criteria shall cease to be classified as held for sale.

Example 22.13 Originally, Bank Tony acquires through foreclosure a property comprising land and buildings that it intends to sell. It does not intend to transfer the property to a buyer until after it completes renovations to increase the property's sales value.

After the renovations are completed and the property is classified as held for sale, and before a firm purchase commitment is obtained, the bank becomes aware of environmental damage requiring remediation. It still intends to sell the property, but it does not have the ability to transfer the property to a buyer until after the remediation is completed.

Discuss.

Answers

The delay in the timing of the transfer of the property imposed by others before a firm purchase commitment is obtained demonstrates that the property is not available for immediate sale. The criteria for classifying the property as held for sale would not continue to be met.

In consequence, the bank shall cease to classify the property as held for sale, and re-measure the property at the lower of

- its carrying amount before the asset was classified as held for sale, adjusted for any depreciation, amortisation or revaluations that would have been recognised had the asset not been classified as held for sale; and
- its recoverable amount at the date of the subsequent decision not to sell.

22.5 Presentation and Disclosures for Assets Held for Sale

The presentation and disclosure requirements of IFRS 5 include not only the disposal of non-current assets and disposal groups, but also discontinued operations. An entity is required to present and disclose information that enables users of the financial statements to evaluate

- the financial effects of disposals of non-current assets or disposal groups; and
- the financial effects of discontinued operations (IFRS 5.30).

This section addresses the presentation and disclosure requirements for non-current assets or disposal groups classified as held for sale.

22.5.1 Presentation of Assets Held for Sale

In the balance sheet, an entity is required to do the following:

1. Present a non-current asset classified as held for sale and the assets of a disposal group classified as held for sale separately from other assets in the balance sheet;
2. Present the liabilities of a disposal group classified as held for sale separately from other liabilities in the balance sheet;
3. Neither offset nor present those assets and liabilities as a single amount;

4. Present separately any cumulative income or expense recognised directly in equity relating to a non-current asset or disposal group classified as held for sale.

Either on the face of the balance sheet or in the notes, an entity is required to separately disclose the major classes of assets and liabilities classified as held for sale, except for a newly acquired subsidiary that meets the criteria to be classified as a disposal group held for sale on acquisition. Disclosure of the major classes of assets and liabilities for such a subsidiary is not required.

**Real-life
Case 22.8**

Denway Motors Limited

The 2005 annual report of Denway Motors Limited presented the current assets and current liabilities in the following manner:

	2005	2004
	HK\$'000	HK\$'000
Current assets:		
Inventories	88,710	141,190
Trade and other receivables	96,634	205,303
Current tax recoverable	252	219
Cash and bank balances:		
Pledged	30,684	57,671
Others	1,632,513	2,536,995
	<u>1,848,793</u>	<u>2,941,378</u>
Non-current assets classified as held for sale	243,394	–
	<u>2,092,187</u>	<u>2,941,378</u>
Current liabilities:		
Trade and other payables	175,724	353,190
Current tax liabilities	9,982	7,783
Borrowings	13,686	85,608
	<u>199,392</u>	<u>446,581</u>
Liabilities directly associated with non-current assets classified as held for sale	<u>194,571</u>	–
	<u>393,963</u>	<u>446,581</u>

An entity is not allowed to reclassify or re-present amounts presented for non-current assets or for the assets and liabilities of disposal groups classified as held for sale in the balance sheets for prior periods to reflect the classification in the balance sheet for the latest period presented.

Real-life

Case 22.9

COSCO International Holdings Limited

As noted in Real-life Case 22.8, there were no comparatives for the assets held for sale and the liabilities directly associated with the assets held for sale as IFRS 5 does not allow such re-presentation. COSCO International Holdings Limited in its annual report of 2006 clearly contrasted this with the re-presentation requirements for discontinued operations as follows:

- Assets held for sale are stated at the lower of carrying amount and fair value less costs to sell. The liabilities of the disposal group are classified as liabilities directly associated with assets held for sale. Prior year balances of amounts relating to assets held for sale and liabilities directly associated with assets held for sale are not re-presented.
- The profit after tax of discontinuing operations is presented separately in the income statement as profit from discontinuing operations. Prior year amounts are re-presented (see Section 22.6.2).

22.5.2 Gains or Losses Relating to Continuing Operations

Non-current assets held for sale or disposal groups are not necessarily the same as discontinued operations.

In consequence, an entity is required to include any gain or loss on the re-measurement of a non-current asset or disposal group classified as held for sale that does not meet the definition of a discontinued operation, for example, impairment loss of such assets or groups, in its income statement as “profit or loss from continuing operations”.

22.5.3 Additional Disclosures

An entity is further required to disclose the following information in the notes in the period in which a non-current asset or disposal group has been either classified as held for sale or sold:

1. A description of the non-current asset or disposal group;
2. A description of the facts and circumstances of the sale, or leading to the expected disposal, and the expected manner and timing of that disposal;
3. The gain or loss recognised for impairment loss and any subsequent reversal and, if not separately presented on the face of the income statement, the caption in the income statement that includes that gain or loss;
4. If applicable, the segment in which the non-current asset or disposal group is presented in accordance with IFRS 8 *Operating Segments*.

If any non-current asset or disposal group ceases to be classified as held for sale, an entity is required to disclose, in the period of the decision to change the plan to sell the non-current asset or disposal group

1. a description of the facts and circumstances leading to the decision; and

2. the effect of the decision on the results of operations for the period and any prior periods presented.

22.6 Presentation of Discontinued Operations

An entity is now required to separately present a discontinued operation in accordance with IFRS 5. In order to effect a convergence with the practices in the United States and align with the spirit of IAS 10 *Events after the Balance Sheet Date*, the current separate presentation of discontinued operation has replaced the previous requirements on presenting a discontinued operation.

22.6.1 Discontinued Operations

A discontinued operation is either a component of an entity or a disposal group of an entity to be abandoned if the component or the group meets certain conditions and criteria.

22.6.1.1 Component of an Entity as a Discontinued Operation

A component of an entity is a discontinued operation if:

1. First, it either has been disposed of or is classified as held for sale; and
2. Second, it meets one of the following three criteria:
 - a. It represents a separate major line of business or geographical area of operations;
 - b. It is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
 - c. It is a subsidiary acquired exclusively with a view to resale (IFRS 5.32).

A **component of an entity** is defined as operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity.

Based on its definition, a component of an entity may be a cash-generating unit or a group of cash-generating units while being held for use.

22.6.1.2 Disposal Group to Be Abandoned As a Discontinued Operation

In addition to being a component of an entity that meets the above conditions and criteria, a disposal group to be abandoned should also be classified as discontinued operations at the date on which it ceases to be used when the group meets the following three criteria:

1. It represents a separate major line of business or geographical area of operations;
2. It is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or

3. It is a subsidiary acquired exclusively with a view to resale (IFRS 5.13 and 5.32).

These three criteria are also used in defining whether a component of an entity may be a discontinued operation.

Real-life**Case 22.10****Tian Teck Land Limited**

Tian Teck Land Limited, a listed company in Hong Kong and the land owner of the Hyatt Regency Hotel in Tsim Sha Tsui, Hong Kong, has early adopted only one new HKFRS, HKFRS 5 (equivalent to IFRS 5), and stated in its 2004/05 annual report as follows:

- The group has not early adopted these new HKFRSs in the financial statements for the year ended 31 March 2005, except for HKFRS 5 *Non-current assets held for sale and discontinued operations*.
- HKFRS 5 has defined the timing of the classification of an operation as “discontinued” to be the date when the operation meets the criteria as “held for sale” or has already been disposed of, or the assets have ceased to be used.
- Following the adoption of this HKFRS, the hotel operation ... will not be disclosed as discontinuing operation until the operation has ceased.
- The early adoption of HKFRS 5 has no significant impact on the group’s results of operations and financial position.

Based on the requirements in IFRS 5, the flow chart in Figure 22.1 is set out to describe the decision in classifying a discontinued operation.

22.6.2 Presenting Discontinued Operations

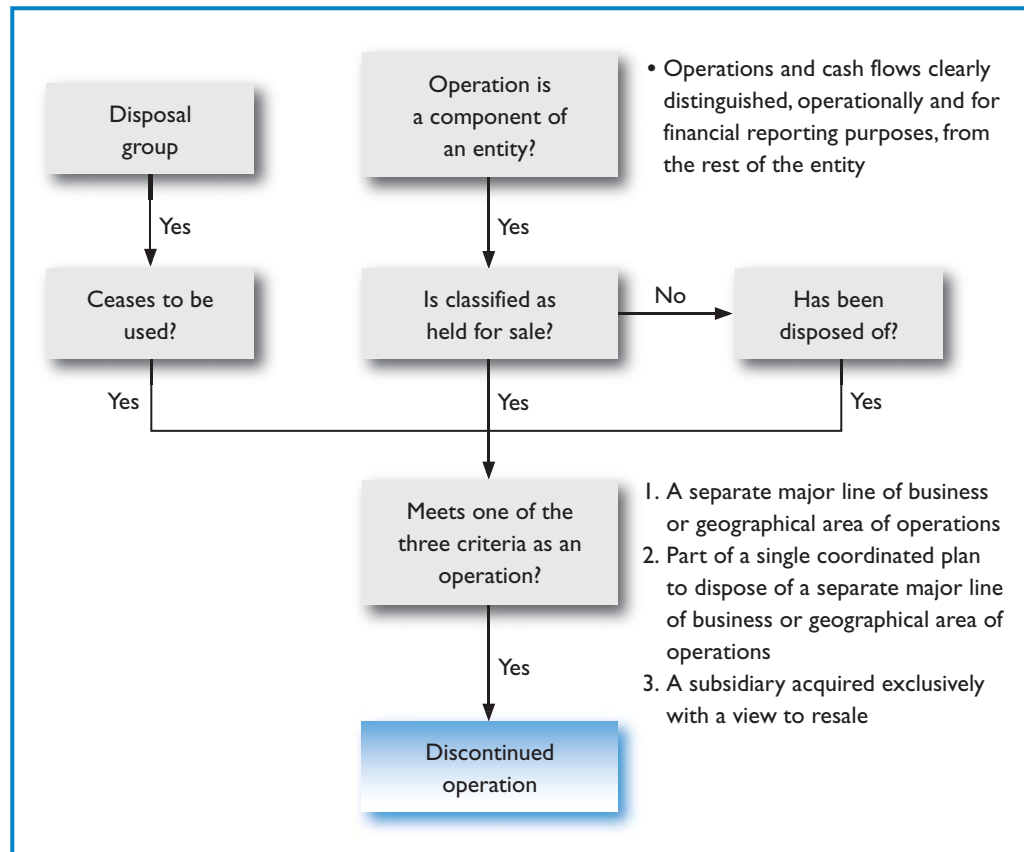
On the face of the income statement, an entity is required to present a single amount comprising the total of

1. the post-tax profit or loss of discontinued operations; and
2. the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation.

Either in the notes or on the face of the income statement, an entity is required to present or disclose an analysis of the single amount disclosed above into the following:

1. Revenue, expenses and pre-tax profit or loss of discontinued operations;
2. Related income tax expense as required by IAS 12;
3. Gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and
4. Related income tax expense as required by IAS 12.

FIGURE 22.1 Classification of a discontinued operation



If the above analysis is presented on the face of the income statement, an entity is required to present in a section identified as relating to discontinued operations, i.e., separately from continuing operations. The above analysis is not required for disposal groups that are newly acquired subsidiaries that meet the criteria to be classified as held for sale on acquisition.

Either in the notes or on the face of the financial statements, an entity is required to present the net cash flows attributable to the operating, investing and financing activities of discontinued operations. These disclosures are not required for disposal groups that are newly acquired subsidiaries that meet the criteria to be classified as held for sale on acquisition.

An entity is required to re-present the above disclosures for prior periods presented in the financial statements so that the disclosures relate to all operations that have been discontinued by the balance sheet date for the latest period presented. In other words, the comparative amounts should be re-presented based on the current year's classification as discontinued operations.

Real-life

Case 22.11

Denway Motors Limited

In 2006, Denway Motors Limited presented its consolidated income statement with discontinued operations as follows:

	2006 HK\$'000	2005 HK\$'000
Profit for the year from continuing operations	2,274,600	1,973,274
A discontinued operation:		
Loss for the year from a discontinued operation	(8,093)	(113,026)
Profit for the year	<u>2,266,507</u>	<u>1,860,248</u>

As permitted by HKFRS 5, further analysis of the operating results and cash flows of the discontinued operations of Denway was set out in its notes to the financial statements as follows:

	2006 HK\$'000	2005 HK\$'000
Income	17,866	179,526
Expense	(25,959)	(292,552)
Loss for the year	<u>(8,093)</u>	<u>(113,026)</u>
Operating cash flows	(18,337)	(31,006)
Investing cash flows	5,750	15,396
Financing cash flows	5,437	(3,500)
Total cash flows	<u>(7,150)</u>	<u>(19,110)</u>

22.6.3 Presenting Subsequent Adjustments

After the discontinued operation has been presented, adjustments to those presented amounts may still occur in subsequent periods. In those subsequent periods, the adjustments directly related to the disposal of the discontinued operation should be classified separately in discontinued operations. The nature and amount of such adjustments should be disclosed.

Example 22.14 Examples of circumstances in which adjustments in the current period to amounts previously presented in discontinued operations that are directly related to the disposal of a discontinued operation in a prior period include the following:

1. The resolution of uncertainties that arise from the terms of the disposal transaction, such as the resolution of purchase price adjustments and indemnification issues with the purchaser;
2. The resolution of uncertainties that arise from and are directly related to the operations of the component before its disposal, such as environmental and product warranty obligations retained by the seller;
3. The settlement of employee benefit plan obligations, provided that the settlement is directly related to the disposal transaction.

22.6.4 Other Issues

If an entity ceases to classify a component of an entity as held for sale, the results of operations of the component previously presented in discontinued operations in accordance with IFRS 5 should be reclassified and included in income from continuing operations for all periods presented. The amounts for prior periods should be described as having been re-presented.

An entity is prohibited from having a retroactive classification of an operation as discontinued in the current year, when the criteria for that classification are not met until after the balance sheet date of that year.

22.7 Summary

All the non-current assets and the assets normally regarded as non-current of an entity cannot be classified as current assets until the assets can meet all the criteria to be classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*. IFRS 5 not only covers individual assets but extends to a disposal group, which may consist of assets and their directly associated liabilities, goodwill and reserves.

Classifying a non-current asset or disposal group as held for sale implies its carrying amount will be recovered principally through a sale transaction, rather than through continuing use. The criteria for classifying a non-current asset or a disposal group are restrictive, and an entity has to confirm that the asset or disposal group is available for immediate sale and the sale must be highly probable.

To meet the highly probable criterion, an entity has to demonstrate (1) there is a commitment to a sale plan, (2) an active programme is initiated to find a buyer, (3) the asset must be actively marketed with a reasonable fair price, (4) the sale is expected to be completed within 1 year from the date of classification and (5) significant changes to the plan or withdrawal of the plan are unlikely.

After the non-current asset or disposal group is classified as held for sale, the non-current or disposal group (except for those outside the scope of measurement requirements in IFRS 5, say, deferred tax assets or financial assets) should be subsequently measured at the lower of its carrying amount and fair value less costs to sell. No depreciation or amortisation on the non-current asset or the non-current

asset within a disposal group should be ceased. The write-down of carrying amount to fair value less costs to sell is an impairment loss recognised in accordance with IFRS 5. In addition to other additional disclosures, a non-current asset held for sale and assets and liabilities of a disposal group should be separately presented on the face of the balance sheet.

Discontinued operation is a component of an entity (either is classified as held for sale or has been disposed of) or a disposal group to be abandoned (ceased to be used) that meets the three “operation” criteria. Instead of discontinuing operations, discontinued operations are now required for separate presentation on the face of the income statement. A more detailed analysis of the discontinued operations should also be disclosed either on the face of the income statement or in the notes.

Review Questions

1. Discuss why we may need to restrict the reclassification of non-current assets to current assets.
2. Discuss the objectives and scope of IFRS 5.
3. Which kinds of assets should not be subsequently measured by IFRS 5 even if they are reclassified as held for sale?
4. What is a disposal group?
5. State the criteria for reclassifying a non-current asset or disposal group as held for sale.
6. What is the meaning of highly probable? How can an entity fulfil this criterion?
7. Are there any circumstances in which an entity can classify its non-current asset as held for sale even if it can only complete its sale beyond 1 year? State the circumstances.
8. Discuss the measurement requirements for a non-current asset held for sale.
9. Discuss the measurement requirements for a disposal group classified as held for sale.
10. How does an entity allocate the impairment loss to individual assets and liabilities included in a disposal group?
11. What are the requirements when there is a change to a sale plan on a non-current asset or a disposal group classified as held for sale?
12. Describe the presentation and disclosure requirements for a non-current asset or a disposal group classified as held for sale.
13. What is a component of an entity?
14. What is a discontinued operation?
15. When should a disposal group be classified as a discontinued operation?
16. Describe the presentation and disclosure requirements for discontinued operations.

Exercises

Exercise 22.1 Based on Real-life Case 22.3, discuss the scope and application of IFRS 5 (or HKFRS 5) on different kinds of assets, in particular the classification of financial assets, including available-for-sale financial assets.

Exercise 22.2 KHK Electricity Company Limited, a power generation entity, is discussing a plan to sell a disposal group, a power generating plant, that represents a significant portion of its regulated operations. The sale requires approval from the relevant regulatory bodies, which could extend the period required to complete the sale beyond 1 year.

Actions necessary to obtain that approval cannot be initiated until after a buyer is known and a firm purchase commitment is obtained. However, a firm purchase commitment is highly probable within 1 year.

Discuss when KHK can classify the plant as held for sale.

Exercise 22.3 MGA Manufacturing Limited is committed to a plan to sell a manufacturing facility in its present condition and classifies the facility as held for sale at year-end.

After a firm purchase commitment is obtained, the buyer's inspection of the property identifies environmental damage not previously known to exist. MGA is required by the buyer to make good the damage, which will extend the period required to complete the sale beyond 1 year. However, MGA has initiated actions to make good the damage, and satisfactory rectification of the damage is highly probable.

Discuss whether the disposal can still be classified as held for sale.

Problems

Problem 22.1 Committed to a plan to sell its hotel in the United Kingdom and planning to buy a new one in Italy, BB Inc. classified the hotel as held for sale at year-end of 2005.

- a. During 2006, the market conditions that existed in 2005, when the hotel was classified initially as held for sale, deteriorated, and as a result, the hotel was not sold by the end of 2006. During 2006, BB actively solicited but did not receive any reasonable offers to purchase the hotel and, in response, reduced the price.
- b. During the following year, 2007, market conditions deteriorated further, and the hotel was not sold by 2007. BB believes that the market conditions will improve and has not further reduced the price of the hotel. The hotel continues to be held for sale, but at a price in excess of its current fair value.

Discuss the classification of the hotel at the end of 2006 and 2007.

Problem 22.2 Rockby, a public limited company, has committed itself before its year-end of 31 March 2004 to a plan of action to sell a subsidiary, Bye. The sale is expected to be completed on 1 July 2004, and the financial statements of the group were signed on 15 May 2004. The subsidiary, Bye, a public limited company, had net assets at

the year-end of \$5 million, and the book value of related goodwill is \$1 million. Bye has made a loss of \$500,000 from 1 April 2004 to 15 May 2004 and is expected to make a further loss up to the date of sale of \$600,000. Rockby was at 15 May 2004 negotiating the consideration for the sale of Bye, but no contract has been signed or public announcement made as of that date.

Rockby expected to receive \$4.5 million for the company after selling costs. The value-in-use of Bye at 15 May 2004 was estimated at \$3.9 million.

Discuss the way in which the sale of the subsidiary, Bye, would be dealt with in the group financial statements of Rockby at 31 March 2004 under IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

(ACCA 3.6 June 2004, adapted)

Problem 22.3 Tangible non-current assets held for use in operating leases: At 31 March 2004 the company had at carrying value \$10 million of plant, which was recently leased out on operating leases. These leases have now expired. The company is undecided as to whether to sell the plant or lease it to customers under finance leases. The fair value less selling costs of the plant is \$9 million, and the value-in-use is estimated at \$12 million.

Plant with a carrying value of \$5 million at 31 March 2004 has ceased to be used because of a downturn in the economy. The company decided at 31 March 2004 to maintain the plant in workable condition in case of a change in economic conditions. Rockby subsequently sold the plant by auction on 14 May 2004 for \$3 million net of costs.

Discuss whether the above non-current assets would be classed as “held for sale” if IFRS 5 had been applied to the items of plant in the group financial statements at 31 March 2004.

(ACCA 3.6 June 2004, adapted)

Case Studies

Case Study 22.1 Beijing Enterprises Holdings Limited early adopted all new HKFRSs (equivalent to IFRSs) in 2004 and stated that in its 2004 annual report on the adoption of HKFRS 5 (equivalent to IFRS 5) as follows:

- The adoption of HKFRS 5 has resulted in a change in accounting policy on the recognition of a discontinued operation.
- Prior to the adoption of HKFRS 5, the group would have recognised a discontinued operation at the earlier of when:
 - The group entered into a binding agreement; and
 - The board of directors approved and announced a formal disposal plan.
- HKFRS 5 now requires an operation to be classified as discontinued when the criteria to be classified as held for sale have been met or the group has disposed of the operation.
- Held for sale is when the carrying amount of an operation will be recovered principally through a sale transaction and not through continuing use.

- The result of this change in accounting policy is that a discontinued operation is recognised by the group at a later point than the accounting policy previously adopted due to the recognition criteria being stricter under HKFRS 5.

Discuss the accounting policy in accordance with IFRS 5 or HKFRS 5.

Case Study 22.2

The Board of Rockby approved the relocation of the head office site on 1 March 2003. The head office land and buildings were renovated and upgraded in the year to 31 March 2003 with a view to selling the site. During the improvements, subsidence was found in the foundations of the main building. The work to correct the subsidence and the renovations were completed on 1 June 2003. As at 31 March 2003 the renovations had cost \$2.3 million and the cost of correcting the subsidence was \$1 million. The carrying value of the head office land and buildings was \$5 million at 31 March 2003 before accounting for the renovation. Rockby moved its head office to the new site in June 2003, and at the same time, the old head office property was offered for sale at a price of \$10 million.

However, the market for commercial property had deteriorated significantly, and as at 31 March 2004 a buyer for the property had not been found. At that time the company did not wish to reduce the price and hoped that market conditions would improve. On 20 April 2004 a bid of \$8.3 million was received for the property, and eventually it was sold (net of costs) for \$7.5 million on 1 June 2004. The carrying value of the head office land and buildings was \$7 million at 31 March 2004.

Non-current assets are shown in the financial statements at historical cost.

Discuss whether the above non-current assets would be classed as “held for sale” if IFRS 5 had been applied to the head office land and buildings in the group financial statements at 31 March 2003 and 31 March 2004.

(ACCA 3.6 June 2004, adapted)

Case Study 22.3

Ashlee had already decided prior to the year-end, 31 March 2005, to sell its subsidiary, Gibson. Gibson was to be sold after the financial statements had been signed. The contract for the sale of Gibson was being negotiated at the time of the preparation of the financial statements, and it was expected that Gibson would be sold in June 2005.

The carrying amounts of Gibson, including allocated goodwill, were as follows at the year-end:

	\$ million
Goodwill	30
Property, plant and equipment – cost	120
Property, plant and equipment – valuation	180
Inventory	100
Trade receivables	40
Trade payables	(20)
	450
	450

The fair value of the net assets of Gibson at year-end was \$415 million, and the estimated costs of selling the company were \$5 million.

Discuss the implications, with suitable computations, of the above events for the group financial statements of Ashlee for the year ended 31 March 2005.

(ACCA 3.6 June 2005, adapted)

Case
Study 22.4

Seejoy is a famous football club that has significant cash flow problems. The directors and shareholders wish to take steps to improve the club's financial position. The following proposal has been drafted in an attempt to improve the cash flow of the club. However, the directors need advice upon their implications.

Player trading

The proposal is for the club to sell its two valuable players, Aldo and Steel. It is thought that it will receive a total of \$16 million for both players. The players are to be offered for sale at the end of the current football season on 1 May 2007. Details of the players' contracts are enclosed below.

Player	Transfer fee capitalised \$ million	Amortisation to 31 December 2006 \$ million	Contract commenced	Contract expires
A. Steel . . .	20	4	1 January 2006	31 December 2010
R. Aldo . . .	15	10	1 January 2005	31 December 2007

The club capitalises the unconditional amounts (transfer fees) paid to acquire players. The club originally proposes to amortise the cost of the transfer fees over 10 years instead of the current practice, which is to amortise the cost over the duration of the player's contract.

Required:

Discuss how the above proposal would be dealt with in the financial statements of Seejoy for the year ending 31 December 2007, setting out their accounting treatment and appropriateness in helping the football club's cash flow problems.

(No knowledge of the football finance sector is required to answer this case study.)

(ACCA 3.6 December 2006, adapted)

23

The Effects of Changes in Foreign Exchange Rates

Learning Outcomes

This chapter enables you to understand the following:

- 1 The nature and determination of functional currency
- 2 The translation of foreign currency items and transactions
- 3 The accounting for the exchange loss resulting from translation of foreign currency items and transactions
- 4 The translation of the results and financial position of foreign operations
- 5 The translation of an entity's results and financial position in another presentation currency

Real-life

Case 23.1

Jardine Matheson Group and Li & Fung Limited

Today, no entity can avoid exposure to foreign currency; the only difference may be extent of exposure. From Microsoft Corporation, one of the largest companies in the world, to small local businesses, all entities have some extent of foreign currency exposure. The two real-life cases below set out some issues worthy of discussion.

1. Jardine Matheson Limited, an Asia-based conglomerate, gave the following briefing in its 2006 annual report:
 - a. Incorporated in Bermuda, Jardine Matheson has its primary share listing in London, with secondary listings in Bermuda and Singapore. Jardine Matheson Limited operates from Hong Kong and provides management services to group companies ...
 - b. The principal operating subsidiary undertakings, associates and joint ventures have different functional currencies in line with the economic environments of the locations in which they operate. The consolidated financial statements are presented in US dollars.
2. Li & Fung Limited, a blue-chip listed entity in Hong Kong, explained in its 2006 annual report as follows:
 - a. Headquartered in Hong Kong, the company's extensive global sourcing network covers over 70 offices in more than 40 economies around the world. With a growing network of nearly 10,000 international suppliers, Li & Fung explores the world to find quality-conscious, cost-effective manufacturers ... Committed to the highest standards, our 9,700 staff around the world give Li & Fung the global reach and local presence ...
 - b. Items included in the accounts of each of the group's entities are measured using the currency of the primary economic environment in which the entity operates (functional currency). The consolidated accounts are presented in HK dollars, which is the company's functional and presentation currency.

How should a conglomerate with multiple locations for its transactions and operations and significant exposure to various foreign currencies, determine its exchange rate in translating the transactions and operations, and how does it report its translation differences?

An entity such as Microsoft, Adidas, Jardine and Li & Fung, has many opportunities to expose itself to foreign currencies, having transactions in foreign currencies, having foreign operations, and presenting their financial statements in a foreign currency. In dealing with these issues, an entity has to determine which exchange rates to use in the translation and how to account for and report the effect of the changes in exchange rates in the financial statements.

This chapter aims at explaining the accounting requirements of IAS 21 *The Effects of Changes in Foreign Exchange Rates* in respect of an entity having foreign currency

transactions and foreign operations and translating its financial statements into another foreign currency for presentation purposes.

23.1 Applicable Standard and Scope

An entity is required to apply IAS 21 in the following areas:

1. Accounting for transactions and balances in foreign currencies, except for those derivatives transactions and balances that are within the scope of IAS 39 *Financial Instruments – Recognition and Measurement*;
2. Translating the results and financial position of foreign operations that are included in the financial statements of the entity by consolidation, proportionate consolidation or the equity method; and
3. Translating an entity's results and financial position into a presentation currency (IAS 21.3).

IAS 21 does not apply to the following items or transactions:

1. Some foreign currency derivatives that are within the scope of IAS 39;
2. Hedge accounting for foreign currency items, including the hedging of a net investment in a foreign operation, as IAS 39 applies to hedge accounting; and
3. The presentation in a cash flow statement of cash flows arising from transactions in a foreign currency, or to the translation of cash flows of a foreign operation (see IAS 7 *Statement of Cash Flows*, Chapter 24).

23.2 Summary of the Approach Required by IAS 21

Determining functional currency If an entity is involved in foreign currency transactions or foreign operations, it is first required to determine its functional currency in accordance with IAS 21 when it prepares financial statements.

Translating foreign currency transactions The entity is then required to translate foreign currency transactions into its functional currency and report the effects of such translation in accordance with IAS 21.

Translating foreign currency operations An entity with foreign operations, for example, subsidiaries, associates or branches, is required to translate the results and financial position of each foreign operation into the entity's presentation currency and include the translated results and financial position in its financial statements. If the functional currency of a foreign operation is different from the entity's presentation currency, translation should be made in accordance with IAS 21.

Presenting in another currency IAS 21 permits an entity to have any currency as its presentation currency. If the entity's presentation currency differs from its functional currency, its results and financial position are also translated into the presentation currency in accordance with IAS 21.

23.3 Determining Functional Currency

In preparing financial statements with foreign currency items or transactions, the first task of each entity is to determine its functional currency.

Functional currency is defined as the currency of the primary economic environment in which the entity operates (IAS 21.8).

Foreign currency is in turn defined as a currency other than the functional currency of the entity (IAS 21.8).

The primary economic environment in which an entity operates is normally the one in which it primarily generates and expends cash. However, if its operation is exposed to a different economic environment, it will be required to determine its functional currency by considering certain factors or indicators, which can be divided into primary indicators and other indicators.

Real-life

Case 23.2

HSBC Holdings plc

HSBC Holdings plc explained its functional currency and presentation currency briefly in its 2006 annual report as follows:

- Items included in the financial statements of each of HSBC's entities are measured using the currency of the primary economic environment in which the entity operates (functional currency).
- The consolidated financial statements of HSBC are presented in US dollars, which is the group's presentation currency.

23.3.1 Primary Indicators

In determining its functional currency, a reporting entity considers the following primary indicators:

1. The currency
 - a. that mainly influences sales prices for goods and services (this will often be the currency in which sales prices for its goods and services are denominated and settled); and
 - b. of the country whose competitive forces and regulations mainly determine the sales price of its goods and services;
2. The currency that mainly influences labour, material and other costs of providing goods or services (this will often be the currency in which such costs are denominated and settled).

**Real-life
Case 23.3****Sing Lun Holdings Limited**

Being an apparel provider listed on the stock exchange of Singapore, Sing Lun Holdings Limited determined its functional currency in accordance with Singapore's accounting standards (equivalent to IAS) and explained in its 2006 annual report as follows:

- The functional currency of the company is Singapore dollars. As revenue and expenses are denominated primarily in Singapore dollars and receipts from operations are usually retained in Singapore dollars, the directors are of the opinion that the Singapore dollar reflects the economic substance of the underlying events and circumstances relevant to the company.

**Real-life
Case 23.4****BP plc**

BP plc, one of the largest integrated oil companies in the world, has adopted IFRS since 2005. It explained its functional currency briefly in its 2006 annual report as follows:

- Functional currency is the currency of the primary economic environment in which a company operates and is normally the currency in which the company primarily generates and expends cash.

23.3.2 Other Indicators

In addition to the primary indicators, a reporting entity can consider the following indicators, which may also provide evidence of its functional currency:

1. The currency in which funds from financing activities (i.e., issuing debt instruments and equity instruments) are generated;
2. The currency in which receipts from operating activities are usually retained.

A reporting entity can also consider the following additional factors in determining the functional currency of its foreign operations, and whether their functional currency is the same as that of the entity itself:

1. Whether the activities of the foreign operation are carried out as an extension of the reporting entity, rather than being carried out with a significant degree of autonomy;
2. Whether transactions with the reporting entity form a high or low proportion of the foreign operation's activities;
3. Whether cash flows from the activities of the foreign operation directly affect the cash flows of the reporting entity and are readily available for remittance to it;

4. Whether cash flows from the activities of the foreign operation are sufficient to service existing and normally expected debt obligations without funds being made available by the reporting entity.

Example 23.1 When an entity's foreign operation only sells goods imported from the entity and remits the proceeds to it, the foreign operation can be regarded as an extension of the entity.

Alternatively, when a foreign operation accumulates cash and other monetary items, incurs expenses, generates income and arranges borrowings, all substantially in its local currency, the operation can be regarded as being carried out with a significant degree of autonomy.

An extension of a reporting entity's operation is an indicator of having the same functional currency of the reporting entity, while an operation being carried out with a significant degree of autonomy is an indicator of having a different functional currency from the reporting entity.

23.3.3 Mixed Indicators and Functional Currency Not Obvious

There may be cases when the implications of the indicators are mixed or different indicators may imply a different currency to be a functional currency of an entity. The functional currency is not obvious in these cases. In such situations, the entity's management is required to use judgement to determine the functional currency that most faithfully represents the economic effects of the underlying transactions, events and conditions.

In making the judgement, management should give priority to the primary indicators before considering other indicators. Other indicators are designed to provide additional supporting evidence for determining an entity's functional currency.

23.3.4 No Free Choice and Not Normally Changed

An entity does not have free choice in its functional currency. Historically, an entity can choose its or its operation's reporting currency by, for example, incorporating an operation in a particular location. In accordance with IAS 21, an entity's functional currency reflects the underlying transactions, events and conditions that are relevant to it. In consequence, once an entity has determined its functional currency, its functional currency is not changed unless there is a change in those underlying transactions, events and conditions.

Example 23.2 Panda Overseas Limited is incorporated in Singapore, with its head office and administrative office in Singapore. However, all of its factories are located in Europe and its products are manufactured and traded in Europe. Panda's sales are denominated in euros, and its operation is financed in euros, too.

Historically, Panda's reporting currency was the Singapore dollar and euro was its foreign currency. In accordance with IAS 21, Panda's functional currency should be the euro instead of Singapore dollar since the primary indicators, including the sale price, show that the euro is its functional currency. In consequence, the Singapore dollar is Panda's foreign currency, a currency other than the euro.

If an entity's functional currency is the currency of a hyperinflationary economy, the entity is required to restate its financial statements in accordance with IAS 29 *Financial Reporting in Hyperinflationary Economies*. An entity cannot avoid restatement in accordance with IAS 29 by, for example, adopting as its functional currency a currency other than the functional currency determined in accordance with IAS 21.

23.4 Translating Foreign Currency Transactions

After determining its functional currency, an entity is required to translate its foreign currency transactions into its functional currency for recording and reporting purposes.

A foreign currency transaction is a transaction that is denominated in a foreign currency or requires settlement in a foreign currency. It includes the following transactions:

1. An entity purchases or sells goods or provides services, and the price of goods or services is denominated in a foreign currency.
2. An entity borrows or lends funds in a foreign currency or is required to repay or receive in a foreign currency.
3. An entity acquires or disposes of assets, or incurs or settles liabilities, denominated in a foreign currency.

For recording and reporting purposes, the translations of foreign currency transactions are considered on initial recognition and at subsequent balance sheet dates.

23.4.1 Initial Recognition

An entity is required to record a foreign currency transaction, on initial recognition in the functional currency, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction (IAS 21.21).

Exchange rate is the ratio of exchange for two currencies, while **spot exchange rate** is the exchange rate for immediate delivery (IAS 21.8).

The date of a transaction (the transaction date) is the date on which the transaction first qualifies for recognition in accordance with the accounting standards. For

practical reasons, a rate that approximates the actual rate at the transaction date is commonly used.

Example 23.3 For practical reasons, Panda Overseas Limited, having a functional currency of euros, has adopted average weekly exchange rates in respect of the euro in translating its foreign currency transactions (for example, transactions in US dollars and HK dollars) occurring during a period. However, if the exchange rates fluctuate significantly, the use of the average rates for the period may become inappropriate.

23.4.2 Reporting at Subsequent Balance Sheet Dates

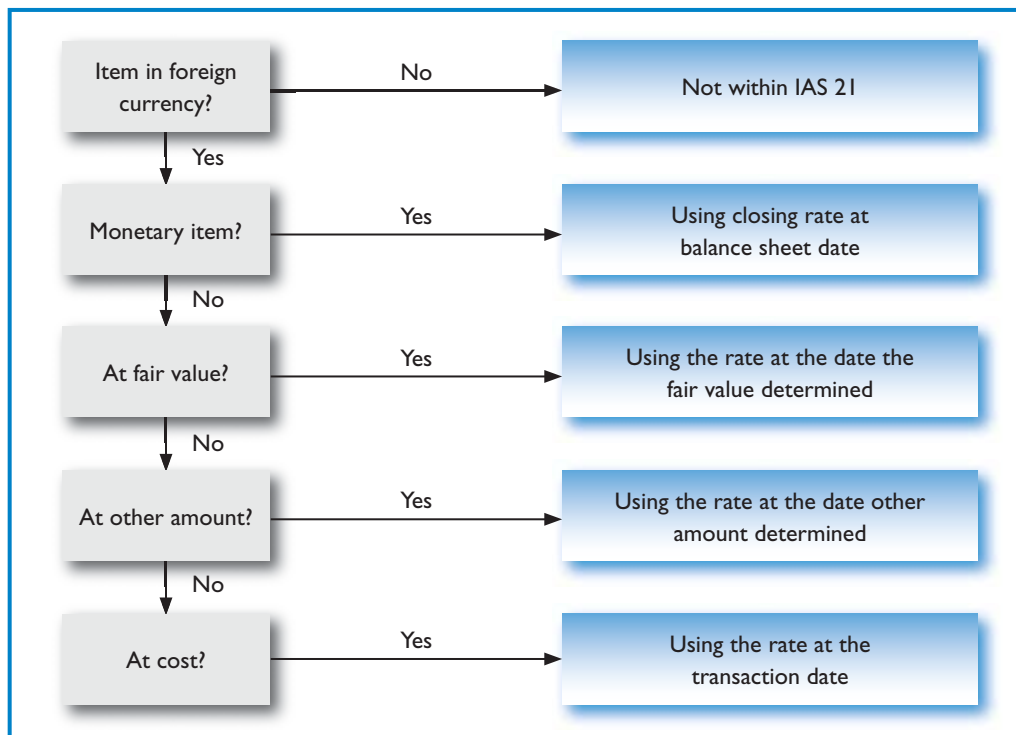
At each balance sheet date, an entity is required to translate

1. foreign currency monetary items using the closing rate;
2. non-monetary items that are measured at fair value in a foreign currency using the exchange rates at the date when the fair value was determined; and
3. non-monetary items that are measured in terms of historical cost in a foreign currency using the exchange rate at the date of the transaction (IAS 21.23).

Figure 23.1 summarises the approach adopted in IAS 21 in respect of the translation of items in foreign currency at each balance sheet date:

FIGURE 23.1

Translation of items in foreign currency at each balance sheet date



Real-life

Case 23.5

HSBC Holdings plc

In its 2006 annual report, HSBC Holdings plc explained its translation of foreign currency items at each balance sheet date as follows:

- Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the rate of exchange ruling at the balance sheet date.
- Non-monetary assets and liabilities that are measured at historical cost in a foreign currency are translated into the functional currency using the rate of exchange at the date of the initial transaction.
- Non-monetary assets and liabilities measured at fair value in a foreign currency are translated into the functional currency using the rate of exchange at the date the fair value was determined.

23.4.2.1 Foreign Currency Monetary Items

An entity is required to translate the foreign currency monetary items at each balance sheet date by using the closing rate.

Monetary items are defined as units of currency held and assets and liabilities to be received or paid in a fixed or determinable number of units of currency (IAS 21.8).

Closing rate is defined as the spot exchange rate at the balance sheet date (IAS 21.8).

To distinguish a monetary item from a non-monetary item, the essential feature is whether the item has a right to receive (or an obligation to deliver) a fixed or determinable number of units of currency. If the item has such a right or obligation and the currency is a foreign currency, the item is a foreign currency monetary item that has to be translated at each balance sheet date by using the closing rate.

Example 23.4 Monetary items include

- pensions and other employee benefits to be paid in cash;
- provisions that are to be settled in cash;
- cash dividends that are recognised as a liability;
- a contract to receive (or deliver) a variable number of the entity's own equity instruments or a variable amount of assets in which the fair value to be received (or delivered) equals a fixed or determinable number of units of currency.

Non-monetary items include

- amounts prepaid for goods and services;
- prepaid rent;
- goodwill and intangible assets;
- inventories;
- property, plant and equipment;
- provisions that are to be settled by the delivery of a non-monetary asset.

23.4.2.2 Non-monetary Items at Fair Value in Foreign Currency

The carrying amount of non-monetary items in foreign currency is determined not only by IAS 21, but also by other relevant accounting standards. In some accounting standards, the carrying amount of a non-monetary item can be measured at fair value or by using some basis other than historical cost. For example, property under IAS 40 *Investment Property* and IAS 16 *Property, Plant and Equipment* can be measured at fair value.

If a non-monetary item is determined in foreign currency and is measured at fair value, an entity is required to translate that non-monetary item into functional currency by using the exchange rate at the date when the fair value was determined.

Example 23.5 Bull and Bear Limited adopts the revaluation model in accordance with IAS 16 in measuring its freehold office premises in London. The office acquired on 2 January 2007 was £200,000, and the exchange rate of sterling to Hong Kong dollar at that date was HK\$15.20. A surveyor reported to Bull and Bear that the fair value of the office at 31 December 2007, the balance sheet date, was £230,000 and the exchange rate of sterling at that date was HK\$15.50. The useful life of the office was estimated to be 40 years, while the functional currency of Bull and Bear was the Hong Kong dollar.

Calculate the cost, depreciation and carrying amount of the office in Bull and Bear's financial statements at the balance sheet date.

Answers

Cost of the office in pounds sterling	£200,000
Exchange rate at 2 January 2007	15.2
Cost of the office in Hong Kong dollars	HK\$3,040,000
Depreciation as calculated (HK\$3,040,000 ÷ 40 years)	HK\$(76,000)
Carrying amount before revaluation	HK\$2,964,000
Fair value of the office in pounds sterling	£230,000
Exchange rate at 31 December 2007	15.5
Carrying amount after revaluation in Hong Kong dollars	HK\$3,565,000

23.4.2.3 Non-monetary Items in Other Amounts in Foreign Currency

In addition to measuring some items at fair value, an entity is sometimes required to measure in an amount other than historical cost by comparing two or more amounts.

Example 23.6 An entity is required to determine the carrying amount of some items by comparing two or more amounts, for example:

- In accordance with IAS 2 *Inventories*, the carrying amount of inventories is the lower of cost and net realisable value;
- In accordance with IAS 36 *Impairment of Assets*, the carrying amount of an asset for which there is an indication of impairment is the lower of its carrying amount before considering possible impairment losses and its recoverable amount.

If a non-monetary asset is determined by comparing two or more amounts and is simultaneously measured in a foreign currency, the comparison should be made between

1. the cost or carrying amount, as appropriate, translated at the exchange rate at the date when that amount was determined (i.e., the rate at the date of the transaction for an item measured in terms of historical cost); and
2. the net realisable value or recoverable amount, as appropriate, translated at the exchange rate at the date when that value was determined (e.g., the closing rate at the balance sheet date).

The effect of this comparison may be that an impairment loss is recognised in the functional currency but would not be recognised in the foreign currency, or vice versa. When several exchange rates are available, the rate used is that at which the future cash flows represented by the transaction or balance could have been settled if those cash flows had occurred at the measurement date. If exchangeability between two currencies is temporarily lacking, the rate used is the first subsequent rate at which exchanges could be made.

Example 23.7 Based on Example 23.5, Bull and Bear Limited, having the HK dollar as its functional currency, is also involved in trading classic-style furniture and fixtures in London. Since its marketing survey had not been properly conducted, Bull and Bear's inventories sourced from Hong Kong at a cost of HK\$80,000 were not welcome in the London market. The estimated net realisable value to dispose of them in London was only £4,000 on 31 December 2007.

The carrying amount of the inventories is required to carry at the lower of cost and net realisable value. While the estimated net realisable value should be translated to HK dollars at the exchange rate at the date when the value was determined, i.e., 31 December 2007, the estimated net realisable value in HK dollars should be HK\$62,000 ($£4,000 \times 15.5$) and a loss of HK\$18,000 would be recognised.

23.4.3 Recognition of Exchange Differences

The difference resulting from translation of different exchange rates is accounted for in accordance with IAS 21, except for those outside the scope of IAS 21. For example, hedge accounting for foreign currency items is accounted for in accordance with IAS 39.

Exchange difference is the difference resulting from translating a given number of units of one currency into another currency at different exchange rates (IAS 21.8).

23.4.3.1 Exchange Differences on Monetary Items

If the exchange rate used to settle a monetary item is different from the exchange rate used to measure the item previously, an exchange difference results. An exchange difference on a monetary item may also arise when the exchange rate used to translate the item in the current period is different from the exchange rate used to translate it initially or previously.

If there is an exchange difference arising from a monetary item during a period, an entity is required to recognise such exchange difference in profit or loss during the period, except for those items that form part of a reporting entity's net investment in a foreign operation (IAS 21.28).

23.4.3.2 Exchange Differences on Non-monetary Items

Exchange differences arising from non-monetary items result from the revaluation of the items or a comparison of their carrying amount to two or more amounts, e.g., net realisable value or recoverable amount. Such exchange differences are in substance related to the translation of the gain or loss resulting from the revaluation or the comparison.

In consequence, any exchange component of that gain or loss on a non-monetary item is recognised in

1. equity, when a gain or loss on a non-monetary item is recognised directly in equity; or
2. profit or loss, when a gain or loss on a non-monetary item is recognised in profit or loss (IAS 21.30).

Example 23.8 Based on Example 23.5, in accordance with IAS 16 and 21, Bull and Bear Limited revaluated its freehold office in London to fair value and translated it into Hong Kong dollars as follows:

Cost of the office in pounds sterling	£200,000
Exchange rate at 2 January 2007	15.2
Cost of the office in Hong Kong dollars	HK\$3,040,000
Depreciation as calculated (HK\$3,400,000 ÷ 40 years).....	HK\$(76,000)
Carrying amount before revaluation	HK\$2,964,000
Fair value of the office in pounds sterling	£230,000
Exchange rate at 31 December 2007.....	15.5
Carrying amount after revaluation in Hong Kong dollars.....	HK\$3,565,000

How should Bull and Bear account for the above revaluation and translation?

Answers

IAS 16 requires Bull and Bear to recognise the revaluation gains and losses directly in equity, unless the accumulated revaluation gains of an asset become negative. It implies that the revaluation gain of the office should be recognised in equity.

When such gain is recognised in equity, IAS 21 also requires Bull and Bear to recognise any exchange component of such gain (on a monetary item) in equity as well.

In consequence, the revaluation gain and exchange difference of HK\$601,000 (HK\$3,565,000 – HK\$2,964,000) in total should be recognised in equity.

Dr Property, plant and equipment.....	\$601,000
Cr Revaluation surplus (reserves).....	\$601,000
To recognise the intangible assets written off during the year.	

Real-life Case 23.6

China Construction Bank Corporation

In its 2006 annual report, China Construction Bank Corporation explained its policy on recognising exchange differences as follows:

- Non-monetary assets and liabilities that are measured at fair value in foreign currencies are translated using the foreign exchange rates at the date the fair value is determined.
- When the gain or loss on a non-monetary item is recognised directly in equity, any exchange component of that gain or loss is recognised directly in equity, and all other foreign exchange differences arising from settlement and translation of monetary and non-monetary assets and liabilities are recognised in the income statement.

23.4.3.3 Exchange Differences on Monetary Items Being Part of Net Investment in a Foreign Operation

An entity may lend or borrow from a foreign operation, e.g., loans to subsidiaries, or loans from associates.

Foreign operation is an entity that is a subsidiary, associate, joint venture or branch of a reporting entity, the activities of which are based or conducted in a country or currency other than those of the reporting entity (IAS 21.8).

When there is a monetary item that is receivable from or payable to a foreign operation and is in a foreign currency, an entity is required to translate the item to its functional currency at each balance sheet date by using the closing rate (see Section 23.4.2.1)

If an entity has no plan to settle or is not likely to settle a monetary item with a foreign operation in the foreseeable future, such an item is in substance a part of its net investment in that foreign operation. Such monetary items may include long-term receivables or loans but do not include trade receivables or trade payables.

Net investment in a foreign operation is the amount of the reporting entity's interest in the net assets of that operation (IAS 21.8).

In the separate financial statements of an entity or the individual financial statements of the foreign operation, the exchange difference arising on a monetary item in foreign currency that forms part of the entity's net investment in a foreign operation is recognised in profit or loss (as exchange differences arising from other monetary items in foreign currency).

However, in financial statements that include the foreign operation and the reporting entity, e.g., consolidated financial statements when the foreign operation is a subsidiary, such exchange differences are recognised initially in a separate component of equity and recognised in profit or loss on disposal of the net investment of such a foreign operation (IAS 21.32).

Real-life

Case 23.7

HSBC Holdings plc

HSBC Holdings plc explained its policy in recognising exchange differences on a monetary item as part of net investment in a foreign operation in its 2006 annual report as follows:

- Exchange differences on a monetary item that is part of a net investment in a foreign operation are recognised in the income statement of the separate financial statements.
- In consolidated financial statements these exchange differences are recognised in the foreign exchange reserve in shareholders' equity.

Example 23.9 Melody Corporation, with a functional currency of HK dollars, advanced a loan of €10,000 to a subsidiary in France on 2 February 2007. At that date, the exchange rate of the euro to HK dollar was 10. At year-end of 31 September 2007, the exchange rate of the euro increased to 11.

If Melody considers this loan as part of the net investment in the subsidiary's operation and the subsidiary has a functional currency of euro, what is the consequence of the translation?

Answers

First, the loan, being a monetary item, was initially recognised in Melody's books in its functional currency at HK\$100,000 ($€10,000 \times 10$).

At year-end, the loan was translated into Melody's functional currency by using the closing rate of 11 and its carrying amount became HK\$110,000 ($€10,000 \times 11$) with an exchange gain of HK\$10,000.

In Melody's financial statements (without consolidating the subsidiary), the exchange difference would be recognised in profit or loss. However, in Melody's consolidated financial statements, such an exchange difference would be recognised in a separate component of equity until the subsidiary is disposed of.

23.4.4 Change in Functional Currency

The functional currency of an entity reflects the underlying transactions, events and conditions that are relevant to the entity. Once the functional currency is determined, it can be changed only if there is a change to those underlying transactions, events and conditions.

Example 23.10 Panda Overseas Limited originally had a functional currency of euro. In 2008, it closed down all its factories and operations in Europe and began to offer logistic services in Hong Kong. The services are charged in Hong Kong dollars, and all employee-related and other costs are incurred in Hong Kong dollars.

As a result of this change, which influenced the price of Panda's services, Panda's functional currency was changed to the Hong Kong dollar.

When there is a change in an entity's functional currency (as Panda above), the entity is required to apply the translation procedures applicable to the new functional currency prospectively from the date of the change (IAS 21.35).

Prospective accounting implies that an entity translates all items into the new functional currency using the exchange rate at the date of the change. The resulting translated amounts for non-monetary items are treated as their historical cost. Exchange differences arising from the translation of a foreign operation previously

classified in equity are not recognised in profit or loss until the disposal of the operation.

Real-life**Case 23.8****Royal Dutch Shell plc**

Royal Dutch Shell plc, one of the largest oil companies, has adopted IFRSs since 2005. In 2005 it changed its functional currency and explained the change in its annual report as follows:

- Following Royal Dutch Shell becoming the parent company of Royal Dutch and Shell Transport on 20 July 2005 and through Royal Dutch and Shell Transport, of the rest of the Shell Group, the directors have concluded that the most appropriate functional currency of the company is dollars.
- This reflects the fact that the majority of the Shell Group's business is influenced by pricing in international commodity markets, with a dollar economic environment. The previous functional currency of the company was the euro.
- On the date of the change of functional currency, all assets, liabilities, issued capital and other components of equity and income statement items were translated into dollars at the exchange rate on that date.
- As a result, the cumulative currency translation differences which had arisen up to the date of the change of functional currency were reallocated to other components within equity.
- As a result of the change in functional currency, the company's functional and presentation currency are now the same.

23.5 Use of a Presentation Currency Other Than the Functional Currency

An entity may present its financial statements in any currency or currencies and, simultaneously, the foreign operation may have a functional currency different from the entity. In such a case, the entity is required to translate its or the foreign operation's results and financial position into its presentation currency.

Presentation currency is the currency in which financial statements are presented (IAS 21.8).

23.5.1 Translation to the Presentation Currency

In translating its results and financial position into the presentation currency, an entity first determines whether its functional currency is the currency of a hyperinflationary economy, and then translates in accordance with IAS 21.

23.5.1.1 Functional Currency Not the Currency of a Hyperinflationary Economy

If an entity's functional currency is not the currency of a hyperinflationary economy, the entity translates its results and financial position into a different presentation currency using the following procedures:

1. Translate assets and liabilities for each balance sheet presented (i.e., including comparatives) at the closing rate at the date of that balance sheet;
2. Translate income and expenses for each income statement at exchange rates at the dates of the transactions; and
3. Recognise all resulting exchange differences as a separate component of equity (IAS 21.39).

For practical reasons, an entity may use a rate, for example an average rate of a week, to approximate the exchange rates at the transaction dates in translating the income and expense items. However, use of the average rate for a period is inappropriate if exchange rates fluctuate significantly during a period.

In translating its results and financial position, an entity may have exchange differences resulting from the following:

1. Translating income and expenses at the exchange rates at the dates of the transactions and assets and liabilities at the closing rate. Such exchange differences arise on both income and expense items recognised in profit or loss and on those recognised directly in equity;
2. Translating the opening net assets at a closing rate that differs from the previous closing rate.

Since the translation of the financial statements into another presentation currency has little or no direct effect on the present and future cash flows from an entity's operations, the resulting exchange differences are not recognised in the income statement.

Example 23.11 Melody Corporation, with a functional currency of HK dollars, had the following set of financial statements for the year ended 31 December 2007:

	HK\$ million
Revenue	1,200
Expenses	(958)
Profit for the year	<u>242</u>
Property, plant and equipment	1,080
Current assets	432
Current liabilities	(270)
	<u>1,242</u>
Share capital	1,000
Retained earnings	<u>242</u>
	<u>1,242</u>

An investor in Mainland China approached Melody to discuss a major investment and asked whether Melody could present its financial statements in renminbi (RMB) for his review. Melody briefly concluded that the average exchange rate of the RMB to HK dollar was 1 (i.e., RMB 1 = HK\$1) during 2007 and the fluctuation during the year was not significant.

If the closing rate at 31 December 2007 was 1.08 (i.e., RMB 1 = HK\$1.08), translate Melody's financial statements to the presentation currency of renminbi.

Answers

By assuming that the income and expenses are translated at the average exchange rate of 2007, the financial statements of Melody presented in RMB would be as shown:

	HK\$ million	Exchange rate	RMB million
Revenue	1,200	1	1,200
Expenses	(958)	1	(958)
Profit for the year	<u>242</u>		<u>242</u>
Property, plant and equipment	1,080	1.08	1,000
Current assets	432	1.08	400
Current liabilities	(270)	1.08	(250)
	<u>1,242</u>		<u>1,150</u>
Share capital	1,000		1,000
Retained earnings	242		242
Exchange reserves	0		(92)
	<u>1,242</u>		<u>1,150</u>

Exchange reserves represent the exchange difference resulting from:

	RMB million
Translating income and expenses at the exchange rates at the transaction dates and assets and liabilities at the closing rate (HK\$242 – HK\$242 ÷ HK\$1.08)	(18)
Translating the opening net assets at a closing rate that differs from the previous closing rate (HK\$1,000 – HK\$1,000 ÷ HK\$1.08)	(74)
	<u>(92)</u>

23.5.1.2 Functional Currency Is a Currency of a Hyperinflationary Economy

If an entity's functional currency is the currency of a hyperinflationary economy, the entity translates its results and financial position into a different presentation currency using the following procedures:

1. Translate all amounts (i.e., assets, liabilities, equity items, income and expenses, including comparatives) at the closing rate at the date of the most recent balance sheet, except for those items in point 2 below;
2. Present comparative amounts to those that were presented as current year amounts in the relevant prior year financial statements, when amounts are translated into the currency of a non-hyperinflationary economy. In other words, there are no adjustments for subsequent changes in the price level or subsequent changes in exchange rates for the comparatives, if the presentation currency is not the currency of a non-hyperinflationary economy (IAS 21.42).

When an entity's functional currency is the currency of a hyperinflationary economy, the entity is required to restate its financial statements in accordance with IAS 29 *Financial Reporting in Hyperinflationary Economies* before applying the above translation method, except for comparative amounts that are translated into a currency of a non-hyperinflationary economy (IAS 21.34).

When the economy ceases to be hyperinflationary and the entity no longer restates its financial statements in accordance with IAS 29, it is required to use as the historical costs for translation into the presentation currency the amounts restated to the price level at the date the entity ceased restating its financial statements (IAS 21.43).

Example 23.12 Based on Example 23.11, if the HK dollar is a currency of a hyperinflationary economy and the financial statements of Melody will be presented in renminbi, Melody should use the closing rate of 1.08 (i.e., RMB 1 = HK\$1.08) in translating all its income, expenses, assets and liabilities.

In consequence, the critical differences in the translated financial statements between Example 23.11 and this example are the results of Melody and its comparatives, if any.

IAS 21 has not specified the accounting treatment for exchange differences resulting from the above translation of the financial statements with the functional currency being a currency of a hyperinflationary economy. Such an entity seems to have a choice between accounting for the exchange differences as a separate component of equity or accounting them to the income statement.

23.5.2 Translation of a Foreign Operation

An entity can follow the above procedures (Section 23.5.1) in translating the results and financial position of a foreign operation into its presentation currency. In addition, an entity has to follow the normal consolidation procedures, such as the elimination of

intragroup balances and intragroup transactions, and the normal approach in applying the equity method to include the results and financial position of a foreign operation in its financial statements.

Real-life**Case 23.9****China Construction Bank Corporation**

In its 2006 annual report, China Construction Bank Corporation explained its policy on translating foreign operations as follows:

- The assets and liabilities of overseas operations, including goodwill arising on consolidation of overseas operations, are translated into renminbi at the foreign exchange rates ruling at the balance sheet date.
- The income and expenses and cash flows of overseas operations are translated into renminbi at rates approximating the foreign exchange rates ruling at the date of the transaction.
- Foreign exchange differences arising from translation are recognised directly in a separate component of equity.

23.5.2.1 Implication of the Definition of Foreign Operation

As discussed in Section 23.4.3.3, a foreign operation is an entity that is a subsidiary, associate, joint venture or branch of a reporting entity, the activities of which are based or conducted in a country or currency other than those of the reporting entity (IAS 21.8).

The above definition implies that a foreign operation should have a different functional currency other than the functional currency of the reporting entity before it can be qualified as a foreign operation. In other words, if an operation is incorporated in a foreign country but has the same functional currency of the reporting entity or has activities based or conducted in the same country as the reporting entity, it would not be a foreign operation as defined in IAS 21.

In consequence, the translation of the transactions of such an operation (not qualified as a foreign operation under IAS 21) is not an issue of translation of foreign operation. The transactions of such an operation may only be the extension of the operation of the reporting entity and should be regarded as foreign currency transactions only. The relevant translation requirements are set out in Section 23.4, instead of Section 23.5.

23.5.2.2 Goodwill and Fair Value Adjustments

To align with the requirements discussed in Section 23.5.1, an entity is also required to apply the same procedures to any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation and to treat them as assets and liabilities of the foreign operation. In other words, any such goodwill and fair value adjustments are translated the same as other assets and liabilities (IAS 21.47).

Real-life**Case 23.10 Kingsgate Consolidated Limited**

Kingsgate Consolidated Limited, an Australian company, adopted Australian financial reporting standards, which are similar and equivalent to IFRSs. It stated the following clearly in its 2006 annual report in respect of goodwill and fair value adjustments:

- Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

23.5.2.3 Disposal of Foreign Operation

On the disposal of a foreign operation, when the gain or loss on disposal of that foreign operation is recognised, an entity is required to recognise the cumulative amount of the exchange differences deferred in the separate component of equity relating to that foreign operation in profit or loss (IAS 21.48).

Real-life**Case 23.11 China Construction Bank Corporation**

Further to Real-life Case 23.9, China Construction Bank Corporation also explained its policy on recognising exchange differences upon disposal of a foreign operation as follows:

- On disposal of an overseas operation, the cumulative amount of the foreign exchange differences recognised in equity that relate to that overseas operation is included in the calculation of the profit or loss on disposal.

23.6 Tax Effects of All Exchange Differences

Gains and losses on foreign currency transactions and exchange differences arising on translating the results and financial position of an entity (including a foreign operation) into a different currency may have tax effects. IAS 12 *Income Taxes* applies to these tax effects.

23.7 Disclosure

An entity is required to disclose the following:

1. The amount of exchange differences recognised in profit or loss except for those arising on financial instruments measured at fair value through profit or loss in accordance with IAS 39; and
2. Net exchange differences classified in a separate component of equity, and a reconciliation of the amount of such exchange differences at the beginning and end of the period (IAS 21.52).

When the presentation currency is different from the functional currency, an entity is required to state that fact, together with disclosure of the functional currency and the reason for using a different presentation currency (IAS 21.53).

When there is a change in the functional currency of either the reporting entity or a significant foreign operation, the entity is required to disclose that fact and the reason for the change in functional currency (IAS 21.54).

When an entity presents its financial statements in a currency that is different from its functional currency, it is required to describe the financial statements as complying with accounting standards only if they comply with all the requirements of each applicable accounting standard and each applicable interpretation of those standards, including the translation method set out in IAS 21 (IAS 21.55).

When an entity displays its financial statements or other financial information in a currency that is different from either its functional currency or its presentation currency and the requirements of IAS 21 are not met, it is required to do the following:

1. Clearly identify the information as supplementary information to distinguish it from the information that complies with accounting standards;
2. Disclose the currency in which the supplementary information is displayed; and
3. Disclose the entity's functional currency and the method of translation used to determine the supplementary information (IAS 21.57).

23.8 Summary

IAS 21 *The Effects of Changes in Foreign Exchange Rates* prescribes the requirements in accounting for the translation of foreign currency transactions, foreign operations and financial statements to a presentation currency. Under IAS 21, an entity is required to first determine the functional currency when it prepares its financial statements with foreign currency exposure. The translation of foreign currency transactions and foreign currency operations should be then accounted for separately. When an entity chooses to adopt a currency other than the functional currency as its presentation currency, it is required to translate its financial statements in accordance with IAS 21.

Functional currency is the currency of the primary economic environment in which an entity operates. In determining its functional currency, an entity considers whether a currency influences its sales prices or costs (the primary indicators), or whether a currency in which funds from financing and operating activities are generated and retained (the secondary indicators). Priority in consideration is given to the primary indicators.

For foreign currency transactions, an entity is required to initially recognise them at spot exchange rate at the transaction date. At each balance sheet date, the entity is not required to re-translate non-monetary items that are measured in terms of historical cost in a foreign currency; but it is required to re-translate (1) foreign currency monetary items using closing rate and (2) non-monetary items that are measured at fair value in a foreign currency using the exchange rates at the date when the fair value was determined. Exchange differences are accounted for in profit or loss, except for the

exchange component in respect of the gain or loss on a non-monetary item that is recognised directly in equity.

When an entity is required to translate its financial statements into a presentation currency other than its functional currency, or its foreign operation into its presentation currency, the entity should consider whether its functional currency is the currency of a hyperinflationary economy. If its functional currency is not the currency of a hyperinflationary economy, the income and expenses of its financial statements or of its foreign operation are translated at the exchange rates at the transaction dates and the assets and liabilities are translated at the closing rate at the balance sheet date. All resulting exchange differences are recognised in equity.

Review Questions

1. Summarise the approach of IAS 21 in dealing with the translation of foreign currency transactions and foreign operations.
2. What kinds of items or transactions are not within the scope of IAS 21?
3. What is a functional currency?
4. How can an entity determine its functional currency?
5. How can an entity decide upon a functional currency if the indicators for a particular currency are not obvious?
6. State the requirements in translating the initial recognition of foreign currency transactions.
7. What are the general requirements at each balance sheet date in reporting items in foreign currency?
8. What are the requirements in accounting for the exchange differences resulting from translating items in foreign currency?
9. When can an entity have a change in functional currency?
10. How can an entity account for a change in functional currency?
11. How can an entity translate its financial statements into a presentation currency other than its functional currency if its functional currency is not the currency of a hyperinflationary economy?
12. How can an entity translate its financial statements into a presentation currency other than its functional currency if its functional currency is the currency of a hyperinflationary economy?
13. What are the differences between the translation of an entity's foreign operation and the translation of the same entity's financial statements into a presentation currency other than its functional currency?

Exercises

- Exercise 23.1** Sonia Fashion Limited operates in Hong Kong and decides to re-domicile its location to Singapore from 2009. Advise Sonia on the implications of the relocation on the foreign currency translation.

Exercise 23.2 Before the relocation, Sonia Fashion Limited is finalising its financial statements for the year-end of 2008. Its functional and presentation currency used to be Hong Kong dollars. In Singapore, it has a property (to be its head office from 2007) of S\$2 million and a fixed deposit of S\$500,000, both in Singapore dollars. At the acquisition of the property and the inception of the deposit, the exchange rate was S\$1 to HK\$5. At year-end, the exchange rate was S\$1 to HK\$6.

Required:

Calculate the carrying amount of the property and deposits at year-end in the balance sheet and suggest the journal entries.

Exercise 23.3 Rosanna Beauty Group, incorporated in Singapore, has its head office in Singapore. It operates several beauty retailing shops in Singapore, Korea and Hong Kong, and the operations are financed by local letters of credit or bank loans from the respective locations. Rosanna sources its beauty products from France and the United Kingdom and settles the payable in euros and pounds sterling. All the net cash inflows after deducting the local operating expenses are remitted to Singapore.

Required:

Discuss which currency should be used as Rosanna's functional currency.

Exercise 23.4 Rosanna Beauty Group extends its operation by opening new shops in China and purchasing securities in Europe and the United Kingdom. To open new shops in China, Rosanna remits funds from Singapore to purchase property, plant and equipment in China. The securities are bonds and certificates of deposit with well-established banks in Europe and the United Kingdom.

Required:

Discuss the implication on foreign currency translation of having new property, plant and equipment in China and purchasing securities in Europe and the United Kingdom.

Problems

Problem 23.1 Sonia Fashion Limited is finalising its financial statements for the year-end of 2008. Its functional and presentation currency used to be Hong Kong dollars. In Singapore, it has a property (to be its head office from 2007) of S\$2 million. Sonia considers revaluating its property in Singapore for financial reporting purposes. When the property was acquired, the cost was S\$2 million and the exchange rate was S\$1 to HK\$5. At year-end, the fair value of the property was S\$2.5 million and the exchange rate was S\$1 to HK\$6.

The director, Sonia Koo, asks whether the classification of property as investment property or property, plant and equipment would have an impact on the translation of the revalued property.

Required:

1. Assuming the property is an investment property, calculate the carrying amount of the property at year-end in the balance sheet and suggest the journal entries.
2. Assuming the property is an item of property, plant and equipment, calculate the carrying amount of the property at year-end in the balance sheet and suggest the journal entries.

Problem 23.2 Alice Furniture Inc. is sourcing furniture and fixtures in China and trading them to Hong Kong and the Asia Pacific. Alice's head office is in Hong Kong, with representative offices in Shanghai, Beijing and Singapore. The operating income is mainly in HK dollars and US dollars and the operating costs are mainly in HK dollars and China renminbi. The representative offices in different locations are required to report all income and expenditure monthly to the Hong Kong office, and the operating assets are financed by the Hong Kong office and accounted for in the books of the Hong Kong office.

Required:

1. Discuss and advise Alice on which currency should be adopted as its functional currency and presentation currency.
2. Explain Alice's translation process in combining the income and expenditure statements of different representative offices with the financial statements of the Hong Kong office.

Case Studies

Case Study 23.1 HSBC Holdings plc, a banking corporation with headquarters in London and sources of income around the world, determined the following:

Items included in the financial statements of each of HSBC's entities are measured using the currency of the primary economic environment in which the entity operates (functional currency). The consolidated financial statements of HSBC are presented in US dollars, which is the group's presentation currency.

With reference to Real-life Case 23.1, Jardine Matheson Group, an Asia-based conglomerate, had also determined on the same presentation currency, US dollars. However, in the same case, Li & Fung Limited, with its extensive global sourcing network, had determined to present in HK dollars.

Discuss.

Case Study 23.2 Misson, a public limited company, has carried out transactions denominated in foreign currency during the financial year ended 31 October 2006 and has conducted foreign operations through a foreign entity. Its functional and presentation currency is the US dollar.

Misson purchased goods from a foreign supplier for €8 million on 31 July 2006. At 31 October 2006, the trade payable was still outstanding and the goods were still

held by Misson. Similarly, Misson sold goods to a foreign customer for €4 million on 31 July 2006 and received payment for the goods in euros on 31 October 2006. Additionally, Misson purchased an investment property on 1 November 2005 for €28 million. At 31 October 2006, the investment property had a fair value of €24 million. The company uses the fair value model in accounting for investment properties. Misson would like advice on how to treat these transactions in the financial statements for the year ended 31 October 2006.

Exchange rates

	Euro: \$	Average rate for year to that date (Euro: \$)
1 November 2004.....	1.1	
31 October 2005.....	1.4	1.2
1 November 2005.....	1.4	
31 July 2006.....	1.6	
31 October 2006.....	1.3	1.5

Required:

Discuss the accounting treatment of the above transactions in accordance with the advice required by the directors.

(ACCA 3.6 December 2006, adapted)

Case Study 23.3

Argent, a public limited company, operates in the energy and power sector. The company has experienced significant growth in recent years and has expanded its operations internationally by the acquisition of overseas subsidiaries. Group policy is to translate the financial statements of these subsidiaries using the closing rate method with goodwill calculated at the rate of exchange ruling at the date of acquisition.

One of these subsidiaries, Argon, is incorporated in a country that is suffering from a very high rate of inflation (120% over the last 3 years) as a result of political and economic problems. Additionally, it is difficult to repatriate funds from the country. Argent owns 91% of the shares of Argon, with the foreign government owning the balance. Most of the products produced by Argon are sold locally, but approximately 10% of the products are sold at cost to Argent. Because of a dispute, Argon has created a provision for doubtful debts against an inter-company amount owing from Argent. As part of its risk management policies, Argent hedges the profits made by Argon and denominates Argon's financial statements in US dollars rather than the local currency. Argon's non-current assets are carried at a US dollar valuation, which is prepared by the chief accountant.

Discuss and comment.

(ACCA 3.6 December 2003, adapted)

Case**Study 23.4**

Dietronic had a 100% owned German subsidiary, which was set up in 2000 by Dietronic. The subsidiary was sold on 1 December 2002 for €600,000 (\$400,000). The subsidiary was included in the holding company's accounts at a cost of \$300,000 at 30 November 2002, and the net assets at the same date included in the consolidated financial statements were €540,000 (\$360,000). All exchange differences arising on the translation of the subsidiary's financial statements were taken to a separate exchange reserve, and the cumulative total on this reserve was \$40,000 debit as at 1 December 2002 before the receipt of the dividend.

Dietronic calculated the gain on the sale of the subsidiary as follows:

	\$
Sale proceeds	400,000
Cost of investment	(300,000)
Gain on sale	100,000

The financial statements of the subsidiary were translated into Dietronic's presentation currency for consolidation purposes in accordance with IAS 21. During the year to 30 November 2002, the German subsidiary declared and accounted for a proposed dividend of €48,000. This had been included in the holding company's financial statements at the exchange rate ruling when the dividend was declared (\$1 = €1.60). This dividend was received on 1 December 2002 by Dietronic and recorded in the cash book and dividends receivable account. The shareholders of the subsidiary approved the dividend on 1 October 2002, and the exchange rate on 1 December 2002 was \$1 = €1.50.

Discuss and comment.

(ACCA 3.6 December 2003, adapted)

24

Statement of Cash Flows

Learning Outcomes

This chapter enables you to understand the following:

- 1 The meaning of cash and cash equivalents (the definition)
- 2 The classification of cash flows into operating, investing and financing activities
- 3 The presentation of a cash flow statement
- 4 The presentation of different cash flows in a cash flow statement
- 5 The disclosure requirements on a cash flow statement

Real-life

Case 24.1

EganaGoldpfeil (Holdings) Limited

EganaGoldpfeil (Holdings) Limited claimed itself as one of the leading and most respected multi-brand luxury and fashion accessories groups. It reported a continuous growth in its turnover and profit from 2004 to 2006 in its 2006 annual report as follows:

	2006 HK\$'000	2005 HK\$'000	2004 HK\$'000
Turnover.....	5,975,450	3,716,706	3,513,434
Profit for the year.....	339,222	258,537	160,832

However, the cash flow statement of EganaGoldpfeil set out the following cash flow information:

	2006 HK\$'000	2005 HK\$'000
Operating profit before working capital changes.....	501,057	256,606
Increase in inventories	(124,375)	(182,716)
(Increase)/Decrease in accounts receivable.....	(1,016,110)	356,622
Increase in deposits, prepayments and other receivables	(41,775)	(22,726)
Increase in due from associated companies.....	(8,406)	(1,878)
Increase/(Decrease) in accounts payable, accruals and other payables	455,035	(17,949)
Decrease in provisions	(6,609)	(18,631)
Increase in bills payable	82,985	24,784
Decrease in provision for pensions and other post-retirement obligations	(8,094)	(6,276)
Increase in due to associated companies	1,427	3,412
(Decrease)/Increase in due to directors.....	(439)	470
Increase in derivative financial instruments assets.....	(16,463)	-
Increase in derivative financial instruments liabilities.....	39,587	-
Exchange adjustments	(7,488)	5,795
Net cash (outflow)/inflow generated from operations	(149,668)	397,513

EganaGoldpfeil's profit was not supported with the same amount of operating cash inflow, and over one-sixth of the revenue contributed to the increase in accounts receivables (HK\$1 billion) only.

On 31 August 2007, following a critique by an analyst, EganaGoldpfeil reported the findings of its independent reviewer, KPMG:

**Real-life
Case 24.1***(cont'd)*

- Based on KPMG's review to date, it appears that the recoverability of certain receivables totalling, as at 31 August 2007, approximately HK\$2.28 billion (comprising approximately HK\$605 million in trade receivables and approximately HK\$1.67 billion in interest-bearing deposits) is sufficiently uncertain as to make it likely that provisions will need to be made in the group's accounts in relation to at least a proportion of these receivables.
- It is also doubtful whether a certain trading business from which a substantial proportion of the group's reported profit has previously been derived will continue to generate such profits in the future.
- Further material adjustments may also be necessary following the audit of the group's consolidated accounts.
- The published unaudited interim results to November 2006 reported the group's total assets as being approximately HK\$6,441 million.

Cash is one of the key elements used in the finance curriculum to evaluate a project or an entity. Even in financial statement analysis, like Real-life Case 24.1, cash flow information and analysis can provide information that other financial statements cannot. IAS 7 *Statement of Cash Flows* (the title revised by IAS 1 in September 2007) aims at providing information about the historical changes in cash and cash equivalents by means of a cash flow statement. This chapter explains the requirements on reporting cash flow information and the presentation of the cash flow statement.

24.1 Benefits of Cash Flow Information

A cash flow statement provides some information that may not be found in other financial statements, for example, changes in net assets of an entity and cash flows from different kinds of activities. With such information, together with other financial statements, a user can evaluate the following:

- An entity's financial structure, including its liquidity and solvency;
- An entity's ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities;
- The amount, timing and certainty of future cash flows by comparing historical cash flow information; and
- The accuracy of past assessments of future cash flows and the relationship between profitability and net cash flow and the impact of changing price.

In accordance with the accounting standards, different entities can use different accounting policies or treatments for the same transactions and events, for example, cost model or revaluation model in subsequently measuring property, plant and equipment. The cash flow statement can eliminate the effects of such differences to enhance the

comparability of the performance and financial positions of different entities. Cash flow information can also help users develop models to assess and compare the present value of the future cash flows of different entities.

24.2 Applicable Standard and Scope

In view of the benefits of cash flow information and the need of users, IAS 7 requires an entity to prepare a cash flow statement in accordance with its requirements and present the cash flow statement as an integral part of an entity's financial statements for each period for which financial statements are presented (IAS 7.1).

24.2.1 Definition of Cash and Cash Equivalents

A cash flow statement should be a precise statement of the flow of cash and cash equivalents, as IAS 7 defines cash flows to include the flow of cash equivalents.

Cash flows are inflows and outflows of cash and cash equivalents.

Cash comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value (IAS 7.6).

24.2.1.1 Cash Equivalents

Cash equivalents should be similar to cash and are held to meet short-term cash commitments. If an investment cannot be convertible to a known amount of cash and cannot be subject to an insignificant risk of changes in value, such an investment should not be considered a cash equivalent.

In consequence, from its maturity point, only an investment with a short maturity, for example, three months or less from the date of acquisition, can be regarded as a cash equivalent. Depending on its nature or type, an equity investment is normally excluded from cash equivalents.

Real-life Case 24.2

Royal Dutch Shell plc

Royal Dutch Shell plc, one of the largest oil companies, has adopted IFRSs since 2005. It explained its cash and cash equivalents in its 2006 annual report as follows:

- Cash and cash equivalents comprise cash at bank and in hand, and bank overdrafts where there is a right of offset, together with commercial paper notes that have a maturity of 3 months or less at the date of acquisition.

24.2.1.2 Bank Borrowings

Borrowings from banks, except for certain bank overdrafts, are usually classified as financing activities. Certain bank overdrafts, which are repayable on demand, can be regarded as an integral part of an entity's cash management. A characteristic of such bank overdrafts is that the balance often fluctuates from being positive to negative, i.e., overdrawn. Thus, those bank overdrafts may be included as a component of cash and cash equivalents.

Real-life

Case 24.3

BP plc

BP plc, one of the largest integrated oil companies in the world, has adopted IFRS since 2005. It explained its cash and cash equivalents in its 2006 annual report as follows:

- Cash and cash equivalents comprise cash in hand; current balances with banks and similar institutions; and short-term highly liquid investments that are readily convertible to known amounts of cash, are subject to insignificant risk of changes in value and have a maturity of 3 months or less from the date of acquisition.
- For the purposes of the group cash flow statement, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

24.2.1.3 Cash Flows

Movements between items that constitute cash or cash equivalents are not regarded as cash flows in IAS 7. This is because these items and movements represent part of an entity's cash management, for example, the transfer from cash on hand to demand deposits may represent the investment of excess cash in cash equivalents to earn interest. Such items and movements are not part of an entity's operating, investing and financing activities.

24.3 Presentation of a Cash Flow Statement

With the definition of cash flows, an entity is required to report its cash flows during a period with the following classification:

1. Operating activities;
2. Investing activities; and
3. Financing activities (IAS 7.10).

Real-life
Case 24.4 **Esprit Holdings Limited**

Esprit Holdings Limited, an international youth lifestyle brand listed in Hong Kong and London, presented its cash flow statement (extract only) in 2006 in the following manner:

	2006	2005
	HK\$'000	HK\$'000
<i>Cash flows from operating activities:</i>		
Cash generated from operations.....	4,651,959	4,068,571
Interest paid.....	(1,425)	(1,901)
Interest element of finance lease payments.....	–	(27)
Hong Kong profits tax paid.....	(4,940)	(5,039)
Overseas tax paid.....	(1,225,915)	(1,343,653)
Overseas tax refund received.....	8,524	–
Net cash inflow from operating activities.....	<u>3,428,203</u>	<u>2,717,951</u>
<i>Cash flows from investing activities:</i>		
Purchase of property, plant and equipment.....	(837,505)	(1,064,689)
Proceeds from disposal of property, plant and equipment...	8,172	10,512
Prepaid lease payments.....	–	(171,657)
Dividend received from an associate.....	–	46,123
Interest received.....	37,544	21,576
Net cash used in investing activities.....	<u>(791,789)</u>	<u>(1,158,135)</u>
<i>Cash flows from financing activities:</i>		
Net proceeds on issue of shares for cash.....	484,061	108,175
Repayment of obligations under finance leases.....	–	(1,342)
Dividends paid.....	(2,421,161)	(1,712,641)
Net cash used in financing activities.....	<u>(1,937,100)</u>	<u>(1,605,808)</u>
Net increase/(decrease) in cash and cash equivalents.....	699,314	(45,992)
Cash and cash equivalents at beginning of year.....	1,728,651	1,757,708
Effect of change in exchange rates.....	40,629	16,935
Cash and cash equivalents at end of year.....	<u>2,468,594</u>	<u>1,728,651</u>

How an entity classifies its cash flows into operating, investing and financing activities depends on the type or nature of its business. Such information allows users to assess the impact of those activities on the financial position of the entity, the amount of its cash and cash equivalents, and the relationships among those activities. A single transaction may include cash flows that can be classified into different activities.

Example 24.1 A cash payment of \$220,000 on a finance lease includes the repayment to obligation of finance lease of \$200,000 and the element of finance charge on obligation of finance lease of \$20,000. The element of finance charge may represent an operating activity, while the repayment to obligation of finance lease is a cash flow of financing activities.

24.3.1 Operating Activities

Operating activities are defined as

- the principal revenue-producing activities of the entity; and
- other activities that are not investing or financing activities (IAS 7.6).

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the entity. Thus, such cash flows generally result from the transactions and other events that enter into the determination of net profit or loss.

Cash flows arising from operating activities should be a key indicator of the ability of an entity, without external financing sources, to maintain its operation or operating capability. The amount of historical operating cash flows, together with other information, provides information to help users forecast future operating cash flows.

Example 24.2 Cash flows arising from operating activities include the following:

1. Cash receipts from the sale of goods and the rendering of services;
2. Cash receipts from royalties, fees, commissions and other revenue;
3. Cash payments to suppliers for goods and services;
4. Cash payments to and on behalf of employees;
5. Cash receipts and cash payments of an insurance entity for premiums and claims, annuities and other policy benefits;
6. Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
7. Cash receipts and payments from contracts held for dealing or trading purposes.

Entities with different business practices or trading purposes may classify the same transactions differently. For example, loans obtained from the bank are normally classified as financing activities by an entity but may be classified as operating activities by a bank, since loans obtained and advanced should be the main revenue-producing activities of a bank.

Example 24.3 Both Melody Corporation and Tony Limited purchase securities. However, Melody holds the securities for dealing purposes, while Tony purchases them for longer-term investment.

In consequence, Melody's cash flows on the purchase and sale of its securities are classified as operating activities while Tony should classify the cash flows on the purchase and sale of its securities as investing activities.

24.3.2 Investing Activities

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents (IAS 7.6).

Cash flows from investing activities represent an entity's expenditure made to generate future income and cash flows. It provides information to the users to estimate, for example, the future operating capability and growth of an entity.

Example 24.4 Cash flows arising from investing activities include the following:

1. Cash payments to acquire property, plant and equipment, intangibles and other long-term assets. These payments include those relating to capitalised development costs and self-constructed property, plant and equipment;
2. Cash receipts from sales of property, plant and equipment, intangibles and other long-term assets;
3. Cash payments to acquire equity or debt instruments of other entities and interests in joint ventures (other than payments for those instruments considered to be cash equivalents or those held for dealing or trading purposes);
4. Cash receipts from sales of equity or debt instruments of other entities and interests in joint ventures (other than receipts for those instruments considered to be cash equivalents and those held for dealing or trading purposes);
5. Cash advances and loans made to other parties (other than advances and loans made by a financial institution);

6. Cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution);
7. Cash payments for futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the payments are classified as financing activities;
8. Cash receipts from futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.

24.3.3 Financing Activities

Financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity (IAS 7.6).

Historical cash flows arising from financing activities represent an entity's cash sourced from capital providers or lenders. They can help in predicting the claims on future cash flows by those providers and lenders and assessing the financial structure of an entity.

Example 24.5 Cash flows arising from financing activities include the following:

1. Cash proceeds from issuing shares or other equity instruments;
2. Cash payments to owners to acquire or redeem the entity's shares;
3. Cash proceeds from issuing debentures, loans, notes, bonds, mortgages and other short- or long-term borrowings;
4. Cash repayments of amounts borrowed;
5. Cash payments by a lessee for the reduction of the outstanding liability relating to a finance lease.

24.4 Reporting Cash Flows from Operating Activities

An entity is required to report cash flows from operating activities using either of the following methods:

1. The direct method, whereby major classes of gross cash receipts and gross cash payments are disclosed; or
2. The indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future

operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows (IAS 7.18).

IAS 7 allows entities to choose either of the above methods in reporting cash flows from operating activities, but it encourages entities to use the direct method.

24.4.1 Direct Method

The direct method of reporting cash flows from operating activities provides information on the gross cash receipts and gross cash payments of an entity, including cash receipts from customers and cash paid to suppliers and employees. These kinds of information are not available under the indirect method and may be useful in developing cash flow forecast and finance modelling.

An entity can adopt the following two approaches to obtain its major classes of gross cash receipts and gross cash payments for the direct method:

1. Direct extracting approach – to extract the cash flow information directly from accounting records; or
2. Adjusting approach – to derive the cash flow information by adjusting individual items in the income statement, including sales, cost of sales and other items, for
 - a. changes during the period in inventories and operating receivables and payables;
 - b. other non-cash items; and
 - c. other items for which the cash effects are investing or financing cash flows.

Example 24.6 The income statement and balance sheet of Bonnie Corporation for the years 2007 and 2006 are set out below:

Income statement

	2007	2006
	\$	\$
Revenue – sales of goods	1,610	1,450
Cost of sales	(870)	(694)
Other expenses	(329)	(312)
Foreign exchange loss	(21)	(14)
Depreciation	(200)	(150)
Profit before tax	190	280
Income tax – current tax expenses	(100)	(150)
Profit for the year	90	130

Balance sheet

	2007	2006
	\$	\$
Property, plant and equipment.....	1,000	840
Trade receivables.....	570	430
Savings deposits at bank.....	420	0
Cash on hand and at bank.....	210	350
Bank loans.....	(80)	0
Trade payables.....	(260)	(180)
Current tax payable.....	(180)	(150)
	<u>1,680</u>	<u>1,290</u>
Share capital.....	600	500
Retained earnings.....	880	790
Revaluation reserves.....	200	0
	<u>1,680</u>	<u>1,290</u>

The movements in property, plant and equipment represent the addition of property, depreciation and revaluation. No disposal was made during 2007.

Foreign exchange loss represented the effect on exchange rate changes on cash and cash equivalent held in foreign currency.

Prepare the cash flow information arising from operating activities of 2007 by using the adjusting approach of the direct method.

Answers

	\$
<i>Cash flows from operating activities:</i>	
Cash receipts from customers (Note 1).....	1,470
Cash paid to suppliers and employees (Note 2).....	(1,119)
Cash generated from operations.....	351
Income tax paid (Note 3).....	(70)
Net cash from operating activities.....	<u>281</u>

Notes

1. Cash receipts from customers:

	\$	\$
Revenue – sales of goods for 2007		1,610
Adjusting the changes in receivables:		
Trade receivables at beginning of 2007	430	
Trade receivables at end of 2007	<u>(570)</u>	
Increase in trade receivables during 2007		<u>(140)</u>
		<u><u>1,470</u></u>

2. Cash paid to suppliers and employees:

	\$	\$
Cost of sales		870
Other expenses		329
Adjusting the changes in payables:		
Trade payables at beginning of 2007	180	
Trade payables at end of 2007	<u>(260)</u>	
Increase in trade payables during 2007		<u>(80)</u>
		<u><u>1,119</u></u>

3. Income tax paid:

	\$	\$
Income tax – current tax expenses		100
Adjusting the changes in income tax payable:		
Current tax payable at beginning of 2007	150	
Current tax payable at end of 2007	<u>(180)</u>	
Increase in current tax payable during 2007		<u>(30)</u>
		<u><u>70</u></u>

24.4.2 Indirect Method

The indirect method derives the cash flow information for operating activities by using a similar approach to the adjusting approach under the direct method. However, the adjusting approach of the indirect method focuses on the bottom line, i.e., the profit or loss, of the income statement of an entity, rather than the individual items of its income statement.

The net cash flow from operating activities under the adjusting approach of the indirect method is determined by adjusting profit or loss for the effects of

1. changes during the period in inventories and operating receivables and payables;
2. non-cash items such as depreciation, provisions, deferred taxes, unrealised foreign currency gains and losses, undistributed profits of associates, and minority interests; and
3. all other items for which the cash effects are investing or financing cash flows.

Example 24.7 Based on Example 24.6, prepare the cash flow information arising from operating activities of 2007 for Bonnie Corporation by using the adjusting approach of the indirect method.

Answers

	\$
<i>Cash flows from operating activities:</i>	
Profit before tax	190
Adjustment for non-cash item:	
Depreciation	200
Foreign exchange loss	21
Profit before working capital changes	411
Increase in trade receivables	(140)
Increase in trade payables	80
Cash generated from operations	351
Income tax paid	(70)
Net cash from operating activities	281

Real-life

Case 24.5

MTR Corporation Limited

MTR Corporation Limited, a listed railway company in Hong Kong, presented its cash flow from operating activities in its cash flow statement of 2006 with the following details:

**Real-life
Case 24.5**
(cont'd)

	2006 HK\$ million	2005 HK\$ million
<i>Cash flows from operating activities:</i>		
Operating profit from railway and related businesses before depreciation	5,201	5,101
Adjustments for:		
Decrease in provision for obsolete stock	(2)	–
Loss on disposal of fixed assets	37	40
Deferred project study costs written off	26	–
Amortisation of deferred income from lease transaction	(6)	(6)
Amortisation of prepaid land lease payments	14	13
(Increase)/decrease in fair value of derivative instruments	(7)	9
Unrealised gain on revaluation of investment in securities	(2)	–
Employee share-based payment expenses	9	5
Exchange gain	(1)	(7)
Operating profit from railway and related businesses before working capital changes	5,269	5,155
Increase in debtors, deposits and payments in advance	(53)	(82)
Increase in stores and spares	(17)	–
Increase in creditors, accrued charges and provisions	204	118
Cash generated from operations	5,403	5,191
Overseas tax paid	(3)	(2)
Net cash generated from operating activities	<u>5,400</u>	<u>5,189</u>

In addition to the adjusting approach, IAS 7 allows an alternative approach under the indirect method in presenting the net cash flows from operating activities. The alternative approach shows

1. the revenues and expenses disclosed in the income statement; and
2. the changes during the period in inventories and operating receivables and payables.

Example 24.8 Based on Examples 24.6 and 24.7, prepare the cash flow information arising from operating activities of 2007 for Bonnie Corporation by using the alternative approach of the indirect method.

Answers

	\$
<i>Cash flows from operating activities:</i>	
Revenues excluding investment income	1,610
Operating expenses excluding depreciation	(1,199)
	<u>411</u>
Increase in trade receivables	(140)
Increase in trade payables	80
	<u>351</u>
Cash generated from operations	(70)
Income tax paid	<u>281</u>
Net cash from operating activities	<u><u>281</u></u>

24.5 Reporting Cash Flows from Investing and Financing Activities

An entity is required to report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities, except to the extent that cash flows allowed in IAS 7 are reported on a net basis (IAS 7.21).

Example 24.9 Based on Example 24.6, prepare the cash flow information arising from investing and financing activities of 2007 for Bonnie Corporation.

Answers

	\$
<i>Cash flows from investing activities:</i>	
Purchase of property, plant and equipment (Note 1)	(160)
Net cash used in investing activities	<u>(160)</u>
<i>Cash flows from financing activities:</i>	
New bank loans	80
Issue of shares (Note 2)	100
Net cash from financing activities	<u>180</u>

Notes

1. Purchase of property, plant and equipment:

	\$
Property, plant and equipment at beginning of 2007.....	840
Add: Revaluation gain recognised during 2007.....	200
Less: Depreciation.....	(200)
Property, plant and equipment at end of 2007.....	<u>(1,000)</u>
Purchase of property, plant and equipment.....	<u>(160)</u>

2. The movements in bank loans and share capital are assumed to be new bank loans obtained and new shares issued during the year.

Real-life
Case 24.6

China Unicom Limited

China Unicom Limited, one of the largest mobile telecommunications operators in Mainland China, presented its cash flow from investing and financing activities in its cash flow statement of 2006 with the following details:

	2006 RMB'000	2005 RMB'000
<i>Cash flows from investing activities:</i>		
Purchase of property, plant and equipment.....	(16,744,789)	(16,643,005)
Proceeds from sale of property, plant and equipment....	59,341	91,851
Decrease in short-term bank deposits.....	86,637	379,568
Purchase of other assets.....	(738,500)	(576,755)
Net cash used in investing activities.....	<u>(17,337,311)</u>	<u>(16,748,341)</u>
<i>Cash flows from financing activities:</i>		
Proceeds from exercise of share options.....	535,299	52,134
Proceeds from minority interest of a subsidiary in respect of share capital contribution.....	–	2,500
Proceeds from short-term bonds.....	6,949,700	9,690,800
Proceeds from short-term bank loans.....	2,143,000	12,532,071
Proceeds from long-term bank loans.....	1,345,050	5,798,657
Proceeds from issuance of convertible bonds.....	7,993,500	–
Repayment of short-term bonds.....	(9,731,800)	–
Repayment of short-term bank loans.....	(8,905,858)	(20,104,146)
Repayment of long-term bank loans.....	(10,348,059)	(19,928,416)
Dividends paid.....	(1,384,146)	(1,256,924)
Net cash used in financing activities.....	<u>(11,403,314)</u>	<u>(13,213,324)</u>

24.6 Reporting Cash Flows on a Net Basis

IAS 7 allows an entity to report the cash flows arising from the following operating, investing or financing activities on a net basis:

1. Cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the entity; and
2. Cash receipts and payments for items in which the turnover is quick, the amounts are large, and the maturities are short (IAS 7.22).

Example 24.10 Cash receipts and payments on behalf of customers reflecting the activities of the customer rather than those of the entity include the following:

1. The acceptance and repayment of demand deposits of a bank;
2. Funds held for customers by an investment entity; and
3. Rents collected on behalf of, and paid over to, the owners of properties.

Cash receipts and payments for items in which the turnover is quick, the amounts are large, and the maturities are short include the following:

1. Principal amounts relating to credit card customers;
2. The purchase and sale of investments; and
3. Other short-term borrowings, including those that have a maturity period of 3 months or less.

A financial institution is also allowed to report the cash flows arising from each of the following activities on a net basis:

1. Cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date;
2. The placement of deposits with and withdrawal of deposits from other financial institutions; and
3. Cash advances and loans made to customers and the repayment of those advances and loans (IAS 7.24).

24.7 Foreign Currency Cash Flows

In case of foreign currency transactions and foreign operations, an entity is required to determine its functional currency and translate the transactions and operations in foreign currency to its functional currency in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates* (see Chapter 23). Cash flows denominated in a foreign currency are reported in a manner consistent with IAS 21.

For cash flows arising from transactions in foreign currency, an entity is required to record them in its functional currency by applying to the foreign currency amount the exchange rate between the functional currency and the foreign currency

at the date of the cash flow (IAS 7.25). An entity is also required to translate the cash flows of a foreign subsidiary at the exchange rates between the functional currency and the foreign currency at the dates of the cash flows (IAS 7.26).

The use of an exchange rate that approximates the actual rate is permitted, for example, a weighted average exchange rate for a period may be used for recording foreign currency transactions or the translation of the cash flows of a foreign subsidiary. However, the use of an exchange rate at the balance sheet date is not permitted under IAS 21 when translating the cash flows of a foreign subsidiary.

**Real-life
Case 24.7**

Royal Dutch Shell plc

Royal Dutch Shell plc explained the translation of its cash flow statement in its 2006 annual report as follows:

- This (consolidated cash flow) statement reflects the cash flows arising from the activities of group companies as measured in their own currencies, translated to dollars at quarterly average rates of exchange.
- Accordingly, the cash flows recorded in the consolidated statement of cash flows exclude both the currency translation differences that arise as a result of translating the assets and liabilities of non-dollar group companies to dollars at year-end rates of exchange (except for those arising on cash and cash equivalents) and non-cash investing and financing activities.
- These currency translation differences and non-cash investing and financing activities must therefore be added to the cash flow movements at average rates in order to arrive at the movements derived from the consolidated balance sheet.

Like other unrealised gains and losses, unrealised gains and losses arising from changes in foreign currency exchange rates are not cash flows. In order to reconcile cash and cash equivalents at the beginning and end of the period, however, the effect of exchange rate changes on cash and cash equivalents in foreign currency is reported in the cash flow statement. This effect of exchange rate changes is presented separately from cash flows from operating, investing and financing activities.

Example 24.11 Based on Examples 24.6 to 24.9, prepare the cash flow statement of 2007 for Bonnie Corporation by using the direct method.

Answers

	\$	\$
<i>Cash flows from operating activities:</i>		
Cash receipts from customers	1,470	
Cash paid to suppliers and employees	(1,119)	
Cash generated from operations.....	351	
Income tax paid	(70)	
Net cash from operating activities		281
<i>Cash flows from investing activities:</i>		
Purchase of property, plant and equipment	(160)	
Net cash used in investing activities.....		(160)
<i>Cash flows from financing activities:</i>		
New bank loans	80	
Issue of shares	100	
Net cash from financing activities.....		180
Effect of exchange rate changes on cash and cash equivalents		(21)
Net increase in cash and cash equivalents.....		280
Cash and cash equivalents at beginning of 2007.....		350
Cash and cash equivalents at end of 2007.....		630

Real-life**Case 24.8****China Construction Bank Corporation**

China Construction Bank Corporation reports its effect of exchange rate changes on cash held (in millions of renminbi) in its cash flow statement of 2006 in the following manner:

	2006	2005
Net (decrease)/increase in cash and cash equivalents.....	(111,430)	62,558
Cash and cash equivalents as at 1 January.....	280,757	220,106
Effect of exchange rate changes on cash held.....	(1,838)	(1,907)
Cash and cash equivalents as at 31 December	167,489	280,757

24.8 Specific Items in Cash Flow Statements

IAS 7 requires an entity to specifically address or disclose certain cash flows and items in the cash flow statement.

24.8.1 Interest and Dividends

An entity is required to disclose separately cash flows from interest received, interest paid, dividends received and dividends paid and to classify them in a consistent manner from period to period as operating, investing or financing activities (IAS 7.31).

Even if the interest paid includes the interest capitalised in accordance with IAS 23 *Borrowing Costs*, the total amount of interest paid during a period is disclosed in the cash flow statement.

24.8.1.1 Interest Received, Interest Paid and Dividends Received

For a financial institution, interest received, interest paid and dividends received are usually classified as operating cash flows. However, for other entities, there is no consensus on the classification of these cash flows.

On one hand, interest received, interest paid and dividends received by other entities may be classified as operating cash flows because they enter into the determination of profit or loss. On the other hand, such cash flows of other entities may be classified as financing cash flows and investing cash flows respectively, because they are costs of obtaining financial resources or returns on investments.

Real-life Case 24.9

Esprit Holdings Limited and COSCO Pacific Limited

As set out in Real-life Case 24.4, Esprit Holdings Limited classified its interest paid in its cash flow statement of 2006 as operating cash flows but its interest received and dividend received as investing cash flows:

	2006 HK\$'000	2005 HK\$'000
<i>Cash flows from operating activities:</i>		
Cash generated from operations	4,651,959	4,068,571
Interest paid	(1,425)	(1,901)
Interest element of finance lease payments	–	(27)
Hong Kong profits tax paid	(4,940)	(5,039)
Overseas tax paid	(1,225,915)	(1,343,653)
Overseas tax refund received	8,524	–
Net cash inflow from operating activities	<u>3,428,203</u>	<u>2,717,951</u>
<i>Cash flows from investing activities:</i>		
Purchase of property, plant and equipment	(837,505)	(1,064,689)
Proceeds from disposal of property, plant and equipment . . .	8,172	10,512
Prepaid lease payments	–	(171,657)
Dividend received from an associate	–	46,123
Interest received	37,544	21,576
Net cash used in investing activities	<u>(791,789)</u>	<u>(1,158,135)</u>

Real-life

Case 24.9

Esprit Holdings Limited and COSCO Pacific Limited

(cont'd)

Instead of classifying interest paid as operating cash flows as Esprit, COSCO Pacific Limited, one of the world's leading container terminal operators and container leasing companies, classified its interest and other borrowing costs paid as financing cash flows in its cash flow statement of 2006:

	2006 HK\$'000	2005 HK\$'000
<i>Cash flows from financing activities:</i>		
Loans borrowed	517,103	321,119
Loans repaid	(889,986)	(128,385)
Issue of shares on exercise of share options	49,098	21,843
Share issue expenses	(13)	(20)
Dividends paid	(183,735)	(180,651)
Dividends paid to minority shareholders of subsidiaries	(2,774)	(2,212)
Interests paid	(36,095)	(36,238)
Other incidental borrowing costs paid	(783)	(2,273)
Net cash used in financing activities	<u>(547,185)</u>	<u>(6,817)</u>

24.8.1.2 Dividends Paid

Dividends paid may be classified as financing or operating cash flows. Dividends paid classified as financing cash flows represent that they are a cost of obtaining financial resources. In order to assist users to determine the ability of an entity to pay dividends out of operating cash flows, dividends paid may be classified as operating cash flows.

Real-life

Case 24.10

COSCO Pacific Limited and Esprit Holdings Limited

COSCO Pacific Limited, as set out in Real-life Case 24.9, and Esprit Holdings Limited, as set out in Real-life Case 24.4, classified their dividend paid in their cash flow statement of 2006 as financing cash flows. Esprit's presentation of cash flows from financing activities is extracted below:

	2006 HK\$'000	2005 HK\$'000
<i>Cash flows from financing activities:</i>		
Net proceeds on issue of shares for cash	484,061	108,175
Repayment of obligations under finance leases	–	(1,342)
Dividends paid	(2,421,161)	(1,712,641)
Net cash used in financing activities	<u>(1,937,100)</u>	<u>(1,605,808)</u>

24.8.2 Taxes on Income

Separate disclosure is required on cash flows arising from taxes on income in the cash flow statement. They are classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities (IAS 7.35).

In most cases, it is difficult to identify the related activities of tax expenses and the resulting tax cash flows. In consequence, taxes paid are usually classified as operating cash flows. However, when it is practicable to identify the tax cash flow with an individual transaction that gives rise to cash flows and the related individual transaction is classified as investing or financing activities, the tax cash flow is classified as an investing or financing activity as appropriate. When tax cash flows are allocated over more than one class of activity, the total amount of taxes paid is disclosed.

Real-life

Case 24.11

Esprit Holdings Limited

As set out in Real-life Cases 24.4 and 24.9, Esprit Holdings Limited classified its tax paid in its cash flow statement of 2006 as operating cash flows:

	2006 HK\$'000	2005 HK\$'000
<i>Cash flows from operating activities:</i>		
Cash generated from operations.....	4,651,959	4,068,571
Interest paid.....	(1,425)	(1,901)
Interest element of finance lease payments.....	–	(27)
Hong Kong profits tax paid.....	(4,940)	(5,039)
Overseas tax paid.....	(1,225,915)	(1,343,653)
Overseas tax refund received.....	8,524	–
Net cash inflow from operating activities.....	<u>3,428,203</u>	<u>2,717,951</u>

24.8.3 Investments in Subsidiaries and Associates

In accordance with IAS 27 *Consolidated and Separate Financial Statements* and IAS 28 *Investments in Associates*, an entity can choose to account for its investment in a subsidiary or an associate by use of the cost method in its separate financial statement. In accordance with IAS 28 *Investments in Associates*, an entity is even required to account for its investment in an associate by use of the equity method.

When an entity uses the cost method or equity method to account for an investment in a subsidiary or an associate, IAS 7 restricts the entity to report only the cash flows between itself and the subsidiary or associate, for example, dividends and advances, in the cash flow statement.

24.8.4 Investments in Jointly Controlled Entities

In accordance with IAS 31 *Interests in Joint Ventures*, an entity can choose to account for its interest in a jointly controlled entity by using the proportionate consolidation or equity method.

When an entity accounts for its interest in a jointly controlled entity by using proportionate consolidation, its cash flow statement reports its proportionate share of the jointly controlled entity's cash flows.

When an entity accounts for its interest in a jointly controlled entity by using the equity method, its cash flow statement reports the cash flows in respect of its investments in the jointly controlled entity, and distributions and other payments or receipts between it and the jointly controlled entity.

24.8.5 Acquisitions and Disposals of Subsidiaries and Other Business Units

The aggregate cash flows arising from acquisitions and from disposals of subsidiaries or other business units are presented separately and classified as investing activities in the cash flow statement (IAS 7.39). The aggregate amount of the cash paid or received as purchase or sale consideration is reported in the cash flow statement net of cash and cash equivalents acquired or disposed of. The cash flow effects of disposals are not deducted from those of acquisitions.

An entity is also required to disclose in aggregate, in respect of both acquisitions and disposals of subsidiaries or other business units during the period, each of the following:

1. The total purchase or disposal consideration;
2. The portion of the purchase or disposal consideration discharged by means of cash and cash equivalents;
3. The amount of cash and cash equivalents in the subsidiary or business unit acquired or disposed of; and
4. The amount of the assets and liabilities other than cash or cash equivalents in the subsidiary or business unit acquired or disposed of, summarised by each major category (IAS 7.40).

The above separate presentation of the acquisition and disposal cash flows, together with the separate disclosure of the above amounts, helps to distinguish those cash flows from the other cash flows.

24.8.6 Non-cash Transactions

A cash flow statement does not report the investing and financing transactions that do not require the use of cash or cash equivalents. These transactions are disclosed elsewhere in the financial statements in a way that provides all the relevant information about these investing and financing activities (IAS 7.43).

Example 24.12 Investing and financing transactions that do not require the use of cash or cash equivalents (non-cash transactions) include the following:

1. The acquisition of assets by assuming directly related liabilities;
2. The acquisition of assets by means of a finance lease;

3. The acquisition of an entity by means of an equity issue; and
4. The conversion of debt to equity.

Real-life**Case 24.12****Next Media Limited and China Construction Bank Corporation**

Next Media Limited reported its major non-cash transactions in its 2007 annual report as follows:

- During the year, a subsidiary of the group entered into a finance lease arrangement in respect of plant and equipment with a total capital value at the inception of the leases of HK\$2,091,000 (2006: nil).

China Construction Bank Corporation reported its significant non-cash transactions in its 2006 annual report as follows:

- As approved by the shareholders in the general meeting on 6 June 2005, the bank settled the government receivable of RMB 23,781 million by the bank's profit distribution during the 6 months ended 30 June 2005.

24.9 Components of Cash and Cash Equivalents

In addition to the cash flows from operating, investing and financing activities, an entity is required to

1. disclose the components of cash and cash equivalents; and
2. present a reconciliation of the amounts in its cash flow statement with the equivalent items reported in the balance sheet (IAS 7.45).

Example 24.13 Based on Example 24.6, prepare the disclosure for Bonnie Corporation's components of cash and cash equivalents.

Answers

Cash and cash equivalents consist of cash on hand, cash at bank and savings deposits at bank. Cash and cash equivalents included in the cash flow statement comprise the following balance sheet amounts:

	2007	2006
	\$	\$
Savings deposits at bank.....	420	0
Cash on hand and at bank.....	210	350
Cash and cash equivalents.....	<u>630</u>	<u>350</u>

An entity also discloses the policy that it adopts in determining the composition of cash and cash equivalents. The effect of any change in such policy is reported in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (see Chapter 20).

Real-life**Case 24.13 China Construction Bank Corporation**

China Construction Bank Corporation reports its components of cash and cash equivalents (in millions of renminbi) in its 2006 annual report as follows:

	2006	2005
Cash	30,191	28,413
Surplus deposit reserve	103,767	108,395
Amounts due from banks and non-bank financial institutions	82,185	190,108
Less:		
Amounts due over 3 months when acquired	(15,376)	(32,362)
Balances under resale agreements	(33,278)	(13,797)
	<u>33,531</u>	<u>143,949</u>
Total	<u>167,489</u>	<u>280,757</u>

24.10 Other Disclosures

An entity is required to disclose, together with a commentary by management, the amount of significant cash and cash equivalent balances held by the entity that are not available for use by the entity or the group (IAS 7.48). Examples of such restriction of cash usage may include cash and cash equivalent balances held by a subsidiary that operates in a country where exchange controls or other legal restrictions apply when the balances are not available for general use by the parent or other subsidiaries.

Real-life**Case 24.14 Royal Dutch Shell plc**

Royal Dutch Shell plc set out its cash and cash equivalents (in \$ million) and the related restriction in its 2006 annual report as follows:

	2006	2005
Cash at bank and on hand	2,052	1,594
Cash equivalents		
Listed	29	73
Unlisted	509	1,293
Carrying amount at 31 December	<u>2,590</u>	<u>2,960</u>

**Real-life
Case 24.14**

(cont'd)

- Cash equivalents are classified as available-for-sale financial assets and as such are recorded at fair value.
- Cash and cash equivalents at 31 December 2006 includes \$773 million which is restricted. This relates principally to amounts on deposit to cover trading positions on trading exchanges.

**Real-life
Case 24.15 COSCO Pacific Limited**

COSCO Pacific Limited explained its cash and cash equivalents thus in its 2006 annual report:

- As at 31 December 2006, cash and cash equivalents of US\$15,834,000 (2005: US\$82,745,000) were denominated in renminbi and US dollars, which are held by certain subsidiaries with bank accounts operating in the PRC where exchange controls apply.

The carrying amounts of time deposits, bank balances and cash are denominated in the following currencies:

	Group		Company	
	2006 US\$'000	2005 US\$'000	2006 US\$'000	2005 US\$'000
US dollar	163,929	145,711	96,053	68,169
Renminbi	15,378	17,944	–	–
Hong Kong dollar	31,630	11,733	27,270	9,113
Other currencies	13,731	3,927	3,420	–
	<u>224,668</u>	<u>179,315</u>	<u>126,743</u>	<u>77,282</u>

- As at 31 December 2005, restricted bank deposits mainly included deposits of US\$21,819,000, which were held as securities for repayment of bank loans and were restricted for the purpose of the related banking facilities.

IAS 7 also encourages an entity to disclose the following additional information that may be relevant to users in understanding the financial position and liquidity of the entity:

1. The amount of undrawn borrowing facilities that may be available for future operating activities and to settle capital commitments, indicating any restrictions on the use of these facilities;
2. The aggregate amounts of the cash flows from operating, investing and financing activities related to interests in joint ventures reported using proportionate consolidation;
3. The aggregate amount of cash flows that represent increases in operating capacity separately from those cash flows that are required to maintain operating capacity; and
4. The amount of cash flows arising from the operating, investing and financing activities of each reportable segment (see IFRS 8 *Operating Segments*).

IAS 7 also states that the following separate cash flow disclosures may help the users in different ways:

1. The separate disclosure of cash flows that represent increases in operating capacity and cash flows that are required to maintain operating capacity is useful in enabling the user to determine whether the entity is investing adequately in the maintenance of its operating capacity.
2. The disclosure of segmental cash flows enables users to obtain a better understanding of the relationship between the cash flows of the business as a whole and those of its component parts and the availability and variability of segmental cash flows.

24.11 Summary

Together with other financial statements, a cash flow statement can provide additional information to the users of financial statements to evaluate an entity's ability in generating cash flows and other aspects that accrual accounting may not be able to provide. IAS 7 specifically requires an entity to present a cash flow statement prepared in accordance with IAS 7 as an integral part of its financial statements.

A cash flow statement is a precise statement of the flow of cash and cash equivalents, which are defined to include not only cash, but also short-term, highly liquid investments that are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value. Bank borrowings, except for bank overdrafts, are usually classified as financing activities, not cash equivalents.

An entity is required to classify and report its cash flows into three kinds of activities – operating, investing and financing.

- Operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.
- Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
- Financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.

IAS 7 encourages an entity to report the cash flows from operating activities by using the direct method, while the indirect method is also allowed. The direct method reports the major classes of gross cash receipts and gross cash payments, and the indirect method adjusts the profit or loss for the effects of transactions of a non-cash nature to derive the operating cash flows.

Investing and financing cash flows are reported on a gross basis, except for cash receipts and payments made on behalf of customers and cash receipts and payments with a quick turnover.

Foreign currency cash flows should be translated into functional currency by using the exchange rate at the date of the cash flow. Interest received, interest paid and dividends received are usually classified as operating cash flows, but they can also be classified as investing and financing cash flows. Dividends paid are normally classified as financing cash flow, but they may also be classified as operating cash flow.

Components of cash and cash equivalents should be disclosed and reconciled to the equivalent items reported in the balance sheet. Other relevant disclosures are also encouraged.

Review Questions

1. List the benefits of having a cash flow statement for financial statement users.
2. What are cash equivalents?
3. What kinds of activities should be presented in the cash flow statement?
4. Define operating, investing and financing activities.
5. How does an entity report cash flows from operating activities?
6. What is the direct method in reporting cash flows from operating activities?
7. What are the benefits of using the direct method in reporting cash flows from operating activities?
8. What is the indirect method in reporting cash flows from operating activities?
9. How does an entity report the cash flows from investing and financing activities?
10. What kinds of activities can be reported on a net basis?
11. How does an entity translate the cash flows in foreign currency?
12. How does an entity classify interest and dividend paid and received?
13. What kinds of disclosures should be made on acquisition and disposal of other business units?
14. What kinds of disclosures should be made on non-cash transactions?
15. List the disclosures required on components of cash and cash equivalents.

Exercises

- Exercise 24.1** Dividends received by and paid to Bonnie Limited, a property holding and investment company, are quite significant. Explain the presentation of dividends received by and paid to Bonnie in a statement of cash flows.

- Exercise 24.2** If Bonnie Limited is also an investment holding company and considers the holding of equity instruments to be part of its business operation, how are the dividends received by Bonnie presented in a statement of cash flows.
- Exercise 24.3** Operating cash flows can be presented in the statement of cash flows by the direct method and indirect method. Discuss the pros and cons of using these two methods.

Problems

Problem 24.1 Aileen Tang is the managing director of Aileen Technology Limited, and her financial controller, Vincent Kung, presented her a statement of cash flows prepared in accordance with IAS 7 *Statement of Cash Flows*. Aileen is not sure why the statement of cash flows is required, because financial reporting is based on the accrual accounting assumption and she considers that it may conflict with the assumption. In addition, she also thinks that the balance sheet and income statement are sufficient in evaluating the financial position and financial performance of her company.

Required:

Advise Aileen on the usage of statement of cash flows and discuss whether there are any conflicts with the accrual accounting assumptions.

Problem 24.2 The cash and cash equivalents in the statement of cash flow prepared by Vincent Kung for Aileen Technology Limited comprise cash at bank of \$500,000 and a 2-month term deposit with the bank of \$2 million. The treasurer, Andrew Cheung, asks Vincent whether the deposit with the bank can be pledged for the company's property to be purchased soon. Vincent considers that the security given may not affect the liquidity of the company but may affect the presentation of the deposit in the statement of cash flows. Andrew wants to know more about that implication.

Required:

Explain to Andrew the implication of granting the 2-month term deposit as a security of the property to be purchased.

Problem 24.3 In recent years many analysts have commented on a growing disillusionment with the usefulness and reliability of the information contained in some companies' income statements.

Discuss the extent to which a company's cash flow statement may be more useful and reliable than its income statement.

(ACCA 2.5 June 2005, adapted)

Case Studies

Case Study 24.1 Minster is a publicly listed company. Details of its financial statements for the year ended 30 September 2006, together with a comparative balance sheet, are as follows:

Balance sheet as at 30 September 2005 and 30 September 2006

	30 September 2006		30 September 2005	
	\$'000	\$'000	\$'000	\$'000
Non-current assets (Note (i)):				
Property, plant and equipment.....		1,280		940
Software.....		135		Nil
Investments at fair value through profit and loss.....		150		125
		<u>1,565</u>		<u>1,065</u>
Current assets:				
Inventories.....	480		510	
Trade receivables.....	270		380	
Amounts due from construction contracts.....	80		55	
Bank.....	Nil	830	35	980
Total assets.....		<u>2,395</u>		<u>2,045</u>
Equity and liabilities:				
Equity shares of 25 cents each.....		500		300
Reserves:				
Share premium (Note (ii)).....	150		85	
Revaluation reserve.....	60		25	
Retained earnings.....	950	1,160	965	1,075
		<u>1,660</u>		<u>1,375</u>
Non-current liabilities:				
9% loan note.....	120		Nil	
Environmental provision.....	162		Nil	
Deferred tax.....	18	300	25	25
Current liabilities:				
Trade payables.....	350		555	
Bank overdraft.....	25		40	
Current tax payable.....	60	435	50	645
Total equity and liabilities.....		<u>2,395</u>		<u>2,045</u>

Income statement for the year ended 30 September 2006

	\$'000
Revenue	1,397
Cost of sales	(1,110)
Gross profit	287
Operating expenses	(125)
	162
Finance costs (Note (i))	(40)
Investment income and gain on investments	20
Profit before tax	142
Income tax expense	(57)
Profit for the year	85

Notes

- (i) Included in property, plant and equipment is a coal mine and related plant that Minster purchased on 1 October 2005. Legislation requires that in 10 years' time (the estimated life of the mine) Minster will have to landscape the area affected by the mining. The future cost of this has been estimated and discounted at a rate of 8% to a present value of \$150,000. This cost has been included in the carrying amount of the mine and, together with the unwinding of the discount, has also been treated as a provision. The unwinding of the discount is included within finance costs in the income statement.

Other land was revalued (upward) by \$35,000 during the year. Depreciation of property, plant and equipment for the year was \$255,000. There were no disposals of property, plant and equipment during the year. The software was purchased on 1 April 2006 for \$180,000. The market value of the investments had increased during the year by \$15,000. There were no sales of these investments during the year.

- (ii) On 1 April 2006 there was a bonus (scrip) issue of equity shares of one for every four held utilising the share premium reserve. A further cash share issue was made on 1 June 2006. No shares were redeemed during the year.

Additional information

A dividend of 5 cents per share was paid on 1 July 2006.

Required:

Prepare a statement of cash flows for Minster for the year to 30 September 2006 in accordance with IAS 7.

(ACCA 2.5 December 2006, adapted)

Case Study 24.2 Shown below are the summarised financial statements for Boston, a publicly listed company, for the years ended 31 March 2005 and 2006, together with some segment information analysed by class of business for the year ended 31 March 2006 only:

Income statements

	Carpeting \$ million	Hotels \$ million	House building \$ million	Total 31 March 2006 \$ million	Total 31 March 2005 \$ million
Revenue	90	130	280	500	450
Cost of sales					
(Note (i))	(30)	(95)	(168)	(293)	(260)
Gross profit	60	35	112	207	190
Operating expenses ..	(25)	(15)	(32)	(72)	(60)
Segment result	35	20	80	135	130
Unallocated corporate expenses				(60)	(50)
Profit from operations				75	80
Finance costs				(10)	(5)
Profit before tax				65	75
Income tax expense ..				(25)	(30)
Profit for the period ..				40	45

Balance sheets

	Carpeting \$ million	Hotels \$ million	House building \$ million	Total 31 March 2006 \$ million	Total 31 March 2005 \$ million
Tangible non-current assets	40	140	200	380	332
Current assets	40	40	75	155	130
Segment assets	80	180	275	535	462
Unallocated bank balance				15	Nil
Consolidated total assets				550	462
Ordinary share capital				100	80
Share premium				20	Nil
Retained earnings				232	192
				352	272
Segment current liabilities:					
Tax	4	9	12	25	30
Other	4	51	53	108	115
Unallocated loans				65	40
Unallocated bank overdraft				Nil	5
Consolidated equity and total liabilities ..				550	462

The following notes are relevant:

- (i) Depreciation for the year to 31 March 2006 was \$35 million. During the year, a hotel with a carrying amount of \$40 million was sold at a loss of \$12 million. Depreciation and the loss on the sale of non-current assets are charged to cost of sales. There were no other non-current asset disposals. As part of the company's overall acquisition of new non-current assets, the hotel segment acquired \$104 million of new hotels during the year.
- (ii) The above figures are based on historical cost values. The fair values of the segment net assets are as shown below:

	Carpeting \$ million	Hotels \$ million	House building \$ million
At 31 March 2005	80	150	250
At 31 March 2006	97	240	265

Required:

Prepare a statement of cash flows for Boston for the year ended 31 March 2006.

(ACCA 2.5 June 2006, adapted)

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