

Cases in Financial Management

Cases in Financial Management

Third Edition

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RACCRRXHRYALZ

To

Our parents

*Shri G P Pandey and Smt. Premvati Pandey
and*

Shri Dwarika Nath Bhat and Smt. Jayshree Bhat

PREFACE TO THE THIRD EDITION

The subject of financial management is undergoing rapid changes. With the shift in emphasis from raising of funds to utilisation of funds, financial management has attained greater importance in corporate decision-making. Today, the financial managers are not in a passive role of just a scorekeeper of the accounting information and funds arranger; rather, they occupy a key position in top management and play a dynamic role in dealing with complex management problems. The growing emphasis on raising funds economically and utilising them effectively and efficiently has increased the responsibilities of a corporate financial manager. Finance professionals are now involved in shaping the fortunes of an enterprise through their active participation in the most vital decision, viz., allocation of capital. Because of the change in emphasis, the descriptive treatment of the subject of financial management is being replaced by growing analytical content and sound theoretical underpinnings. The use of cases in teaching financial management course, as experienced by the authors, provides an excellent mechanism, whereby students can experiment with the applications and gain a real-world understanding of the concepts, techniques, tools, and theory of financial management. *Cases in Financial Management* contains an organized group of cases depicting diverge real-life financial situations faced by the managers.

This edition of the book includes 62 cases, covering a wide spectrum of topics. The first part introduces the reader to the concepts in balance sheet and profit and loss statement, and financial and cost analysis. After this foundation, the reader is exposed to financial decision-making in the areas of working capital management, financing, leasing, dividend policy decisions, mergers and acquisition, private equity finance and international finance. Five comprehensive cases towards the end would help the readers to integrate a large number of concepts in financial management.

The book has been divided into five parts.

Part I: Financial and Cost Analysis This part includes cases on financial and cost analysis. It contains three sections on preparation and understanding of financial statements, funds flow and cash flow analysis, and ratio analysis and cost analysis of decision-making.

Part II: Working Capital Management and Finance Part II covers working capital management and finance and includes cases on financial forecasting, working capital and bank finance, and management of current assets, such as cash, inventories, and debtors.

Part III: Capital Budgeting Decisions and Cost of Capital This part deals with capital budgeting decisions and includes cases on cash flow determination, investment criteria, and investment decision under inflation, capital rationing and risk, cost of capital and capital budgeting systems.

Part IV: Financing Decision, Dividend Policy and Leasing Part IV on financing and dividend decisions contains cases on financial leverage, debt policy, dividend policy, bonus issues and leasing.

Part V: Mergers, Acquisitions, Valuation, and International Finance It contains cases on mergers, acquisitions, valuation, and international finance.

Part VI: Comprehensive Cases This part contains five comprehensive cases.

The cases represent various industries and belong to different size-group—both small and large companies. The purpose is to provide a wide coverage of different situations and problems faced by financial executives. The coverage and content would help the students acquire factual material and procedural skills and also in developing an ability to handle different types of financial problems analytically. Each case generally emphasises one key issue for discussion in the class and these issues are provided in case grid section of the book.

New Cases

In this edition, we have updated many cases, dropped some and added many new cases. The following new cases have been added:

- Case 5: Hindustan Petroleum Corporation Limited (HPCL)—Financial Evaluation of Existing Retail Outlet Shiva Filling Station (Financial Analysis)
- Case 26: Larsen and Toubro Hydraulic Works (Investment Analysis)
- Case 27: Healthy Drinks Company (Capital Budgeting and Cost of Capital)
- Case 31: Hind Petrochemicals Company (Cash Flow Estimation in Capital Budgeting)
- Case 35: Hindustan Petroleum Corporation Limited (HPCL) Pritamgaon Retail Outlet (Investment Analysis)
- Case 38: Richa Foods Company (Risk Analysis)
- Case 44: TechProcess Solutions Limited (Financing Decision and Private Equity)
- Case 48: HUL: Buyback of Shares (Shares Buyback)
- Case 52: RPG Cables (Financial Strategy)
- Case 61: Blackstone–Gokaldas Exports (Private Equity Finance)
- Case 62: Supalai Public Company Limited (Investment Process)

This book is intended for the students pursuing postgraduate studies in management, finance and control, commerce, and accountancy. It provides hands-on experience to the students pursuing courses in Chartered Accountancy, Cost Management Accountancy, Company Secretary, Financial Analysts, and courses offered by other professional bodies. The book has also been designed keeping in view the requirements of the financial executives, who wish to update their knowledge about recent thinking in financial management and to improve their ability of making right financial decisions.

I M PANDEY
RAMESH BHAT

PREFACE TO THE FIRST EDITION

The subject of financial management is undergoing rapid changes. With the shift in emphasis from raising of funds to utilization of funds, financial management has attained greater importance in corporate decision-making. Today, the financial manager is not in a passive role of just a scorekeeper of the accounting information and arranging funds; rather, he occupies a key position in top management and plays a dynamic role in the complex management problems. The growing emphasis on raising funds economically and utilizing them effectively and efficiently has increased the responsibilities of a corporate financial manager. He is now involved in shaping the fortunes of the enterprise through his active participation in the most vital decision of allocation of capital. Because of the change in emphasis, the descriptive treatment of the subject of financial management is replaced by growing analytical content and sound theoretical underpinnings. The use of cases in teaching financial management course, as experienced by the authors, provides an excellent mechanism whereby students can experiment with and gain a real-world understanding of the concepts, techniques, tools, and theory of financial management. The book *Cases in Financial Management* contains an organized group of cases depicting diverse real-life financial situations faced by the managers.

This book includes 41 cases, covering a wide spectrum of topics. The book first introduces the reader to the concepts in balance sheet and profit and loss statement and financial and cost analysis. After this foundation, the reader is exposed to financial decision-making in the area of working capital management, financing, leasing and dividend policy decision. Three comprehensive cases towards the end would help the readers to integrate a large number of concepts in financial management.

The book has been divided into five parts.

Part I includes cases on financial and cost analysis. This part contains three sections on preparation and understanding of financial statements, funds flow and cash flow analysis, and ratio analysis and cost analysis for decision-making.

Part II on Working Capital Management includes cases on financial forecasting, working capital and bank finance, and management of current assets, such as cash, inventories and debtors.

Part III deals with capital budgeting decisions and includes cases on cash flow determination, investment criteria, investment decisions under inflation, capital rationing and risk, cost of capital and capital budgeting systems.

Part IV on financing and dividend decisions contains cases on financial leverage, debt policy, dividend policy, bonus issue and leasing.

Part V contains three comprehensive cases.

The cases represent various industries and belong to different size-groups—both small and large companies. This is to provide a wide coverage of different situations and problems faced by financial executives. The coverage and the content would help the students acquire factual material and procedural skills and also in developing an ability to handle different types of financial problems analytically.

Each case generally emphasizes one key issue (given as subtitles in Contents) for discussion in the class. The book accompanied by an Instructor's Manual provides a list of questions for discussion and suggests an approach to handle the cases. The Instructor's Manual would be available to those instructors who adopt the book.

This book is intended for the students pursuing postgraduate studies in management, finance and control, commerce and accountancy. It provides hands-on experience to the students pursuing courses of Chartered Accountancy, Cost and Management Accountancy, Financial Analysts and courses offered by other professional bodies. The book has also been designed keeping in view the requirements of the Financial Executives who wish to update their knowledge about recent thinking in financial management and to improve their ability of making the right financial decisions.

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PART
ONE

Financial and Cost Analysis

RAJPUR GARMENTS AND TEXTILES LIMITED

The management of Rajpur Garments and Textiles Limited, a closely-held company, was reviewing the first-ever unfavourable financial performance of the company.

In its recently concluded accounting year ending as on 31st March, 2011, the company has incurred a loss of Rs. 37.13 lakh and was thus forced to borrow Rs. 100 lakh from the banks, resulting in high interest cost. Exhibits I and II contain the current balance sheet and the profit and loss account of the company.

The management fears that if the same trend continues, then the future is going to be very difficult. During the review meeting, Mr. J C Chandok, the Chairman and Managing Director of the company, pointed out:

Since the company has always been profitable in the past, we have never prepared and discussed the operational and financial plan in advance. Now the time has changed; as the competition is intensifying, there is a need to develop a financial plan for the year 2011–2012. This will help to indicate whether we are going in the right direction or not. We can thus think about appropriate steps to remedy any adverse situation on the basis of anticipated performance.

He listed the following items of information that a systematic financial plan must generate:

- The company should get the detailed view of its operations and their levels, during the next year. This should include the expected level of sales, and of purchases and the other operating expenses. Examining the projected profitability, he suggested that the company may draw out an action plan for achieving the desired level of profitability.
- The company should find out the financial requirements on account of operations and the future expansion programmes. In the past the company has been borrowing from the banks and their allied concerns as and when required. It has resulted in an increase in interest cost, and has adversely affected the profitability of the company. Through the systematic financial plan, the company will be able to make better decisions about finances so as to minimize the interest costs.

Mr. Chandok asked Mr. M K Meghani, Manager Finance, to prepare the project financial statements for the next year. After consulting the Production and Marketing Managers, Mr. Meghani obtained the following information regarding the operations:

- Given the nature of the competition and company's sales efforts, the sales of the company are likely to go up by 12 per cent during the next accounting year. Out of the total sales, 90 per cent of the goods will be sold on credit to customers. The company also has a small source of income of Rs. 2.61 lakh as dividends from investment in securities.
- Raw material consumption during 2011–12 has been estimated at Rs. 789.71 lakh. The consumption of stores and supplies is estimated at Rs. 230 lakh. The closing balances of work-in-progress and finished goods are estimated to be Rs. 350 lakh and Rs. 361.64 lakh, respectively.

The following manufacturing, administrative, and selling and distribution expenses, are expected to be paid in cash, except depreciation:

	<i>(Rupees in lakh)</i>
Manufacturing Expenses	
Wages	414.60
Power and fuel	296.14
Depreciation	55.20
Insurance	9.60
Rates and taxes	12.80
Administrative Expenses	130.00
Selling and Distribution Expenses	56.00

- Wages are paid in cash at monthly intervals, while insurance is paid in advance for each quarter—in the months of March, June, September and December in equal amounts. All the other expenses, except depreciation, are paid when they are incurred.

The company is expecting to collect Rs. 1,750 lakh from its debtors. It has planned to purchase on credit raw material worth Rs. 840 lakh and store and supplies Rs. 250 lakh worth. During the year, it will pay about Rs. 980 lakh to its creditors. There is an income tax payment of Rs. 10 lakh at the end of September 2011. Debentures worth Rs. 50 lakh would be redeemed during the year. The company has also an obligation to repay Rs. 75 lakh of term-loan to the bank. Mr. Meghani expects that the company would collect loans and advances of Rs. 12 lakh and extend new loans and advances of Rs. 5 lakh to its employees during the year.

The company has planned capital expenditure of Rs. 200 lakh for expansion. It has already got the sanction and received Rs. 150 lakh as a term-loan from a financial institution for financing the expansion projects. The interest liability on the total borrowing is expected to be Rs. 82 lakh.

The shareholders of the company expect at least 10 per cent dividends. The company would like to maintain a minimum cash balance of Rs. 20 lakh; and, if there is any deficit, it shall be met by borrowing from the bank under the overdraft facility.

DISCUSSION QUESTIONS

1. Prepare pro-forma profit and loss account and balance sheet for the year 2011–12.
2. Discuss various adjustments that were required to arrive at pro-forma profit and loss account and balance sheet. Why were these adjustments necessary?
3. Determine the financial requirements for the year 2011–12 justifying your calculations.
4. Based on above statements what is your assessment of the financial strength of this company? Do you think bank will consider the request of the company to meet its financial requirements? Should the company review its requirements before approaching to the bank?

Exhibit I**RAJPUR GARMENTS AND TEXTILES LIMITED**
Balance Sheet as on March 31, 2011*(Rupees in lakh)*

	2010		2011	
ASSETS				
Cash		24.99		12.24
Debtors		264.87		212.58
Inventory:				
Raw material		48.53		84.35
Work-in-progress	259.57		323.64	
Finished goods	225.66		275.47	
Stores	69.38	603.14	75.72	759.18
Loans advances		42.59		45.44
Prepaid Insurance		1.56		1.90
<i>Total current assets</i>		<u>937.15</u>		<u>1,031.34</u>
Fixed assets	1,059.87		1,088.05	
Less:				
acc. depreciation	<u>386.26</u>	673.61	<u>431.97</u>	656.08
Investment		<u>13.58</u>		<u>18.58</u>
<i>Total assets</i>		<u>1,624.34</u>		<u>1,706.00</u>
LIABILITIES				
Creditors		404.99		434.67
Provision for tax		23.00		18.80
Wages payable		27.58		31.94
Loans:				
Debentures		100.00		100.00
Bank borrowing		121.38		217.33
Paid up capital		350.00		350.00
Reserves and surplus		<u>597.39</u>		<u>553.26</u>
<i>Total liabilities</i>		<u>1,624.34</u>		<u>1,706.00</u>

Exhibit II

RAJPUR GARMENTS AND TEXTILES LIMITED
Profit and Loss Account
for the Year ending March 31, 2011

(Rupees in lakh)

<hr/>		1,762.74
Sales		1,762.74
Other Income		2.61
<i>Less: Cost of goods sold</i>		
Raw material consumption	718.79	
Wages	383.44	
Power and fuel	289.51	
Stores and supplies	210.68	
Repairs	34.14	
Depreciation	45.71	
Insurance	7.61	
Rates and taxes	9.21	
	<hr/>	
	1,699.09	
<i>Less:</i>		
Increase in WIP and FG	113.88	1,585.21
Gross Profit		<hr/>
		180.14
<i>Less: Expenses</i>		
Administrative	117.07	
Selling and distribution	44.14	161.21
Profit before Interest and tax		18.93
Interest		56.06
Profit before tax		-37.13
Provision for tax		0.00
Profit after tax		<hr/>
		-37.13

KHAN AND SONS

Mr. Javed Khan, the sole proprietor of Khan and Sons, has been in the business of manufacturing and supplying of cow chain, goat chain, sheep chain, long chain, well chain and allied products for the last 20 years. The works office is located at Hauz Khas, Delhi, where Mr. Khan runs the business himself, with the help of eight permanent employees. As and when the demand for the products go up, he employs additional persons on daily-wage basis to meet the production requirements. As a result of this, his overheads are not large.

The business has been profitable and the company did not ever face any financial problems in the past. Whenever Mr. Khan required funds, he borrowed them from one of his close friends, who is an important cloth merchant in the city. As and when he borrowed the funds, the financial requirements were not very significant. Most of the time the borrowing has been for a short period of time. He has been keeping a trading margin of around 15 to 20 per cent consistently and that made him profitable.

During the year 2010, Khan and Sons achieved an annual sales volume of Rs. 26 lakh and a net profit of about Rs. 3 lakh. Despite such a profitable operation, Mr. Khan had to contribute Rs. 3 lakh of his own money but was still short of funds. He was obliged, therefore, to borrow Rs. 2 lakh from his friend to meet the business need.

Mr. Khan is at a loss, as to where his money has gone. He has asked his accountant to provide him with an analysis of this position.

The accountant collected the following information from the books of accounts:

1. Balance Sheet of M/s Khan and Sons as on December 31, 2009 (*see Exhibit I*).
2. Summary of transactions recorded in the books during the year 1st January 2010 to 31st December 2010 (*see Exhibit II*).

DISCUSSION QUESTIONS

1. Indicate the impact of each of the transactions given in Exhibit II on current assets (CA), non-current assets (NCA), current liabilities (CL), non-current liabilities (NCL), cash (CASH), working capital (WC) and capital (CAPITAL). You may use the format

given on the enclosed *transaction analysis sheet* indicating increases by “+”, decreases by “-” followed by the amounts, and 0 for no change.

2. After completing the transaction analysis sheet prepare the following statements:
 - a. Profit and Loss Account
 - b. Balance Sheet
 - c. Cash Flow Statement
3. What are key differences between profit and loss statement and cash flow statement? If you need to compare the net profit with component of cash flow statement, which component will you compare? What are sources of cash and how the cash has been used in the business? What are its implications for the future?

DISCUSSION QUESTIONS

1. Indicate the impact of each of the transactions given in Exhibit II on current assets (CA), non-current assets (NCA), current liabilities (CL), non-current liabilities (NCL), cash (CASH), working capital (WC) and capital (CAPITAL). You may use the format given on the *transaction analysis sheet* indicating increases by “+”, decreases by “-” followed by the amounts, and 0 for no change.
2. After completing the transaction analysis sheet, prepare the following statement:
 - a. Profit and Loss Account
 - b. Balance Sheet
 - c. Funds Flow Statement by using the following definitions:
 - (i) Working capital; and
 - (ii) Cash

Exhibit I**KHAN AND SONS**
Balance Sheet as on December 31, 2009*(Rupees in thousand)***ASSETS**

Current Assets

Cash 85

Sundry debtors 115

Inventory 150

Total current assets 350

Fixed Assets

Equipment gross value 835

Less: Accumulated depreciation 165 670*Total assets* 1,020**LIABILITIES**

Sundry creditors 150

Long-term borrowing 200

Capital 500

Reserves and surplus 170

Total liabilities 1,020

Exhibit II

List of Transactions

The following transactions were recorded in the books during the year 2010 (all items are in thousands of rupees):

1. Purchased inventory for Rs. 2,200 on credit.
2. Sold goods on account for Rs. 2,000; cost of goods sold was Rs. 1,500.
3. Sold chains of cash Rs. 600; cost of goods sold was Rs. 450.
4. Bought new equipment for Rs. 600. Cash paid Rs. 150 and the balance is to be paid after 2 years.
5. Collected Rs. 1,700 of the amount owed by customers.
6. Paid accounts payable Rs. 2,100.
7. Borrowed short-term loan of Rs. 200 from his friend.
8. Contributed additional capital worth Rs. 300.
9. Sold on equipment for Rs. 200. Its original cost was Rs. 180 and so far Rs. 45 has been provided as depreciation on this equipment.
10. Paid interest Rs. 50.
11. Paid *Paghri* (goodwill) Rs. 300 for the use of new works office, out of which Rs. 60 had been written off during the year.
12. Interest accrued but not paid on loans was Rs. 30.
13. Salaries and other administrative expenses during the year were Rs. 260.
14. Depreciation provided on equipment was Rs. 120.
15. Withdrawals by Mr Khan were Rs. 55.

TRANSACTION ANALYSIS SHEET

TR No.	EFFECT ON						
	CA	NCA	CL	NCL	CAPITAL	CASH	WC
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
Total							

Case 3

BHARAT CHEMICALS LIMITED

The Chief Manager of Bharat Chemicals Ltd. is surprised to find that though his company has incurred a loss during the year ended March 31, 2011, the cash has increased during the period. He was puzzled further, by finding that there was an increase in the stock, and the collections from the customers were slow.

The financial statements for the company are given below:

Profit and Loss Account for the year ended March 31, 2011

	<i>Rs.</i>	<i>Rs.</i>
Sales		5,60,000
Cost of goods sold (including depreciation on equipment, Rs. 60,000)		3,85,000
<i>Gross profit</i>		1,75,000
Operating expenses		
Office and administrative	1,70,000	
Selling and distribution	55,000	
Amortisation of goodwill	25,000	2,50,000
<i>Net loss</i>		75,000

**Comparative Balance Sheet as on
March 31, 2010 and March 31, 2011**

	<i>2011</i>	<i>2010</i>
ASSETS	<i>Rs.</i>	<i>Rs.</i>
Cash	1,40,000	95,000
Debtors	80,000	55,000
Stock	1,00,000	80,000
Prepaid rent	10,000	12,000
Land	1,50,000	1,50,000
Equipment, net of depreciation	4,40,000	6,00,000
Goodwill	75,000	1,00,000
<i>Total assets</i>	<u>9,95,000</u>	<u>10,92,000</u>
CAPITAL AND LIABILITIES		
Creditors	60,000	90,000
Bills payable	10,000	5,000
Interest payable	10,000	9,000
Accrued wages	20,000	18,000
Long-term loans	2,45,000	2,45,000
Share capital	6,00,000	6,00,000
Reserve and surplus	50,000	1,25,000
<i>Total liabilities</i>	<u>9,95,000</u>	<u>10,92,000</u>

DISCUSSION QUESTIONS

1. Prepare Cash Flow statements for the year 2010–11.
2. What is the percentage increase in stock and accounts receivables?
3. Do you think the collections have slowed down during the year 2010–11?
4. Why has the cash balance increased during the year despite the company incurring a loss?

Case 4

CONTINENTAL EQUIPMENT COMPANY

The Managing Director of Continental Equipment Company was surprised to find decrease in working capital for 2011, when he reviewed the financial statements for the year. He had planned to acquire a new machine by issuing shares and by utilizing the profit of the year. He had expected working capital to remain at the level of the year 2010.

The financial statements for the company are given below:

Profit and Loss Account for the Year March 31, 2011

	Rs.
Sales	34,00,000
Cost of goods sold	19,20,000
(including depreciation on machinery Rs. 1,40,000)	
<i>Gross profit</i>	<u>14,80,000</u>
Operating expenses	<u>7,80,000</u>
Operating profit	7,00,000
Profit on sale of asset*	<u>3,000</u>
Profit before interest and tax	7,03,000
Interest	<u>60,000</u>
Profit before tax	6,43,000
Provision for tax	<u>2,96,000</u>
<i>Net profit</i>	<u>3,47,000</u>

* The book value of the equipment as on 31st March 2010 was Rs. 4,000 and it was bought for Rs. 10,000 six years ago. The equipment was sold in the beginning of April 2010.

Balance Sheet as on March 31, 2011

	2011	2010
	Rs.	Rs.
ASSETS		
Current assets:		
Cash	5,25,000	7,50,000
Debtors	3,10,000	3,75,000
Stock	7,85,000	6,92,000
Prepaid expenses	15,000	18,000
<i>Total current assets</i>	16,35,000	18,35,000
Investments	4,00,000	2,80,000
Plant and machinery, net of depreciation	18,00,000	8,00,000
<i>Total assets</i>	38,35,000	29,15,000
LIABILITIES		
Current liabilities:		
Creditors	2,10,000	2,29,000
Bank loans	1,20,000	1,12,000
Accrued expenses	50,000	36,000
Income-tax payable	3,00,000	1,80,000
<i>Total current liabilities</i>	6,80,000	5,57,000
	2011	2010
	Rs.	Rs.
Debentures	7,50,000	9,00,000
Shareholders' equity:		
Share capital, Rs. 10 par value	10,00,000	4,20,000
Share premium	4,00,000	2,80,000
Reserves and surplus	10,05,000	7,58,000
<i>Total liabilities</i>	38,35,000	29,15,000

DISCUSSION QUESTIONS

1. Prepare Cash Flow Statement for CEC for the year 2010–11. How has the company financed its working capital requirements?
2. Which component significantly contributed to the increase in working capital requirements? What are its implications?

HINDUSTAN PETROLEUM CORPORATION LIMITED (HPCL)—FINANCIAL EVALUATION OF EXISTING RETAIL OUTLET SHIVA FILLING STATION

BACKGROUND OF THE COMPANY

Shiva Filling Station was established in 1986 and has been in the business of trading of petrol, diesel and engine oil. The business was set up as sole proprietorship by Shiva Lal. Initially, this retail outlet of HPCL faced number of problems. The sale remained stagnant at low levels for quite sometime. However, the business continued its operations as its sales were expected to grow. This was because the filling station was going to be part of a newly created ring road. This expectation helped Shiva Filling Station to stay on as well as HPCL providing support to this outlet.

With the construction of ring road in 1994 and development of residential housing blocks in and around the area subsequently, the location of Shiva Filling Station proved to be a prime one. The sales started increasing and finally operations turned to be profitable. The performance of outlet showed considerable improvement and it started reporting positive profits after 1996. The annual turnover of petrol and diesel was then in the range of 900 kls and 600 kls per annum, respectively. The sales of lubes were still on the lower side but were expected to grow in future.

NATURE OF THE BUSINESS

Over the years, the demand from consumers increased at a significant rate. Further, many new housing blocks were developed and the region experienced a significant growth of townships in and around Shiva's location. In order to meet this growing demand, a number of other filling stations came up in the vicinity of Shiva Filling Station. This in some way started affecting the sales of Shiva Filling Station. Shiva observed that with this growth of townships and growing competition, some of the customers who were loyal to his station started using other outlets occasionally. One of the things Shiva realized was that the expectations of the customers were changing. He had not responded to these changes in any significant manner and was doing the business as usual. For example, Shiva had not introduced any new services for quite some time. Somehow he felt it was not necessary. For example, neither did he focus on improving the look of

his outlet nor introduced any new initiative to attract the customers to meet their requirements. However, he soon realized this as one of factors that could have affected the loyalty of his customers.

HPCL has also over the years emphasized the customer vision and strengthening of retail outlets. For example, the vision of the retail SBU suggested the following:

- Ensure customer delight at the point of interface. Fulfil the stated and latent needs of customer through innovative products and services
- Competent, committed and empowered employees
- Conducting business in a fair, transparent and ethical manner
- Sense of pride and mutual trust and camaraderie
- To perform consistently better than competitors to sustain growth and profitability

Vikram Chadda, Sales Officer In-charge of the region, was concerned about the operations of this outlet. He was constantly monitoring its performance. Vikram was of the view that for the filling station to meet the expectations of consumers, Shiva needed to introduce a number of new initiatives. However, this required more funds as new initiative would need investments. From his interaction, he felt that Shiva was not sure about the economic and financial potential of these new initiatives. Shiva would be apprehensive about whether he would earn reasonable return on these investments.

As a starting point, Vikram thought of having a look at its existing operations and understand the financial position before he made any suggestions on future course of action. He also remembered that of late though the sales of the outlet had increased, Shiva was happy with his financial performance. This was quite visible as the competition was intensifying.

FINANCIAL PERFORMANCE OF SHIVA FILLING STATION

Shiva's financial performance revealed the following points:

The sales of Shiva Filling Station increased from Rs. 1.4 crore in 1996 to Rs. 4.34 crore in 2003. Profits have not risen at the same rate. Shiva's profits in 2003 had been about Rs. 1 lakh only. Vikram was interested in finding out how had this outlet performed on financial parameters and explored whether it had potential for future growth and profitability if new initiatives were developed and implemented. Vikram proposed that the following questions were needed to be answered to fully understand the performance of this outlet:

- How profitable were its current operations? How would new initiatives and growth affect the future profitability of the outlet?
- What factors had contributed to the operating performance of Shiva? What was the role of profitability margin and asset utilization in this?
- How had Shiva performed in terms of return on equity? What was the contribution of the way the business had been financed over the period?

- Could the outlet sustain growth and improve its profitability given the competitive and other environmental situations?
- Where were his resources invested in the business? How effectively had the firm utilized these assets in generating sales?
- How had Shiva financed its growth in the past? What was the contribution of internally generated funds?
- Given the outlet's operating circumstances, was its current financial structure appropriate?
- What kind of financial pressures might the outlet face in future? Would it be able to raise necessary funds at acceptable terms? How to assess the future initiatives from investment point of view?

Financial Statements

For this purpose, Vikram collected the previous year's financial statements of Shiva Filling Station. Exhibits 1–5 contain these statements. Vikram also scheduled a meeting with Shiva. The following is the summary of points based on the financial information Vikram collected and the discussion he had with Shiva Lal:

The outlet prepared its accounts based on accrual basis of accounting and never changed its accounting system. From the beginning, the outlet has been preparing its statements of accounts based on accrual system of accounting. Exhibits 1 and 2 provide the balance sheet and profit and loss account of the firm. The stocks were always valued at market price. The description of its assets is provided in Exhibit 3. The depreciation of fixed assets was provided as per the written down value method provided in Income Tax Act. All fixed assets were stated at the cost price.

During the last year of operations, Shiva had expanded its facilities by investing resources in various facilities. For example, Shiva had installed water cooler and aquaguard. Some funds were also invested in fire safety equipments. The irregular power supply had also forced Shiva to invest some resources in generator. The total amount of investments in expanding the facilities totalled about Rs. 7.31 lakh. These investments had put a lot of strain on finances of the outlet. They at times faced cash shortages. This also resulted in deferring a number of expenditures. For example, Shiva deferred lease rental payments and other expenses (see Exhibit 4 section C). The total payables worked out Rs. 0.76 lakh.

The development of these facilities certainly needed more funds. Shiva had brought in his own savings to finance these requirements. However, his contribution was not adequate to meet all the requirements. To meet the gap, he had to borrow a substantial amount from his friends and relatives. Therefore, the level of borrowings increased substantially in comparison to his funds contribution. Vikram anticipated that this would have significant impact on the ability of the outlet to raise funds in future. They needed funds to plan for better growth in future.

One of the factors that bothered Vikram was the level of stocks as shown in the Balance Sheet of the outlet. The outlet was having an inventory stock of Rs. 11 lakh. This represented about 10 days of stock. This was very unusual as Vikram observed that many outlets kept very low stocks and many times, the outlets went dry and lost a lot of sales. In contrast to that,

Shiva had locked substantial amount of funds in inventory. Vikram was wondering whether this was the stock the firm maintained throughout the year. He examined the month-end stock levels during the previous year and found on an average the firm was maintaining 7 days of stock. This required funds as 7 days of stock needed to be maintained.

To support the high levels of stocks, no formal channel of financing was available to outlets like Shiva. Having no credible standing in the market, banks were not interested in extending the cash credit to firms like Shiva. There were some filling stations that were able to raise money for working capital based on their standing and relationship with the bank.

HPCL had also initiated some steps to negotiate with banks to recommend to them to extend the credit to filling stations. However, the experience from this initiative had been mixed.

Shiva, in the past, had approached to his bank but was not extended the credit. Options to raise funds to finance the working capital requirements of the filling stations remained limited and in most cases filling station owners were required to mobilize resources from their own sources. Borrowings from friends and relatives were generally the main source of funds. This source of finance had many limitations. In a number of cases, the outlets borrowed money from informal sources sometimes paying very high cost on these funds. Given the low margins, the high interest cost, critically affected the profitability of operations.

Vikram also found that substantial funds were locked in accounts receivables. During the past few years, the accounts receivables of several outlets had gone up in pursuit to sell more. In the process, many outlets in region suffered because several of these accounts could not be recovered. However, in case of Shiva, Vikram found that almost all of these accounts were good and there was no risk of bad debt losses. The outlet had high cash balances with their bank. Vikram observed that this may be a typical situation as on year-end basis. However, this was not true. On an average, the firm had to buy Rs. 1.20 lakh worth of fuel every day and cash payments were needed for this purpose.

Shiva's sales though at levels of Rs. 4 crore were much better than the other similar filling stations in the region, it still faced high operating risk. Vikram was wondering that given the competition the levels of sales may dip in future if something significant was not done. In case necessary steps were not taken at this stage, Shiva might lose interest in business and HPCL might lose a potentially profitable partner in the process. The cost structure of the filling station was generally biased towards the variable cost for being the cost of fuel and supplies. Almost 95 – 97 per cent of costs were cost of fuels and supplies. The profits were, thus, dependent on sales volume performance. Vikram was wondering what was safety of margin of Shiva. That is, how far he could sustain the decline in sales assuming all other expenses were fixed in nature and the only variable cost was cost of fuel.

While examining expenses of Shiva, Vikram was bothered about two main items. One was interest cost and second was expenses towards lease rentals. Most of the borrowings were from friends and relatives. Vikram had apprehension that most of these funds belonged to Shiva himself. He was perhaps not interested in bringing all his money in the form of equity capital, but would prefer to lend the funds to the outlet. This ensured him certain cash flows in from interest payments and also helped him to plan his taxes better as interest is tax deductible expense. The

other expense was lease rentals. Vikram also found that the land that had been leased by Shiva belonged to his brother. Vikram was wondering whether these two items should qualify for the expenses in operating sense.

For quite some time, Shiva had been showing profits. One of the sources of funds to finance new requirements was internally generated funds. During the year, Shiva had withdrawn an amount of Rs. 42,000 for his personal expenses. Vikram was also interested in knowing the role of internally generated funds and whether Shiva had been ploughing back adequate resources to finance its growth.

DISCUSSION QUESTIONS

1. How has Shiva Filling Station performed? How would you use financial information provided in the case to evaluate performance of Shiva Filling Station?
2. How would you find whether Shiva is running profitable operations or not? What are drivers of its financial and operating performance?
3. What strategies you suggest to improve financial and operating performance of the company? What would you suggest to change and why?

Exhibit I

SHIVA FILLING STATION
Balance Sheet
 As on March 31, 2003

<i>Particulars</i>	<i>Amount Rs.</i>	<i>Amount Rs.</i>
Sources of Funds		
Capital Account (last year balance of capital was Rs. 205,000)	464,577	464,577
Loan Funds		
Secured Loan	0	0
Unsecured Loan	1,160,000	1,160,000
Total		1,624,577
Application of Funds		
Fixed Assets		
Gross Block	730,961	
Less: Depreciation	98,701	
Net Block		632,260
Current Assets, Loans and Advances		
Stock	1,115,928	
Accounts Receivables	97,408	
Cash and Bank	227,211	1,440,547
Less: Current Liabilities and Provisions		
Creditors	300,356	
Prepaid Amounts	72,000	
Unpaid Expenses	75,874	448,230
Net Current Assets		992,317
Total		1,624,577

Exhibit II

SHIVA FILLING STATION
Profit and Loss Account
for the year ended March 31, 2011

<i>Particulars</i>	<i>Amount Rs.</i>
INCOME	
Trading Income	43,420,896
Other Income	1,000
Total Income	43,421,896
EXPENDITURE	
Cost of Goods Sold	41,946,199
Operating Expenses	29,124
Administrative Expenses	1,246,296
Depreciation	98,701
Profit Carried Forward to Balance Sheet	101,576

Exhibit III**SHIVA FILLING STATION**

Schedule forming part of the Balance Sheet
Block of Fixed Assets

<i>Name of Assets</i>	<i>Opening Balance 04/01/02</i>	<i>Addition Before September</i>	<i>Addition After September</i>	<i>Deduction</i>	<i>Total</i>	<i>Depreciation</i>	<i>Balance As on 31/3/2011</i>
Aqua Guard	0	0	6,100	0	6100	763	5337
Air Compressor	0	52,200	0	0	52,200	13,050	39,150
Air Tower	0	0	43,500	0	43,500	5,438	38,062
Building	65,855	233,623	64,707	0	364,185	33,183	331,002
Electric Installation	0	66,495	2,667	0	69,162	10,174	58,988
Fire Safety Instrument	0	3,420	0	0	3420	855	2565
Furniture & Fixtures	0	79,280	9,213	0	88,493	12,583	75,910
Generator	0	72,500	0	0	72,500	18,125	54,375
Instrument	0	0	540	0	540	68	472
Refrigerator	0	0	6,025	0	6025	753	5272
Submersible Pump	0	4,836	0	0	4836	1,209	3627
Water Cooler	0	0	20,000	0	20,000	2,500	17,500
Total Amount Rs.	65,855	512,354	152,752	0	730,961	98,701	632,260

Exhibit IV**SHIVA FILLING STATION**
Schedule forming part of the Balance Sheet

	<i>Amount Rs.</i>
Current Liabilities & Provisions	
(A) Creditors	
Harsh Electronics	30,990
Heena Corporation	42,862
Hindustan Petroleum Corporation Ltd.	184,138
Nebulla Impression	13,540
Rathod Welding Works	4,000
Saraswati Machineries	10,000
Screen O Graphics	5,528
Yash Marketing	9,298
Total Amount	300,356
(B) Account Deposit from party	
AJ Enterprise	2,000
Asal Marketing Pvt. Ltd.	4,000
B & R Industrial Automation Pvt. Ltd.	10,000
I.C.E.C.D.	10,000
L.P.& Sons	5,000
Rakesh Gupta	4,000
S.P. Marketing	8,000
Shiv Ashish Hostel	25,000
Trivedi & Gupta Advocates	4,000
Total Amount	72,000
(C) Unpaid Expenses	
Audit Fees Payable	5,000
Lease Rent Payable	60,000
Security Charges Payable	2,500
Telephone Payable	5,374
Vakil Fees Payable	3,000
Total Amount	75,874

(Contd.)

SUMMARY

Creditors	300,356
Account Deposit from party	72,000
Unpaid Expenses	75,874
Total Amount	448,230

Exhibit V

SHIVA FILLING STATION
Schedules forming part of Accounts

<i>Particulars</i>	<i>Rs.</i>
Opening Stock	303,919
Add: Purchase	42,758,208
Total stock available	43,062,127
Less: Closing Stock	1,115,928
Cost of Goods Sold	41,946,199
Diesel Expenses	19,024
Pump Operating Expenses	10,100
Operating Expenses	29,124
Account Charges	21,000
Advertisement Expenses	5,096
Audit Fees	5,000
Bank Charges	1,763
Consulting Charges	15,000
Conveyance Expenses	19,753
Donation Expenses	3,251
Electric Expenses	43,373
Gardening Expenses	22,485
Gift Expenses	11,970
Insurance Expenses	15,711
Interest Expenses	78,000
Lease Rent Expenses	330,000
Measurement Expenses	14,985

(Contd.)

Membership Expenses	5,500
Miscellaneous Expenses	2,789
Office Expenses	30,324
Opening Ceremony Expenses	27,000
Postage & Courier Expenses	2,730
Repair & Maintenance Expenses	8,611
Salary Expenses	339,000
Sales Promotion Expenses	66,103
Security Charges	30,724
Stationery & Printing Expenses	55,162
Tea & Coffee Expenses	25,944
Telephone Expenses	24,075
Vakil Fees	5,500
Vehicle Expenses	18,672
Water Charges	16,775
Administrative Expenses	1,246,296

SUPREME ELECTRONICS LIMITED

Supreme Electronics Limited (SEL) is engaged in the assembly of LCD/LED TV, Plasma TV, Colour TV, Music Systems, DVD Players, Home Theatre Systems and Two-in-one/Car Stereos. Its factory is situated in a cosmopolitan city in Northern India. The company was incorporated initially as private limited in late sixties and was converted into a public limited company in the year 1976 in pursuance of Section 43 A of the Companies Act, 1956, with an authorised capital of Rs. 12.50 crore. In the year 1980, its authorised capital and its paid-up capital were Rs. 50 crore and Rs. 23.15 crore respectively, SEL is a closely-held company, and all the shares are held by the members of the same family.

SEL's sales have shown an increasing trend during the period 2007–10. However, the profitability of the company has been quite low. Accordingly, it has become necessary for the management to ascertain the reasons for the declining profitability of the company.

SALES AND PRODUCTION

Exhibit 1 contains the year-wise data on the volume of sales of different products. Besides sales of these products, a direct source of income is service charges. The income of the company from service contracts and other sources during 2007–10 is as follows:

<i>Year</i>	<i>Income from service contracts</i>	<i>Other income</i>	<i>Total</i>
2007	52.86	30.25	83.11
2008	68.09	33.15	101.24
2009	19.91	42.68	62.59
2010	133.20	23.00	156.20

The company has a formal arrangement for selling its sets to M/s Suman Electronics, an associate company, which in turn sells them to its branches in U.P., Panjab and Haryana. The branches record these transactions as purchases and sales.

A review of Exhibit I indicates that the company recorded the highest gross sales of Rs. 2,491.12 crore in the year 2010.

The marketing and sales department of the company is supervised by the managing director himself. Under him, sales are supervised by two managers—in charge of marketing and exports respectively. The marketing manager is being assisted by four regional managers and two assistant managers. The distribution channels are the branches, spread all over India, with distributors appointed at various cities, besides an overseas branch. The branches of the company have a network of dealers in most cities in the country. Suman Electronics, the associate company, also acts as an indenting agent for branches. As a result of the sustained publicity and promotional campaign, the company has been able to establish a distinct brand image. Another crucial factor contributing to the successful marketing efforts in this kind of industry is the ability to provide prompt and efficient after-sales service. SEL has stationed trained and experienced technicians at various branches meet after-sales service needs of their customers.

Sales to distributors are based on keeping a margin against each product. The margin varies for different products. No overriding commission is allowed to any distributors for sales in his territory. However, Suman electronics is paid a commission of one-fourth per cent on sales for acting as indenting agent for branches.

The company pays commission to dealers in addition to margin allowed to distributors. No uniform policy is followed in this regard. An account of the commission and margins allowed by the company is given below:

<i>Year</i>	<i>(Rupees in crore)</i>		
	<i>Commission</i>	<i>Distributors Margin</i>	<i>Total</i>
2007	15.29	36.63	51.92
2008	12.84	27.09	39.93
2009	5.81	18.49	24.30
2010	20.49	14.02	34.51

It is evident that the commission and margin allowed by the company have varied erratically.

Exhibit II gives the item-wise production trend in the value of production. From this exhibit, it can be seen production value touched the peak of Rs. 1,485.86 crore in the year 2007. However, in the following year, there was a drop in the production value. It increased again in the next year.

Television constituted the major production line of the company. The production of music systems showed an irregular pattern. The production of CD/DVD players had been showing a decline after the year 2008. On the contrary, the production of car stereos has been showing a steady increase from year to year. The company produced TV Games only in the years 2007 and 2009. The impact of change in product-mix could be examined from the standpoint of contribution. The company, however, does not keep necessary costing records by which contribution margin for each product could be ascertained.

FINANCIAL PERFORMANCE

Exhibit III gives the sales, contribution and profits of the company for the period 2007 to 2010. Expenses have been approximately divided into fixed and variable components. The variable costs have been increasing. In view of the steep competition, it was not possible for the company to transfer the entire increase in variable costs to the customers by adjusting the selling prices.

The balance sheets for the period 2007 to 2010, as derived from the published in the annual reports and accounts, are given in Exhibit IV. The company seems to have liquidity problem. It has heavily invested its funds in materials and finished goods.

It is also evident that a substantial amount of the company's funds is blocked in book debts. The position of outstanding debts for the period 2007 to 2010 is as follows:

	<i>(Rupees in crore)</i>			
	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Total book debts	58.80	88.22	109.22	211.23
Outstanding and doubtful debts				
for more than 6 months	4.61	10.99	25.32	24.80
Debts considered doubtful	0.59	0.61	0.68	2.34

The company's outstanding debts have been on a steep rise. Major portion of outstanding debts is blocked in the accounts of the companies/concerns in which the directors or their relatives are directly/indirectly interested.

SEL has also been spending large amounts on publicity and travelling which work out to be about 50 per cent of total selling, general and administrative expenses. The amount so spent during the period 2007 to 2010 is given below:

	<i>(Rupees in crore)</i>		
<i>Year</i>	<i>Conveyance and Travelling</i>	<i>Publicity</i>	<i>Total</i>
2007	9.81	102.76	112.57
2008	12.91	61.60	74.51
2009	14.18	39.36	53.54
2010	16.95	43.63	60.58

COMPETITION

The company has a number of competitors, both Indian and foreign, all over India. There are also other regional competitors who take a sizeable share in regional markets. The company contends that its share in the all-India market is about 13 to 15 per cent. SEL is doing fairly well in northern—particularly in Punjab and eastern parts to India. Sales in Western India have been slowly picking up, while in the South, the company has not been able to penetrate the market.

Prices of products, other than television, are primarily governed by the prices of similar products of competitors. Over the last five years, there has not been any appreciable change in the prices of these products. However, a number of changes in the selling prices of TV sets have taken place since the year 2008.

DISCUSSION QUESTIONS

1. Calculate liquidity, activity, and capital structure and profitability ratios for SEL. Also do a trend analysis for important financial analysis.
2. From your analysis of ratios indicate the areas which need further investigation and managerial interventions.

Exhibit I**SUPREME ELECTRONICS LIMITED**
Sales Volume**(Figures in crore)*

	2007	2008	2009	2010
LED/LCD	1,145.15	1,192.93	1,526.88	1,515.20
Music System	40.40	90.65	0175.20	118.14
Home Theatre System	43.78	52.80	88.52	34.35
Calculator	76.06	84.60	76.03	50.45
TV Games	10.46	0.53	1.70	
DVD/CD Player	143.36	110.98	13.44	14.66
Others	47.75	100.75	214.26	448.28
Sales in Foreign Branch	63.25	318.52	310.04	
<i>Total Sales</i>	1,506.96	1,696.49	2,414.55	2,491.12

Note: Sales volume are gross of excise duty.**Exhibit II****SUPREME ELECTRONICS LIMITED**
Production Trend*(Valued at average gross sale price)**(Figures in crore)*

	2007	2008	2009	2010
LED/LCD	1,152.96	981.83	989.03	958.09
Music System	43.01	88.04	50.86	125.56
Home Theatre System	52.51	45.69	12.51	40.59
Calculator	82.81	83.05	74.08	60.47
TV games	13.46	0.94		
DVD/CD Player	141.11	109.04	14.11	11.29
<i>Total</i>	1,485.86	1,307.65	1,141.53	1,196.00

Note:

The trend in production in Exhibit II does not represent total production as value details of items like video games, video cassette recorder, telephone diallers, etc. are not known.

Exhibit III**SUPREME ELECTRONICS LIMITED**
Contribution and Profit Statement*(Rupees in crore)*

	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Sales Value	1,430.50	1,667.86	2,343.29	2,491.12
<i>Less: excise duty</i>	143.12	132.71	151.33	185.40
Net sales value	1,287.38	1,535.15	2,191.96	2,305.72
<i>Variable Expenses</i>				
Raw materials	957.74	1,245.74	1,899.28	1,959.74
Others	142.38	96.65	48.40	51.89
<i>Total</i>	1,10.12	1,342.39	1,947.68	2,011.63
Contribution	187.26	192.76	244.28	294.09
<i>Fixed Expenses</i>				
Interest	18.58	33.46	59.47	70.50
Depreciation	5.45	6.38	6.31	7.20
Others	113.78	150.70	168.57	196.74
<i>Total</i>	137.81	190.54	234.35	274.44
Profit before tax	49.45	2.22	9.93	19.65
Provision for tax	30.38	0.26	0.48	8.56
Profit after tax	19.07	1.96	9.45	11.09

Note:

Sales value has been arrived at after adjusting the change in finished goods stock and includes other income net of expenses.

Ninety per cent of the firm's sales are on credit basis.

Exhibit IV**SUPREME ELECTRONICS LIMITED**
Balance Sheet as on December 31*(Rupees in crore)*

	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
LIABILITIES AND CAPITAL				
Net Worth				
Share Capital*	9.65	11.58	23.15	23.15
Reserves	34.89	34.92	32.80	43.89
<i>Total</i>	44.54	46.50	55.95	67.04
Long-term loans	5.00	8.27	6.79	7.83
	<u>49.54</u>	<u>54.77</u>	<u>62.74</u>	<u>74.87</u>
Current liabilities				
Bank borrowings	133.22	264.72	278.50	288.02
Creditors	111.44	195.51	158.02	276.35
Securities & advances	17.99	17.01	26.48	97.45
Other provisions	65.61	122.31	111.91	135.34
<i>Total</i>	328.26	599.55	574.91	797.16
<i>Total Funds</i>	<u>377.80</u>	<u>654.32</u>	<u>637.65</u>	<u>872.03</u>
ASSETS				
Fixed assets (net)	51.54	64.93	63.64	62.76
Current assets				
Raw material	160.05	219.08	223.69	250.11
Stock-in-process	52.15	16.50	10.35	
Finished goods	33.78	59.70	77.52	129.40
Debtors	58.80	88.29	109.22	211.23
Cash in bank	19.78	8.74	13.88	49.45
Loans & advances	53.85	161.43	133.20	158.73
<i>Total</i>	326.26	589.39	574.01	809.27
<i>Total Assets</i>	<u>377.80</u>	<u>654.32</u>	<u>637.65</u>	<u>872.03</u>

*Capitalized out of reserves Rs. 1.93 crore and Rs. 11.57 crore respectively in 2008 and 2009.

COST CLASSIFICATION EXERCISE

Attached is a list of cost items which do not necessarily relate to a single company. Classify each cost item as indicated below:

- A. On a functional basis, that is manufacturing (M), selling (S), and administration (A). Items not falling in any of these three categories should be classified as other (O). Specify your answer in column 2 by inserting the appropriate letter (M), (S), (A), or (O) against each item. If it is (O), specify what it is, to the extent you can.
- B. On a traceability basis, that is direct or indirect cost. The terms 'direct' and 'indirect' relate to the traceability of the cost item to the final product. Direct cost can be traced directly and easily to a particular job or product, while indirect cost may have to be allocated using some apparently rational basis to trace its effect on individual products. Indicate your answer in column 3 by inserting the letter (D) for direct cost, and (I) for indirect costs.

Note: This classification is required only for those items which you have classified as manufacturing costs in column 2. For this exercise, all non-manufacturing costs are deemed to be indirect costs, though not true in some situations.

- C. On a behavioural basis, that is, variable or fixed cost. The terms 'variable' and 'fixed' refer to the variability of the cost item in relation to the volume of activity. It is easier to identify a true variable cost which directly, proportionately and almost automatically varies with fluctuations in volume, whereas fixed costs remain the same irrespective of changes in the level of activity, within a relevant range. Specify your answer in column 4 by inserting the letter (V) for variable costs and (F) for fixed costs against each cost item.

This first eight items in Part I have already been classified; you should classify the remaining items and be prepared to explain and defend your logic for the chosen classification.

<i>Sl. No.</i>	<i>Example</i>	<i>Functional M/S/A/O</i>	<i>Traceability D/I</i>	<i>Behaviour V/F</i>
Part 1: Illustrative Answers				
1.	Wheat flour in bread	M	D	V
2.	Tailoring charges in garment making	M	D	V
3.	Factory rent	M	I	F
4.	General Manager's salary	A	-	F
5.	Salesmen's commission	S	-	V
6.	Interest paid on deposits (Finance charges)	O	-	F
7.	Loss due to theft		Loss, not a cost.	
8.	Cost of installing machinery		Capital (Asset); not a cost till it is depreciated.	

Part II: Home Work for Practice

9. Pulp in paper making
10. Daily wages paid for road construction
11. Salesmen's salary
12. Salesmen's samples
13. Depreciation of machinery (common for all products)
14. Monthly rental for leased computer
15. Fire loss
16. Commission paid to sales agency
17. Commission paid to raw material buying agency
18. Rent for head office building
19. Depreciation of delivery truck with a fixed schedule of trips every month

Contd . . .

<i>Sl. No.</i>	<i>Example</i>	<i>Functional M/S/A/O</i>	<i>Traceability D/I</i>	<i>Behaviour V/F</i>
20.	Auditors' fee			
21.	Batteries for a car manufacturer			
22.	Insurance premium on company car			
23.	Dividend paid to shareholders			

Part III: For Class Discussion

24. Cloth in garment making
25. Thread in garment making
26. Lubricating oil for the sewing machine
27. Depreciation of a chemical processing plant and machinery
28. Power to run the machinery
29. Electricity for lighting the shop floor
30. Freight-in
31. Customs duty on raw materials
32. Royalty to author in book publishing
33. Royalty (lumpsum payment) for using a foreign brand name
34. Helpers' wages in a furniture firm
35. Nails used in a furniture firm
36. Advertising expenses
37. Trade discount (margin to outlets)
38. Cash discount (for prompt payment)
39. Expense account for government liaison

Contd . . .

<i>Sl. No.</i>	<i>Example</i>	<i>Functional M/S/A/O</i>	<i>Traceability D/I</i>	<i>Behaviour V/F</i>
40.	Bribes paid			
41.	Donations			
42.	Overtime (factory workers)			
43.	Idle time (accounts clerks)			
44.	Waste of raw material in manufacturing			
45.	Bottled perfume: the perfume			
46.	Bottled perfume: the bottle			
47.	Bottled perfume: the fancy carton for each bottle			
48.	Cardboard boxes to pack and deliver large orders of perfumes and other toiletries to the retail shops			
49.	Civil Engineer's salary in a construction firm			
50.	Advanced basic research			

DISCUSSION QUESTIONS

1. On a functional basis, that is manufacturing (M), selling (S), and administration (A). Items not falling in any of these three categories should be classified as other (O). Specify your answer in column 2 by inserting the appropriate letter (M), (S), (A), or (O) against each item. If it is (O), specify what it is, to the extent you can.

STAR ENGINEERING COMPANY

Star Engineering Company (SEC) produces electrical accessories like meters, transformers, switchgears, and automobile accessories like taximeters and speedometers.

SEC buys the electrical components, but manufactures all mechanical parts within its factory which is divided into four production departments—Machining, Fabrication, Assembly, and Painting and three service departments—Stores, Maintenance, and Works Office.

Though the company prepared annual budgets and monthly financial statements, it had no formal cost accounting system. Prices were fixed on the basis of what the market can bear. Inventory of finished stocks was valued at 90 per cent of the market price assuming a profit margin of 10 per cent.

In March, the company received a trial order from a government department for a sample transformer on a cost-plus-fixed-fee basis. They took up the job (numbered by the company as Job No. 879) in early April and completed all manufacturing operations before the end of the month.

Since Job No. 879 was very different from the type of transformers they had manufactured in the past, the company did not have a comparable market price for the product. The purchasing officer of the government department asked SEC to submit a detailed cost sheet for the job giving as much details as possible regarding material, labour and overhead costs.

SEC, as part of its routine financial accounting system, had collected the actual expenses for the month of April, by 5th of May. Some of the relevant data are given in Exhibit I.

The company tried to assign directly, as many expenses as possible to the production departments. However, it was not possible in all cases. In many cases, an overhead cost, which was common to all departments had to be allocated to the various departments using some rational basis. Some of the possible bases were collected by SEC's accountant. These are presented in Exhibit II.

He also designed a format to allocate the overhead to all the production and service departments. It was realized that the expenses of the service departments on some rational basis. The accountant thought of distributing the service departments' costs on the following basis:

- a. Works office costs on the basis of direct labour hours.
- b. Maintenance costs on the basis of book value of plant and machinery.

- c. Stores department costs on the basis of direct and indirect materials used.

The accountant who had to visit the company's banker, passed on the papers to you for the required analysis and cost computations.

DISCUSSION QUESTIONS

1. Complete the attached "overhead cost distribution sheet" (Exhibit III). (Wherever possible, identify the overhead costs directly to the producing and service departments. If such direct identification is not possible, distribute the costs on some "rational" basis).
2. Calculate the overhead cost (per direct labour hour) for each of the four producing departments. This should include share of the service departments' costs.
3. Do you agree with: (a) The procedures adopted by the company for the distribution of overhead costs? (b) The choice of the base for overhead absorption, i.e. labour hour rate?
4. Job No 879 was expected to be cleared by the Inspection Department in the first week of May. The actual materials cost applicable to job No 879 was Rs 487.92. Labour time spent on the job was estimated to be 50 hours in Machining; 40 hours in Fabrication and 20 hours each in Assembly and Painting Departments, totaling Rs. 460.10. Calculate the total cost of this job including overhead costs.
5. If Job No 879 is a cost-plus-fixed fee (CPFF) contract with the Government, fixed fee being Rs 200, what would be the total charges recoverable from the client?
6. Evaluate the cost accounting system adopted by the accountant and suggest improvements.

Exhibit I

STAR ENGINEERING COMPANY Actual Expenses (Manufacturing Overheads) for April

	<i>Rs.</i>	<i>Rs.</i>
<i>Indirect Labour and Supervisions:</i>		
Machining	33,000	
Fabrication	22,000	
Assembly	11,000	
Painting	7,000	
Stores	44,000	
Maintenance	32,700	1,49,700
<i>Indirect Materials and Supplies:</i>		
Machining	2,200	
Fabrication	1,100	
Assembly	3,300	
Painting	3,400	
Maintenance	2,800	12,800
<i>Others</i>		
Factory Rent	1,68,000	
Depreciation of Plant and Machinery	44,000	
Building Rates and Taxes	2,400	
Welfare Expenses (At 2 per cent of direct labour wages and Indirect labour and supervision)	19,494	
<i>Power</i> (Maintenance—Rs. 366; Works Office Rs. 2,220, Balance to Producing Departments)	68,586	
Works Office Salaries and Expenses	1,30,260	
Miscellaneous Stores Department Expenses	1,190	4,33,930
<i>Total</i>		<u>5,96,430</u>

Exhibit II

STAR ENGINEERING COMPANY Projected Operation Data for the Year

Department	Area (sq. m)	Original Book value of Plant and Machinery Rs.	Direct		Horse Power Rating	Direct		Direct Labour Budget*
			Materials Budget*	Rs.		Labour Hours	Rs.	
Machining	13,000	26,40,000	62,40,000		20,000	14,40,000	52,80,000	
Fabrication	11,000	13,20,000	21,60,000		10,000	5,28,000	26,40,000	
Assembly	8,800	6,60,000			1,000	7,20,000	13,20,000	
Painting	6,400	2,64,000	10,80,000		2,000	3,30,000	6,60,000	
Stores	4,400	1,32,000						
Maintenance	2,200	1,98,000						
Works Office	2,200	66,000						
<i>Total</i>	48,000	52,80,000	94,80,000		33,000	30,18,000	99,00,000	

Note*:

The estimates given in this exhibit are for the budgeted year January to December whereas the actuals given in Exhibit I are for just one month—April of the budgeted year.

Exhibit III

STAR ENGINEERING COMPANY Actual Overhead Distribution Sheet for April

Departments Overhead Costs	Production Departments				Service Departments			Total Amount Actuals for April (Rs.)	Basis for Distribution
	Machining	Fabrication	Assembly	Painting	Stores	Maintenance	Works office		
A. Allocation of Overhead to all departments									
A.1 Indirect Labour and Supervision								1,49,700	
A.2 Indirect Materials and Supplies								12,800	
A.3 Factory Rent								1,68,000	
A.4 Depreciation of Plant and Machinery								44,000	
A.5 Building Rates and Taxes								2,400	
A.6 Welfare Expenses								19,494	
A.7 Power								68,586	
A.8 Works Office Salaries and Expenses								1,30,260	
A.9 Miscellaneous Stores Expenses								1,190	
A. Total (A.1 to A.9)								5,96,430	

Contd . . .

SULPHURIC ACID PLANT

General Chemical Works (GCW) produced several industrial chemicals out of which sulphuric acid was one. The Sulphuric Acid Plant (SAP) was a fairly independent unit with its own plant and related facilities. The Plant Manager of SAP was responsible for its output and costs. Sales were handled by the head office sales department which was responsible for selling all products of GCW.

SAP had an installed capacity of 15,000 tonnes of sulphuric acid per annum. However, due to perennial shortage of sulphur, SAP hardly produced to full capacity. Import of sulphur, the basic raw material for sulphuric acid, was controlled by the government. Its pricing and allocation to the various manufacturing units in the country was the responsibility of the State Trading Corporation (STC). The price of sulphuric acid was also controlled by the government and in the year 2010–11 it was Rs. 2000 per tonne.

Ever since he took over this plant, the Plant Manager of SAP was in a double mind, squeezed between the controlled supply of the basic input and the controlled price of the output. For the plant, the worst month turned out to be January 2011. For the first time, SAP incurred a loss. The cost of production of sulphuric acid in January 2011 was Rs. 2104.40 more than the controlled price by over ten rupees.

This shock triggered the Plant Manager to review his plans for, the year 2011. He collected the detailed cost data for three typical months (January 2010, July 2010, and January 2011) from the recent past. These are presented in Exhibit I. Based on these past actuals and expected changes in prices and rates, he re-worked the estimated cost of sulphuric acid for the year 2011.

The quota of sulphur for the year 2011 was already fixed by STC. Based on the standard consumption of sulphur per tonne of sulphuric acid, it was estimated that the allotted quota was just enough to produce 12,000 tonnes of sulphuric acid, including the output for January. Based on this volume of expected output, the cost for 2011 was estimated to be Rs. 1980 per tonne of sulphuric acid. The details of this estimated cost are shown.

Since the monthly supply of sulphur from the annual quota varied substantially, GCWs management wished to know in advance the expected profit from SAP under different rates of capacity utilization. In response the Plant Manager prepared the following profit schedule.

Profit under Varying Capacity Utilization

<i>Capacity Utilization (%)</i>	<i>Monthly Output (Tonnes)</i>	<i>Monthly Profit (Rs.)</i>
20	250	5,000
30	375	7,500
40	500	10,000
50	625	12,500
60	750	15,000
70	875	17,500
80	1,000	20,000
90	1,125	22,500
100	1,250	25,000

While submitting this schedule to the top management, the Plant Manager wrote:

I am glad that I will make 'some' profit every month, but it is too low even at hundred per cent capacity utilization. As per my calculations, I would make only Rs. 3,00,000 for the year even if I produce to full capacity. At 80 per cent utilization, which we are anticipating, we will make Rs. 2,40,000. Since I am told that your net investment in my plant is Rs. 93,00,000, even an annual profit of Rs. 3,00,000 would be just above 3 per cent return on investment (ROI) before taxes. Since our criteria for project approval is an ROI of 25 per cent before taxes, 3 per cent is a beggarly return. We should perhaps approach the Chemical Manufacturers' Association to move the government for a price increase. Since the last price increase was in 2009, I hope we have a fair chance of getting our request acceded to by the STC.

DISCUSSION QUESTIONS

1. What do you think of the Plant Manager's profit schedule?
2. Is there a percentage capacity utilization below which SAP will incur losses? If there is, what is that percentage at which the plant is likely to break even?
3. At the expected level of operations in the year 1967, what will be:
 - (a) SAP's ROI before taxes? and
 - (b) The company's margin of safety before it may run into losses?
4. If SAP is a typical plant in the industry and if the average capacity utilization in the industry for at least the next 3–4 years is going to be around 80 per cent, do you think the industry has the case for price increase? If, so what should be the new price, if government will consider a 20 per cent ROI before taxes as a permissible return for manufacturers of industrial chemicals?
5. If the government expects all units to produce to full capacity, does the company have a chance to push its case for a price increase?

Exhibit I

SULPHURIC ACID PLANT Cost Statement for Sulphuric Acid for three Typical Months

Sl. No.	Particulars Unit Production Tonnes	<i>Actuals for</i>		
		<i>January 2010</i> 1,000	<i>July 2010</i> 1,200	<i>January 2011</i> 800
<i>Costs</i>		<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
1.	Sulphur	11,71,000	14,23,560	9,32,800
2.	Electricity	34,900	46,680	31,700
3.	Canal Water	52,000	60,100	47,000
4.	Soft Water	13,200	14,300	9,500
5.	Salaries	2,64,000	2,64,000	2,70,000
6.	Wages	11,900	11,200	11,700
7.	Provident Fund, E.S.1	4,220	4,200	4,240
8.	Supplies	16,300	13,000	4,500
9.	Maintenance	10,060	11,800	12,020
10.	Repairs	8,060	7,480	5,090
11.	Depreciation	1,50,000	1,50,000	1,50,000
12.	Insurance	4,000	4,000	5,000
13.	Interest	40,000	40,000	50,000
14.	Allocated Co. Overhead	1,00,000	1,00,000	1,50,000
	<i>Total costs</i>	<u>18,79,640</u>	<u>21,50,320</u>	<u>16,83,550</u>
	Cost per tonne	1879.60	1791.90	2104.40
	Price per tonne	2,000.00	2,000.00	2,000.00
	Profit per tonne	120.40	208.10	(104.40)

Exhibit II

SULPHURIC ACID PLANT Cost Estimate for 2011

Estimated cost/tonne of Sulphuric Acid

<i>Sl. No.</i>	<i>Cost particulars</i>	<i>Cost/tonne</i>
		<i>Rs</i>
1.	Sulphur	1200.00
2.	Electricity	40.00
3.	Canal Water	53.00
4.	Soft Water	12.00
5.	Salaries	270.00
6.	Wages	12.00
7.	Provident Fund, Employees State Insurance	4.00
8.	Supplies	14.00
9.	Maintenance	12.00
10.	Repairs	8.00
11.	Depreciation	150.00
12.	Insurance	5.00
13.	Interest	50.00
14.	Allocated Company Overheads	150.00
	<i>Total cost</i>	<u>1980.00</u>

PART
TWO

*Working Capital Management
and Finance*

KHANNA MANUFACTURING COMPANY

Khanna Manufacturing Company Limited (KMC) is engaged in manufacturing rubber-based products used in a variety of commercial applications. The company is located in Noida near Delhi and is one of the leading suppliers of these products to a large number of companies engaged in manufacturing automobile accessories, electronic and light engineering products. In recent years, the competition in this type of business has intensified. KMC has been able to face this competition and has been growing rapidly. The main reasons for its growth have been its good image for quality products, technological improvements leading to increased production capacity, cost advantage and strong marketing team.

During the last two years of operation, the company has been facing frequent cash deficit problems, as a result of which the company has not been able to meet its obligation to pay to its suppliers in time, and this has forced the company to postpone its payments. The company's reputation as a credit-worthy customer has gone down. Mr. Khanna speculates that if this experience is repeated, the suppliers would force the company for cash payments for its purchases. To prevent the occurrence of this type of unforeseen events, he wanted to plan his cash in a better way.

Mr. Khanna asked his finance manager Mr. V P Iyer to develop the monthly cash forecasts for the period starting from January 2011 to June 2011. Mr. Iyer obtained the following actual sales figures from the records of the last three months:

		<i>(Rs. in lakh)</i>
October	2010	240
November	2010	280
December	2010	320

Mr. Iyer first tried to find out the sales forecasts for the next seven months. After consulting with Mr. Khanna, he developed the following forecasts:

		<i>(Rs. in lakh)</i>
January	2011	260
February	2011	210
March	2011	160
April	2011	240
May	2011	200
June	2011	160
July	2011	200

Over the past three years, KMC had averaged 25 per cent of the company's total sales as cash sales, the remaining 75 per cent of the sales being accounts receivable. Forty per cent of these accounts receivables were collected in the first month after sales, 30 per cent collections took place in the second month after the sales and the remaining receivables were collected in the last month.

KMC's average consumption of raw material is 80 per cent of the sales. The accounts indicated that 40 per cent of this is paid in the month of sales itself, 55 per cent in the following month and the remaining in the third month.

Mr. Iyer anticipated payments for wages and salaries to be as follows:

		<i>(Rs. in lakh)</i>
January		42
February		39
March		32
April		40
May		32
June		28

The other general administrative expenses were assumed to be about Rs. 2.5 lakh per month. Mr Iyer was aware of the 16 per cent annual interest payment liability on Rs. 20 lakh of borrowing to be paid in the month of March. A tax payment on 2010 income of Rs. 2.5 lakh is due in April. Mr. Iyer estimated that KMC's tax liability for the next accounting year is expected to be Rs. 24 lakh, for which the company would be required to pay the tax in advance. Quarterly instalment of such liability would be due in March, June, September and December. He also found that a capital expenditure of Rs. 70 lakh is planned in February, of which 50 per cent will have to be paid in the same month and the remaining in May. The company has a cash balance of Rs. 1,40,000 as on December 31, which is the minimum desired level of cash. For projecting the cash flows for the next six months, Iyer assumed the prices and costs to remain constant.

After collecting the information about cash flows, Iyer created a file in spread sheet by classifying each item of cash flows systematically into cash receipts and payments. While entering the amounts of cash flows he was not sure how to input these figures. Also his immediate concern was that as and when any change in sales or collection experience is made, the cash flow forecasts should automatically get updated. Before entering the figures in the worksheet file, he wanted to plan it more systematically.

DISCUSSION QUESTIONS

1. Prepare cash forecast for KMC by completing Exhibit I of the case.
2. What are assumptions you have made in preparing this cash flow? What if some of these assumptions change?
3. Where should company put its effort to improve its cash flow position?

STANDARD ALUMINIUM FITTINGS COMPANY

In January 2011, Mr. Rohit Jain was busy preparing the *pro forma* statements and cash forecasts for his newly promoted business—the Standard Aluminium Fittings Company (SAFC). The SAFC would be engaged in the distribution of a basic full-line of hardware, aluminium fittings, pipe fittings, and sanitary fittings used mainly in construction works. The business would be primarily with the wholesale distributors' market which was estimated to be about 80 per cent, and the remaining sales would be local sales as a retail business. Jain was already in the fabrication business since the year 2001 and had been selling aluminium fittings on a limited basis to local customers. The increasing sales level of aluminium fittings, about Rs. 10 crore in 2010, encouraged him to find out the potential market for aluminium fittings. As a result, he decided to start his own aluminium fittings company.

ROHIT'S PREVIOUS VENTURE

In college, Rohit Jain studied engineering and after that he did part-time post-graduate diploma in business management. While attending the management course, he worked for the Sharma Steel and Supply Company. After his graduation, with the help of his father, he started Jain Metals Company (JMC) in 2001. During the first two years, the company incurred heavy losses. This performance did not discourage Jain. Looking at the potential of the business, Rohit continued in the business. Because of persistent hard work and skilled management, by the end of the year 2010, Jain had achieved an annual sales level of nearly Rs. 10 crore. The company has also made profits and its net worth was around Rs. 3.40 crore. Total assets at that time exceeded Rs. 8 crore.

MARKET POTENTIAL AND COMPETITION

Rohit Jain explored the local market for aluminium fittings, pipe fittings, and sanitary fittings. He knew that this would require the estimation of demand for aluminium and other fittings. Understanding all the limitations of demand estimation, he referred to a report published by a local marketing consultancy firm, which had estimated the wholesale hardware sales in local markets to be about Rs. 400 crore in the year 2007. The report also mentioned that aluminium

fittings, pipe fittings, and sanitary fittings were generally 14 to 16 per cent of hardware sales. On this basis he calculated the sales of aluminium fittings to be about Rs. 60 crore in 2007. Rohit also found that the market for fittings has been growing at 6 to 7 per cent per annum. Using a compound sales growth-rate, he estimated the potential aluminium fittings market for 2011 to be about Rs. 70 crore. This figure was for the sales of wholesale aluminium fittings originating within local markets.

Rohit encountered one difficulty in estimating the total demand for the fittings originating from the local markets. The above estimates were true only in part. A more difficult figure to estimate was wholesale purchases of aluminium and other fittings by local wholesalers from several wholesale distributors outside the local areas. After consulting his friends who had knowledge about this business, Jain estimated that this would add another Rs. 70 crore to the estimated market size. Considering both the local demand and purchases from outside, a total fittings market of over Rs. 140 crore was thus estimated. While estimating this demand, Jain believed that this was a conservative estimate of the demand. He was sure that the total demand would easily be larger, as no one really had sufficient information to know all the potential customers and current users.

After estimating the demand for fittings, Rohit examined how much of the fittings market demand SAFC can secure. Regarding the competitive advantage of the Standard Aluminium Fittings, he observed that SAFC would be the first wholesale distributor to specialize in fittings in that area. Rohit felt that this would give an extraordinary amount of competitive advantage to the company. He believed that his being a specialized wholesale company, the large user-companies may prefer to buy from him. He can advertise that he will provide regular supply and service.

Rohit estimated that during the initial phase of the business, he would not be able to manufacture the full range of fittings. He also observed one difficulty in going for the manufacturing of all types of fittings. The already established standard quality brands of fittings would make it difficult for Rohit to go in for full line of production. Therefore, he decided that the standard quality fittings for inventory would be purchased initially from Prakash Steel Company, a prominent supplier in the local market.

PROJECTIONS

Jain thought that the estimate of sales was crucial as the projection of a number of items would depend upon it. He estimated monthly sales for the full year beginning March 1, 2011. The estimates which he developed were based on the most expected assumptions and, therefore, reflected the normal circumstances of the business. However, he was concerned about the possibility of anything adverse happening in the industry. The key factors causing such adverse situation could be a decline in the level of construction activity or shortage of raw material. Therefore, he developed a pessimistic estimate of sales based on the minimum he would be able to sell under the most adverse circumstances. But at the same time, he could not rule out the

possibility of demand going up significantly. Assuming the most favourable factors operating in the market, he also developed an optimistic projection of sales (see Exhibit I).

The expected margins on purchased fittings were estimated to be 35 per cent of the selling price. Jain estimated that it would be possible to get margins as high as 45 per cent under favourable circumstances, and 25 per cent under adverse circumstances. Jain decided to pay to his suppliers in the month of purchase so as to get the best terms possible.

Rohit thought that the next step in the financial projection was to estimate expenses. He, therefore, considered the following expenses in detail:

- For wages and salaries, he planned that five full-time machine operators, one full-time storekeeper and one order-booking clerk would be needed. Extra part-time help was expected to be necessary from June to September. At an optimistic sales level, the year's estimate was Rs. 2.92 crore, while at a pessimistic level it was Rs. 2.20 crore. Wages would be paid in the same month in all cases. Employees welfare expenses and employer's contribution to provident fund were estimated at 15 per cent of total wage bill. This amount would generally be incurred one month later than the wages on which they were based. Jain expected to devote some time to SAFC to get it started as a separate company. The management and supervision work would both be performed in the first year by Rohit, in conjunction with his regular work in JMC. For these services, he would charge SAFC, a commission of one per cent of sales, which he would carry on the books as payable to JMC, requiring no cash outlay by SAFC in the first year of operation.
- He will have to spend on freight-in and freight-out. Freight was estimated at 2 per cent on purchases and 1.5 per cent on sales. To guard against risk of fire, theft, etc., he decided to insure his stock of goods. Insurance costs were projected at Rs. 4 lakh in March and Rs. 2 lakh in September.
- Rent of Rs. 60,000 per month would be paid one month later. This expense would remain fixed irrespective of any possible fluctuations in sales. Expenditure on stores, spares and other supplies was estimated at Rs. 80,000 paid in the first month, and Rs. 40,000 per month thereafter, at the expected level. At the optimistic level, it would be assumed to be 50 per cent more, and at the pessimistic level 50 per cent less.
- Transportation and other conveyance charges would be Rs. 30,000 per month under normal situation, double that amount would be incurred at an optimistic level, and half that amount for pessimistic scenario.
- Expenses for telephone, electricity, etc., were estimated at Rs. 20,000 per month at expected and pessimistic sales levels, and Rs. 40,000 per month at the optimistic level. Miscellaneous items of expense were hard to estimate, but Jain put down Rs. 60,000 for the first month and Rs. 20,000 per month thereafter, at all levels. Advertising would consist of a brochure at a cost of Rs. 6 lakh in March 2011 and Rs. 4 lakh for an update in February 2000.

- About the depreciation charge in the books of accounts, Rohit found the following: Companies, while reporting the annual performance of the year in their annual accounts, have the option of using either written down value (WDV) or straight line (SL) methods of depreciation. However, as per the Companies Act, the rates of depreciation under both the methods are specified in Schedule XIV. For example, the general rate applicable to plant and machinery for which no special rate has been specified elsewhere in the Schedule is 15 per cent under WDV method and this rate is 5.15 per cent if SL method is followed. For each extra shift, additional depreciation at the rate of 7.5 per cent has to be provided under WDV method. The additional rate is around 3 per cent under SL method. For the purpose of preparing the financial statements, Rohit assumed that the equipment would be depreciated using written down value method.
- Corporate income taxes would be computed at 35 per cent of profits earned.

Rohit knew it pretty well that for smooth production and sales he will need funds to be tied down in inventory and receivables (book debts). To project receivables, he required information about the time which the customers may take on an average, to make payments. From his past experience in JMC, he found that his actual collection period has been one month. He thought that in his new business also he will be able to collect payments within a month.

About Inventory, Rohit first decided about the range of fittings which the business should stock. A desired inventory list for full-line supply of fittings was drawn up (see Exhibit II). Rohit estimated that this would require an expenditure of about Rs. 44 lakh. This expenditure was going to be in addition to aluminium fittings inventory worth Rs. 6 lakh, which JMC was having in their stock. Rohit planned to purchase this stock from JMC with the cash invested by him in SAFC, along with some machinery and equipment.

Examining the Inventory levels in detail. Rohit decided that the expenditure on Inventory can be reduced. Purchases of Rs. 24 lakh, under any circumstances, were planned for the first month of operations. Rohit decided that this would include purchase of Rs. 6 lakh inventory from JMC. Thereafter, purchases of Rs. 14 lakh per month were planned at the expected level—at an average expected cost of sales of 65 per cent. An ending optimistic level of inventory was projected at Rs. 25 lakh and pessimistic at Rs. 25.2 lakh.

Rohit planned to maintain a minimum cash balance of Rs. 6 lakh but felt the requirements of cash would go up in case the most favourable circumstances turn out in the business. He estimated that the cash requirements would be around Rs. 1 lakh if this happens.

After making these estimates, Jain wanted to see the first year's *pro forma* profit and loss account and balance sheet. He also wanted to examine the impact of different scenarios on the potential of profitability and financial position of the business. He also wanted to know whether he would be able to meet all the cash requirements arising from the operations of the new venture. To find this out, he was interested in projecting a detailed cash flow month by month, to begin with using expected scenario of the business. As regards the financing of the business, he decided to bring in Rs. 6 lakhs in cash and Rs. 1 crore in equipment (the only fixed asset of SAFC at the start). He also decided to borrow the remaining funds to meet his

requirements. He expects that the average rate of interest on borrowing will be 15 per cent per annum and will be payable quarterly.

DISCUSSION QUESTIONS

1. Identify the variables posing uncertainty and the possible range which they may assume. Justify your reasoning.
2. Construct cash flow and pro-forma statements under three scenarios viz. optimistic, expected and pessimistic. What inferences do you draw from these scenarios? How does these help you in developing key strategies to handle the uncertainty in business?

Exhibit I**STANDARD ALUMINIUM FITTINGS LIMITED****Sales Estimates at three Levels***(Rupees in lakh)*

<i>Year and Month</i>	<i>Expected</i>	<i>Optimistic</i>	<i>Pessimistic</i>
2011			
March	80	160	40
April	120	200	40
May	200	300	80
June	240	360	80
July	280	400	120
August	280	400	160
September	240	320	160
October	200	320	160
November	200	280	120
December	160	240	120
2012			
January	160	240	80
February	200	280	80
<i>Total</i>	<u>2360</u>	<u>3500</u>	<u>1240</u>

Exhibit II**STANDARD ALUMINIUM FITTINGS LIMITED**

Desired Inventory

(Rupees in lakhs)

Aluminium handles	
Heavy cut-size	15.50
Fancy full size	3.52
Gate hook	
Light kunda	4.78
Cut size-kunda	1.49
Heavy kunda	1.00
Door handle	
Aluminium jalli	2.73
Round in CP	1.04
Square jalli	0.63
Aluminium tower bolt	
Towel stand	0.48
Plain bend	0.41
Fluted	0.41
Door stoppers	1.43
Aluminium knobs	
Button	1.89
Flower	1.89
Sholay	1.89
Aluminium hinges	
Hinges	3.09
Aluminium safety	1.47
Heavy window stay	0.35
<i>Total</i>	<u>44.00</u>

MULTIPURPOSE TOOLS LIMITED

Ms. Sarita Jaikishan read the memo from her PA for the second time. The message was loud and clear. Carbide Widgets had been moved from Open General Licence (OGL) to Specific Import Licence and the custom duty had been raised from 70 per cent to 135 per cent. This would mean that if she handled the situation well, she could possibly wipe out the entire competition. What was essential was that she would have to plough in more resources into the business. She was fully aware of the pros and cons of managing growth through aggressive debt policy, public issues, internal funds, etc. However, her business sense—which she had inherited from her father—told her to manage the growth through utilizing existing funds more effectively. She felt that it would not be wise to commit external resources to this opportunity immediately. She would have a controlled growth, rather than a volcano blast which she possibly would not be able to handle easily.

She cast her mind to her business school days and all that she had read in cash management. While cash management was considered an effective tool in America, she wondered why few companies in India used it. To discuss the various opportunities, better cash management could throw up, she decided to call for a meeting of her directors.

BACKGROUND OF MPTL

MPTL was established in Ghaziabad in 1979 by Mr. Sharad Jaikishan as a company producing steel widgets. The company grew rapidly and acquired reputation as a producer of quality steel widgets by the mid eighties. In 1980, it went into technical collaboration with Bandzik Inc., the international market leader in carbide widgets. During 1991–92, MPTL saw a major diversification into carbide widgets, and by 1996, had firmly established itself as a market leader. In the late nineties, while MPTL continued to grow, Bandzik Inc. went into a decline as Japanese firms made inroads into the international market. By 2010, the Japanese had cut the international price of carbide widgets to such an extent that the imported price in India was almost equal to the cost of carbide widgets produced locally. This put an enormous pressure on the sales team of MPTL. Despite all efforts, MPTL could only show a 5.7 per cent increase in sales between the years 2008 and 2009 on real value terms. MPTL's Balance Sheet and Profit and Loss Statement for the year ending on March 31, 2011 are given in Exhibits I and II.

MANAGEMENT POLICIES

The management policies of MPTL continued to be coloured by those of Bandzik Inc. The three-pronged strategy of excellent product quality, customer service and financial prudence had given it the reputation of a 'solid' company. MPTL had never skipped giving dividends in the last 18 years.

The management followed a centralized system with little autonomy given down the ranks. However, with Ms. Sarita Jaikishan at the helm from 2009, the company has been slowly moving towards decentralization. Her overall management policy could be summarized as: *if it makes sense, let's do it.*

MARKET

MPTL was one of the 17 companies in India that produced carbide widgets indigenously. However, there were over 70 trading houses that were in the business of importing, stocking and selling carbide widgets. Normal trade terms of selling were 15 to 30 days credit with a cash discount of 1.5 per cent on sale price for down payments. Being a buyers' market, payments were usually made by cheque and rarely by drafts (cost Rs. 2 per 1000 with a cap of Rs. 1,000). Payment by 90 days bills was also an accepted mode of payment. Since the average shipment varied between Rs. 10 to 20 lakh, letters of credit were rarely used due to their prohibitive cost of 0.4 per cent flat (bank charges for opening an LC).

Carbide widgets are an essential consumable in any process involving machining of high speed steel components. The essential raw material required for the manufacture of carbide widgets was Carbolyptum, produced by only three companies in India with their factories/headquarters in Jananpur, Poplainagar and Karsangad. While they did accept payments by cheques, they had made it clear that default in payment would result in the black-listing of the buying company. However, apart from cheques, they allowed 90 days terms, but only if covered by an LC with all charges to the buyer's account (interest terms were first 30 days free, i.e., interest to be paid only for 60 days by the buyer). These companies had maintained this policy to minimize credit risks.

CURRENT CASH MANAGEMENT

MPTL has its headquarters at Delhi with regional offices in Mumbai, Kolkata and Chennai. Each regional office has three branch offices reporting to it. The list of branch offices is given in Exhibit III. Each branch office is responsible for sales in its geographically demarcated territory.

The company maintained current accounts in cities where they had a branch office and overdraft account at the regional centres. All cheques were mailed to the branch offices by the dealers. While cheques payable in the city of branch offices were deposited in bank locally for remittance to Delhi, all cheques payable outside the branch office (outstation cheques: estimated at 70 per cent of total collection volumes) were sent by courier to the regional office.

The regional office would send the outstation cheques on collection and on realization of the proceeds, would remit funds to Delhi after netting off for all expenses related to the reporting branch offices and itself. Currently the selling guidelines were to offer 15 to 30 days credit for all sales. For purchases of Carbolyptum, payments were made by cheques. From experience, this essentially resulted in a 30-day credit due to cheque collection delays.

DISCUSSION ON PROPOSED CASH MANAGEMENT TECHNIQUES

Ms. Sarita Jaikishan (SK): I have been looking at certain reports and I am convinced that we can do a lot for this company by just improving our cash management. I would appreciate if you would share your views on this. I hope that this discussion will help us in designing a more efficient system.

Mr. Arjun Das (AD): Before we get into the nitty-gritties, I think we should address the issue of maintaining centralized control vs. decentralized autonomy. According to me, what MPTL needs is a tight monitoring system, coupled with a highly centralized cash management. Obviously, this requires specialized skills. Overall decision related to investments, borrowings, trade terms, and financial policies should be left to a cell in Delhi. This cell should make up its mind and just get our regional/branch officers to carry out the policies. I think we need to institute a weekly reporting cycle, to keep tabs on our nationwide operations. Every Friday, all branch offices/factories should telex to headquarters a report that includes sales, cash inflows and outflows, surplus funds and a forecast of the following week's cash position. Branches designated as 'Cash Cows' like Pune, Bangalore, etc. would be asked to report once in every two or three days. These reports will be supplemented by a monthly cash summary that details total cash inflows and outflows, collections, payables, remittances and the month-end cash balance. The monthly summary report should be used as a countercheck against the weekly reports to make sure that what they are reporting is accurate. We can probably feed this data into a computer which could generate a variety of reports like DSOs (Daily Sales Outstanding), Ageing, etc. which will be crucial in controlling receivables, payables, bank balances, etc.

Ms. Gomi Kapoor: While what you said has probably a lot of sense in it, I am a strong believer in decentralization. As the old saying goes, "if you control from your side 100 per cent, they will depend on you 100 per cent"?

The only problem with decentralization is that typically it happens by default, and rarely by design. You see, I like your concept of a specialized cash management cell here in Delhi, but I do not agree with its role as described by you. I think it should set guidelines, but leave actual implementation of the policy to the branch offices. In other words, the cell should *manage* from here, but *not do* it from here.

Take for example, managing credit and collection. I think it works best by delegating levels of authority. Yes, you don't have to tell me—I know of some companies who try to manage from headquarters, but it always beats me how the system works. You see, our branch offices work in too diverse an environment for a centralized cash management

Contd . . .

style. The market norms, dealer behavioural pattern, our product's strengths, collection terms, etc. vary dramatically across the country. It takes 30 to 40 days to collect outstation cheques in the eastern region, whereas it takes only 10 to 15 days in South India. Every region is quite different—it's a real mish-mash. To take this example further, I think what is essential to ensure consistency in the regional credit and collection approach is that we should put together "The Bible"—a manual on sales and credit terms including DSO targets. Permissible levels should be negotiated with local management. It is quite possible that these levels vary sharply across offices. We should then let the branch managers design and use their own cash management style and strategies—as long as the receivables stay within the specified limits. You have to set your authority limits sensibly, so that there is a right amount of work being given to the local guy and he has enough freedom to act. Any exceptions should be bounced off at the headquarter level.

JK: Ms. Kamini Gupta, which of the two dramatically opposite approaches do you think makes sense?

Ms. Kamini Gupta (KG): It depends on which side of the fence you make me sit. In centralized set up, you need some guys going through tons of papers over here and acting as a surveillance group. My experience is that nobody ever goes through reports. While these people like to believe that they are close to the real action through numbers, I need not say what actually happens.

On the other hand, if you go in for a decentralized system, you've got to have highly competent people all over the place. I would like to believe that we do have good people and, therefore, I tend to get biased towards decentralization. At the same time, however, I believe in tight controls. The concept of surveillance is good, but I think you should try to make the branch manager his own surveillance officer.

The branch manager should be asked to manage some key items which should include borrowings, investments, payables, receivables, DSOs, ageing, bank balances, etc. These should be used by him to generate cash forecast for the next month. What is essential is that the branch manager should develop a long-term perspective plan and a forecast for the coming three years where the first 18 months are broken up, say, by quarter. When branches go out of line, you should slam an MBO on the local management—say, to drop DSO from 30 to 15 days in the next six months. If he doesn't do it, then he gets a "not achieved". So if he does not get the maximum juice out of the total sales figure, then he doesn't meet his objective, and if he doesn't meet his objective, he shouldn't be getting his salary raise. It's that simple.

Ms. Nalini T. Ramachandran (NTR): I think we are coming close to the final design. I think that while she has cut the lemon, she has not been able to squeeze it. Kamini, I think in your excitement of proposing your new system, you landed up contradicting yourself. You yourself said that nobody reads reports. At the same time, you want 20 different variables to be monitored.

In simple terms, all that cash management tries to achieve is that you should try to receive money fast and pay up as late as possible. I think we can summarize all this in a magic ratio. Let's christen this as the "Performance Ratio". This could be:

Performance Ratio = Debtors/Creditors.

Contd . . .

The lower the ratio, the quicker the turnaround. This would imply that you could monitor performance of branch managers on just one number. Too much information is bad, you know that. All we need to do is put the raises of the branch manager a function of the PR.

Kamini: Nalini, that's the problem with short-cuts. You tend to miss the key variables.

Everybody knows that one of the important things that cash management tries to achieve is to minimize bank balances. I see, your magic ratio is absolutely transparent to this.

Gomti: But, Kamini, tell me why should we work to reduce our bank balance. I can negotiate with banks to give us an equivalent return of nine per cent after tax on short term (2-4 days) balances, which I think, is a very good return.

AD: I think the discussion is getting to be counterproductive. A return of 9 per cent implies that we make a margin of 3 to 3.5 per cent per annum, which is way below our returns if we plough the money back into our business.

What is bothering me is that I always thought that cash management is a device to increase liquidity. What we are saying here is that we reduce debtors, bank balances, etc. which contribute to current assets, and increase creditors which is the key factor in current liabilities. In other words, the way I understand is that the liquidity ratio (current assets/current liabilities) will drop due to all our cash management efforts. Now, this is a paradox which I need somebody to explain.

JK: All I have to say is that cash management is more complex than what it seems.

What we can do is to hire a cash management expert or a consultant to answer the following questions:

- Pros and cons of centralized cash management vis-a-vis a decentralized set up.
- What should be the cornerstones of our cash management policy?
- Should we extend cash discounts on sales?
- Should we continue with the existing system of payment, or change it?
- How should we manage our bank balances?
- What is the best way we can organize cash flows for our collections?
- What is the best reporting/control system we should implement?
- If we do all this, what will be the total gain to the company, if any?

DISCUSSION QUESTIONS

1. Analyze the pros and cons of centralized cash management vis-a-vis a decentralized set up.
2. What should be the corner stone of ML's cash management policy? What policy decisions are required in various areas such as cash discount, existing system of payment, management of bank balances, collections, reporting and control system.

Exhibit I**MULTIPURPOSE TOOLS LIMITED**

Balance Sheet as on 31 March, 2011

(Rupees in lakh)

CURRENT ASSETS		
Bank Balance/Cash		2,142
Bank Balance	342	
Cash in transit	300	
Cheques in transit	1,500	
Debtors		1,450
Inventory		8,320
Raw Materials	2,300	
Work in Progress	1,000	
Finished Goods	5,000	
Supplies	20	
Prepaid Insurance		8
<i>Total current assets</i>		11,920
FIXED ASSETS		
Plant Building Equipment	20,610	
Less: Depreciation	4,480	
<i>Total fixed assets</i>		16,130
<i>Total assets</i>		<u>28,050</u>
CURRENT LIABILITIES		
Overdrafts with Banks*		4,002
Creditors		1,500
Estimated unpaid IT		2,597
<i>Total current liabilities</i>		8,099
TERM LOANS		10,000
CAPITAL		
Equity		9,099
Retained Earnings		852
<i>Total capital</i>		9,951
<i>Total liabilities</i>		<u>28,050</u>

* Total bank borrowing limit Rs. 40 crore.

Exhibit II**MULTIPURPOSE TOOLS LIMITED**

Profit and Loss Account
during the year 31 March, 2011

(Rupees in lakh)

Sales	26,400
Less: Discount	8
	<hr/> 26,392
Cost of Goods Sold	16,970
Gross Profit	9,422
Sales & Administrative Expenses	3,900
Net Operating Profit	5,522
Interest Expenses	800
Bank Charges	45
	<hr/> 4,677
Net Profit Before Tax	4,677
Estimated Income Tax	2,596
	<hr/> 2,081
Net Profit	2,081
Dividend	1,274
	<hr/> 807

Exhibit III**MULTIPURPOSE TOOLS LIMITED**

Branch Network

- | | |
|--|--|
| <p>1. MUMBAI</p> <ul style="list-style-type: none"> • Ahmedabad • Pune • Nagpur | <p>3. KOLKATA</p> <ul style="list-style-type: none"> • Guwahati • Patna • Bhubaneswar |
| <p>2. CHENNAI</p> <ul style="list-style-type: none"> • Bangalore • Cochin • Hyderabad | <p>4. DELHI</p> <ul style="list-style-type: none"> • Chandigarh • Jaipur • Kanpur |

STRIKE WHITE DETERGENTS

As he got off the plane at Ahmedabad, Mr Ramesh Gupta, Senior Consultant of Good Consultancy Ltd. recalled the time—around two weeks ago—when his boss had asked him to look into the cash management of Strike White Detergents (SW). He had said:

“This company has grown dramatically over the last few years (see Exhibit I) and I suspect they still have a lag effect in their cash management system. See if you can convince them that they require a change in the system—and get some business in the process”.

All he knew about SW at that time was that it was one of the leading detergent manufacturing companies which had managed to remain in the unorganised sector, despite its turnover of Rs. 400 crore.

Strike White, a company that had started as a backyard affair over the past few years, was currently rumoured to be the largest manufacturer of detergents in the world in terms of quantity sold. So much was the effect of SW on the domestic market that it had caused enough concern for the well-established Hindustan Soaps & Detergents Ltd. (HSDL)—the leader of the organized sector in the soaps and detergents market (Exhibit II).

Despite its astronomical growth, SW continued to be a one-man show. Man-sukhani, who was responsible for the dramatic success of the company, was no doubt a marketing wizard, but was extremely conservative in his financial dealings. For instance, he insisted that this group of six sister companies deals with just one bank in Ahmedabad. Professional management was discouraged, for he thought that the family had all the required skills.

Till recently, SW was a single product company (detergent powder). In 1986 they launched the SW detergent soap, which was also a major success. Currently, according to some press reports the company had secured a clutch of letters of intent to set up plants to manufacture distilled fatty acids (for toilet soap), glycerine, synthetic detergents and alfaolefin sulphinate (AOS an ingredient for detergents). Awaiting final sanction was also the SW Rs. 150 crore project for putting up a Linear Alkyl Benzene (LAB) plant near the Visakhapatnam refinery. Also in the works are plans for a Rs. 250 crore soda ash unit. Apart from the backward integration. Mansukhani was test-marketing SW toilet soap and was planning to produce toothpaste in the near future.

Ramesh knew that the company was grossly cash surplus and selling the idea of a new cash management system would be very difficult. Nevertheless, he decided to get more information on the company. What he found out over the last two weeks has been summarized below.

COMPETITION

Market shares were vulnerable to strong regional rivals as well as counter attacks from the big battalions. The phenomenal success of SW had given birth to hundreds of would-be Mansukhanis across the country in the small sector. In and around Ahmedabad, the detergent capital of India, scores of manufacturers had sprouted and many of them were on their way to making their mark.

Sudarshan Chemicals, a small-scale unit promoted by Ayansh Kumar, is one of them. He expected to haul in a turnover of a neat Rs. 19 crore in the current year, from his Crimal brand of washing powder and detergent cakes. Vyas of Sethi Chemicals was another entrepreneur who chalked up sales of over Rs. 10 crore in the past financial year.

Detergent units were mushrooming elsewhere, too. In Mumbai, Kishore Detergents, a small-scale outfit that is part of Kishore Synthetics group, claimed to have attained a Rs. 10 crore turnover, barely 10 months after being launched during last year. The target for this year was Rs. 30 crore. In Uttar Pradesh, perhaps the biggest market for detergents in the country, a brand called Blus, launched by a former executive of HSDL, had carved a substantial niche for itself.

Stronger and older regional brands were also flexing their muscles. Brahma Soap Factory, which had two plants in and around Ahmedabad, had secured a market for Pipolin detergents. Similar was the case with Tamil Nadu-based Ron Wandur detergent brand.

If the small sector was exerting pressure upwards from the lower end of the market (these brands were usually cheaper than SW brand), SW was also facing stronger competition from the majors who had begun to move down-market in an effort to chase volume. HSDL, in particular, had launched a full-scale price war with its Heel detergent, which fell bang in the SW range.

Even though HSDL was still to make a success of Heel, Mansukhani smelt a rat. "They are selling below cost, especially if overheads are taken into account", he had alleged in the press. However, a top HSDL executive had refuted the charge, "Excluding launch costs, which anyway tend to be high in the beginning, 'Heel' is priced correctly".

Mansukhani, however, had reason to be wary of HSDL because the latter was believed to be mulling over lower-cost operations in the detergent market. As SW was in the process of graduating into the organized sector, HSDL was moving in the opposite direction. It was considering the transfer of some of its detergent production to smaller units with lower overheads. HSDL had already transferred substantial chunks of production to subsidiary or leased companies in Rajpura, Mangalore and Rajkot. It was farming out jobs to ancillary packing units in Chinchwad, Aurangabad and Bangalore. It was obvious that all these actions would have the net effect of showing up HSDL's competitive position vis-a-vis SW.

To understand this threat in its proper perspective, it is necessary to delve into SW's own success formula. Factors that worked in SW's favour in the past may either diminish in importance or disappear altogether, as the company grows bigger.

FACTORS TO SW'S SUCCESS

The biggest advantage SW may have to forego is in excise duty, which currently is a hefty 26.5 per cent. Thus far, SW's excise obligations had been kept low by the mere fact that it had been operating in small scale and that too without power. To add to this advantage, Mansukhani was believed to have floated a clutch of separate companies to produce the SW brand under licence to derive the maximum advantage in terms of excise rates (small units are exempt from duty for turnovers up to Rs. 15 lakh and get concessional rates for output in excess of that, but below Rs. 75 lakh).

His move into large-scale manufacturing, however, will deprive him of this advantage, though it was a fact that he had already lost much of it, following the Central Government's decision last year to withdraw excise concessions for branded products that are manufactured in the small-scale, under licence.

The low rate of sales tax on detergents in Gujarat had been another plus factor in SW's favour, Gujarat levied only one per cent (as against six per cent in Maharashtra). This meant that SW, with all its six plants based in Gujarat, enjoyed a price advantage.

The growth of strong regional rivals has neutralized much of this advantage since the tax handicap of rivals was counter-balanced by lower transport costs, which worked out to 50 to 70 paise per kg of detergent, depending on the distance.

Even if SW proves equal to the challenge ahead, it would find that its freedom of operation will be circumscribed in the future for two reasons:

- Once SW goes public next year to raise money for the LAB project, it will suddenly find itself coming under the harsh glare of public and shareholder scrutiny.
- SW could no longer escape competition laws, both by virtue of commanding a dominant share (50–80 per cent) in the detergent market, and in terms of huge investments made in the new products.

MANAGEMENT PHILOSOPHY

SW had so far been a one-man company under Mansukhani. His approach and thinking was radically different from the conventional line.

The general advice of management experts would be to go up-market because that is where the margins are. Mansukhani took the opposite road and created a whole new market.

Then again, it is conventional wisdom that advertising creates a market. Mansukhani did not think so. He never advertised a product before it was marketed and distributed. In the case of toilet soap, which was being test-marketed in Gujarat, Mansukhani had decided against

advertising this year. He felt: “Advertising just tells people in India that a product is available. It cannot sell a product”.

Mansukhani had no time for market research, too. His answer to how he picked up winners was deceptively simple—proper quality at proper price with low margins. He was reported to have said: “I only do MR to test quality”.

DEALER NETWORK

Mansukhani apparently set great store by a strong distribution network. He kept close contacts with all his 300 and odd agents in the districts and cities who are given sole selling franchise in their territories. He viewed ‘poaching’ a serious offence. Mansukhani had brought in a financial discipline amongst the dealers.

Typically the dealers had to open an account with SW with an upfront advance, usually equivalent to two months, supplies. Then on, the terms were despatch on cash. That in effect implied that the dealer had to keep on maintaining a stipulated balance and replenishing his account with payment into Ahmedabad. Since SW commanded a premium, Mansukhani had no problems in enforcing this structure.

This was one of the key factors in making the company have a surplus, with practically negligible bank borrowings. Armed with all this information, Ramesh confidently walked into Mansukhani’s room. Relevant excerpts from their conversation are given as follows.

DISCUSSION ON EXISTING CASH MANAGEMENT

Mr. Ramesh (R): Mr Mansukhani, how does your company control the despatches? I mean, are orders placed by dealers on monthly basis, and based on that you supply, or do you follow any other system?

Mr. Mansukhani (M): See, we have been lucky enough to have products that command a premium. I insist on a two-month advance and then cash payment for any sale.

Most of the dealers are nice enough to give new annual orders, though there are some who give semi-annual or quarterly orders. In any case, the instructions to the despatch section are clear. For any despatch, they should do the following:

- Check despatch schedule for each customer (prepared at the time of receiving of orders).
- Check account-balance of the dealer as on date.
- Check quotas allocated to dealers/regions.

R: That is interesting. Are your dealers concentrated in a few towns, say, top 20 cities of India?

M: No, not at all, I have over 300 dealers scattered all over the country. You see, I sell to the down-market, which automatically means that I need a network that extends to the interiors of the country. The top 20 cities, as you mentioned, cover only one-third of my total sales.

R: So, how do all these people pay you?

M: Very simple. You see, I maintain six bank accounts—one each of the sister companies, Some dealers have accounting in various banks at Ahmedabad and they pay me by local cheques (cheques drawn on Ahmedabad). However, the proportion of such people is very low; I would estimate it to be around five to ten per cent. Most of the other people pay us by Demand Drafts (DDs) drawn on Ahmedabad. You see, in a nutshell, I not only insist on upfront payment; I ask for upfront funds payable at Ahmedabad.

R: So, how many DDs do you receive every day?

M: Say, around 200 to 250 drafts per day.

R: I'm sure you'll love to have a system that will take care of updating dealer date. I think maintaining such records will be a mammoth job for your company personnel.

M: Yes, you are right to a certain extent. Once the DDs are received in our office, they are collated and pay-in slips filled up for deposit to the bank. Information such as:

- from whom the DD has come—dealer's name,
- for what amount,
- for which location,
- for which of the six companies, etc.,

are recorded on the bank pay-in slips and passed on to the supplies section to update dealer outstanding. Updated accounts are then conveyed to the despatch section for effecting/holding back any further supplies.

We also send an acknowledgement advice to each dealer that his account has been credited in Ahmedabad.

R: What happens if there are delays in payments?

M: Apart from the shipment being held up, there is a penal charge on the dealer. See, in short, the collection flow takes place as follows (Exhibit IV.)

R: The way, I see it is that the dealers are under a lot of stress. I am sure they would be sending drafts, 4–8 days before due date, which essentially means that they have an equivalent opportunity cost of their funds. Not only do they have to pay 0.2 per cent towards cost of DD, they would also be penalized if the remittance is delayed or the draft is lost in transit.

M: Yes, you are right, but this is the cost they happily pay to sell our products and make lots of money.

R: Yes, this is true in the current scenario, but with competition growing, would you think that relaxing the term dished out to dealers will be a good idea? Even if you don't think that way, won't you like it if you got the funds earlier so that you could enjoy that float?

M: But, what do I do with the float? Inflate my current account balance? What's the use? All I need the balance for is to pay for my raw material requirements. What you are suggesting

Contd . . .

will make a lot of sense if I was in a cash deficit situation, which might happen in the future when the competition becomes aggressive or when I diversify. We'll see what to do then. Do you have any suggestions which will improve my bottom line now?

R: I think I have the answer, but before I come to that, tell me, how do you manage your disbursements?

M: We pay by DDs. Most of our suppliers are mainly in the metro cities, particularly in Bombay. My total payment will be close to Rs. 250–275 crore. The raw material is scarce and they insist on DD, I do have an opportunity cost of three to four days, but as my payment system is a mirror image of my collection system, I do not have any problems.

R: I see, I must congratulate you in designing a simple, but extremely efficient system. However, I am sure that we can do a lot to improve it. I'll send you my preliminary report.

M: Okay. You show me that you can change my bottom line and I'll have no problems paying you Rs. 2 lakh—that's what your quotation said.

R: Yes, you are right. I'll get back to you in a week.

DISCUSSION QUESTIONS

1. Comment on SW's current cash management. What are the costs of this system?
2. What should be done to improve SW's cash management?

Exhibit I**STRIKE WHITE DETERGENTS****SW Growth**

<i>Year</i>	<i>Production in tonnes</i>	<i>Growth (Percentage)</i>
2003	33,350	
2004	48,910	46
2005	86,665	77
2006	1,29,866	50
2007	1,88,521	45
2008	2,50,198	33
2009	2,88,302*	15
2010	4,40,659*	53

* (includes detergent cake)

Exhibit II**STRIKE WHITE DETERGENTS****Detergent Market***(in thousand tonne)*

<i>Year</i>	<i>Organized Sector</i>	<i>Unorganized Sector</i>	<i>Percentage Share of Unorganized Sector</i>
2003	154	50	24
2004	170	70	29
2005	165	140	46
2006	170	200	54
2007	180	280	61
2008	190	350	65
2009	200	410	67
2010*	210	590	74
2011*	220	700	76

* Estimated

Exhibit III

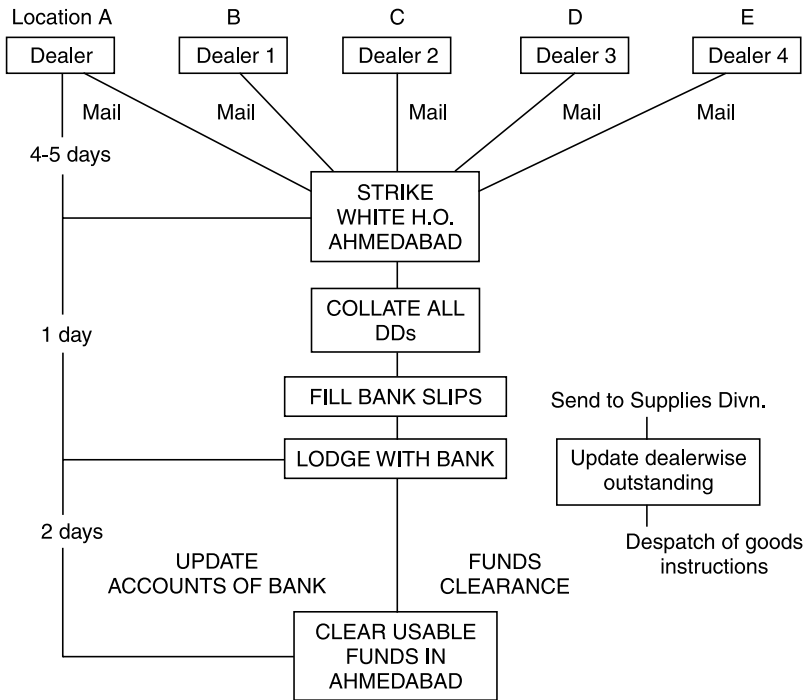
STRIKE WHITE DETERGENTS
 Washing Products Demand/Forecast in a Given Region

(in thousand tonne)

<i>Year</i>	<i>Total Demand</i>	<i>Synthetic Detergents (at 60:40 ratio)</i>	<i>Washing Soap</i>
2013	2,227	1,336	891
2014	2,316	1,426	950
2015	2,535	1,521	1,014
2016	2,705	1,623	1,018
2017	2,886	1,732	1,154
2018	3,080	1,848	1,232
2019	3,286	1,972	1,314
2020	3,507	2,104	1,403
2021	3,741	2,245	1,496
2022	3,992	2,395	1,597
2023	4,250	2,550	1,700

Exhibit IV

STRIKE WHITE DETERGENTS Schematic Representation



COOL-AID PRIVATE LIMITED

Radhemohan Gupta and Manmohan Gupta, two brothers, promoted Cool-Aid Private Limited (CAPL) near Delhi in 2008. They contributed an initial capital of Rs. 80 lakh in addition to the contributions from their near relatives. The two brothers, however, owned about 60 per cent of the capital and are solely responsible for running the business. They are engineering graduates from one of the technology institutes in India. They entered the air-cooler market and developed a unique model called, Cool-Aid, to cater to the needs of the customers located in Delhi, Haryana and Rajasthan. Unlike most of their competitors, they manufactured all the components of an air-cooler in their factory. Both of them are competent engineers with good understanding of marketing.

PRODUCT AND MARKET

Cool-Aid is an excellent high-tech product. Unlike other available coolers in the market, it has an elegant look like an air-conditioner. It makes less noise. Cool-Aid delivers 3,500 cubic feet of cool air per minute and its water tank has a capacity of 50 litres which keeps air cool for about eight hours. The model is reasonably priced as compared to the competitive models; it costs about Rs. 5,000 including all taxes. Thus, CAPL has been able to sell well and expand rapidly. It sold 4,992 coolers in 2009, which increased to 6,140 units in 2010, and further to 7,350 units in 2011. The summarized balance sheet and profit and loss account are given in Exhibits I and II.

FINANCE OF OPERATIONS

CAPL has made judicious use of equity and debt capital to finance its growth during the last three years. Its debt-equity ratio is about 1:4. The lenders are not prepared to extend further loan to the company unless it increases its equity capital. Neither Radhemohan and Manmohan nor the other shareholders of the company have personal funds to invest in the business. Nor do they want to become public for fear of dilution of ownership.

Both the brothers have no training in finance. To take care of the financial activities of the company's operations, they had been relying on their accountants. Their bank and other lenders

have indicated to them that their management of funds was not up to the mark. Particularly the management of accounts receivables was very poor. The company's average collection period of last three years had been around 93 days. However, it has a tight control over inventory.

CREDIT POLICY

The company has about 1,080 small and medium sized enterprises as dealers, spread over the cities and main towns of Haryana, Rajasthan and Delhi. The company has a policy of extending a credit of 60 days, but most of its dealers in the recent period have stretched payments. The average collection period of the company last year, based on year-end figures, was about 120 days. In addition to the salesmen who also do the job of collection, CAPL has employed three collection officers. The total collection expenses which include salaries, travel, etc. amount to about Rs. 2 lakh per year. Ninety per cent of the firm's sales are on credit basis. Out of this, 15 per cent is sold to the customers whose financial position is not very sound. In fact, the entire bad debt losses which amounted to about 2 per cent of sales to these customers and three-fourth of the collection expenses are attributable to these accounts. The company's sales are highly seasonal in character; about two-thirds of the sales take place during the period from January to April.

The company is expecting a 20 per cent increase in sales over last year's sales. The company's cost of goods sold is 80 per cent. After consulting the marketing and accounting staff and analyzing the status of competition, the company has decided to change its credit policy. Given the acute competition and availability of cheaper models, the company did not want to change the credit period for its prompt customers. However, it has decided to offer cash discount to motivate customers to pay early. The new credit terms would be "2/15, net 60". A quick study of sample customers indicated that about two-thirds of them might like to avail cash discounts. This change in policy would not change the expected sales, but the average collection period of the prompt customers is likely to reduce to 80 days.

The company has also decided to relax its credit standards to expand its sales. This is expected to increase sales by 10 per cent. The marginal customers, which would also include new customers, are not expected to take advantage of cash discounts and are likely to continue to take on an average 150 days to pay. In the case of these customers, bad debt losses are expected to increase to 2.5 per cent. The company would enforce collections with more vigour. It is expected that collection expenses would increase by Rs. 50,000 per annum. The company generally requires a rate of return of 15 per cent from its investments.

DISCUSSION QUESTIONS

1. Why CAPL has a high investment in accounts receivables? Should the company reduce its sales to the marginal accounts to improve its profitability?
2. What are the peculiar features of CAPL's credit policy changes? Discuss the implications of these changes. What credit policy would you recommend to Mr. Gupta? What are

the implications of your suggested policy on company's profitability and financing requirements?

3. If you are CAPL's financial advisor, would you recommend
 - (a) relaxation of its credit standards to 75 days and thus increasing sales by 10 per cent,
or
 - (b) introduction of cash discount of "2/15 net 60"? Show your calculations.
4. Do you think average collection period is relevant criterion for monitoring CAPL's accounts receivables?

Exhibit I**COOL-AID PRIVATE LIMITED****Summarized Balance Sheet
as on March 31***(Rupees in lakh)*

	2009	2010	2011
ASSETS			
Cash	3.35	5.26	7.14
Accounts receivables	40.47	72.94	107.10
Inventory	20.12	42.95	70.00
<i>Current assets</i>	63.94	121.15	184.24
Net fixed assets	100.40	124.15	142.80
<i>Total assets</i>	<u>164.34</u>	<u>245.30</u>	<u>327.04</u>
LIABILITIES			
Creditors	10.04	14.00	17.90
Accruals	3.35	4.20	5.40
Bank borrowing	10.04	44.76	63.90
<i>Current liabilities</i>	23.43	62.96	87.20
Long-term debt	45.47	67.64	109.61
Share capital	95.44	114.70	130.23
<i>Total liabilities</i>	<u>164.34</u>	<u>245.30</u>	<u>327.04</u>

Exhibit II

COOL-AID PRIVATE LIMITED
Summarized Profit and Loss Account
for year ending on March 31

(Rupees in lakh)

	<i>2009</i>	<i>2010</i>	<i>2011</i>
Sales	251.45	306.96	357.10
<i>Less: Cost of goods sold</i>	203.85	243.15	285.10
<i>Gross profit</i>	47.60	63.81	72.00
<i>Less: Interest</i>	6.03	14.57	26.84
Collection charges	1.67	1.86	2.14
Bad debt losses	0.69	0.93	1.02
Other expenses	6.46	8.89	10.61
Taxes	17.31	18.30	15.89
<i>Profit after tax</i>	<u>15.44</u>	<u>19.26</u>	<u>15.50</u>

Note:

1. All collection charges are fixed.
2. During the year 2010-11, 60 per cent of other expenses were fixed and the remaining 40 per cent were variable.

Exhibit III**COOL-AID PRIVATE LIMITED**

Monthly Sales

(Rupees in lakh)

	<i>Actual 1997-98</i>	<i>Projected 1998-99</i>
July	8.87	10.00
August	8.50	10.00
September	8.62	10.00
October	7.79	10.00
November	8.12	10.00
December	6.95	10.00
January	39.57	50.00
February	80.67	95.00
March	86.15	100.00
April	73.74	87.00
May	19.00	21.00
June	9.12	10.00
<i>Total</i>	<u>357.10</u>	<u>423.00</u>

SWAN TEXTILES AND SILK MILLS LIMITED

In the beginning of 2010, the Swan Textiles and Silk Mills Limited was evaluating the possibility of engaging factors to solve its problem of liquidity, arising from slow collection of book debts. The company extends credit for 45 days, but the actual average collection period is about 85 days. It also has a policy of maintaining two months of finished goods inventory. Its liquidity problem is further compounded as commercial banks allow only three-and-a half months combined holding of finished goods and book debts for extending credit.

BACKGROUND

Swan Textiles and Silk Mills Limited (STSML) is a medium-sized, composite textile and silk mill based in Bangalore. The company is producing pure and artificial silk fabrics, sarees, scarves, stoles, cushions, covers, garments, lungis, belts, and neck-ties. During the year 2009, the company had an annual turnover of Rs. 37 crore. The company is anticipating 20 per cent yearly increase in sales in 2010 and 2011.

The company has grown consistently over the period. The traditional look of the products, coupled with durability and richness in colours and attractive designs, has significantly contributed to its growth. The company has made it possible that its prices are lower than the traditional silk products. The main reason why the demand for the company's products has been growing is that they can be used more frequently, particularly sarees which are lighter than the traditional silk sarees. Quality control regarding the texture, design and colour combination, fastness of colours, and durability gets the top priority in the production process.

The company is experiencing a significant increase in demand for silk products. The demand for the modern silk (different from the traditional silk) has been estimated around Rs. 400 crore by an independent agency on Silk Industry. The company, however, was finding it very difficult to cope up with the increasing demand.

STSML'S PROBLEMS

The company is being squeezed for liquidity. For arriving at cash credit limit, the STSML's bank uses norm for composite textile mills for accounts receivable and finished goods inventory,

which is clubbed together at $3\frac{1}{2}$ months. Since the company typically maintains two months finished goods inventory and since the effective collection period is 85 days, the company is facing severe liquidity constraint to finance its growing accounts receivables and finished goods inventory. The present position of the company's chargeable current assets, other current assets, and other current liabilities is as follows:

Partial Balance Sheet of STSML

(Rupees in crore)

<i>Liabilities</i>	<i>Assets</i>	
Other current liabilities	5.0	
	Chargeable current assets:	
	Accounts receivables	8.70
	Inventory	6.25
	Other current assets	2.80

The average invoice size of STSML during the last three years has been around Rs. 8,000. The company sells its goods through approximately 170 semi-wholesalers (dealers) spread all over the country. The average gross margin on the company's products is around 25 per cent. It is operating in a buyer's market in which the sales depend upon personal selling and persuasion at the point of sales. Consequently, its leverage over its dealers is extremely limited.

CHANNELS OF DISTRIBUTION

In order to sell its products in a market which is strongly conscious of high quality, better designs, texture and colour, the company has employed agents in different states/territories. They have continuous interaction with dealers in their territory. These agents identify dealers for the company in their region and give information about their financial position, sales effort, goodwill and credit-worthiness. For their services, the agents get a commission of 1.5 per cent flat on all sales routed through them. However, the goods are despatched from STSML directly to dealers and the agents share no responsibility for bad debts or for ensuring that the bills are paid on time.

EXISTING CREDIT PROCEDURES

The collection procedure begins with the company despatching the goods and raising an invoice on the dealer, with instructions to pay within a specified period of time. STSML's collection policy allows for a credit period of 45 days. For this period the company draws usance bills on the dealers. This is done to ensure that the customers pay within the specified period. The company discounts these bills with a bank to finance their book debts within the overall limit.

However, the company's experience regarding honouring of the bills has not been satisfactory. When the bills are presented for payment, the dealers hardly ever pay on time so that the effective average collection period (ACP) is 85 days.

The existing methods of follow-up by the credit department with the dealers have proved to be totally inadequate and have not succeeded in reducing ACP. The credit administration department of the company is responsible for monitoring and follow-up of debtors. The department employs four persons, one in senior officer's rank drawing salary of Rs. 40,000 per month, and three clerks whose total salary amounts to about Rs. 250,000 per year. The follow-up methods include:

- (a) On an average one letter by registered post is sent to the dealer for each invoice. The average cost of registered post is about Rs. 15.
- (b) Telephonic and telex messages for bills which on an average amount to Rs. 10 per invoice.
- (c) When a salesman visits a territory, he also follows up. The follow-up visit is generally planned by one of the clerks employed in the credit administration department.

Although the instructions attached with the invoice clearly mention that the dealer will pay a penalty rate of interest of 21 per cent p.a. to STSML for every day of delayed payment, the clause rarely gets implemented.

FACTORING

The existing method of financing the working capital requirements of the company has proved ineffective. As per the cash credit norms for accounts receivables and inventory holding, the company is not able to obtain sufficient funds from the bank to finance its working capital requirements. The norms which the company has to observe fix up the upper limit to its drawing power (DP). Even if the drawing power of the company is high, it can at best avail cash credit facility to finance its finished goods inventory and accounts receivables only for three-and-a-half months, whereas the requirements of the company is for five to six months.

Though the company is able to obtain the finance from the bank against the discounting of bills, the extent of finance available through bill discounting is also subject to limits prescribed by the bank. Moreover, only in few cases the dealers honour the bills, which in turn puts pressures on the company's finances. As compared to cash credit, the company is able to get benefit of lower costs since the maximum rate of discount on bills is 15.5 per cent p.a. However, due to a stamp duty, the effective discount rate turns out to be high.

The company wants to turn to factoring for a solution to their liquidity problems. The company is contemplating a scheme through an informal factoring arrangement with their agents, in which the AGENTS would act as FACTORS. Under this scheme the bills will be drawn on the agent (account dealer), and his responsibility would be to make payment on the 45th day when the bill is going to be presented. For these 45 days, STSML is going to follow the same practice of discounting the bills with banks as it is doing at present. It will be the

responsibility of the agent to collect dues from dealers and regardless of whether he does so or not, he has to make payment on the 45th day.

The new scheme of 'agent-factor' relationship can be said to differ from STSML's existing system of 'agent' relationship in the following respects.

- Agent-factor will take responsibility of achieving targeted company sales.
- Agent-factor will provide finance on the due date.
- Agent-factor may perform ancillary functions for his client like administration of the sales ledger.

Under the new memorandum of understanding (MOU) between an agent and the company, the agent is going to bear the brunt of bad debts. He would be, therefore, given the right to credit-rate dealers and stop business with a dealer if he finds him noteworthy of credit. So the factor is given the right to select dealers, but he can do so, subject to the condition that sales targets are met. At least once in a year, the company is planning to hold meetings with dealers in every territory at which the agents would also be present. It is here that the assessment of sales potential will be made. So the agent will be free to choose his dealers as long as he realizes the region's potential.

It is not as if the agent will be able to manage to collect in 45 days. From 85 days, he will probably reduce the average collection period to 60 days. However, he will have to honour the bill on the 45th day and can charge the dealers some interest for the delay. It is the agent who will be financing the dealer in the new scheme.

The company expects that under the new scheme of agreement, the 'agent-factor' relationship is going to perform the following functions for STSML:

- Credit appraisal.
- Collection.
- Provision of funds on maturity—reduces uncertainty in cash flows. Protection against bad debts.

For his additional services as a factor, the agent will be paid a commission of 2.5 per cent of sales in addition to 1.5 per cent that he is getting at present. Since credit appraisal was being done even earlier and cost of funds was being recovered from the dealers, this additional 1.5 per cent represents a charge only for collections and bad debt protection. The costs incurred in the credit administration department of the company at present cannot be fully avoided. The manager's new responsibility will be to strengthen and manage the agent-factor relationship. He would require assistance of at least one clerk for this function. However, two of the three clerks currently employed in the department can be transferred to the goods despatch section of the company where additional clerks are required. The postage and telephone cost is expected to come down by 60 per cent, since in the new system, collection and follow-up would be the responsibility of the factors.

STSML's bad debt experience has been in the region of about one per cent of sales. The company also realizes that they would be willing to pay the price in return for the following benefits:

- Improved liquidity.
- Cash flow certainty.
- An improved current ratio and reduced accounts receivable in accordance with STSML's bank norms.
- The modern factor is expected to operate on a much larger scale than STSML's agents.

THE FACTORING AGREEMENT

In case the company finds factoring profitable and having potential to improve its liquidity and strengthen its market, it would be interested in implementing this new scheme. In the absence of any formal agreement, the company is quite worried about the possibility of dispute arising in future. The company will, therefore, be interested in evolving a formal relationship between the factor-agent and the company. The formal relationship must necessarily be governed by a formal contract so as to aid settlement of any dispute which may arise in future. Such an agreement must define the rights, duties, liabilities and obligations of the parties involved in a clear and comprehensive manner.

From the company's point of view, it would be necessary that the agreement clearly establishes factor's title and rights to the debts purchased and their proceeds. The factor's liabilities as regards the administration of accounts receivables, the procedure for credit screening and follow-up of delayed payments should be clearly defined and properly classified so that conflict is avoided. While formalizing the agreement, the company requires to see that the dealers' functioning is not disrupted by the operations of the factor.

In the formal agreement, the factors' principal requirement would be to have an absolute and unencumbered right on the debts purchased by him. Therefore, it would become necessary that an effective 'legal assignment' is created. This would ensure an actionable claim and would offer sufficient protection to the factor. Creating a formal legal assignment in accordance with the statutory provisions will attract stamp duty of about two to three per cent. However, the incidence of the stamp duty can be avoided provided the following steps are undertaken:

- (i) The agreement is drawn stating that the factor will provide funds without recourse to the customer against all his accounts receivables. The agreement would be just sufficient to take the dealers' receivables off the books of the company and bring them into the books of the factor. This would not represent any legal assignment of the debt and will not hold up in a court of law.
- (ii) The company gives power of attorney to the factor, allowing him to assume legal title to the debts in the event of legal proceedings.

- (iii) The company must send a letter to the dealer, stating that the debt obligations must be discharged by payment to the factor.

DISCUSSION QUESTIONS

1. Should STSML engage factors?
2. What are the costs and benefits, both qualitative and quantitative?

WASH WELL LIMITED

Wash Well Limited (WWL) was started as a joint venture company by a leading group in southern India in 2006. The company received state-of-the-art technological know-how from a well-known Japanese company, which is an important global player in the automatic washing machine product segment. This joint venture (JV) provided WWL with an opportunity to establish its brand in the highly domestic market, without facing much difficulty. In the initial phases, the main business of the company was to assemble and manufacture washing machines. The company had acquired a superior technology through the JV, and its sales were expected to grow at 10 per cent per annum. The company experienced a significant growth in its sales during the first three years of its operations, and its actual growth rate averaged about 30 per cent per annum. Apart from its brand name, another advantage the company had was in terms of its pricing policy. The company had cost and technology advantage, and therefore, could keep its prices significantly lower as compared to its competitors. Over this period, the company established its name, and its products became well-known in the market. The company entered into MoU with 40 well-known distributors all over the country, who were appointed as sole agents for distributing the company's products. WWL also had an agreement with other 300 agencies which agreed to display and sell its products.

As the competition intensified in the washing machine market, and the general market slow-down conditions engulfed the entire economy, WWL started experiencing a decline in its sales. This started happening from the beginning of 2011. The company made a number of changes in the manufacturing process to reduce costs, and was, thus, successful in reducing the prices of its products. However, this did not halt the process of decline in sales. The company's sales dropped by about 10 per cent during the current accounting year. It was for the first time that the company suffered a loss from its operations. The deteriorating market position started creating tension between the company and its JV partner. The company began delving into developing an action plan to handle its deteriorating financial condition.

One of the main reasons for the loss was a huge interest liability which had doubled during the last one and half years. This had happened because of the large amount of short-term borrowings. The continuous increase in inventory levels was identified as the reason for significant increase in short-term borrowings. Given the group's standing in the market, it did not face any problem in borrowing from its bankers. The current borrowing rate is about

15 per cent per annum. The management of the company generally uses a required rate of return of 17 per cent (before tax) to evaluate any financing decision. The financial records of the company showed the following inventory position at the end of current accounting year 2011:

	<i>Amount</i> <i>(Rupees in lakh)</i>	<i>Equivalent in months</i>	<i>Past experience</i>
Raw material	300	2 months of RMC	1 month
Work-in-progress	225	1 month of COP	½ month
Finished goods	1,000	4 months of CGS	2 months

The financial data on inventory suggests that the current inventory levels are considerably higher than the levels suggested by the company's past experience. Accounts receivable does not indicate any significant increase since most of the distributors are using the hire-purchase system to a very large extent. Account receivable and cash requirements of the company are about 12 per cent of sales. Accounts payable constitute about five per cent of sales. The management of the company identified inventory levels as a major issue causing financial problems. The company decided to work out a plan to reduce the inventory levels. Of course, one of the options before the company was to cut down the production for the next year, and suitably adjust the stock level and new production to the projected demand for the next year. This was a difficult proposition in view of the fact that the company had already entered into an agreement with its suppliers to supply the raw material. Any change in the purchase plan for the next year would result in paying substantial compensation to its suppliers for not honouring the contract. Also, since most operations of the company are highly mechanised, a cut down in production would result in a huge idle capacity and large stocks of raw material. The company was also contemplating to manufacture new models of washing machines, but its immediate problem was reducing the existing stocks. Bringing out new models in the market would mean substantial efforts in promoting the sales of the company in the near future. The top management of the company asked its marketing team to brainstorm on this problem and come out with feasible solutions. The marketing team presented the following options to reduce the inventory levels of the company:

1. The company could explore selling its washing machines on discount. The company had recently reduced the price, and the existing price after this reduction averaged about Rs. 12,000 per unit. The reduction in price had averaged about five per cent. The company did not experience any significant impact on sales. The previous studies on market behaviour to price responses in this category of product suggested less sensitivity to price reduction or discounts in the lower range. However, a price reduction above 10 per cent indicated a significant association with the increase in demand. Using these findings as the basis of their argument, the marketing team proposed a plan of providing discounts up to 12 per cent. It provided an estimate of about 1,000 units to be sold during the next quarter after implementing the suggestion of proposed discount.

2. The company could, alternatively, explore the possibility of introducing exchange sales scheme. The recent successes in television and other electronic goods market has indicated that this option has contributed significantly to the sales of many television companies in India. The marketing team had done some analysis of the number of machines and their average years of useful life in selected regions where the exchange schemes had been successful. Most of the existing machines owned by the households did not have new features which the company's product offered. The marketing team argued that there was a good chance of exchange scheme becoming popular provided the customers were offered an attractive exchange scheme. The marketing team gave an estimate of selling about 4,000 units in the next one year, provided the scheme offered, off-setting Rs. 3,000 to Rs. 4,000 of the price to customers who purchase company's product in exchange for their existing machines. The actual deduction, however, would depend on the condition of the machines and for that, the company would be required to prepare detailed guidelines.
3. The third option, which the marketing team proposed, was aimed to bring all-round reductions in the inventory levels. The marketing team was aware that the company's operating cycle consisted of raw material, work-in-progress, and finished goods holding periods. If the production takes place as per the sales plan, the total inventory holding period of the company works out about 3½ months. Of this, the finished goods holding period alone is 2 to 2½ months. The company, therefore, has to hold finished goods for this period to sell its products in the market. Recently, due to a slow-down in the market, this period had increased to 4 – 4½ months. As a result, the working capital requirements of the company has increased significantly. The marketing division of the company recently explored the possibility of selling the goods to its customers under a scheme which would deliver the machine after 1½ months of placing the order. A pilot test was carried out with a select group of customers. Based on the results of this pilot study, the proposed scheme would offer following package to a customer: on paying an advance of Rs. 1,000, the customer could order the product which would be delivered after 1½ months of time. As per the terms and conditions of the scheme, the customer would pay Rs. 8,500 at the time of delivery of the product. Through this scheme, the customer would get a benefit of Rs. 2,500 for this waiting period. The field tests had indicated that a section of customers would not mind waiting for 1 to 1½ months and taking this benefit. The marketing team gave an estimate that about 200 machines could be sold per month through this scheme.
4. A recent survey in this product segment showed that the customers had expressed concern for rapid technological changes in the product profile. Many customers had indicated preference for waiting and deferring their purchase decision till the period they get a technologically advanced product. In order to ensure that the company did not lose on sales because of this factor, the marketing team proposed that customer would be given a choice to replace their machines after every three years by paying a sum of

Rs. 8,000 any time after the third year. The scheme would remain valid for one year and after that the exchange price would increase by Rs. 1,000 every year.

5. It was found that one of the reasons for overstocking the raw material has been the foreign exchange fluctuations. About 45 per cent of the total raw material constituted imports. The company had a policy of overstocking raw material to the extent of 25 per cent of its requirements. This was considered necessary to take care of delays in getting the supplies through imports, and also to cover for foreign exchange fluctuation risks. The company does not experience any problem in getting local supplies of raw material on time. One of the reasons for high borrowings was to finance this excess raw material inventory. The marketing team suggested to review the policy of overstocking raw material under the current scenario. The Director of Finance estimated that on an average about 20 per cent of the raw material was stocked to buffer foreign exchange fluctuations, and this helps the company to gain on an average 20 to 25 per cent of this investment per annum.

In recent times, there has also been mounting pressure on the company to introduce new product models in the market. The financial requirements for these expansions would be considerable. The company had identified a model for heavy-duty use which was expected to have good demand in the market. The new product decision would not involve any major capital expenditure.

At the outset, the top management of the company appreciated the efforts of the marketing team to generate various options to reduce inventory levels. The options looked very attractive but had number of financial and managerial implications. The top management was interested in knowing the complete financial implications of each of the options presented, and would then need to develop an implementation plan in case options were found to be financially viable.

DISCUSSION QUESTIONS

1. Discuss various options prepared by the marketing team? What are key assumptions made in drawing these options?
2. Evaluate each option from financial viewpoint? Do they make financial sense?
3. What critical challenges the company will face in implementing these options?

FINE TOYS LIMITED

In early 2011, Mr. D D Narang, Chairman and Managing Director of Fine Toys Limited (FTL), was preparing himself for the possible questions which may be raised by Mr. Sushil Batra, Loan Officer of UB Bank Limited, who was reviewing his company's request for extending the period of the loan repayment. Just a week ago, the accountant of the company, Mr. R K Mittal, had informed Mr. Narang that the company would require more funds to sustain the planned level of sales. Therefore, he also wanted to obtain some assurance from the bank that more funds would be made available for a period of one year. The company owed a loan of Rs. 15 crore to the bank, due for repayment in June 2011. During the last two years of its operations, the company has primarily concentrated on growth and development of markets, with little attention paid to financial aspects. However, it did not face any severe financial problem in the recent past. Mr. Narang believed that more growth would generate more funds. As he was going through the notes prepared for the forthcoming bank meeting, one of his assistants dropped a set of reports and statements on his desk.

BACKGROUND

Fine Toys Limited is engaged in the manufacture of plastic and metal-based toys for sale to various wholesale dealers. Mr. Narang had purchased FTL in 1995. During the early phase of the business, volume of sales and earnings fluctuated considerably; there was a serious setback to financial performance and the company faced severe financial problems during the first five years. The position showed partial improvement during the next two years. The business of toys is cyclical in nature; it prospers in boom period and gets extremely poor results during the period of general recession. Because of this, prices in the industry are volatile during boom period, when the overall supply of metals and plastics becomes tight. There is no serious entry barrier as it is a low-tech and low-capital intensive business. FTL is a small but reputed firm among the competitors.

Mr. Narang operated the business as the sole proprietor for seven years until 2004, when the business was incorporated as a private limited company. At that time, Narang brought more capital into the business. Thereafter, the company exhibited a grainy performance for about

18 months; afterwards, the company began to demonstrate improved financial performance with increase in both sales and earnings.

In 2010, the company appointed a new sales manager, redesigned and restructured its products and introduced many new toys, and began an intensive sales promotional campaign. Because of this restructuring of marketing function, the company is expecting significant improvements in its performance. The company has now become a major manufacturer of toys with 45 wholesale dealers in different parts of the country.

Generally, sales of FIL are level throughout the year, except for a high seasonal period lasting from March to July. In the winter of 2010, however, FTL has received special orders from a well-known soft drink and ice cream manufacturers for toys to be used as gifts in advertising campaigns.

FTL had been a customer of the UB Bank since Narang purchased the business. The company had been a borrower from time to time and the repayment schedule of loans had been satisfactory, although sometimes there had been delays in payments.

CURRENT SITUATION

While looking through the reports and statements which Narang had on his table, he noted that during the last three years, FTL has devoted most of its attention to promotion of sales and growth of earnings. Most of the profits have been used to finance the growth. The company's sales have grown by 40 per cent and 36 per cent during the last two years. In fact during the last meeting with the bank for a loan of Rs. 15 crore, Mr Narang had highlighted the growth which his business has achieved in the past. He had also discussed the continued growth potential for his business. The bank was convinced about the growth potential of FIL and hence had sanctioned a loan of Rs. 15 crore for a period of two years. This loan was supposed to be paid in June 2011. The company has requested for an extension.

After having a long conversation with Mr. Batra, Narang requested that the bank should extend the period of loan and allow him to draw some more money by way of an additional loan of Rs. 50 crore, to sustain its growing operations. During the meeting, Narang apprised Mr Batra that the shareholders would be bringing Rs. 2 crore of more equity capital during the next two to three months. After listening to Narang's arguments, Mr Batra replied:

“Well, Mr Narang, I appreciate the efforts which your company has been making towards developing and extending its market and achieving higher levels of growth. At the same time, you cannot neglect the financial aspects of the business. I advise you to kindly look into your financial policies, particularly regarding collections, payments and inventory holding period. I appreciate that you would be bringing more equity in the business in future. This would certainly support your operations by financing the growth and strengthening your liquidity and debt-equity ratio to some extent. But that is not sufficient. On the basis of information provided by you, both of us can rework the estimates and assess after a week, the exact financial requirements of your company. We can meet again and compare our

results and we will see what can be done for your company. However, I am not sure that the bank would be able to finance a loan of more than Rs. 20 crore to your company. Why don't you also examine the possible ways of generating funds internally, which at the same time suits your plans?"

FINANCIAL PLANNING

Narang was trying to find out why the company was not in a position to meet its obligation, whereas the growth in the past was supposed to generate sufficient funds for the company. Further, he also wanted to examine whether the company really required additional funds to finance its operations. He wanted some analysis which would clearly identify the magnitude and urgency of the company's financial problems and help him in developing a plan for their solution.

To help him to understand the company's financial position. Narang requested Mr. Mittal to furnish the following information for developing the financial plan for the company:

1. Necessary cash balance required to be maintained by the business to support the projected level of sales.
2. Accounts payable's schedule of payments and purchases plan about raw material and stores during the next four months.
3. Capital expenditure plan.
4. Sales projections and details about any other income.
5. Credit policy and actual realizations from sales.
6. Details about operating costs, overheads, selling and distribution expenses, depreciation and tax payments.
7. Estimates of inventory necessary to support the planned level of sales.
8. Details about financing plan including the payment of dividends, any payment towards the loans, instalments, or repayment of other liabilities, or any additional borrowings from outside.

In response to Mr. Narang's request, Mr. Mittal presented him the detailed financial information about the company's operations. Narang started with requesting Mr. Mittal to explain the basic assumptions made in preparing the budget which was submitted to the bank. While listening to Mittal's presentation, he was frequently reminded of Mr. Batra's comments about looking into policies regarding accounts receivables, creditors and inventory holding. Mr Mittal's presentation is summarized below:

"We have enough orders on hand from our present customers and a special order from a soft-drink and ice cream manufacturer to ensure operations at full capacity till June 30. On the basis of these orders, monthly sales for April, May and June have been assumed to be approximately equal to Rs. 43 crore. Sales in June have been assumed to be about Rs. 35 crore because of seasonal turn. All our sales are made on credit.

As you know, that we were cautioned early in the year by several suppliers, that because of increase in demand and proliferation of small toy-makers, raw materials might be hard to get this year. We purchased more than what we were required to store under normal circumstances as a hedge against future shortages, and now we owe Rs. 40 crore to our suppliers and others on 30 days credit. The company has decided to pay Rs. 40 crore during March. However, the company's average payment period in the past has been as long as 60 days without hearing complaints from suppliers. The following is the accounts payable schedule:

Accounts Payable Schedule

(Rupees in crore)

	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Total</i>
Opening Balance	40	16	8	8	40
Credit Purchases	16	8	8	8	40
Payment to Creditors	-40	-16	-8	-8	-72
Closing Balance	16	8	8	8	8

So far as the repayment of loan instalment or payment towards any other liability is concerned, there is an instalment of Rs. 1.5 crore to be paid in July on a loan. In the financial plans submitted to the Bank, we have provided for income tax provision at the rate of 30 per cent of each month's profit during April to July. Advance payment of tax has been put at Rs. 8 crore in April.

At the end of March, our accounts receivable were Rs. 47.50 crore. We should be able to collect Rs. 27.00 crore by the end of April, and the remainder will be carried over to the next month. The estimates of collection during April to July are given as follows.

Accounts Receivables Schedule

(Rupees in crore)

	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Total</i>
Opening Balance	47.50	63.50	49.35	52.87	47.50
Collections	-27.00	-57.15	-39.48	-42.30	-165.93
Sales (New A/R)	43.00	43.00	43.00	35.00	164.00
Closing Balance	63.50	49.35	52.87	45.57	45.57

We have ordered raw materials and supplies to be delivered during the month of April amounting to Rs. 16 crore. As pointed out earlier, most of these materials are purchased on net 30-day terms. Although our suppliers have not indicated how much material they

will be able to despatch us during the months of May, June and July, we are relatively certain that receipts of raw materials and supplies during this period will not be less than Rs. 8 crore on a monthly average. Since we have purchased sufficient raw material in advance in view of possible shortages, we are ready to operate till the June level. Our contract with the soft-drink and ice cream manufacturer will assure that at least till April there is no problem in demand and will keep us profitable. Our inventory schedule till July is as follows:

Inventory Schedule

(Rupees in crore)

	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Total</i>
Opening Balance	50.0	53.1	48.2	43.3	50.0
Purchases	16.0	8.0	8.0	8.0	40.0
R M Consumed	-12.9	-12.9	-12.9	-10.5	-49.2
Closing Balance	53.1	48.2	43.3	40.8	40.8

Generally, in our business the raw material consumption on an average has been about 30 per cent of sales. The operating efficiency that we displayed during the previous accounting year is typical of what we should be able to do for this year (Exhibits I and II contain the company's financial statements for the year 2011). As shown by our profit and loss account, this recent experience demonstrated 25 per cent of sales for direct labour and 13 per cent for the variable cash elements of factory overhead. The factory overhead, selling, and general and administrative expenses should continue at about Rs. 7.50 lakh per month at all levels of sales.

The company charges about Rs. 0.40 lakh per month for depreciation before computing profits. No expansion of productive facilities is planned. However, as one of our machines, purchased for Rs. 6 lakh many years ago and fully depreciated by 1999, has practically worn out, we have ordered a replacement and installation is expected to be made this month. The machine will cost Rs. 15 lakh, 20 per cent payable on delivery and the balance three months later.

There have been no dividends for years, and this year looks like the time to start. We are thinking of paying Rs. 4 lakh as interim dividends in June. That will be a small part of this year's profits.

Regarding the cash balance necessary to maintain the projected level of sales, we had a balance of Rs. 3 lakh at the end of February. From our past experience, it is uncomfortably low, and therefore in our budget submitted to the bank we planned it for a minimum of Rs. 4.60 lakh by the end of this month. At present, the company does not have any investment in marketable securities and hence release of cash from such investments is out of question."

NARANG'S REACTIONS

After listening to Mr. Mittal's presentation, Mr. Narang thought that most of the assumptions underlying the operating plan were reasonable. He was wondering if some policy changes could be initiated immediately to generate some funds internally. He thought that collection could be expedited by putting extra efforts and inventory could be reduced through tight control. He asked Mr. Mittal to give him the break-up of Rs. 47.5 lakh receivables outstanding at the end of February 2011. After checking sales ledger, Mr. Mittal gave the following break-up:

<i>Sales of</i>	<i>(Rupees in lakh)</i>
<i>Amount</i>	
This month (February)	27.7
Previous month (January)	15.0
Two months before (December)	4.8

Mr. Mittal stated that against the company's credit term of 30 days, customers on an average take 50 days to make payment. As is indicated in the break-up for February's receivables, approximately 15 per cent of credit sales in a month are recovered after three months, 55 per cent after two months and remaining after one month. Narang was surprised to know the laxity of his company's efforts to collect sales in time. He, therefore, decided to put all efforts to collect sales in time. After consulting the sales manager and the accountant, he thought it reasonable that with an action plan to expedite collections, the company may be able to realize 80 per cent of sales within a month and remaining 20 per cent within two months.

On analyzing inventories, Mr. Narang thought that much funds could not be released if they are reduced. In view of the large seasonal demand for March-June period, the company has already acquired the material. The purchases planned during these months are to accommodate material for future months, particularly in view of the expected tightness in the supply of material. Narang was prepared to take a risk and reduce purchases by Rs. 3 crore each month.

He wanted to know Mr. Mittal's reaction to the continuation of stretching the accounts payables to 60 days. Mr. Mittal argued that though creditors have not generally objected to FTL's stretching of bills in the past, they may do so now, in view of the tight supply situation. Yet he thought that the company may continue with such a policy only for a short period; ultimately the company would be forced to pay in time. Narang agreed with Mittal. But he instructed him to rework estimates assuming 60 days suppliers' credit at least for the next four to five months. He, however, decided that he would personally talk to suppliers for this accommodation and clarify any misunderstanding which may arise in this regard.

DISCUSSION QUESTIONS

1. Estimate the company's requirements of funds for the next quarter. What is the maximum amount the company would be required to borrow? Do you think that these requirements are permanent in nature?
2. What problems you expect this company would face while carrying out its operating plan? What do you think the company should do to minimize the requirements of funds to finance its working capital requirements?
3. What policy changes Mr. Narang is contemplating to manage its working capital better?
4. What are the financial implications of such changes? Draw the revized plan after incorporating these changes. What problems Mr. Narang would face in implementing revized plan?

Exhibit I

FINE TOYS LIMITED
Balance Sheet as on March 31, 2011

*(Rupees in crore)***ASSETS**

Current assets

Cash	3.00
Debtors	47.50
Inventory	50.00

<i>Total</i>	100.50
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Net fixed assets	21.50
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<i>Total assets</i>	122.00
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LIABILITIES

Share capital	57.00
Borrowings	25.00
Creditors	40.00

<i>Total liabilities</i>	122.00
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Exhibit II

FINE TOYS LIMITED
Summarized Profit and Loss Account for the year ended
March 31, 2011

(Rupees in crore)

Sales		412
Raw material consumption	123	
Direct wages	103	
Other manufacturing expenses	55	
Selling and distribution and other administrative expenses	83	
Depreciation	5	
Interest	4	
		373
Profit before tax		39
Provision for tax		19
Profit after tax		20

RELIABLE TEXAMILL LIMITED

In the beginning of 2010, Shyam Lal, Chairman and Managing Director of the Reliable Texamill Limited (RTL), was concerned about the company's liquidity position to meet its future financial requirements. As the company was expecting its net sales to increase from Rs. 1,208.61 million in 2010 to Rs. 2,185.94 million in 2011, the management of working capital components would assume greater importance. The company would need more working capital funds to support the expanding sales. It, therefore, requested its banker, the Premier Bank of India, in the beginning of 2010 for increasing its credit limit for working capital to Rs. 625 million for the year 2011. The existing credit limit of Rs. 400 million has been secured against the hypothecation of the company's entire stocks, book debts (receivables) and other outstanding present and future rights and assets.

THE COMPANY AND ITS PERFORMANCE

RTL promoted Shyam Lal, Chairman and Managing Director, and Kajari Lal, the whole-time Director, in 2000. The company commenced commercial production in 2002. RTL manufactures special fabrics for hotel and hospital industry. The company's factory locations are situated in an industrially less developed area in a western state. The average capacity utilization of the company was 81 per cent during 2008–09 and 85 per cent during 2009–10. It expects to use 87 per cent of the installed capacity during 2010–11.

In the beginning, the company incurred a net loss. The acute power shortage was the dominant reason, besides the initial teething troubles, for the poor beginning of the company. However, the RTL has since been able to increase its sales to Rs. 973.32 million in 2008–09, and to Rs. 1,208.61 million in 2009–10 as against the estimated sales of Rs. 1,767.55 million. The management of RTL has attributed the lower actual sales to the sluggish market conditions that prevailed during the second half of the year 2009–10, forcing the company to keep its production at a low level, and to a certain extent due to the change in the company's product mix. The company showed EBDITA of Rs. 163.35 million in 2009–10.

Increased power problem is attributed as the reason for the low profitability of the company in spite of its higher production. Because of the power problem, the company supposedly had to carry on production with the help of power generators with diesel oil purchased at exorbitant

prices in order to adhere to the production to the extent possible. The lower profitability was also contributed by the increase in input costs and administrative expenses resulting from the expansion of capacity in 2009–10.

RTL has not so far paid any tax and dividends. The company has not envisaged any tax liability for quite a few years because of the various tax benefits to which it is entitled because of its past losses. The actual and estimated balance sheets and the profit and loss account of the company are given in Exhibits I, II and III.

PRODUCTION FACILITIES

The company's existing production facilities are considered adequate for operating at the enhanced capacity. The production process for obtaining the main product originates with the mixing up of the different fibres and using specially designed processes for the blend proposed to be manufactured. The annual consumption of these fibres generally depends on the product mix manufactured during the particular year. The actual consumption during the years 2008–09 and 2009–10, being valued, respectively, is at Rs. 713.11 million and Rs. 902.30 million. The company generally does not encounter any significant difficulties in procuring its full requirements of raw materials and stores at the current market prices from suppliers.

In the past three years of its operations, the company has been facing frequent power problems. As a result, the company built up adequate captive power generating capacity by installing one more set of diesel power generator. RTL is now planning to replace two sets by the purchase of one SKODA set as it is expected to be more economical from the point of view of diesel consumption and usage for longer period.

COMPETITION AND SELLING ARRANGEMENTS

The company's end-products cater to the needs of large and medium manufacturers of fabrics and also, handlooms and powerlooms. The major buyers, accounting for 80–85 per cent of sales, include reputed manufacturers. The remaining 15–20 per cent is sold to small dealers and traders.

RTL faces a fair amount of competition from a number of companies. In spite of the stiff competition, the products manufactured by RTL are well received in the market and is supposed to enjoy a premium over the other leading manufacturers in the country. The selling operations of the company are managed by its four branches located in different parts of the country. The full-fledged sales depots recently opened are situated far away from the company's factory. As a result, a good part of the finished goods remains in transit at any point of time. About 65 per cent of the company's sales are being affected on credit terms ranging from 45–60 days depending on the market conditions. The company has been finding it difficult to realize its dues within the normal credit period allowed to customers. The management attributed this to its being new to this segment of the market. Till 2008–09, the company had a practice

of selling a part of its production through selling agents to small buyers. This practice has been discontinued, and now the company directly sells to these buyers. The company, however, allows a discount ranging between 2–2 ½ per cent for sales on demand or cash basis.

EXPANSION

Soon after starting commercial production in 2002, RTL embarked on major expansion programme for installation of more capacity. Since the company incurred a loss in the very first year, the company attempted a modest expansion programme involving installation of additional capacity in later years. However, the recent growth of fabric manufacturers has increased the demand for its products. The company, therefore, felt that the increase in its capacity was absolutely necessary in order to bring about a better economy in its operations and capture market growth. The expansion programme was completed with a capital expenditure of Rs. 275.88 million (exclusive of working capital margin) against the estimated cost of Rs. 275 million (inclusive of Rs. 22 million working capital margin) last year. The expansion was financed partly from internal accruals and partly from loans from bank (Rs. 155.88 million). The entire accruals during 2009–10 were utilized towards meeting the cost of the expansion project. The additional capacity would be put to commercial production from April 2010.

As stated earlier, the company plans to acquire one generator and other equipment at a cost of Rs. 47.70 million in 2010–11. This is proposed to be financed by a long-term loan of Rs. 40 million from the bank and the balance by internal accruals. The installation of the generator will enable the company to combat the power shortage and to carry out uninterrupted production.

FUTURE PROSPECTS

The operations of the company are affected by the changes in the government policies from time to time. The recent announcements made by the government about the rate of excise payable are expected to help the company in boosting its sales. The fluctuations in foreign exchange rates and changes in government policies from time to time also affect the company's operations, especially the prices of their basic raw material as prices of these materials ruling in the international market are reportedly a little lower than the prices prevailing in India. While the prices of raw materials have increased substantially during the last two years, the prices of RTL's end-products have, more or less, remained at the same level. As the company has not been able to absorb in the selling prices the increased costs of inputs, the company faces an urgent need of funds. There also seems to be an urgent need to bring long-term funds to improve the company's liquidity position. RTL raised substantial funds (nearly Rs. 112.80 million) as unsecured loans from directors/associates for financing part of the cost of the expansion project, and considers it difficult to raise long-term funds now.

The power supply in the State, where the company is situated, is presently showing signs of improvement, and it is expected to be satisfactory in the coming months. With the consumer preference during the recent years having shifted to products that are more sophisticated and the company's products being of good quality and well accepted in the market, RTL can hope to fare well in the coming years.

RTL normally plans its production schedule based on the market trends so as to sell the end-products with ease and avoid any risk of not-selling because of change in preferences and acceptability of colours and designs. Manufacturing operations during previous years were mostly confined to the production of lower-value products because of its acceptability in the market. In addition, it carried a better profit margin for the company. The same pattern was maintained during last year. Production during the second half of that year was kept at a lower level as RTL experienced difficulties in selling products mainly due to sluggishness in the market during this period. RTL's current production plan has been devised keeping in view the changes in market preferences towards higher-value products. RTL has planned to manufacture more quantities of higher-value products during the period 2010–11. These products are expected to be more acceptable in the market.

The company has projected its energy costs at about 3.4 per cent of the total cost of production. The other expenses have been estimated in line with the past experience. In addition, the assets and liabilities of the company have been estimated in accordance with the past trends.

RTL had depended quite substantially on trade credit for meeting its working capital needs. Trade credit forms about one-third of the current liabilities. The normal credit period allowed by the suppliers is 45 days; however, a discount of 2 per cent for payments made within 15 days of the purchase date is allowed. In the past, creditors did not object to RTL's stretching of payments to them. In view of the difficult liquidity scenario, they are likely to pressurize hard for early payment of dues.

DISCUSSION QUESTIONS

1. How has RTL performed and financed its operations in the past and how it proposes to finance its requirements in future? What are key assumptions?
 - (a) Prepare cash flow statement for 2010, projected cash flow statement for 2011. Based on these, discuss how the company proposes to finance its operations during 2011.
 - (b) Discuss the key financial ratios and evaluate financial plan of the company.
2. How has RTL managed its working capital? What are its plans to improve its working capital management in future? (Assume raw material stock of Rs. 150 million at the end of 2011)
 - (a) Show calculation of gross and net operating cycle.
 - (b) Other key indicators reflecting working capital management dimensions and discussion based on this.

3. Should RTL pay promptly to its suppliers in order to avail cash discount of 2 per cent?
4. Given the industry norms, do you think that the bank will accept company's request for the enhancement of the credit limit? Would bank accept company's plan for reducing its credit from suppliers?
5. Do you accept the financial plan prepared by company's management? What modifications would you suggest in the plan and why?

Exhibit I**RELIABLE TEXA LIMITED**

Balance Sheet Actual and Projected as on March 31 (Rs. in million)

	<i>Actual</i>		<i>Projected</i>
	<i>2009</i>	<i>2010</i>	<i>2011</i>
Liabilities			
Bank Borrowing	366.74	490.02	622.91
Trade Creditors	200.94	239.16	70.79
Term Loans Payable	10.56	5.89	98.74
Provisions	47.71	70.71	73.72
Current Liabilities	625.95	805.78	866.16
Long-term Borrowings	531.22	801.14	802.37
Net Worth	191.07	223.49	288.74
Total Liabilities	1348.24	1830.41	1957.27
Assets			
Cash and Bank	4.35	6.06	7.44
Accounts Receivables	293.25	269.48	303.19
Inventory			
Raw Materials	162.00	202.13	275.22
WIP	51.02	64.96	80.85
Finished Goods	22.94	160.44	177.87
Consumable Stores	16.80	27.20	32.34
Other Current Assets	29.67	27.2	36.68
Total Current Assets	580.03	757.47	913.59
Gross Block	820.04	1121.13	1146.19
Less: Accumulated Depreciation	73.66	73.66	127.34
Net Fixed Assets	746.38	1047.47	1018.85
Other Non-current Assets	21.83	25.47	24.83
Total Assets	1348.24	1830.41	1957.27

Exhibit II

RELIABLE TEXA LIMITED
Profit and Loss Account Actual and Projected
for the year ending March 31 (Rs. in million)

	<i>Actual</i>		<i>Projected</i>
	<i>2009</i>	<i>2010</i>	<i>2011</i>
Net Sales	973.32	1208.61	2185.94
Cost of Goods Sold	775.98	921.96	1850.33
Gross Profit	197.34	286.65	335.61
Selling and Administration	97.26	123.30	127.74
Interest	81.68	137.83	140.68
Operating Profit	18.4	25.52	67.19
Other Income	6.08	6.90	-1.94
Profit before Tax	24.48	32.42	65.25
Provision for Tax	0	0	0
Profit after Tax	24.48	32.42	65.25

Exhibit III

RELIABLE TEXA LIMITED
Statement of Cost of Goods Sold (CGS) Actual and Projected
for the year ending March 31 (Rs. in million)

	<i>2009</i>	<i>2010</i>	<i>2011</i>
Raw Material Consumption	685.94	933.67	1649.36
Power and Fuel	36.67	55.37	64.68
Direct Labour	40.00	57.14	79.41
Other Manufacturing Expenses	12.87	27.21	36.52
Depreciation	41.57	0	53.68
Total	817.05	1073.39	1883.65
Add: Opening WIP	24.92	51.02	64.96
Total	841.97	1124.41	1948.61
Less: Closing WIP	51.02	64.96	80.85
Cost of Production	790.95	1059.45	1867.76
Add: Opening finished goods	7.97	22.95	160.44
Total	798.92	1082.4	2028.20
Less: Closing finished goods	22.94	160.44	177.87
Cost of Goods Sold	775.98	921.96	1850.33

ANNEXURE 1: RELIABLE TEXAMILL LIMITED**Inventory Norms Followed in Industry**

1. Raw material	2 months
2. Other consumable spares	5 per cent of inventory
3. WIP	½ months
4. Finished goods and AR	2 ¼ months

FANCY WEAR PRIVATE LIMITED

Early in April 2011, FWPL approached its bank for enhancement in existing credit limits as given below:

	<i>(Rs. in crore)</i>	
	<i>Existing limits</i>	<i>Enhanced limits applied for</i>
Cash Credit Limit	2.10	3.20
LC Limit	3.30	5.00

In their proposal, the company stated that in 2010–11 their total sales were Rs. 18.4 crore (exports Rs. 16.4 crore and domestic Rs. 2.0 crore) as against Rs. 5 crore (Rs. 3.6 crore export and Rs. 1.4 crore domestic) achieved in 2009–10. They hoped to increase the level of sales to Rs. 25 crore in 2011–12. Higher sales would involve more working capital finance for which they were approaching the bank.

GROWTH OF THE COMPANY

Fancy Wear was started as partnership firm on January 1, 2005 as the sole distributor of P Shah and Co., another partnership firm manufacturing the famous 'Fashion' male jewellery, leather waist belts and allied products. The business of P Shah and Co., was taken over by Fancy Wear on August 17, 2005. The firm, Fancy Wear, had initially three partners, P Shah, K Shah and H Shah who held 70 per cent, 20 per cent and 10 per cent interest respectively. On December 31, 2008, K Shah resigned from partnership and Meena Shah was taken as partner. The firm was being financed by the senior partner, P Shah. H Shah and Meena Shah are related to him as brother and wife respectively.

With effect from May 1, 2009, Fancy Wear was converted into a private limited company. The resolution of the company taking over Fancy Wear *inter alia* stated: Resolved that the company do take over from M/s Fancy Wear the entire business of manufacture of leather belts, cufflinks and other fancy items manufactured by them as provided in the Articles of Association of the company with effect from May 1, 2009. The authorised capital of the company has been

fixed at Rs. 40 lakh divided into 40,000 shares of Rs. 100 each. The partners of Fancy Wear took shares in the new company in proportion to their individual capital investment as on the date of transfer. P Shah was nominated as Chairman and Managing Director of the company and H Shah and Meena Shah as directors. Meanwhile, the other three brothers of P Shah have joined the company as shareholders and executives.

The company is a family concern and the entire management is vested in Shah brothers. P Shah looks mainly after finance, exports and overall progress of the company. H Shah, who holds technical degree in electroplating from the USA, looks after cufflinks production and domestic sales. The third brother, N Shah who also holds a degree in leather technology, looks after the production of leather waist belts, wallets and leather garments. The other two brothers are engaged in marketing of products and assist P Shah in his work.

The company employs besides labourers and other operating staff, five consultants from different areas, that is, industrial engineering, leather technology, marketing, export and finance. The accounts of the company are maintained by an experienced cost and works accountant on a part time basis who also helps the management in reviewing the progress in production periodically.

PRODUCTS, MARKET AND COMPETITION

Fancy Wear's products, particularly cufflinks, leather belts, and leather wallets have a good reputation in the market as quality products. In the beginning, the company relied on the domestic market. With the passage of time, they have developed a very good export market that now accounts for more than 80 per cent of its total sales. The domestic market is mainly confined to Mumbai, Kolkata, Chennai and Delhi where sales are routed through departmental stores and a limited number of agents. The company does not anticipate a big increase in the size of domestic market in near the future. It has, therefore, been concentrating more on export market. In the beginning, exports were limited to Middle East and East European countries. But of late, exports to Middle East have considerably decreased. The bulk of export is now accounted for by the East European market.

The company has been following a policy of vigorous export promotion and in this connection, P Shah made a number of visits to various countries. The company expects to find a good market in the USA and the UK where departmental stores serve as important outlets for such products. Shah has already procured some orders from a departmental store in the USA which has more than a billion dollar in sales of leather belts and wallets. It has also agreed to collaborate with the company's new proposed leather unit which would open the biggest market for the company's leather products.

In the domestic market, the company has succeeded in procuring orders from big companies like Air India, Shipping Corporation of India, Escorts, etc. which distribute the company's products as gifts amongst their customers. The company expects this new market to grow large enough to provide an important outlet for their products in the domestic market.

FWPL takes up production usually on the basis of confirmed orders to avoid unnecessary inventory build up. They send samples directly to potential customers and also through agents. On the basis of orders, the purchases are made and orders executed.

The company generally allows 60 days credit to their inland buyers. As the sales are for smaller amounts, they do not draw bills on the purchasers. In case of export sales to Russia, the bills are drawn on sight basis but owing to various delays, it normally takes 90 days to get the payment. Sales to parties in East European countries as also in West European countries are usually on the basis of 6 month's credit.

FINANCING BY THE BANK

On March 31, 2006, the bank's branch for the first time considered the loan application of Fancy Wear, and it recommended to Head Office a cash credit limit of Rs. 40 lakh to be sanctioned to the firm which had estimated net worth of Rs. 40 lakh. In the forwarding letter, it was stated, *inter alia*: 'Mr Shah is an experienced businessman and conducts the firm's affairs on sound and profitable lines. The firm enjoys good credit in the market.' To consider the loan application of the firm, a report was obtained from the Small Industries Services Institute on the working of the firm, which stated, *inter alia*: 'The items manufactured by the firm have a good Indian market and has great potential for export. The technical and managerial ability of the entrepreneur is satisfactory. There is moderate competition in the industry. Future prospects are good. Their case may be considered favourably.'

As against the recommended limit of Rs. 40 lakh, the Head Office granted a limit of Rs. 10 lakh subject to a review after receipt of technical report. The Head Office enhanced the above limit in April 2006 to Rs. 20 lakh and Rs. 9 lakh by way of drawings against semi-finished and finished goods. These limits were again reduced to Rs. 15 lakh and Rs. 5 lakh respectively in June 2006 as the balance sheet of the firm revealed a net working capital surplus of Rs. 21.40 lakh.

Following the reduction in limit, the firm made a representation to the bank:

- On the one hand, the payments from local dealers are not coming in time and, on the other hand, we have to build up our stocks to cope with the season which is likely to open up from October onwards.
- We assure you that as and when the situation improves and we are in a position to reduce the above limit, we shall do so voluntarily. As you will appreciate that if we have surplus funds, we would not like to pay you the interest unless it is necessary.

The Head Office advised the branch in September 2006 that the limits of the firm might be restored if they show satisfactory improvement in the production and sales during the past three months. The limit was finally restored in February 2007 and the branch was asked by the Head Office to submit renewal proposal in April 2007.

In December 2007, the firm brought to the notice of the branch manager various difficulties faced by them on account of existing unsecured borrowings which involved higher interest rates

and continued to be an uncertain source of finance. The firm thereafter applied for further credit from the bank: Rs. 13 lakh against machinery; additional cash credit of Rs. 10 lakh; and additional bill limit of Rs. 10 lakh. On April 8, 2008, cash credit limit was enhanced to Rs. 30 lakh and LC limit to Rs. 13 lakh for one year.

On October 5, 2008, the firm approached the branch for sanction of cash credit which was finally approved by the Head Office on October 15, 2008 as follows: cash credit limit Rs. 25 lakh against stocks.

In March 2009, the firm again approached the branch stating that they had introduced planning, budgetary and forecast systems and anticipated total sales of Rs. 2.8 crore in 2009. The existing limits were then enhanced as follows:

<i>(Rupees in lakh)</i>			
<i>Type of Limit</i>	<i>Applied for by the firm</i>	<i>Recommended by the branch</i>	<i>Sanctioned by Head Office</i>
(i) Demand Cash Credit	140	70	50
(ii) Local Bill Limit	20	45	73
<i>Total</i>	160	115	123

Again in October 2009, bank manager informed the Head Office that they had been approached by P Shah for an enhancement of the cash credit limit to Rs. 1.4 crore with a corresponding increase in the limit for negotiation of foreign bills. He recommended an enhanced cash credit limit of Rs. 90 lakh and LC limit to Rs. 100 lakh. These limits were subsequently confirmed by the Head Office.

During the year 2010, the existing limits were allowed to continue except that the LC limit was enhanced from Rs. 100 lakh to Rs. 200 lakh in view of larger export sales of the company.

CREDIT DECISION LAST YEAR

On the basis of annual domestic sales target of Rs. 1.8 crore for 2011, with estimated raw material consumption of Rs. 9 lakh per month, and taking into account one month's raw material consumption and 20 per cent margin, the existing cash credit limit of Rs. 10 lakh was considered adequate.

The company's monthly exports were estimated at Rs. 120 lakh and raw material component at Rs. 90 lakh. Taking into account 3 months' raw material consumption and 20 per cent margin, cash credit limit of Rs. 200 lakh was considered reasonable. In case of export bills which were normally outstanding for 90 days, an enhanced limit of Rs. 3.3 crore was sanctioned.

All the stocks under cash credit are hypothecated to the bank and a charge is registered with the Registrar of Joint Stock Companies. Besides, the company's entire machinery (unencumbered), worth Rs. 26.6 lakh (depreciated) forms collateral to various facilities. The advance is also secured by the personal guarantees of all the directors of the company who had estimated net means of Rs. 50 lakh.

The profit and loss accounts and balance sheets of the company for the period 2005 to 2011 are given in Exhibits I and II.

P Shah was preparing to meet the banker and was anticipating questions that he might raise. He was also thinking of the strategy he should adopt for negotiations with the bank.

DISCUSSION QUESTIONS

1. Analyze company's operating and financial performance. Your analysis should be properly supported by analysis of financial information presented in Exhibits 1 and 2 of the case. You should also consider qualitative factors in evaluating the company's strengths and weaknesses.
2. How has Fancy Wear Private Limited financed its operations and working capital requirements in the past? What is its future plans?
3. What do you think about the credit worthiness of Fancy Wear Private Limited? What credit rating will you assign to Fancy Wear Private Limited using a scale of 5 points and why?

Exhibit I

Profit and Loss Account Year ending March 31

(Rupees in lakh)

	2005	2006	2007	2008	2009	2010	2011
Sales: Export	-	-	-	14.8	244.6	367.8	1655.6
Domestic	46.0	79.6	79.0	110.2	107.6	138.4	168.2
<i>Total</i>	46.0	79.6	79.0	125.0	352.2	506.2	1823.8
Closing Stock	59.2	85.8	78.2	77.4	42.0	32.0	115.6
Export incentives/other receipts	-	-	-	-	60.8	23.0	17.0
<i>Total Income</i>	105.2	165.4	157.2	202.4	455.0	561.2	1956.4
<i>Manufacturing Expenses</i>							
Opening Stock	-	59.2	85.8	78.2	77.4	42.0	32.6
Purchases	69.2	47.4	23.6	47.0	247.2	268.8	1342.6
Wages	8.0	11.4	10.4	6.0	11.0	72.2	270.2
Depreciation on Machinery	2.2	2.4	2.2	2.2	1.8	3.6	4.6
Other Manufacturing Expenses	1.0	2.2	1.0	1.8	2.6	3.6	6.2
<i>Sub-total</i>	80.4	122.6	123.0	135.2	340.0	390.2	1656.2
<i>Administrative Expenses</i>							
Salaries, Bonus, etc.*	11.4	18.0	11.4	15.0	23.2	51.6	79.6
Factory and General Expenses	1.2	4.0	5.6	7.2	12.6	21.4	36.0
Factory Rent	4.8	7.8	3.4	5.2	5.4	7.4	7.4
Sundry Office Expenses	1.6	1.8	3.6	6.4	9.4	2.2	12.0
<i>Sub-total</i>	19.0	31.6	24.0	33.8	50.6	82.6	135.0

Contd . . .

Exhibit I Contd . . .

	2005	2006	2007	2008	2009	2010	2011
<i>Selling Expenses</i>							
Packing, forwarding and freight	0.6	1.0	1.2	8.6	14.4	24.6	45.2
Advertisement and Publicity	1.6	2.4	1.2	7.6	20.6	22.4	30.0
Sales commission/brokerage	2.8	3.0	6.0	9.8	10.6	15.8	18.8
Sales tax	-	-	-	0.4	2.6	-	-
<i>Sub-total</i>	5.0	6.4	8.4	26.4	48.2	62.8	94.0
<i>Financial expenses **</i>	-	3.8	3.8	4.8	9.8	9.4	24.0
Depreciation on Furniture, etc.	0.4	0.4	0.4	0.4	1.2	0.8	3.4
<i>Total expenses</i>	104.8	124.8	159.6	200.6	449.8	545.8	1912.6
Net profit or (loss)	0.4	0.6	(2.4)	1.8	5.2	16.0	43.8
Gratuity	-	-	-	-	-	-	4.0
Provision for taxation	-	-	-	-	-	8.4	22.8
Development rebate/investment reserve	-	-	-	1.0	1.0	1.6	1.2
Proposed dividend	-	-	-	-	-	1.6	3.0
Balance carried to balance sheet	0.4	0.6	(2.4)	.08	4.2	4.4	12.8

* Include working allowance for partners.

** Include interest on partner's capital.

Exhibit IIComparative Statement of Assets and Liabilities
as on March 31

	(Rupees in lakh)						
<i>Liabilities</i>	2005	2006	2007	2008	2009	2010	2011
<i>Proprietor's Capital/Share Capital</i>							
P Shah	-	-	-	48.6	20.0	-	-
H Shah	-	-	-	2.2	4.0	-	-
Meena Shah	-	-	-	11.0	15.2	-	-
	83.6	61.2	59.0	61.8	39.2	30.0	30.0
<i>Reserves and Surplus</i>							
Profit and Loss Account	-	-	-	1.0	2.0	3.6	4.8
	0.4	1.0	(1.4)	(0.6)	3.6	8.0	20.8
	84.0	62.2	57.6	62.2	44.8	41.6	55.6
<i>Loans</i>							
From Bank							
Trade bills	0.4	29.6	10.0	6.0	10.2	20.4	9.8
Packing credit	-	-	-	10.0	80.0	5.0	-
Cash credit	-	19.8	20.0	30.0	-	6.6	144.6
From others (unsecured)	-	-	24.2	4.2	1.6	3.8	3.8
From Partners/directors	-	-	-	-	-	1.2	3.2
	0.4	49.4	54.2	50.2	91.8	37.0	161.4
<i>Sundry Creditors</i>							
Goods	11.4	11.6	16.2	22.0	54.6	59.8	149.0
Expenses	-	6.0	6.8	8.0	20.4	35.8	54.6

Contd. . . .

Exhibit II Contd . . .

<i>Liabilities</i>	2005	2006	2007	2008	2009	2010	2011
<i>Miscellaneous Liabilities</i>							
Provision for taxation	-	-	-	-	-	2.8	-
Proposed dividend	-	-	-	-	-	1.6	3.0
Total liabilities	95.8	129.2	134.8	142.4	211.6	178.6	423.6
<i>Fixed Assets</i>							
<i>Plant and Machinery</i>							
Net additions during the year	20.6	20.6	25.0	25.8	28.2	15.6	30.0
	-	4.4	0.8	2.4	(1.8)	14.6	8.0
Less depreciation	20.6	25.0	25.8	28.2	26.4	30.2	38.0
Net Plant	2.2	4.6	6.8	9.0	10.8	3.6	8.0
<i>Furniture and Fixtures</i>							
Additions during the year	18.4	20.4	19.0	19.2	15.6	26.6	30.0
	4.4	4.4	5.6	6.0	6.0	3.2	3.6
Less depreciation	-	1.2	0.4	-	(0.6)	1.2	7.2
	4.4	5.6	6.0	6.0	5.4	4.4	10.8
	0.4	0.8	1.2	1.6	2.0	0.4	1.4
	4.0	4.8	4.8	4.4	3.4	4.0	9.4
<i>Motor Car</i>							
Less depreciation	-	-	-	-	3.6	2.8	7.4
	-	-	-	-	0.8	0.4	2.0
	-	-	-	-	2.8	2.4	5.4
<i>Other fixed assets</i>							
Less depreciation	-	-	-	-	-	-	5.8
	-	-	-	-	-	-	0.6
	22.4	25.2	23.8	23.6	21.8	33.0	50.0

Contd . . .

Exhibit II Contd . . .

<i>Liabilities</i>	2005	2006	2007	2008	2009	2010	2011
<i>Current Assets</i>							
Stock in trade	59.0	85.8	78.2	77.4	42.0	32.8	117.4
Sundry debtors	9.0	12.8	25.8	36.4	75.8	86.6	174.4
Deposit and Advances	5.2	5.0	5.6	3.4	11.8	17.4	67.2
Export subsidy receivable	-	-	-	-	36.2	-	-
Advance taxes	-	-	-	-	-	-	12.6
Cash in bank	-	-	0.4	0.8	22.2	4.2	1.6
Cash in hand	0.2	0.4	1.0	0.8	2.0	4.6	0.4
	73.4	104.0	111.0	118.8	189.8	145.6	373.6
<i>Total assets</i>	95.8	129.2	134.8	142.4	211.6	178.6	423.6

Note:

With effect from May 1, 2010, the firm was converted into a limited company. Amounts of assets and liabilities are given at vendor's price.

ANITA MILLS LIMITED

The Finance Manager of Anita Mills Limited, a medium sized mill manufacturing coarse cloth was assessing the cash requirements for the operating year 2011 which had just started. The company had plans to increase its sales by $33\frac{1}{3}$ per cent during 2011. In 2010 the company sold cloth valued at Rs. 708.48 lakh. The physical facilities presently at the command of the company were considered adequate to sustain twice the 2010 level of production. In fact, in early January 2011 when this cash budgeting exercise was being done, revised production plans to suit the changed sales plan had just been finalised.

Due to the seasonal demand of textile products, the sales during the quarters ending September and December were twice as much as those in the first two quarters of the year. Within each of these half years, however, there was near uniformity in the off-take. Efforts that Anita Mills management were capable of could not alter the seasonal pattern of sales. The company, however, follows and would wish to continue to follow a constant level production throughout the year because of several reasons.

Sales are made on 30 days credit, and the company's experience in collection were satisfactory. At the end of 2010 the clients owed Rs. 79.95 lakh of which Rs.65.19 lakh pertained to December 2010 sales. The remaining sum of Rs. 14.76 lakh was being carried over from year to year, and there was no distinct possibility of its realisation even during 2011–12.

Major items of inputs required for the manufacture of cloth are cotton, dyes and chemicals, fuel and power, and labour. The Finance Manager knew that, for every rupee of sales, cost of cotton was 44 paise, dyes and chemicals 6 paise, fuel 4 paise and on packaging, etc. 1 paise. The company purchased cotton, dyes and chemicals and general maintenance stores on 60 days credit. Although it had not been strictly possible to pay the creditors in time in the past, the Finance Manager strongly wished to set things right at least during 2011. At the end of 2010, the company owed Rs. 132.84 lakh to its suppliers.

The minimum stock of cotton the company would like to hold at any point of time is a fixed 1.5 months' requirements. Further, it is the company's policy to buy the requirements of cotton for any one month in the preceding month itself. At the end of 2010, cotton worth Rs. 55.35 lakh was held in inventory. Dyes and chemicals, available with insignificant lead time, were usually bought a month in advance of need. There was no stock of this item at end of 2010. The company maintains a stock of 3 months' requirement of stores and spares and

replenishes consumption every month. They had, at the close of December 2010, stores valued at Rs. 20.91 lakh of which a sum of Rs. 14.76 lakh represented obsolete stock. The company expects its annual consumption of stores and spares during 2011 to remain at the 2010 level of Rs. 49.20 lakh for the whole year.

The mill had unsold finished goods worth Rs. 61.50 lakh (valued at market price) at the end of 2010. The semi-processed material on the spindles and looms worth Rs. 6.15 lakh in 2010 is expected to remain the same during 2011. There was no clear defined policy with regard to stocking finished goods. The company would receive requisitions from buyers, well in advance, indicating the quantities they would like to lift in specified months. The company however made it a point to ensure that as far as possible the deliveries proposed in a particular month were ready by the end of the preceding one. The aggregate cash and bank balance was around Rs. 12.30 lakhs which, according to the Finance Manager, was the minimum he should hold at any time in 2011 also.

Period based costs, as they were incurred in the year 2010, are given below:

Expenses under 1, 2 and 4 are paid every month. Insurance is paid half yearly in March and September; interest on term loan, which is expected to remain the same for 2011, is also paid half yearly but in the months of June and December.

	<i>(Rupees in lakh)</i>
1. Wages and salaries	221.40
2. Rent	6.15
3. Insurance and repairs	4.92
4. Miscellaneous	18.45
5. Interest on term loan	9.84

The management expects a five per cent increase in wages and salaries during 2011 on account of revision in rates. The increased production plan for the year would increase the wage bill further by 5 per cent.

Other obligations which the company has to meet during 2011 are as follows:

	<i>(Rupees in lakh)</i>
1. Tax dues for the year 2009 (to be paid in January)	3.69
2. Unclaimed dividends (may be payable in January)	1.23
3. Dividend for the year 2011 (two equal instalments in June and December)	12.30

The company estimates that its liability on the operational results for the year 2011 could be of the order of Rs. 49.20 lakh which, according to the tax laws, would have to be paid up in four equal quarterly instalments, which commenced from June 2011.

DISCUSSION QUESTIONS

1. Suggest the methodology of estimating the cash requirement of Anita Mills.
2. What assumptions have you made in estimating the requirement?
3. Provide the sketch of partial balance sheet
4. In your opinion is the company profitable and operations generating sufficient funds to finance requirement.
5. What is nature of working capital requirements of Anita Mills? Give your assumptions and their implications.

Case 21

GANESH CHEMICALS LIMITED

Ganesh Chemicals is located in a backward district of Uttar Pradesh. It is engaged in the manufacture of industrial chemicals of various grades. The company is at present enjoying the following credit limits (Rs in crore) from National Bank:

<i>Facilities</i>	<i>Limits</i>	<i>Balance Outstanding</i>	<i>Margin</i>
Medium-Term Loan	50	43.75	33% on fixed assets
Cash Credit Limit	18	17.70	25% on finished goods and raw materials and 30% on work-in-progress
LC Limit	13	12.50	NIL

In April, 2011 the company approached the bank with a request for enhancement of its credit limits as under:

<i>Facilities</i>	<i>(Rs. in crore)</i>
Medium-Term Loan	43.75 (with future instalments deferred by 6 months)
Cash Credit	32.00
LC Limit	30.00

The Bank follows the norms for industries manufacturing basic industrial chemicals as a group as given below:

Raw material	2.75 months
Stock-in-process	0.25 months
Finished goods	1.00 months
Receivables	1.75 months

K. Verma, manager of the bank's branch was in doubt as to how far he could apply the norms and allow deviations from norms in assessing the working capital requirements of the company.

THE COMPANY AND ITS PERFORMANCE

GCL was promoted early in the year 2008 by a regionally well-known group of industrialist. A L Ganesh, the managing director of the company, was a Master of Technology from Indian Institute of Technology, Bombay. His area of specialization was industrial chemicals and he acquired four years of experience in his family group of enterprises before taking over the present position in Ganesh Chemicals. H L Ganesh, another director of the company, was a leading industrialist in the region. He has been the President of the State Chamber of Commerce for the last four years. His connections with chemical and other industries were well known. A Mathur, another director was a retired ICS Officer with experience in dealing with Forest Department of Uttar Pradesh.

The company went into commercial production in September, 2009. It was a continuous process industry and was licensed and installed to produce chemicals.

The main consumer of GCL's products were pharmaceutical, cosmetic, perfumery, toiletries, paints and varnishes, rubber and mining industries. GCL's product found use in industrial perfumeries and disinfectants which were mainly consumed by cosmetic manufacturers and pharmaceutical companies. Distilled chemical was an industrial solvent and was consumed mainly by the paint industry and was used in the manufacture of perfumery, chemicals and special quality resins. Also the product was mainly consumed by the tyre industry and by other rubber-based industries like the carpet industry.

During the year 2010–2011, there was a slump in demand for GCL's products of various grades. However, the company had to keep up production as the demand for by-products and distilled product was good. This, however, resulted in a build up of finished goods inventory and created financial problems for the company.

The company was able to achieve sales of Rs. 48.08 crore in the year 2009–2010. For the year ended March 31, 2011, it estimated sales of Rs. 164 crore, reaching 80 per cent of the capacity, but could achieve only Rs. 142.64 crore.

The break-up of the working results of the company for the year 1997 and 1998 were as follows:

	<i>Production (Quantity)</i>		<i>Sales (Quantity)</i>		<i>Value (Rs. in crore)</i>	
	<i>31.3.10</i>	<i>31.3.11</i>	<i>31.3.10</i>	<i>31.3.11</i>	<i>31.3.10</i>	<i>31.3.11</i>
Main grade	107	171	47	187	28	98
Distilled grade	498	658	295	817	8	22
Rich grade	3	29	-	31	-	4
Grade '40'	104	120	93	97	8	8
By products	96	160	66	185	4	10
<i>Total</i>	808	1,138	501	1,317	48	142

	31.3.10	31.3.11
Sales	48.08	142.64
Depreciation	12.32	12.66
Net Loss	5.40	8.22
Capacity Utilization	41%	65%

In the year 2011, the company availed of a term loan of Rs. 100 crore for acquisition of fixed assets including moveable machinery on pari passu charges basis from Uttar Pradesh Financial Corporation and National Bank (Rs. 50 crore from each). The loan was secured with the personal guarantees of directors. The term loan of Rs. 50 crore from Uttar Pradesh Financial Corporation was payable in twelve half yearly instalments of Rs. 4 crore each and the last instalment of Rs. 6 crore was due to fall in March, 2015. The term loan of Rs. 50 crore from National Bank was repayable in eight half yearly instalments of Rs. 6.25 crore each the repayment to commence from April, 2010. Another term loan of Rs. 10 crore was granted by Uttar Pradesh Financial Corporation in March, 2010 for purchase of additional machinery and the loan was repayable in 10 half yearly instalments of Rs. 1 crore each starting from September, 2010. The working capital facilities were sanctioned by National Bank in 2009. The first instalment of term loan of the bank due in April, 2010 was paid by the company only in May, 2011 and the second instalment due on October, 2010 was outstanding till date.

FUTURE ENVIRONMENTAL PROSPECTS

The company estimated their working capital requirements on the basis of projected sales of Rs. 200 crore for the year 2011–2012 and approached National Bank for higher limits. It also requested the bank to defer future payments of term loan instalments by six months.

H L Ganesh, the director of the company sent to K. Verma, the manager of the bank branch, the following statement along with company's published Profit and Loss Account and Balance Sheet.

'We are one of the four leading manufacturers of industrial chemicals in the country. The marketing of the company's products were below our level of expectations, the reason being that till 2010 the Government of India allowed the import of these chemicals. The cost of imported product was lower than the cost of production of the company. In fact, the import price for high grade product was 60 per cent of the domestic product price. Products produced in the country has key material content of 20 per cent to 25 per cent compared to 65 per cent content obtained in countries like Portugal and France. The low content resulted in lower yield of product and higher price of local product. This adversely affected the sales of the company. We made several representations to the Government in this regard to stop import of this chemical. The Government has now regulated the import. According to the recent import policy announced, this industrial chemical cannot be imported unless specifically cleared by the Government.'

‘Another reason for our failure in achieving the target was due to the all-round recessionary trend prevailing in various industries and more particularly in the rubber, cosmetics, pharmaceutical, perfumery and paint industries which are our customers. The situation was further aggravated by the credit squeeze. All user units therefore brought down their inventory levels to a bare minimum. As a result we had to hold more finished goods inventory. To bring down the accumulated stock, the unit was shut down for two and a half months in 2010.’

‘Further, as ours is a new unit and as we are entering the market, we are required to complete with the well-established units. In order to make a breakthrough with the customers we are required to give extended credit to the customers, at times up to 90 days which increased our requirements of working capital. We are slowly trying to bring down the credit period, but at this juncture it is very difficult to do so, as it would affect our turnover.’

‘You are aware that our factory is situated in a backward area of Uttar Pradesh and it is far away from the regular industrial units consuming our products situated in Mumbai, Kolkata and Chennai. As such, the transportation period is much longer, resulting in parties asking for a longer credit period. The preference is for the suppliers who are situated nearby. Unless additional facilities of cash credit and bills discounting are granted it is practically impossible for our unit, in a distant backward area, to compare with units in metropolitan centres.’

‘We do admit that we are facing competition from three other leading manufacturers. But we have an edge over them in quality. We are also planning to introduce some new brands with alcohol content and to reduce prices to meet the competition. We are introducing a new product called ‘Grade Hydrate’ for which there is great demand. To start with, the company plans to produce 10 to 12 tonnes per year fetching about Rs. 12 crore. Installed capacity of Grade Hydrate will be 20 tonnes. For manufacturing this item, the company has already invested a sum of Rs. 2 crore in additional machinery.’

‘Our loss is primarily due to low turnover compared to sales forecast and installed capacity. As the economy is now expected to slowly recover from recession, we hope that the sales will pick up. Once sales pick up, our financial position will improve. We have also initiated a vigorous sales drive for our products. We have already obtained firm orders for 50 tonnes of product. In the coming year, we hope to achieve a sales target of Rs. 200 crore.’

‘We don’t envisage any problem in purchasing raw material. Uttar Pradesh accounts for 50 per cent of the total production and we have entered into long contracts for purchase of raw material. Regarding power and water requirements, we have often faced problems. As a precautionary step, we are going to install a power generator to meet exigencies of power cut.’

‘To help us at the critical juncture, we request you to defer future instalments of term loan by six months and to allow us to hold more inventory and receivables to meet the competition. Uttar Pradesh Financial Corporation had allowed repayment holiday of their loan by one year when we made a representation last year.’

‘Please find herewith the data relating to our working for the year ended March 31, 2011 and projected figures for the next year in Exhibits I and II. We hope you will consider our request favourably.’

DISCUSSION QUESTIONS

1. What problems GCL is facing? What are strengths and weakness of GCL? What external threats the company is facing? Do you think the credit requirements of the GCL are justified?
2. Do you think bank will enhance the existing limit? What key factors bank is likely to consider while evaluating credit needs of GCL?
3. How would you distinguish the difference between need and purpose? What is credit worthiness? How would you evaluate credit worthiness of GCL?

Exhibit I

Profit and Loss Statement

(Rs. in lakh)

	31.3.2010 (Actuals)	31.3.2011 (Actuals)	31.3.2012 (Projections)
Net Sales	4,808	14,264	20,000
Raw Materials	3,860	4,858	7,200
Power and Fuel	1,612	2,130	3,040
Direct Labour	590	910	1,300
Repairs and Maintenance	236	264	288
Other Manufacturing Expenses	142	506	1,000
Depreciation	1,232	1,266	1,400
<i>Sub-total</i>	7,672	9,934	14,228
Add: Opening Stock-in-process	-	644	120
<i>Sub-total</i>	7,672	10,578	14,348
Deduct: Closing Stock-in-process	644	120	240
<i>Sub-total (Cost of Production)</i>	7,028	10,458	14,108
Add: Opening Stock of Finished Goods	-	4,044	2,720
<i>Sub-total</i>	7,028	14,502	16,828
Deduct: Closing Stock of Finished Goods	4,044	2,720	3,360
(Cost of Sales)	2,984	11,782	13,468
Gross Profit	1,824	2,482	6,532
Interest	1,354	2,030	2,200
Selling: General and Administrative Expenses	1,094	1,360	2,100
<i>Sub-total</i>	2,448	3,390	4,300
Operating Profit	-624	-908	2,232
Other Income	84	86	100
Net Profit	-540	-822	2,332

Exhibit II

Balance Sheet

(Rs. in lakh)

	31.3.2010 (Actuals)	31.3.2011 (Actuals)	31.3.2012 (Projections)
<i>Current Liabilities</i>			
Short-term borrowing			
from banks	2,336	3,014	6,200
Short-term Deposits	-	600	-
Trade Creditors	562 (1.5m)	652 (1.6m)	800 (1.25m)
Interest and other accruals	190	214	-
Other statutory liabilities	36	8	-
Term Loan Instalment			
of National Bank	1,250	1,250	1,250
Term Loan Instalment			
of UPFC	-	400	1,000
Instalment due on			
leasehold land	-	360	366
Total Instalment of			
Term Loans	1,250	2,010	2,616
Other Current Liabilities			
and Provisions	<u>842</u>	<u>1,172</u>	<u>1,400</u>
<i>Total current liabilities</i>	<u>5,216</u>	<u>7,670</u>	<u>11,016</u>
<i>Current Assets</i>			
Cash and bank balances	390	882	1,200
Short-term Investments	-	-	1,200
Receivables	1,988 (5.0m)	4,494 (3.8m)	5,000 (3.0m)
Raw materials	1,248 (3.9m)	1,202 (3.0m)	1,650 (2.75m)
Stock-in-process	644 (1.1m)	120 (0.15m)	240 (0.20m)
Finished goods	4,044 (16.3m)	2,720 (2.8m)	3,360 (3.0m)
Other Current Assets	296	168	398
<i>Total current assets</i>	<u>8,610</u>	<u>9,586</u>	<u>13,048</u>
<i>Fixed Assets</i>			
Gross Block	22,852	23,524	24,524
Depreciation to date	1,232	2,498	3,898
Net Block	21,620	21,026	20,626
Intangible Assets	826	826	600
<i>Total assets</i>	<u>31,056</u>	<u>31,438</u>	<u>34,274</u>

Contd . . .

Exhibit II Contd . . .

	31.3.2010 (Actuals)	31.3.2011 (Actuals)	31.3.2012 (Projections)
<i>Term Liabilities</i>			
Term Loans	9,692	8,726	6,475
Term Deposits (repayable after one year)	3,600	3,038	3,038
Other Term Liabilities (leasehold land)	726	366	-
<i>Total outside liabilities</i>	<u>19,234</u>	<u>19,800</u>	<u>20,530</u>
<i>Net Worth</i>			
Ordinary Share Capital	10,000	10,000	10,000
Other Reserve (excluding provisions)	2,362	3,000	3,000*
Surplus or deficit in profit and loss account	-540	-1,362	744
Net Worth	<u>11,822</u>	<u>11,638</u>	<u>13,744**</u>
<i>Total liabilities</i>	<u>31,056</u>	<u>31,438</u>	<u>34,274</u>

* Created out of cash subsidy received from the Government.

** Less write off of intangible assets of Rs. 2.26 crore.

BHARAT LAWN MOWERS LIMITED

In early January, Mr. Nakul Singh, Director Finance of Bharat Lawn Mowers Limited, was reviewing the projected balance sheet and profit and loss account of the company which he had submitted to the National Bank with a request to enhance the cash credit limit from Rs. 6 crores to Rs. 10 crores for the purpose of financing working capital requirements during the year 2010–11. The bank had promised to get the enhanced sanction of cash credit limit within a week's time. However, he was not sure about it. Since the company was not projecting any increase in sales during the next accounting year, he was expecting some reservations on the part of the bank to enhance the credit limit. At the same time, he anticipated that it would not be difficult for the bank to justify the increase because of its past performance and growth.

BRIEF HISTORY OF THE COMPANY

Bharat Lawn Mowers Limited (BLML) was set up in 1997 in a small but important industrial city in north India by a young entrepreneur named Nakul Singh. Like many other successful small industrialists of the city, his strength lay in his knowledge and experience of the workshop. He had worked with his own hands on various machines. His major area of interest lay in manufacturing high quality blades with sharp and durable edges.

Sahdev Singh was born in a family of rich farmers, and, while still in his teens, he sold off his and his younger brother Nakul Singh's shares of land to his three elder brothers. With his younger brother he moved to the city, deposited the inherited money with a bank in fixed deposit, worked in a workshop to earn his living and to finance his younger brother's education who later graduated in commerce. When he set up BLML, to start with as a private limited company, he kept production operations, his first love to himself, and, left marketing and finance to his college educated younger brother.

PRODUCT LINES AND EXPANSION

BLML started with manufacturing manually operated wheel driven lawn mowers in four sizes ranging from 12 inches to 18 inches. In the eighties they added manually operated roller driven lawn mowers in five sizes ranging from 12 inches to 24 inches. The idea behind this product

was to eliminate separate lawn rollers and to provide along with mowing velvety finish to the lawns with the help of the built-in roller. It was at this stage that they put 'Panther' as the brand name on their products. In the eighties they first came out with a petrol started and kerosene driven lawn mower in 24 inches size and then with an electricity driven mower in the 24 inches size. The fuel driven mower was not popular and they are planning to drop the product in near future. BLML is not fully satisfied with its electric driven model either. They are making serious efforts to improve the design to make the product more efficient so as to be in line with electric mowers now being manufactured abroad, and to produce it in two sizes.

The company realising its strength lay in manufacturing good quality blades, diversified its product line in the late seventies by adding two more products: scateurs and shares, which they manufacture in two and four sizes respectively. These products have proved as popular as the manually driven lawn mowers over the years.

MARKETING OF PRODUCTS

When they started about 15 years ago, there were three competitors for lawn mowers. Two of them have since closed down. But, in the meantime three more competitors have emerged in the lawn mower market. In the scateur and shears market, they face three and ten competitors respectively. The company does not advertise. It has a very small travelling sales force. At the same time the company has developed long-standing dealership arrangements with important horticultural retail outlets in almost all important cities in the country. These dealers get substantial discounts, moreover they offer repair services particularly for sharpening blades edges and for resetting alignments. All this goes well, because company products command the best image in the market.

The dominating image of company products in the market is the outcome of the basic business strategy: the best product at the lowest price. The company has been highly quality and cost conscious. It commands 70 per cent share of the mowers market in the region. Its share of scateurs market is 60 per cent and of shears the market share is 40 per cent. Although the company has continued to enjoy a steady growth in its sales, it has occasionally also experienced sluggish demand in the market, largely because of changing fortunes of decorative horticulture itself. The market has gradually been shifting from the household sector to the institutional sector. The latter now accounts for two-third of sales.

FINANCING OF OPERATIONS

The company started with a share capital of Rs. 40 lakh. It was raised to Rs. 12 crore when it was converted into a public limited company in 2005. However, it continues to be a closely held unit with all its share capital coming from family, relations and friends. Moreover, a significant feature of company's financial management has been its dependence on internally generated funds. Right from the first year of its operations, it has made profits every year, paid reasonable dividends, and ploughed back profit. Nakul Singh, the director finance, has been uncommon in his financial

policies. He has not minded paying tax, but he minds paying interest. His borrowings from banks are confined strictly to short-term financial credit; for long-term loans for project finance, he has been going to the state finance corporation. The company has been purchasing raw material on 30 days credit and selling its products on 45 days credit. It has been prompt in paying its suppliers and equally so in collecting its money from the dealers. Generally the dealers do not carry large stocks with them. Particularly, for higher value larger models of lawn mowers, dealers book orders on payment of some advance money and promise delivery within a month.

BLML manufactures a wide range of products in its product line to meet the demands of different categories of customers evenly throughout the year. The sales however follow a seasonal pattern. This necessitates heavy investment in inventory, particularly of finished goods.

RELATIONSHIP WITH THE BANK

The company right from its inception had been dealing only with one bank: a large public sector bank with its origins in the state. However, for the last few years the company had not been satisfied with the service provided by the dealing branch of this bank. Two successive managers had spoilt the relations. One was too formal and bureaucratic, while his successor had been trying to get too close and had been pestering both Nakul Singh and Sahdev Singh to help him in mobilising more deposits for him in the city.

Anil Gupta, the manager of the main city branch of the National Bank, another large and fast growing public sector bank, had been watching all this happening, and, then had solicited their account. He could easily see the strength of the company and its balance sheet. Particularly he was attracted by the facts that the company borrowed only seasonally, for two to three months it did not borrow at all, and kept sizeable deposits in current account throughout the year, and more so in low season months. After trying for almost two years, he succeeded in getting this account for his bank in May, 2005. As it happened, his chairmen and managing director visited the city towards the end of the month. The manager was fairly excited in talking about this account to them. The chairmen liked the idea of take-over of the account, congratulated the manager and asked him to send the papers quickly for formal approval.

Early in February, 2010, the company sent its papers for sanction of cash credit limit of Rs. 10 crores for the year ending March 31, 2011, and along with it the pro forma statements for the coming year (see Exhibits I and II).

In the proposal, the company made special mention of the following two points:

1. BLML was presently implementing a major plant modernisation programme that was halfway through and would be completed by May, 2010. This would enable the company to reduce costs and to improve the quality of the products further, and, to design and to produce better electric driven lawn mowers. It was being financed entirely out of company's own internally generated funds.
2. The pro forma statements being sent to the bank were the most likely projections made by the company.

As Anil Gupta looked into the proposal, he was intrigued by the fact that the company was not projecting a higher level of sales for the sales for the next year. Moreover, it was asking for a limit higher than what was justified by the projections. The manager was also beginning to develop a feeling of embarrassment because the norms used by the Bank were:

- | | |
|--|------------------|
| 1. Raw Material | 2.75 months; |
| 2. Work-in-process | 1.25 months; and |
| 3. Finished Goods and Accounts Receivables | 3.25 months |

He found that BLML was projecting its requirements beyond the norms. And, above all, Anil Gupta was committed to the customer to obtain the first sanction of cash credit limit for the company within a week.

SANCTION OF CREDIT LIMIT

Anil Gupta thought of requesting BLML to change their projections for the year 2010–11, but then abandoned the idea because he did not want to take the risk of annoying Nakul Singh. He had by now understood his style of management fairly well. The old man was inclined to stick to some of his basic business policies. Therefore, he on his own improvised a few reasons based on past performance and growth of BLML justifying higher credit limit, prepared his note, and strongly recommended sanction of the requested cash credit limit of Rs. 10 crores for the company.

He really had to make frantic efforts to obtain sanction of the limit within the promised time of one week. Nakul received the sanction for cash credit limit within ten days time. He was, however, disappointed when he subsequently received the papers. Limit was sanctioned for Rs. 8 crore only. It stipulated margins of 25 per cent on raw material, 30 per cent on work-in-process, 20 per cent on finished goods and 10 per cent on accounts receivables. To his surprise, the rate of interest was fixed at full 2 per cent above the prime lending rate. He personally met Anil to express his unhappiness. Anil explained his and Bank's position to Nakul and promised flexibility in day-to-day operations.

POST-SANCTION DEVELOPMENTS

Anil Gupta continued to receive regularly every quarter information on actual financial reports from BLML (see Exhibits III and IV). But he was already shaken when he had seen that the account was overdrawn right in the first quarter itself. The company wrote to the bank's branch that the temporary overdraw was necessitated because of capital expenditure and cost overrun under the modernisation programme.

Although there was no overdraw in the account during the second quarter, the drawings were higher and the current account balances lower than the original estimates. The company informed him this was due to somewhat sluggish demand in the market.

However, Anil Gupta was taken aback when he received the actual figures for the third quarter. The position had worsened further. Generally, in the past, in the month of December, BLML did not at all draw funds from the bank and its current account balance rose high. Sahdev Singh personally talked to him on the phone and told him that the company was at present facing a serious recession in the market. This created a need for additional short-term borrowing. He assured him that it was not due to any special conditions affecting his company or the industry to which it belonged. On the contrary—the company's overall share of the market had improved by about 5 per cent. He believed that additional funds would be required only until the company could adjust to the new economic conditions and he envisaged that this adjustment would probably not carry on until the end of April, 2011 or thereabouts.

But when Anil Gupta received the actual figures for the last quarter of the year, he could not yet see the end of the tunnel. He therefore decided to telephone Nakul Singh and seek an early appointment with him before he did the annual review of the account and consider cash credit limit for the company for the next year. The latter told him that he was too happy to invite him for lunch, three days now, the Friday.

PREPARATION FOR THE MEETING

Nakul Singh sensed that Anil was feeling embarrassed when he had called him. For long he had solicited the account with Nakul Singh. At the same time he was now not happy with the turn of the events. The current account deposits had fallen, company was borrowing much more and throughout the year, exceeding the inventory norms and for a month even the cash credit limit sanctioned to it. Nakul was wondering what kind of question Anil would ask during the lunch meeting on coming Friday. He remembered that during the previous discussions with Anil, he had expressed his apprehension about using the short-term bank credit finance for modernisation programme of the company. Nakul expected that discussion would focus around this argument. Nakul also understood that because of the turn of events, the nature of credit of BLML has changed. He was also concerned that the demand for funds in near future would increase because of the seasonal peak during the next few months. Since the company had ended the year with bank borrowing very close to the cash limit sanctioned to the company, he was wondering how to convince Anil for the enhancement of cash credit limit further. He was sure that Anil would not like the idea of further enhancement. Nakul discussed the situation with Sahdev. After a long discussion, Nakul said: 'Sahdev fix quickly a day long meeting of all department heads with a brief to ask all of them to make presentations on working capital management and generate suggestions to improve the liquidity position of the company.'

DISCUSSION QUESTIONS

1. What problems GCL is facing? What are strengths and weakness of GCL? What external threats the company is facing? Do you think the credit requirements of the GCL are justified?

2. Do you think bank will enhance the existing limit? What key factors bank is likely to consider while evaluating credit needs of GCL?
3. How would you distinguish the difference between need and purpose? What is credit worthiness? How would you evaluate credit worthiness of GCL?

Exhibit I

BHARAT LAWN MOWERS LIMITED

Pro forma Income Statements by Quarters

(Rupees on lakh)

	<i>Estimated</i>	<i>Planned</i>				
	<i>Year ended 31.3.10</i>	<i>Quarter ended 30.6.10</i>	<i>Quarter ended 30.9.10</i>	<i>Quarter ended 31.12.10</i>	<i>Quarter ended 31.3.11</i>	<i>Year ended 31.3.11</i>
<i>Sales</i>	8,063	2,160	3,120	1,600	1,120	8,000
Raw material consumption	2,574	624	624	624	624	2,496
Direct labour	2,412	624	624	624	624	2,496
Depreciation	384	120	120	120	120	480
Manufacturing Overheads	489	120	120	120	120	480
Cost of production	5,859	1,488	1,488	1,488	1,488	5,952
Adjustment for inventory	-39	48	624	-288	-576	-192
<i>Cost of goods sold</i>	5,820	1,536	2,112	1,200	912	5,760
Adm. and selling expenses	544	114	185	143	107	549
Operating profit	1,699	510	823	257	101	1,691
Interest	528	152	128	96	108	484
Profit before tax	1,171	358	695	161	-7	1,207
Tax	503	154	299	69	-3	519
<i>Profit after tax</i>	668	204	396	92	-4	688
Dividend	-400	-80	-80	-80	-160	-400
Retained earnings	268	124	316	12	-164	288

Exhibit II**BHARAT LAWN MOWERS LIMITED****Pro forma Balance Sheets by Quarters***(Rupees on lakh)*

	<i>Estimated</i>	<i>Planned</i>			
	<i>Year ended 31.3.10</i>	<i>Quarter ended 30.6.10</i>	<i>Quarter ended 30.9.10</i>	<i>Quarter ended 31.12.10</i>	<i>Quarter ended 31.3.11</i>
Share Capital	1,200	1,200	1,200	1,200	1,200
Reserves and Surplus	2,287	2,411	2,727	2,739	2,575
Term Loan	3,200	2,800	2,800	2,800	2,800
Bank Credit	0	921	117	0	749
Accounts Payable*	231	208	208	208	208
Taxes Payables**	0	32	256	176	0
Term Loan Instalments	0	400	200	200	0
Provisions	72	72	72	72	72
<i>Total liabilities</i>	<u>6,990</u>	<u>8,044</u>	<u>7,580</u>	<u>7,395</u>	<u>7,604</u>
Net Block	3,572	4,372	4,372	4,372	4,372
Raw Material	217	208	208	208	208
Work-in-progress	832	832	832	832	832
Finished Goods	1,120	1,072	448	736	1,312
Accounts Receivables***	558	1,240	1,400	760	560
Cash at Bank	691	320	320	487	320
<i>Total assets</i>	<u>6,990</u>	<u>8,044</u>	<u>7,580</u>	<u>7,395</u>	<u>7,604</u>

* Assumes 30 days payment period.

** Assumes taxes paid in four equal instalments each in June, September, December and March based on pro forma profits.

*** Assumes average collection period of 45 days.

Exhibit III

BHARAT LAWN MOWERS LIMITED Actual Income Statement by Quarter

(Rupees in lakh)

	<i>Year ended 31.3.10</i>	<i>Quarter ended 30.6.10</i>	<i>Quarter ended 30.9.10</i>	<i>Quarter ended 31.12.10</i>	<i>Quarter ended 31.3.11</i>	<i>Year ended 31.3.11</i>
<i>Sales</i>	8,093	2,074	2,739	1,336	962	7,111
Raw material consumption	2,594	656	626	526	436	2,244
Direct labour	2,453	629	622	568	510	2,329
Depreciation	384	120	120	120	120	480
Manufacturing Overheads	495	128	121	145	100	494
Cost of production	5,926	1,533	1,489	1,359	1,166	5,547
Adjustments of inventory	-40	25	396	-262	-368	-209
<i>Cost of goods sold</i>	5,886	1,558	1,885	1,097	798	5,338
Adm. and selling expenses	549	120	158	90	71	439
Operating profit	1,658	396	696	149	93	1,334
Interest	528	140	138	121	124	523
Profit before tax	1,130	256	558	28	-31	811
Tax	486	110	240	12	-13	349
<i>Profit after tax</i>	644	146	318	16	-18	462
Dividend	-400	-80	-80	-80	-160	-400
Retained earnings	244	66	238	-64	-178	62

Exhibit IV**BHARAT LAWN MOWERS LIMITED**

Actual Balance Sheets by Quarters

(Rupees in lakh)

	<i>Year ended 31.3.10</i>	<i>Quarter ended 30.6.10</i>	<i>Quarter ended 30.9.10</i>	<i>Quarter ended 31.12.10</i>	<i>Quarter ended 31.3.11</i>
Share Capital	1,200	1,200	1,200	1,200	1,200
Reserves and Surplus	2,263	2,329	2,567	2,503	2,325
Term Loan	3,200	2,800	2,800	2,800	2,800
Bank Credit	0	1,040	820	517	872
Accounts Payable	235	226	184	138	145
Taxes Payable	0	-26	119	-37	-54
Term Loan Instalments	0	400	200	200	0
Provisions	75	76	72	72	69
<i>Total liabilities</i>	<u>6,973</u>	<u>8,045</u>	<u>7,962</u>	<u>7,393</u>	<u>7,357</u>
Net Block	3,572	4,451	4,461	4,430	4,402
Raw Material	217	203	208	180	121
Work-in-progress	832	862	812	676	674
Finished Goods	1,120	1,065	719	1,117	1,487
Accounts Receivables	527	1,176	1,491	706	387
Cash at Bank	705	288	271	284	286
<i>Total assets</i>	<u>6,973</u>	<u>8,045</u>	<u>7,962</u>	<u>7,393</u>	<u>7,357</u>

INDUSTRIAL GASES (PRIVATE) LIMITED

Industrial Gases (Private) Limited (IGL) was a wholly-owned family company in Udyognagar, located in an industrially fast-developing State in Western India. It was founded in 1961 in technical collaboration with a German firm which had supplied the plant, erected and commissioned it, and trained Indian technical personnel. IGL manufactured oxygen, acetylene, and nitrogen gases. The promoters of the company had made a market study which revealed a growing potential demand for gases from the oil refinery, fertilizer and petro-chemical complex, large public works projects for construction of bridges and dams, and numerous small and big steel fabricating and processing industries located around Udyognagar.

IGL'S BACKGROUND

The promoters were businessmen of long-standing repute but had no manufacturing experience. They were the largest importers of paper in India. But this ancestral family business had dwindled to almost nothing with the imposition of post-war restrictions on the import of paper, with a view to encouraging indigenous paper manufacture. The family therefore was looking for a new line of business, and Ranchodbhai, the head of the family, thought that any such new business should include production of a basic product—a product of daily consumption with repetitive demand. Paper manufacture met the criterion of a basic product, but Ranchodbhai decided against it because it required very large capital and he did not want to raise money from the public. After much discussion, for four good reasons it was decided to set up a plant at Udyognagar to manufacture oxygen, acetylene and nitrogen gases. The reasons were:

1. It met the criterion of a basic-product industry.
2. It was listed as a “priority” industry by the Director General, Technical Development, Government of India.
3. It involved little working capital investment in inventory (the major raw material being air).
4. Success in this enterprise required the efficient servicing of clients—which ideally suited the family's business background.

ORGANIZATION

Ranchodhbhai, aged 64, was the managing director of the company. His 38-year-old son, Ram, a graduate in Arts and Law, was the executive director. He was assisted by a manager (finance) who was a commerce graduate; a works manager—a trained though unqualified technician; an assistant works manager, who was a qualified diploma holder in Engineering; and a sales manager—a commerce graduate, who canvassed business and supervised depots and was responsible for the collection of receivables. Exhibit I gives the organizational chart of IGL.

IGL'S OPERATIONS

Since its inception, IGL had operated at a loss, Exhibits II and III show the company's balance sheet and income statements for the years 1962–63 to 1966–67.

Ram was confident that IGL could make a profit if its sales could be increased from the current level of Rs. 80,000 to Rs. 1,30,000 per month. Achievement of this increase in sales would require a minimum investment of Rs. 5,00,000 for purchasing gas cylinders. Therefore, on September 7, 1966, he had written to his bankers, the Security Bank Limited:

"We do not share your pessimistic outlook for IGL's future.

We believe we can increase our sales by acquiring another 2,000 cylinders, valued at approximately Rs. 5,00,000. We, therefore, earnestly urge you to increase our existing cash credit (open loan) limit of Rs. 10,00,000 against hypothecation of empty (imported) and filled gas cylinders with 10 per cent margin to Rs. 15,00,000. Shortage of cylinders has become a real bottleneck to the growth of our sales.*

Looking at our performance in retrospect. IGL began with 2,000 oxygen cylinders and had a monthly sales of only Rs. 20,000; but today (1966), with 3,200 oxygen, 800 nitrogen, and 1,500 acetylene cylinders, its sales have increased to Rs. 80,000 a month. This increase in sales has been due to efficient collection of empties . . . but now the optimum utilization of existing cylinders by means of quick circulation has been reached (Exhibit IV). Acquiring more cylinders is the only remedy for raising our monthly sales. Hence, our proposal to purchase another 2,000 cylinders, which we hope will help us to increase our sales by Rs. 50,000 a month.

IGL has sufficient staff and installed capacity in the plants for coping with increased production and sales without any increase in the fixed assets or overheads."

IGL'S SALES POLICY AND PROBLEMS

Since increased sales was vital to IGL's success, Ram attached as much importance to the sales planning as to the planning of IGL's finances. He firmly believed that IGL's financing and marketing problems were intertwined.

* The breakup of the cylinders was 1,150 nitrogen and 700 acetylene cylinders.

IGL was a new entrant in the market and faced competition from Indian Oxygen Limited which had long been established in the region. Indian Oxygen had a network of sales depots all over India, and manufactured and supplied highly profitable accessories, whose supply added to the total service IGL could render to its numerous customers. In addition, IGL faced one more competitor in the region. Exhibits V and Va give the installed capacity of IGL and its competitors (Bombay Oxygen and Hindustan Oxygen) and the estimated monthly sales of gases in the region respectively. By June 1967, IGL had captured about 30 per cent of the market sales. This was made possible by its policy of delivering gas cylinders at the customers' premises on time at any hour of the day at only a nominal carting charge. The company absorbed a good part of the transport charges. IGL did not insist on the full value of the cylinder being deposited with it as security deposit, except in the case of small welders and fabricators. IGL gas met ISD, ISI and British Standard specifications.

Ram did not quite know what his pricing policy ought to be (Exhibits VI and VII give data on IGL's capacity utilization). His price per cubic metre was Rs. 1.75 to Rs. 2.50 for oxygen and nitrogen and Rs. 9.75 for acetylene. When questioned about his pricing policy, he replied, "I want sales—I quote the price that gets me the sale." Ram did not think there was much point in juggling with the cost data as long as the plant did not work to capacity.

Ram personally looked after sales. He was assisted by a sales manager who contacted prospective customers and negotiated contracts after consulting him. In addition to sales development work, Ram also looked after the day-to-day administration of the office. He was seriously considering employing an experienced marketing manager who could organize the marketing and sales efforts of the company.

IGL had opened depots at Surat, Rajkot and Ahmedabad.

Exhibit VIII is a statement of fixed monthly cash expenses at the company's typical sales depot.

Actual deliveries of gas from the stock lying at these depots were very small; most of the customers located in the jurisdiction of these depots were serviced directly from the Udyognagar headquarters. Ram held the view that such depots gave IGL a *locus standi* and helped in keeping in constant touch with its customers, and also in the collection of receivables. He wanted to evolve some guidelines for deciding whether he should maintain the existing depots or open more depots for aiding in sales promotion.

IGL sold gas on 30-day credit terms. Every time a new customer was registered, the sales manager was required to fill in particulars like the customer's business turnover and means, and to obtain bank references. These particulars were scrutinized by the executive director, who decided the credit terms to be extended to the customer as also the amount of security deposit the customer should deposit with IGL.

Ram was concerned about the lock-up of his funds in receivables with the increase in sales. It was the sales department's responsibility to follow up on the receivables. Sales department periodically received statements of overdue accounts from the accounts department. More recently, IGL had introduced a policy of vigorous follow-up of receivables by sending reminders to, and making personal calls on, customers.

IGL'S BANKING ARRANGEMENTS: SECURITY BANK LIMITED

Security Bank Limited, one of the five big Indian scheduled banks, was IGL's principal banker and handled all of its banking business. Security Bank was also a banker to the fully-owned associate company, Vikram Brothers Limited (VBL). VBL's other banker was the National and Grindlays Bank Limited, who described the ICL management as "management with British integrity" in reply to a reference sought by Security Bank. Ram had hoped that VBL's satisfactory relations with Security Bank, extending well over three decades, would perhaps ensure a more helping role by Security Bank in IGL's developmental stages.

In early April 1962, IGL approached Security Bank for a cash credit (open loan) limit of Rs. 7,00,000 against the security of its fixed block valued at Rs. 7,50,000; 3,000 empty (imported) and filled gas cylinders valued at Rs. 4,00,000; and a power generator set costing Rs. 1,00,000 to be imported from the USA. In its letter of request for the credit limit, IGL promised to route all its business through Security Bank, and indicated that the limit would have to be increased from time to time for financing import of more cylinders and acetylene plants.

The director of IGL had agreed to give a joint and personal guarantee of the loan payment.

In response to IGL's request for the credit limit, Security Bank sanctioned a cash credit (open loan) limit of Rs. 5,00,000 only, secured by hypothecation* of empty and filled gas cylinders with 10 per cent margin, and stocks of raw materials with 20 per cent margin.

In conveying its sanction of the limit, Security Bank did not state explicitly whether gas cylinders lying with the company's numerous customers could be included in the stocks hypothecated to the bank. Nor did the bank raise any question or ask for data regarding the cost-volume-profit relationship and the potential demand, or ask for an estimate of the quantum and type of capital that IGL would require for making it a profitable operation. The loan was payable on demand and subject to an annual review, and carried an interest at 2.5 per cent over the bank rate (bank rate being 4 per cent) with a minimum of 7 per cent payable half-yearly.

In September 1963, IGL negotiated for a further loan of Rs. 9,00,000 from the State Financial Corporation for the purchase of oxygen and acetylene plants and construction of buildings. The loan, secured by a mortgage of all of IGL's fixed assets (except gas cylinders), was repayable in 12 half-yearly instalments beginning 18 months after receipt of the first loan instalment. It carried an interest at 7.5 per cent, with 0.5 per cent rebate for punctual repayment of interest and loan instalments, IGL drew the loan as follows:

* In an open loan hypothecation arrangement, the banker does not take physical possession of the security (gas cylinders) and keep it under lock and key. Instead, the borrower is free to handle the security in the ordinary course of business, and his major obligation is to maintain at all times a stock of security whose value adequately covers the amount of outstanding advance after fully providing for the stipulated margin. Periodically, the borrower is required to submit a signed statement of the stock of gas cylinders and raw materials hypothecated to the bank. Bankers regard hypothecation loan as a self-liquidating short-term loan, repayable from the sale proceeds of the security.)

<i>Amount</i> Rs.	<i>Date</i>
5,05,000	31.1.1964
2,11,000	14.8.1964
55,000	1.1.1965
39,000	10.4.1965
90,000	21.4.1965

Security Bank readily agreed to IGL's creation of a mortgage on the fixed assets in favour of the State Financial Corporation.

In September 1963, needing more gas cylinders for increasing its sales, the company approached Security Bank for increasing the existing cash credit (open loan) limit of Rs. 5,00,000 to Rs. 20,00,000 for financing the import of 9,000 additional gas cylinders. Security Bank considered such an increase in IGL's limit as disproportionate to its paid-up capital and performance so far.

After much correspondence and protracted negotiations, however, Security Bank agreed to:

1. renew the existing cash credit (open loan) limit for a reduced amount of Rs. 3,00,000;
2. sanction an additional cash credit (key loan) limit to Rs. 5,00,000 secured by the stock of gas cylinders with 10 per cent margin; and
3. sanction an additional clean demand bills limit of Rs. 25,000, under which IGL could discount clean bills drawn by it or by third parties in its favour.

Security Bank also assured IGL that the cash credit (open loan) limit would be restored to its original amount of Rs. 5,00,000 after IGL had increased its paid-up capital from Rs. 5,00,000 to Rs. 10,00,000.

In a key loan facility, the bank takes physical possession of the security (gas cylinders) and keeps it under its custody. The borrower can have the security released from the bank's custody on payment of the advance value of the security required to be released. About this time, some further confusion arose from lack of explicit understanding of whether IGL could include gas cylinders lying with its customers in the stocks hypothecated to the bank. Normally, the ratio of gas cylinders lying with IGL to those lying with its customers was 3:7, and if the bank's point of view was to prevail, IGL would not have been eligible for any advance against the value of as much as 70 per cent of the stock of gas cylinders lying with its customers.

Since IGL was experiencing difficulties in availing of these facilities, it made two representations to Security Bank:

1. that the entire cash credit facility be converted into an open loan facility as all the cylinders were required for circulation; and
2. that Security Bank should also give an advance against gas cylinders lying with the customers. Such cylinders formed 70 per cent of the company's total stock of cylinders.

IGL pointed out that the cylinders were returnable in safe and sound condition, and a quick turnover of cylinders was crucial to the profitability of its operations. The gas cylinders lying

with the customers remained the property of IGL, which had all legal rights to raise money on them. The security deposit that IGL took from its customers against the gas cylinders lying with them was refundable on return of the empty cylinders in good condition. In reality, IGL was unable to collect the security deposit from a large number of its good customers due to its competitors' practice of allowing their customers the use of their cylinders on payment of a nominal security deposit.

About this time, there was also a good deal of correspondence regarding the valuation of gas cylinders. Cylinders were valued at the indent price plus duty plus cartage. The market price of cylinders was twice the value adopted for calculating the drawing power against the cylinders. Security Bank adopted the "import price" as the basis for valuing cylinders, and wanted IGL to depreciate them at the full income tax rate. In IGL's opinion, gas cylinders easily had a life of 30 to 40 years, and therefore the practice of depreciating cylinders at the full rate allowable under the income-tax regulations had no relevance to their economic life and/or the resale value. They produced expert technical opinion on this point.

Again after much correspondence, Security Bank finally agreed to:

1. convert the existing cash credit (key loan) limit (Rs. 5,00,000) into an open loan hypothecation limit;
2. restore the existing cash credit (open loan) limit from Rs. 3,00,000 to 5,00,000 since IGL had increased its paid-up capital from Rs. 5,00,000 to Rs. 10,00,000 in November 1963; and
3. make advances against gas cylinders lying with customers too and allow these cylinders to be included in the stocks hypothecated to the bank. At the same time Security Bank increased the rate of interest from 7 per cent to 7.5 per cent.

By mid-1966, IGL experienced difficulty in increasing its sales, and felt that the difficulty could be obviated if additional cylinders were purchased. So, in September 1966, it approached Security Bank for raising the existing cash credit (open loan) limit of Rs. 10,00,000 to Rs. 15,00,000 for financing the import of an additional 2,000 gas cylinders. This would help IGL increase its sales by Rs. 50,000 per month. Security Bank, however, was concerned with the accumulated losses which had wiped out the net worth of the company. Therefore, on December 22, 1966, it wrote to IGL informing it that the bank would not find it suitable to give the additional loan of Rs. 5,00,000.

Ram was in a predicament. He wondered if he could squeeze some capital out of the company's current assets. He did not know to what extent this was possible. Not only did he require Rs. 5,00,000 for covering the cost of 2,000 gas cylinders but also funds for payment of customs and octroi duties, licence fees and additional working capital as a result of the increased sales.

While appreciating Security Bank's loan assistance, which was on an increasing scale, Ram was not quite happy with the bank's margin and interest rate policies. He was critical of the inordinate delay in getting decisions on the loan applications (see Exhibit IX). He complained that undue emphasis on the security coverage of the loan led to an inadequate application of the concept of flows in the evaluation of a loan risk. Besides, he was only a businessman and he

looked to the bank not merely for loans but also for some kind of advisory service for guiding him in the planning of his finances, forecasting funds requirements, etc.

The operating result of the gas business for the year ended June 1967 showed a loss of Rs. 47,000; the loss in the earlier year ended June 1966 was Rs. 2,59,000. This encouraged Ram to revive his proposal for a loan of Rs. 5,00,000. He wrote to Security Bank on February 28, 1968 as follows:

"I have perused the balance sheets of many oxygen companies in India (Exhibit X and XI) and this has all the more strengthened my conviction that a large number of cylinders is a keynote of high sales . . . For example, Hindustan Oxygen, whose manufacturing capacity is slightly smaller than ours, has 10,000 oxygen and 3,000 acetylene cylinders as against IGL's stock of 3,200 oxygen and 1,500 acetylene cylinders. I would also like to emphasize that the company (IGL) has a capacity to produce twice as much as it now produces and can produce at least 1.5 times its present production with only a negligible increase in its cost.

You will observe that the cost of the raw material as a percentage of sales decreased from 33.62 in 1966 to 24.02 in 1967 due to an increase in sales from Rs. 6,41,500 to Rs. 9,47,400 in the corresponding sale period. It is also evident that with increasing sales our cost will either remain constant or even be reduced . . . With regard to our balance sheet losses, I would like you to appreciate that most of these losses are in the nature of reserves in the light of the fact that the plants and cylinders which have a long life of 25 to 30 years have been written off at a much faster rate. Besides, the market value of the assets (mostly imported) have increased by more than 50 per cent after devaluation of the rupee in 1966. I also draw your attention to the fact that the directors and shareholders of the company have made an unsecured loan of Rs. 11,51,000 as a measure of their confidence in the prospects of the company . . . I expect your favourable decision on my proposal at an early date in order to allow me some time to indent for the required cylinders."

The company's licence to import additional cylinders was to expire in May 1968. Ram did not think that it would be renewed as it had already been revalidated thrice in the past.

DISCUSSION QUESTIONS

1. Mr. Ram in his letter to Security Bank observes:

"We do not share your pessimistic outlook for the future of IGL. Shortage of cylinders has become a real bottleneck to the growth of our sales."

Do you agree that shortage of cylinders is the bottleneck and that profitability can be increased by increased by increasing cylinders?

2. Mr. Ram continues:

"IGL has sufficient staff and installed capacity in plant to cope with increased production and sales without any increase in the fixed assets or overheads."

(a) What is the implication of this? In the light of this how do you interpret Exhibit 7 of the case?

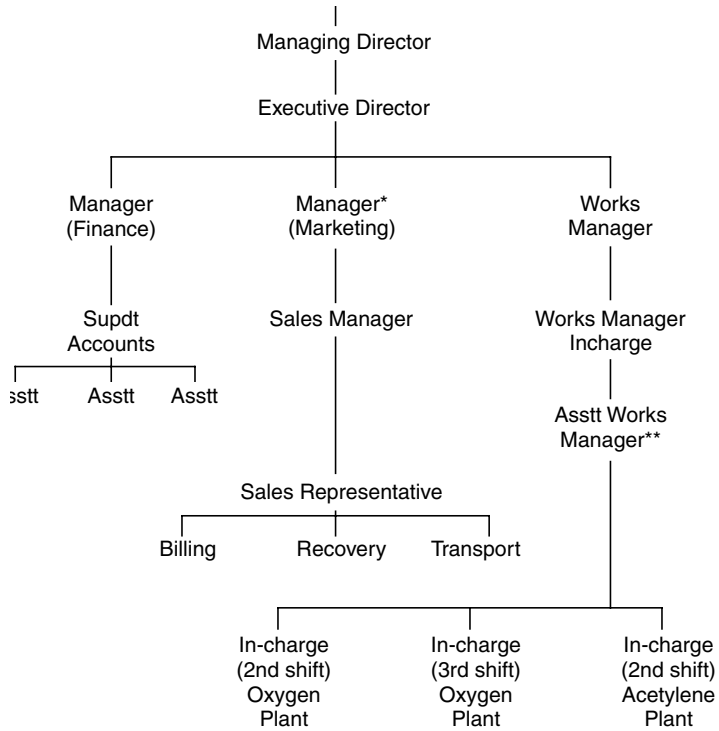
(b) What will the benefits be of adding 2,000 cylinders?

(c) Which is the most preferred product in the light of present conditions?

Exhibit I

INDUSTRIAL GASES (PRIVATE) LIMITED

Organization Chart



* Post proposed

** Post vacant

Exhibit II

INDUSTRIAL GASES (PRIVATE) LIMITED

Balance Sheet as on 30th June year

		('000 Omitted)				
		1963	1964	1965	1966	1967
		Rs.	Rs.	Rs.	Rs.	Rs.
CAPITAL & LIABILITIES						
1. Share capital (paid-up)		5,00	10,00	10,00	10,00	10,00
2. Reserves and surplus (development-rebate reserve)		-	60	2,00	2,04	
3. Secured loans (secured against mortgage of fixed assets)		-	3,05	7,71	7,50	6,00
4. Secured loans from banks against hypothecation of cylinders, raw materials		3,40	3,44	7,10	9,27	8,88
5. Unsecured loans from directors and the associate company, VBL		1,21	2,23	3,26	11,04	12,01
ASSETS						
Fixed Assets (Net)						
1. Land and buildings		3,04	4,47	5,49	5,71	5,81
2. Plant and machinery electrical installations'		3,80	10,13	11,48	11,64	11,02
3. Gas cylinders		3,44	3,19	6,90	12,20	11,52
4. Trucks and vehicles		61	68	92	87	70
5. Furniture		21	20	20	25	28
<i>Total fixed assets (net)</i>		11,10	18,57	24,99	30,67	29,33
Current Assets						
1. Inventories (including loose tools and spares)		3	25	34	1,01	1,22
2. Debtors		-	51	69	2,13	3,92

Contd . . .

Exhibit II Contd . . .

	1963	1964	1965	1966	1967	1963	1964	1965	1966	1967
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
6. Unsecured loans from others	1,40	1,62	1,99	1,66	1,75					
7. Current liabilities and provisions	1,36	1,22	2,01	2,56	4,12					
						63	1,59	1,35	3,64	5,56
						6	6	9	6	6
						58	3,94	6,28	9,66	9,85
<i>Total liabilities and net worth</i>	<u>12,37</u>	<u>24,16</u>	<u>32,71</u>	<u>44,03</u>	<u>44,80</u>	<u>12,37</u>	<u>24,16</u>	<u>32,71</u>	<u>44,03</u>	<u>44,80</u>

* Debtors outstanding for more than 6 months (Includes Rs. 18)

Exhibit III

INDUSTRIAL GASES (PRIVATE) LIMITED

Income Statement for the year ended 30th June year

	(Rupees in thousand)				
	1962-63	1963-64	1964-65	1965-66	1966-67
Sales (net of sales tax)	11	1,38	3,69	6,36	9,43
<i>Variable Costs</i>					
Raw material	1	36	1,35	2,77	2,77
Stores consumed	1	7	7	2,80	15
Inventory adjustment	6	(13)	(12)	(55)	(22)
Net variable costs	8	30	1,30	2,25	2,70
Contribution	3	1,08	2,39	4,11	6,73
<i>Manufacturing Expenses</i> (without depreciation)					
Salaries & wages	10	25	45	62	67
Power & fuel	4	50	65	58	66
Repairs & maintenance	-	14	1,14	1,30	5
<i>Selling & Administrative Expenses</i>					
Administrative expenses	7	43	27	33	38
Rates, taxes & insurance	8	8	7	23	16
Motor vehicle expenses	5	47	42	46	70
Salaries of managing and executive directors	-	20	48	48	48
<i>Interest & Bank Charges</i>	17	61	1,18	1,59	1,61
Fixed Costs	51	2,83	3,56	4,39	4,71

Contd . . .

Exhibit III Contd . . .

	1962-63	1963-64	1964-65	1965-66	1966-67
Net contribution (Before depreciation)	(48)	(1,75)	(1,17)	(28)	2,02
Depreciation	6	1,03	1,26	2,69	2,49
Operating profit (loss)	(54)	(2,78)	(2,43)	(2,97)	(47)
Miscellaneous Income					
Income from agriculture (net)	-	2	13	57	32
Non-operating expenses					
provisions					
Expenditure capitalized	-	-	-	(38)*	-
Development rebate	-	60	4	1,36	4
Profit (Loss) Before taxes	(54)	(3,36)	(2,34)	(3,38)	(19)
Taxes	-	-	-	-	-
Profit (loss) after taxes	(54)	(3,36)	(2,34)	(3,38)	(19)
Cumulated profit	(58)**	(3,94)	(6,28)	(9,66)	(9,85)

* Expenses amounting to Rs. 38,000 were capitalized in plant and machinery account.

** Includes Rs. 4,000 accumulated losses up to 1962.

Exhibit IV**INDUSTRIAL GASES (PRIVATE) LIMITED**Statement Showing Sales* Per Cylinder
1965-66/67-February 1968*(Rupees in lakh)*

	Oxygen			Nitrogen			Acetylene		
	No. of total	Total sales	Sales per cylinder	No. of total	Total sales cylinder	Sales per	No. of total	Total sales cylinder	Sales per
1965-66	30,572	2,67,983	8.77	5,624	66,127	11.76	5,547	3,04,750	54.80
1966-67	35,448	4,12,728	11.64	5,176	73,620	14.22	7,851	4,65,491	59.29
1967-Feb 1968	20,309	2,89,429	14.25	5,724	67,652	11.82	5,120	3,18,351	62.18

* Each oxygen, nitrogen and acetylene gas cylinder contains 6 cubic metres of gas.

Exhibit IVa

INDUSTRIAL GASES (PRIVATE) LIMITED
Average Sales Per Month

<i>Year</i>	<i>Monthly average (Rs.)</i>
1965-66	53,438
1966-67	79,320
1967-Feb. 1968	84,429

Sales figures do not include sales of medical oxygen, and are exclusive of sales tax and cartage. Therefore, sales figures in this exhibit do not tally exactly with those in the Income Statement (Exhibit III).

Exhibit V

INDUSTRIAL GASES (PRIVATE) LIMITED
Installed Annual Capacity (3 Shifts Working)
of IGL and its Competitors

	<i>No. of cylinders</i>		
	<i>IGL</i>	<i>Hindustan Oxygen</i>	<i>Bombay Oxygen</i>
Oxygen*	1,50,000	1,20,000	1,20,000
Nitrogen	2,25,000	1,80,000	1,80,000
Acetylene	48,000	30,000	30,000

* An oxygen plant may be used to produce either oxygen or nitrogen. IGL oxygen plant, working for 3 shifts, can produce either 500 cylinders of oxygen or 750 cylinders of nitrogen per day.

Each oxygen, nitrogen and acetylene gas cylinder contains 6 cubic metres of gas.

Exhibit Va

INDUSTRIAL GASES (PRIVATE) LIMITED
Estimated Region-Wise Annual Demand for Gases

<i>Region</i>	<i>No. of cylinders</i>		
	<i>Oxygen</i>	<i>Nitrogen</i>	<i>Acetylene</i>
A	60,000	24,000	12,000
B	24,000	6,000	6,000
C	36,000	3,000	6,000
D	24,000	1,200	6,000
<i>Total</i>	<u>1,44,000</u>	<u>34,200</u>	<u>30,000</u>
	to	to	to
	<u>1,68,000</u>	<u>36,000</u>	<u>36,000</u>

Exhibit VI

INDUSTRIAL GASES (PRIVATE) LIMITED
Installed Annual Capacity and
Annual Production of Gases at IGL

(Unit: Cylinders)

	<i>Installed* capacity (annual)</i>	<i>Annual production</i>			
		<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>	<i>1967-Feb.1968</i>
Oxygen	1,50,000	17,108	30,708	33,815	21,120
Nitrogen	2,25,000	3,737	4,811	6,043	5,379
Acetylene	48,000	2,456	5,293	7,885	4,957

* Assumes 300 working days in a year.

Exhibit VII

INDUSTRIAL GASES (PRIVATE) LIMITED

Cost Structure of Producing Oxygen and Acetylene Gases

Cost of producing one cylinder of acetylene gas

		<i>Rs.</i>
1. Raw material (calcium carbide)		17,500.00
2. Power		325.00
3. Water		325.00
4. Stores and chemicals		1,000.00
5. Maintenance		100.00
6. Wages: Labour	312.00	
Supervision	600.00	912.00
Total expenses for 16 to 18 working days on one shift		20,162.00
Total production-650 cylinders		
Cost per cylinder		31.02

If the plant is worked for one full shift, the production would be 1,250 cylinders per month and the cost per cylinder would be:

		<i>Rs.</i>
1. Raw material (calcium carbide)		33,750.00
2. Power		625.00
3. Water		625.00
4. Stores and chemicals		2,000.00
5. Maintenance		100.00
6. Wages: Labour		312.00
Supervision	600.00	912.00
Total expenses for one month for running one shift		38,012.00
Cost of one cylinder if 1,250 cylinders of acetylene are produced		30.41

Cost of one cylinder of oxygen (or 1.5 cylinder of nitrogen)

		<i>Rs.</i>
1. Caustic soda 400 kgs		500.00
2. Stores, chemicals and oil		200.00
3. Power		6,000.00
4. Wages and salaries		1,900.00
5. Electrical and plant repairs		200.00
Total expenses for one month for running the 3 shifts		8,800.00

Contd . . .

Exhibit VII Contd. . .

Cost per cylinder of oxygen (or 1.5 cylinder of nitrogen) at different levels of production	<i>Rs.</i>
Total production 3,200 cylinders as at present	2.75
If production is 4,000 cylinders	2.20
If production is 5,000 cylinders (with an increase of Rs. 1,000 in power charges)	1.96

Exhibit VIII**INDUSTRIAL GASES (PRIVATE) LIMITED****Statement of Monthly Fixed Cash Expenses
at a Typical Sales Depot**

	<i>Rs.</i>
Rent including house taxes, etc.	600
Salaries for sales representatives and other depot staff	750
Miscellaneous expenses, including electricity, entertainment, insurance, etc.	100
<i>Total</i>	<u>1,450</u>

Exhibit IX

INDUSTRIAL GASES (PRIVATE) LIMITED

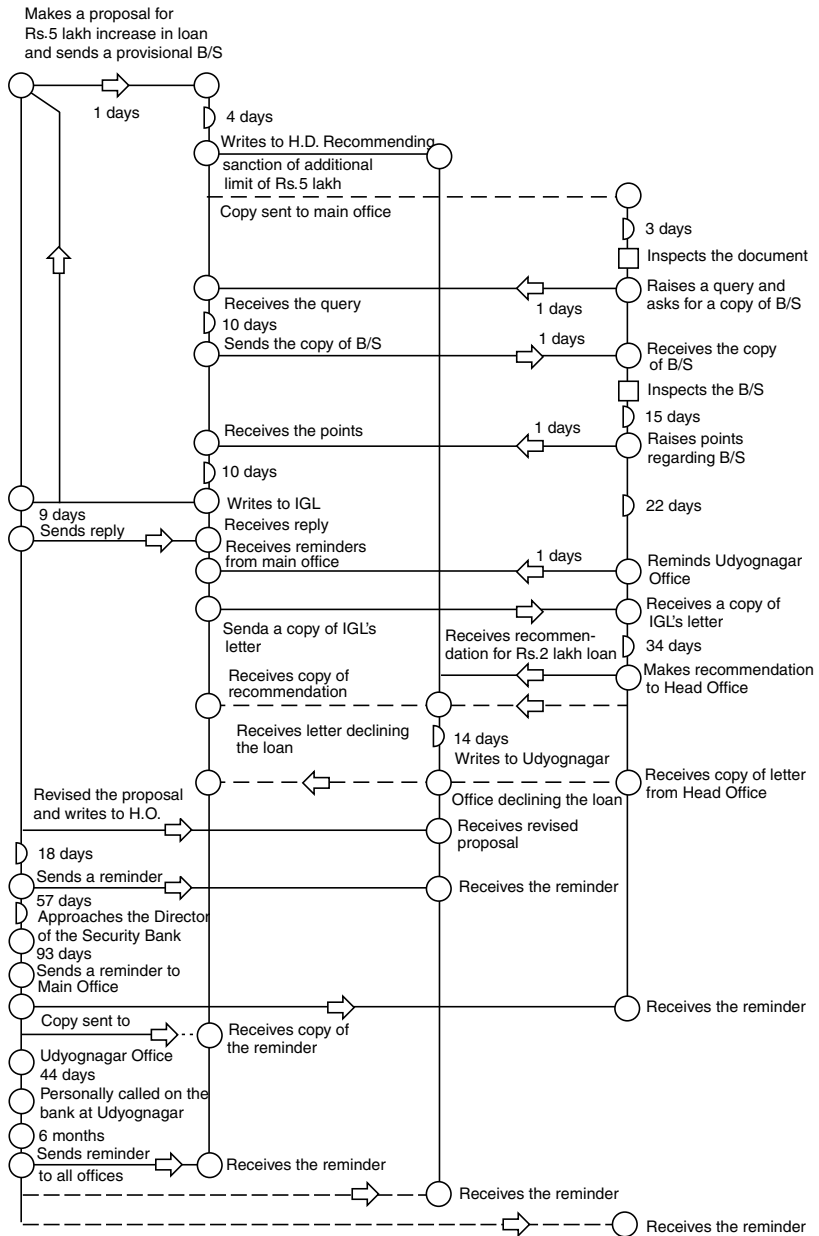


Exhibit X

INDUSTRIAL GASES (PRIVATE) LIMITED

Balance Sheet Data

	<i>Hindustan Oxygen Gas Company Limited (as at 30th June) Year</i>				<i>Bombay Oxygen Corporation Limited (as at 31st December) Year</i>			
	1967	1966	1965	1964	1966	1965	1964	1963
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
LIABILITIES & CAPITAL								
Issued and subscribed	30,00,00	29,48,000	29,71,875	1,50,00,000	1,50,00,000	1,50,00,000	1,50,00,000	1,50,00,000
Forfeited shares (amt paid up)	-	2,700	-	-	-	-	-	-
Less: Calls in arrears	-	29,75,000	-	29,71,875	62,250	1,49,34,750	82,125	1,49,17,875
RESERVES & SURPLUS								
Dev. Reb. Reserve	4,40,460	4,40,300	4,40,000	12,05,493	10,86,233	-	-	3,83,052
Secured Loans	10,00,000	12,50,000	8,45,485	-	-	-	-	-
Unsecured Loans	-	46,166	4,56,948	-	-	-	-	-
CURRENT LIABILITIES AND PROVISIONS								
Current Liabilities								
Sundry creditors	1,85,933	97,575	1,43,005	11,33,302	10,51,690	8,54,923	-	-
Sec. other dep.	1,27,795	1,17,130	64,975	-	-	-	-	-
Unclaimed div.	-	-	-	18,885	11,52,187	10,51,690	-	8,54,923
Provisions Proposed div.	-	-	-	-	3,00,000	-	-	-
Total Liabilities	<u>47,54,188</u>	<u>49,26,171</u>	<u>49,22,228</u>	<u>1,75,92,430</u>	<u>1,70,55,798</u>	<u>1,61,54,350</u>	<u>1,61,54,350</u>	<u>1,61,54,350</u>
ASSETS								
Fixed Assets								
Land	1,59,965	1,59,965	1,59,965	12,11,719	12,11,719	5,24,682	5,24,682	5,24,682
Building	6,30,000	6,34,123	6,17,392	26,90,780	26,95,201	26,92,361	26,92,361	26,92,361
Plant and Machinery	10,16,916	10,15,845	9,72,086	30,08,694	30,08,694	29,90,098	29,90,098	29,90,098
Cylinder	20,01,450	20,15,826	2,016,798	50,38,006	50,41,357	50,45,688	50,45,688	50,45,688
Furniture & Off. Equip.	57,784	56,544	54,612	5,39,443	5,33,519	5,13,771	5,13,771	5,13,771
Trucks & Vehicles	27,351	27,351	26,602	5,31,616	4,84,130	4,96,586	4,96,586	4,96,586
Work in Progress	-	-	-	2,69,616	4,84,130	4,84,130	4,84,130	4,84,130

Contd . . .

	Hindustan Oxygen Gas Company Limited (as at 30th June) Year				Bombay Oxygen Corporation Limited (as at 31st December) Year			
	1967	1966	1965	1964	1967	1966	1965	1964
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Leasehold Depot	-	-	-	1,05,218	1,05,218	1,05,218	73,641	
Electrical Instal.	-	-	-	2,78,968	1,36,73,521	2,83,670	2,83,670	1,26,20,497
Less Acc. Deprn.	10,83,834	7,93,990	38,47,455		19,90,764	13,79,007		10,16,337
Fixed Assets Net	28,10,587	31,15,664	33,90,9221	1,16,82,757	1,20,04,501			1,16,04,160
CURRENT ASSETS, LOANS AND ADVANCES								
Inventories								
Stores, spares and losses tools	1,43,998	1,21,019,	88,589	2,21,360	2,09,767	2,60,753		
* stock-in-trade	1,60,104	68,510	90,420	3,36,627	5,57,987	3,65,980	2,22,430	4,83,183
Sundry Debtors								
Over 6 months	30,310	-	12,486	4,05,351	3,01,477	-	2,76,746	
Less Prov. For Doubtful Debts	(12,000)	-	(4,775)	-	-	-	-	
Other Debtors	3,64,565	3,82,875	1,83,687	11,72,189	15,77,540	12,70,743	7,30,760	10,07,506
Cash Bank Balance								
Loans and Adv.	3,42,364	2,74,667	45,731	5,42,595	30,20,647	5,55,552	66,668	
Misc. Expenses Prelim.	81,468	78,942	84,479	71,054	71,054	24,38,351	71,054	27,81,304
Share Issue Exp.	45,358	45,358	45,358	1,39,850	1,39,850	1,39,850	1,39,850	
P & L A/c	1,06,420	1,06,420	1,06,420	-	-	-	-	
	6,81,104	8,86,955	8,78,972					
	8,32,792	10,38,733	10,30,750	2,10,904	2,10,904	2,10,904		2,10,904
Total Assets	47,54,188	49,26,171	49,22,288	1,75,92,430	1,70,55,798	1,61,54,350		

* Stock-in-trade includes raw materials, finished goods, sundry materials, stock-in-transit.

Exhibit XI

INDUSTRIAL GASES PRIVATE LIMITED Income Statement Data

	<i>Hindustan Oxygen Gas Company Limited</i>				<i>Bombay Oxygen Corporation Limited</i>			
	1967	1966	1965	1967	1966	1965	1966	1965
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SALES	15,85,685	13,13,472	8,75,392	49,70,140	33,21,797	27,39,334	33,21,797	27,39,334
VARIABLE COSTS								
Raw materials	4,35,667	3,65,682	1,85,916	15,71,011	11,02,225	8,82,146	11,02,225	8,82,146
Stores and spares	38,796	28,083	8,501	3,66,146	2,94,697	37,821	2,94,697	37,821
Freight & cartage	1,46,787	1,38,486	72,449	2,46,866	—	—	13,96,948	—
Inventory adjustment	(12,187)	(5,933)	(6,632)	—	29,353	—	(1,43,550)	—
Net variable costs	<u>6,09,065</u>	<u>5,38,184</u>	<u>2,53,498</u>	<u>19,66,510</u>	<u>12,53,398</u>	<u>9,73,654</u>	<u>12,53,398</u>	<u>9,73,654</u>
Contribution	9,76,620	7,75,288	5,71,894	30,03,630	20,68,399	17,65,700	20,68,399	17,65,700
MANUFACTURING COSTS (without depreciation)								
Power and fuel	79,316	70,794	55,558	1,83,572	1,32,761	1,26,558	1,32,761	1,26,558
Salaries & wages and Contribution to provident fund	2,10,664	1,72,727	1,56,711	8,00,732	6,64,976	5,56,512	6,64,976	5,56,512
Staff welfare	—	2,43,521	—	20,132	9,284	—	8,07,021	—
SELLING & ADMINISTRATIVE EXPENSES								
Insurance	9,723	19,375	7,013	52,354	58,317	61,977	58,317	61,977
Directors fees & travelling expenses	12,094	7,209	12,727	1,26,407	50,217	12,717	1,26,407	12,717
Auditing remuneration	3,528	2,814	4,499	6,200	5,600	5,000	5,600	5,000
Rent	15,895	12,015	10,888	18,437	20,294	17,222	20,294	17,222
Rates and taxes	14,025	3,564	11,356	57,607	53,961	71,459	53,961	71,459
Misc expenses	66,677	57,529	70,280	3,74,809	2,77,173	2,36,332	2,77,173	2,36,332
Repairs and maintenance	—	—	—	37,102	14,855	6,943	14,855	6,943
Managing agents remuneration	—	—	—	45,100	7,17,916	45,000	5,25,437	45,000
Interest	—	—	—	—	—	—	—	—
Total fixed costs	<u>5,25,453</u>	<u>4,63,632</u>	<u>4,31,053</u>	<u>17,21,992</u>	<u>13,32,458</u>	<u>11,39,720</u>	<u>13,32,458</u>	<u>11,39,720</u>

Contd . . .

	Hindustan Oxygen Gas Company Limited				Bombay Oxygen Corporation Limited			
	1967	1966	1965	1965	1967	1966	1966	1965
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Net contribution before depreciation	4,51,167	3,11,656	1,40,841	12,81,638	7,35,941	6,25,980		
Depreciation	2,89,844	3,36,456	3,21,571	6,20,163	3,65,206	3,64,236		
Operating profit (loss)	1,61,323	(25,800)	(1,80,730)	6,61,415	3,70,735	2,61,744		
MISCELLANEOUS INCOME								
Interest	10,527	259	773	1,24,083	50,051	8,343		
Misc receipt	45,876	17,858	12,242	2,28,905	2,79,439	2,07,716		
Profit on sale of fixed assets	-	-	-	4,409	2,956	(9,722)		
Refund of income tax	375	-	2,363	-	-	-		
Refund of managing agents remuneration	-	-	13,817	-	-	-		
NON-OPERATING EXPENSES PROVISIONS								
Development rebate (Net)	56,778	18,117	29,195	3,57,397	3,32,466	2,06,337		
Provision for doubtful debts	160	300	1,30,000	1,18,872	7,03,181	3,83,052		
Net profit before taxes	12,000	12,160	1,30,000	1,18,872	7,03,181	3,83,052		
Taxes	2,05,941	(7,983)	(2,81,535)	9,00,000	-	85,029		
Net profit after taxes	2,05,941	(7,983)	(2,81,535)	9,00,000	-	85,029		
NAT sales	-	-	-	-	-	-		
Interim dividend paid	-	-	-	-	-	-		
Proposed dividend	-	-	-	-	-	-		
Balance as per last balance sheet	(8,86,955)	(8,78,972)	(5,97,437)	9,00,000	9,00,000	-		
Carried to balance sheet	(6,81,014)		3,00,000					85,029

PART
THREE

*Capital Budgeting Decisions and
Cost of Capital*

SHYAM LAL AND ASSOCIATES

Shyam Lal & Associates (SLA) was organized as a partnership firm in 1992, with its main office in Delhi. Since that time, the firm diversified into various product lines, both in manufacturing and trading, and also expanded its market. Sales of SLA increased from Rs. 70 lakh in 1992 to the estimated figure of Rs. 15 crore for the accounting year ending on December 31, 2011.

At present, SLA has three works offices engaged in processing of basic industrial chemicals, production of hardware goods and leather products. All these works offices are located in Faridabad, Haryana. In addition to that, SLA also owns one cold storage-cum-warehouse located in Azadpur, Delhi. Each unit operates under the 'overall' guidance of Mr. Shyam Lal. All works offices serve as a sales and distribution point for the line of product carried on by that unit and is run by a supervisor who is responsible for hiring and supervision of personnel and for sales, credit, purchasing, inventory and cost control at the unit level. All decisions affecting SLA's overall policy, capital expenditure and the addition of product lines are reviewed by Shyam Lal.

For the last two years, SLA is experiencing shortage of funds caused by low profits and the instalment payments of term loan to Vishal Bank. The payments became necessary as per the agreement with the bank. However, the problem which bothered Mr. Shyam Lal was of low profits. He asked each unit supervisor to submit his suggestion to improve the long-run profitability of the company. While going through various suggestions, Mr. Shyam Lal found three proposals of investment which he took up for consideration. He was concerned about the profitability and payment schedule of each one of them. He estimated that the use of 12 per cent after-tax required rate of return would be appropriate in evaluating the proposals. SLA's tax rate is estimated at 35 per cent. The first one Mr. Shyam Lal selected was new investment proposal from Faridabad Chemical Processing Unit.

NEW INVESTMENT PROPOSAL

The chemicals processing works office head has suggested that SLA should invest in a plant which can produce a new chemical. He expects that the new chemical would be widely accepted and used by the manufacturers of plastic bags. The works manager of that unit submitted the following information on the basis of market survey and sales forecasts generated by him.

	(Rs. in lakh)
Estimated investment	39.60
Estimated life	10 years
Annual after-tax cash flows:	
Years 1–4	7.60
Years 5–10	8.50

He has estimated that the salvage value of the machine at the end of its expected life is likely to be 50 per cent of its book value. Further, he mentions in his proposal that SLA would be entitled for depreciation at the rate of 25 per cent using diminishing balance (written-down value) method.

COST SAVING PROPOSAL

The hardware unit of SLA used to contribute 40 per cent towards the overall profitability of the company. But recently the contribution had declined significantly because of the rising cost and labour problems. Therefore, the proposals submitted by the hardware unit supervisor emphasized the cost-reduction techniques. Among other suggestions, Mr. Shyam Lal found a proposal to invest in a machine which would help the company to reduce the costs. The following note was submitted by the manager of the unit:

“Automation Industry is a manufacturer of special machines used in the processes like ours. The installation of these machines go a long way to reduce the costs. At present, one particular machine which is being marketed by them will do the job satisfactorily, and will help the company in reducing its costs. The machine costs Rs. 46.35 lakh by paying the entire amount in cash.

However, the company also provides the facility of purchasing the machine on instalment basis. In that case, the amount has to be paid in eight equal annual instalments and the rate of interest compounded annually by the company would be 18 per cent”.

Mr. Shyam Lal was interested in knowing the amount of instalment which the company would be required to pay each year. Further, he wanted to know how much of this amount was towards interest and repayment of principal each year. Since interest payments were tax deductible, Shyam Lal was wondering what was the cost of machine to him as of today?

Given that the life of this machine is 15 years, how much after-tax-cost savings should accrue to SLA each year to recover the investment made on instalment basis?

EXPANSION PROPOSAL

The cold storage manager has proposed to install refrigeration system in their newly acquired complex. A distributor of various makes of refrigeration systems is prepared to install the

system which costs Rs. 14 lakh. The distributor has informed the cold storage manager that firm can pay in four years, interest rate being 13 per cent. He submitted the following schedule giving the details of annual payments.

	<i>(Rs. in lakh)</i>
Principal	14.00
Four years of interest at 13 per cent	7.28
<i>Total amount</i>	<u>21.28</u>
Annual payments	5.32

In case SLA considers the distributor's proposal, what is the implicit rate of interest paid by the firm? In case Mr. Shyam Lal negotiates with the distributor and he agrees to earn 13 per cent rate of return, what will be the annual instalment amount which he will be required to pay to the distributor?

FINANCING AND ITS COST

Mr. Shyam Lal estimated that he would require about Rs. 65 lakh of funds to finance the three proposed projects in case they are accepted. Funds from internal sources were out of question. He approached Vishal Bank to explore the possibility of seven-year term loan. The bank officials informed him that the current rate of interest on such loans would be 15 per cent. The payments for both principal and interest would be required to be made either at the end of each year or at the end of the maturity of loan. In the latter case, he was interested in finding how much he should save each year by investing outside at 18.5 per cent so that he has sufficient funds to repay the loan at maturity. He was also concerned about the after-tax required rate of return which he should use in evaluating the proposals.

DISCUSSION QUESTIONS

1. What is the nature of problems being faced by Shyam Lal? What are the key characteristics of the options he is examining? How should he decide?
2. Why do you think he should consider time value of money and what do you mean by time value of money?
3. For this purpose what discount rate should he use?
4. Explain the concept of present value and future value. While evaluating the profitability and repayment schedule of various projects use the following concepts:
 - (a) Future value factor, $FVF_{n,r}$
 - (b) Future value annuity factor, $FVAF_{n,r}$

- (c) Present value factor, $PVF_{n,r}$
 - (d) Present value annuity factor, $PVAF_{n,r}$
5. How do you interpret the results when you divide any amount by $PVAF_{n,r}$? And similarly for $FVAF_{n,r}$?
 6. What factors should he consider while evaluating financing decision?

MECHANICAL DRYING EQUIPMENT

The Industrial Machinery Manufacturers Ltd. (IMM) has recently come up with a new mechanical drying equipment which is more efficient than the currently available drying equipment. In the first week of January 2011, Ram Ratan, Chief Engineer of Pitamber Cement Company (PCC) met R Ramesh, General Manager of PCC, and apprised him about the technical superiority of this new equipment. On learning this, Mr. Ramesh got curious to know the financial details of the equipment. If the equipment was found to be financially profitable, Ramesh could discuss with the manager of the concerned division the possibility of replacing the existing drying facilities, which his company had put into service in January 2009. He therefore asked his chief engineer to collect information about the cost and financial benefits of the equipment from IMM.

Ram Ratan contacted V Venkateswar, the local marketing representative of IMM. Venkateswar explained the technical aspects of the equipment and impressed upon Ram Ratan that his company should go for the new equipment as it was far superior to their existing drying facilities. Ram Ratan, however, told him that his boss would buy the equipment only if it had net financial benefits to his company. Venkateswar had no alternative but to design a financial analysis of the equipment to convince Ram Ratan. He said that he would report to him in his office the next day with the equipment's financial evaluation. As soon as Ram Ratan left, he sat down to collect the cost and benefit information of the equipment to design a detailed financial analysis.

Venkateswar estimated that PCC would incur annual operating cash cost of Rs.10 lakh if the proposed drying equipment was installed. Venkateswar learnt, on enquiring from the Financial Manager of PCC, that the company used straight-line depreciation method in presenting reports to the internal management and shareholders. He found out, however, that on this kind of equipment, the company would be allowed 15 per cent written down value depreciation for the purpose of tax calculation. He also felt that the drying equipment could have a salvage value equal to 10 per cent of its original cost at the end of its useful life of 12 years (see Appendices I and II for the treatment of depreciation and salvage value while computing taxable profit and the depreciation rates for block of assets).

As per IMM's past experience, Venkateswar estimated a time period of 12 months for delivering the equipment and for start up of facility, following receipt of order from PCC.

Installation costs would amount to Rs. 15 lakh which is payable at the time of the start-up of the equipment. The terms of payment of the equipment cost would be: 50 per cent (that is, Rs. 32.50 lakh) with order; remaining at the time of the start-up of equipment.

Venkateswar was also able to ascertain from PCC's Financial Manager that the existing drying equipment was bought for Rs. 25 lakh and an amount of Rs. 10 lakh was spent on its installation. The current operating cash cost of the existing equipment is Rs. 28 lakh. The equipment, if sold now, was expected to fetch a price of Rs. 4 lakh; if it was not replaced, it could be sold for Rs. 2 lakh at the end of its original economic life of 8 years. Venkateswar also discussed the possibility of overhauling the existing equipment at a capital expenditure of Rs. 25 lakh that could extend the life of machine by 5 years and operating cost would therefore reduce to Rs. 22 lakh per annum. The equipment could be overhauled immediately. Once repaired, the machine could be sold for Rs. 3 lakh at the end of its useful life.

Of the total operating costs in case of all alternatives, 80 per cent was expected to be fuel cost. The long-term general inflation rate was expected to be about 6 per cent while the fuel price could rise as much as 10 per cent per annum.

PCC is a cash rich company. It is entirely equity financed and it has no plans for using long-term debt in the near future to finance its projects. It intends to replace the old machine utilising its internal cash. However, a ten-year long-term debt would be available at an interest rate of 15 per cent per annum to PCC if it wanted to raise a debt. PCC is a privately held company. It has a practice of measuring its cost of capital by adding a risk premium of 7.5 per cent over the yield on one year long-term government bond, which is currently 12.5 per cent. However, for replacement decisions, the company considers a risk premium of 3.5 per cent as reasonable. PCC pays corporate income tax at 35 per cent.

DISCUSSION QUESTIONS

1. Calculate the present value of the project's cash flows. Also find out its (a) net present value; (b) internal rate of return; (c) payback period on an after-tax cash flow basis.
2. Given Venkateswar's original assumptions, how high could be the price of the drying equipment.
3. The cost saving figure of Rs. 22 lakh was Venkateswar's "average" estimate. This could go wrong by $\pm 20\%$. How small the annual cost saving could become before the project would be unprofitable for PCC?
4. Venkateswar has not collected any information on price rise. Suppose that the general inflation rate is 4% and PCC's cost of capital does not include it. Further assume that fuel cost will rise at the rate of 10% per annum for the next five years, and then level off at 4% per year thereafter. How would this information affect the calculation of the equipment's net present value?

APPENDIX I

Depreciation is allowed as deduction every year in respect of buildings, machinery, plant or furniture till the cost of such asset is fully written off.

1. Conditions for allowing depreciation allowance:
 - (a) the assets should be owned by the assessee;
 - (b) the assets should actually be used for the purpose of the assessee's business or profession.
2. Disallowance of depreciation on land: Depreciation is not allowable on the cost of the land on which the building is erected, but only on the superstructure.
3. Depreciation in respect of machinery required on hire-purchase agreement: Under Section 32(1), depreciation on machinery and plant is to be allowed only to the owner thereof who actually uses it for the purpose of his business or profession. In the case of machinery or plant acquired under hire-purchase agreement, the owner is not entitled to depreciation because it is not used for his business purpose. Legally, the lessee is also not entitled to depreciation, as he is not the owner.
4. Basis of calculation of depreciation allowance: Depreciation will be allowed on the written down value of the block of assets. "Block of assets" means a group of assets falling within a class of assets, being buildings, machinery, plant or furniture, in respect of which the same percentage of depreciation is prescribed (see Appendix 2).
5. **Written down value:** This is defined under Section 43 (6) of the Income Tax Act and means:

In the case of block of assets, the written down value shall be arrived as under:

 - (a) The aggregate of the written down value of all the assets falling within that block of assets at the beginning of the previous year shall first be calculated;
 - (b) The aggregate of the written down value arrived at as in (a) shall be increased by the actual cost of any asset falling in that block which was acquired during the previous year; and
 - (c) The sum so arrived as in (b) shall be reduced by the moneys receivable together with scrap value, if any, in respect of any asset falling within that block which is sold or discarded or demolished or destroyed during the previous year, so, however, that the amount of such reduction does not exceed the written down value as so increased.

APPENDIX II

DEPRECIATION CHART: INCOME TAX

Assessment Year 2011–12

<i>Block</i>	<i>Nature of Asset</i>	<i>Rate of Depreciation</i>
Building		
Block-1	Residential building other than hotels and boarding houses	5
Block-2	Office, factory, godowns or building-mainly residential purpose	10
Block-3	Temporary erections such as wooden structures	100
Furniture		
Block-4	Furniture-Any furniture/fittings including electricals fittings	10
Plant and Machinery		
Block-5	Any plant or machinery (not covered by block, 6,7,8,9,10,11, or 12) and motors cars (other than those used in a business of running them on hire) acquired or put to use on or after April 1, 1990	15
Block-6	Ocean-going ships, vessels ordinary operating on inland waters including speed boats	20
Block-7	Buses, lorries and taxies used in business of running them on hire, machinery used in semi-conductor industry, moulds used in rubber and plastic goods factories	30
Block-8	Aeroplanes, life saving medical equipment	40
Block-9	Containers made of glass or plastic used as refills, new commercial vehicle which is acquired during Jan 1, 2009 and Sept 30, 2009 and is put to use before Oct 1, 2009 for the purpose of business/profession	50
Block-10	Computers including computer software. Books (other than annual publication) owned by a professional.	60
Block-11	Energy saving devices; renewal energy devices; rollers in flour mills, sugar works and steel industry	80
Block-12	Air pollution control equipments; water pollution control equipments; solid waste control equipments, recycling and resource recovery system; (being annual publications) owned by assesseees carrying on a profession or books (may or may not be annual publications) carrying on business in running lending libraries	100
Intangible Assets		
Block-13	Intangible assets (acquired after march 31, 1998)-Known how, patents, copyrights, trademarks, licences, franchises and any other business or commercial rights of similar nature	25

LARSEN AND TOUBRO HYDRAULIC WORKS

Larsen and Toubro Limited (L&T), an engineering giant, is engaged in diverse activities. It manufactures hydraulic excavators in its Bangalore Plant. The required hydraulic equipment for the excavators are manufactured in its Hydraulic Works at the same plant.

The main products of Hydraulic Works are hydraulic motors, pumps, cylinders, etc. These products use steel round seamless steel tubes as a main input raw material. The raw material is brought in running length from steel mills and is cut to the required size before taking up for further machining operation. L&T Hydraulics Works has an eight-year old German make, 'Kasto', power-saw machine which is used for the cutting operation. As the cutting capacity of this machine is highly inadequate, the company has been sending the raw-material out to sub-contractors for the cutting operation and sometimes for further semi-finishing operation also.

In the beginning of 2011, the materials manager of L&T Hydraulics Works felt the need of buying a high-productivity cutting machine to replace the age-old power-saw machine. He felt that this could stop sub-contracting of the cutting operation. He was faced with the problem of justifying the need for buying a band-sawing machine to the management and getting the budget sanctioned before March 2011.

BAND-SAWING MACHINE

The materials manager procured the details and funding offer from the manufacturers of eight comparable high speed automatic band-sawing machines. Costs of these machines varied between Rs. 800,000 to Rs. 2.6 million. They differed in terms of their construction feature and thereby, the rigidity, although cutting parameters were comparable. After careful evaluation of the technical parameters and the construction details of these machines, the materials manager felt that a double column machine made by Behringer of Germany was the most suitable one. This feeling was also reinforced by the fact that a few other companies in similar business were using the same make and the performance was satisfactory. The offer obtained for this machine was at Rs. 1.75 million, inclusive of air-freight delivery charges to the plant in Bangalore.

The prevailing customs duty on this type of machine was at the rate of 35 per cent. However, under the Export Promotion of Capital Goods (EPCG) scheme, the company could import the machine with a customs duty of 15 per cent. The condition to be fulfilled under the EPCG

scheme was that the company should export four times the C&F value of the machine within five years and the machine should be used for producing the goods meant for exports. As the company had already received an export order and a letter of intent for the next five years, the materials manager was sure that the benefit can be made use of in buying the band-sawing machine.

The materials manager had received an offer for selling of the old 'KASTO' machine for a price of Rs. 35,000 to a sub-contractor. This machine was originally bought for Rs. 5,20,000. It has been depreciated at 25 per cent written-down value (WDV), and it has a remaining useful life of two years. The expected life of the new Behringer band-sawing machine was 10 years, and its salvage value was expected to be twice of its written-down value after being depreciated at 25 per cent for tax purposes.

CUTTING REQUIREMENTS

The steel rounds and seamless tubes were cut by the power-saw machine in the factory and used for further machining. The cutting was also sub-contracted in the following two ways:

- (a) Cutting the rounds and tubes and returning the cut-pieces to the factory.
- (b) Cutting and semi-finishing to components and supplying to the factory. The different sizes and the number of pieces to be cut in each size per year are given in Exhibit I.

It was calculated that about 20 per cent of the total requirement is cut in-house. The following rates were paid to the sub-contractors of cutting operation:

up to 160 mm diameter	Rs. 0.16 per mm of area cut
above 160 mm to 280 mm diameter	Rs. 0.22 per mm of area cut
above 280 mm diameter	Rs. 0.30 per mm of area cut

When the cutting alone is done by the sub-contractors as in case of (a), there was transportation charges associated with it, to send raw material and to collect it back from the sub-contractors. In case of in-house cutting, the direct cost of cutting blade was involved. The power, coolant charges and maintenance charges could be taken as overheads.

COST SAVINGS

One of the main reasons why the materials manager wanted to buy the band sawing machine was the possibility of saving on the hidden cost in the cutting operation, which he perceived to be quite high. When the cutting operation is done using the power hacksaw machine either in-house or by the sub-contractors, there used to be taper-in cutting and as a result, more allowance had to be given. Also, the thickness of the power hacksaw blades is about 3 mm compared to the thickness of the band-saw machines which is 1.2 mm. Due to this, there could be a saving in the cutting loss. The power saw machines produce a taper of 5 mm per 100-

mm diameter whereas the guaranteed accuracy perpendicularly by the band-saw machine was 0.1 mm in 100 mm diameter.

The materials manager had calculated that on an average about 7 mm of material saving per piece is possible by installing a band sawing machine and at the rate of about Rs. 20 per kg of steel used, the saving per year would be substantial. The weight per metre of each diameter is also given in Exhibit I.

The cost of each blade used for the power saw machine was about Rs. 500 and the average area cut by each blade was about 50,000 sq. cm.* The agent who was willing to supply the imported Behringer band sawing machine was also willing to supply the band-saw blades at a cost of Rs. 3,500 per blade. He also provided the statistics that the average area that could be cut with each blade was about 175,000 sq. cm.

A semi-skilled worker operated the power-saw machine. The new proposed automatic band-saw machine had simple controls and could be operated by the same operator with little training. The materials manager had taken the operator to another company where the similar machine was working and ensured that there was no need to recruit or change the operator. However, the labour union would demand that the automatic machines can be operated by skilled workmen only, and it may put up a case for the promotion of the worker. There could be a small percentage increase in the labour cost if this had to be done. The company has a workforce of about 350 out of which about 100 are skilled operators.

OTHER BENEFITS

There are other tangible and intangible benefits perceived by the materials manager that go along with the decision to buy the new machines. These benefits are:

1. There would be a direct saving of about Rs. 60,000 per year on transportation if the material is cut in-house instead of by sub-contractors.
2. There would be reduction in inventory-carrying cost and the work-in progress.
3. Throughput time would be reduced and response will be faster.
4. Accounting of material would be greatly simplified as only cut-pieces would be sent to sub-contractors for further processing. The present method of accounting was very cumbersome as the raw material was sent in running lengths and received as components.

CAPITAL BUDGETING ISSUES

The materials manager had informal discussion with production manager, planning manager, and finance manager about the proposal of buying the new band-sawing machine. Most of them

* Area of steel rounds/seamless tubes can be calculated as follows:
 $\pi \times R^2$, where $\pi = \text{pie} = 3.1428$, $R = \text{radius} = 1/2 (\text{diameter})$.

had raised their eyebrows on investing about Rs. 2 million for a 'cutting machine' as cutting was perceived a low-tech, mundane job which is better left to sub-contractors. The unit-head also had a similar opinion. This made materials manager's task of proving the viability of the new band-sawing machine quite difficult. He also knew that the corporate finance department expects a post-tax return of 18 per cent on all such investments. In his opinion, this rate was quite high. According to him, the reasonable post-tax required rate of return on replacement projects should be 15 per cent. Corporate tax rate is 35 per cent.

The materials manager has to present and justify the case with hard facts and attractive return on such investments during the budget sanction meeting.

DISCUSSION QUESTIONS

1. Should L&T Hydraulics purchase a high-productivity cutting machine to replace the age-old power-saw machine?
2. What additional data needs to be obtained to justify the need of the new investment decision?
3. What questions do you expect the management is going to ask before finalizing the decision and sanction the budget?

Exhibit I

L&T HYDRAULICS WORK

Cutting Requirements

<i>Diameter (mm)</i>	<i>Weight per metre (kg)</i>	<i>Length/piece (mm)</i>	<i>No. of pieces</i>
80	39.5	1,100	300
90	50.0	1,200	850
100	61.7	1,450	450
110	74.7	40	150
		62	300
		75	350
		1,650	650
120	88.9	80	450
		105	360
		52	150
130	104.3	68	200
		75	230
		84	120
		90	350
140	120.9	100	320
		120	180
		90	320
		102	110
150	138.8	110	80
		150	300
		165	550
160	158.0	190	640
		200	640
		220	350
		280	450
170	178.3	20	400
		260	400
180	200.0	230	150
190	222.7	250	80
200	246.8	280	60
		300	120
220	298.6	80	80
240	355.4	100	100
260	419.1	300	150
280	483.7	240	80
320	631.8		

HEALTHY DRINKS COMPANY

Healthy Drinks Company is planning to produce a new mixed fruit juice. It has engaged a consultant at fees of Rs. 50 million to conduct a market survey to find demand for the juice. The market survey indicated that there was enough demand, and that the company could sell at the maximum 100 million one-litre pack of the product each year. Half of the consultant's fee is to be paid immediately on the submission of the survey report and half after one year subject to the company's decision to manufacture and sell the product. For the full capacity utilization, the manufacturing plant would cost Rs. 2000 million. The economic life of the plant is estimated to be five years. The plant can be depreciated at a written down depreciation rate of 25 per cent for tax purposes. The company is considering using an idle fully depreciated building for setting the manufacturing facility. The current market value of the building is Rs. 50 million and the expected market value after 5 years is Rs. 100 million. The market value of the plant is expected to be Rs. 150 million after five years. Assume that the corporate tax will be considered on loss or profit on sale of assets. The corporate tax rate is assumed to be 30 per cent.

The company expects demand to pick up over years. It expects to utilize 70 per cent of capacity for the first year, 80 per cent in the second year, 90 per cent in the third year and 100 per cent in years four and five. The selling price per one-litre pack at the current price level is expected to be Rs. 100. The company has estimated that the variable cost per pack at the current price level will be Rs. 40. At the full capacity, the fixed overhead cost per unit is estimated at Rs. 60 at the current price level. One-third of these fixed overhead costs are allocations of the corporate general and administrative expenses. The net working capital is estimated to be 20 per cent of sales and will be incurred in the beginning of the year. The general inflation rate is expected to be 5 per cent per annum that will affect both the price and all costs.

The proposal for producing the new product is as risky as the current business. Currently, the company has 30 per cent debt. Its equity beta is 1.20. Both the risk-free rate and risk premium, respectively, are 3 per cent and 5 per cent in real terms. The new project will be financed by 50 per cent debt (at risk-free rate) and 50 per cent equity.

DISCUSSION QUESTIONS

1. Should the project be accepted? Justify by calculating

- (a) the project's nominal cash flows after tax;
 - (b) the firm's real and nominal cost of capital;
 - (c) the project's real and nominal cost of capital and
 - (d) the NPV of the project (round-off the discount rate to the nearest whole number).
2. Show all computations and state your assumptions explicitly.

SUDARSHAN'S RISK INQUEST

Sudarshan Vyas, Director Finance, of a leading cement company was closely following the developments in the secondary market in the recent past. The Bombay Stock Exchange (BSE) Sensitivity Index (Sensex) had declined significantly during the recent times. Looking at the development and growth of the Indian capital market during the post liberalization period of Indian economy, the company had planned a public issue of capital which had to be shelved because of the failure of a number of public issues in the recent past.

One of the recent surveys of investors had highlighted that risk in equity market had increased significantly and as a result, investors are not investing their saving in the equity market. He was wondering whether the risk in the equity market had really increased over these years. He thought that by examining the monthly return data of activity traded scrips, he would be in a position to get some idea of the changing pattern of risk in the equity market. He collected the monthly return data of 21 specified group shares which were part of the Sensex. Sensex is calculated using 30 scrips as the base. Eight shares were excluded because data for sufficiently long periods were not available. Also, the HLL share was excluded from the analysis because of the merger of TOMCO with it. Sudarshan used CIMM Corporate Database to get basic share price information for the period from January 2004 to August 2010. Given the volume of data, he used a spreadsheet to work out the monthly returns of the selected scrips (Appendix 1).

Given the calculated returns, he started thinking about the general risk characteristics of the equity market. The data did not reveal much. He therefore started looking at the measures that could provide some indication about the volatility of returns. He had, many times, in his professional career been involved in describing and analysing risk factors in various investment decisions. But he was never involved in the quantitative analysis of risk. In the past, he always preferred descriptive explanations of risk dimensions of various financial decisions. This was the first opportunity for him to draw any meaningful explanation about the risk factor from a given volume of data. He recalled from his learning of statistics in his professional accountancy course that the best way to measure the risk of any instrument is to work out the standard deviation or variance of its returns over some defined period. He used the monthly return data to work out these measures. Exhibit I presents the mean return, standard deviation and variance of 21 Sensex shares for the period from January 2004 to August 2010.

Sudarshan also thought that a graphical description of data may help him to get insights into the volatility in stock market returns. Using the spreadsheet once again, he plotted the

monthly returns of Sensex for the period from January 1990 to August 1996. To his surprise, he found that volatility of the Sensex monthly returns had come down during the recent past as compared to the earlier period (Exhibit IV). This was contrary to the popular belief that risk in the secondary market had increased recently.

Sudarshan started closely examining the data and other measures calculated on spreadsheet. He found that the standard deviation and variance of Sensex was the lowest compared to the risk measures of all other 21 shares (Exhibit I). However, in his pursuit to get deeper insight into risk-return relationship, he plotted data of Exhibit I on a graph (Exhibit V). He did observe some relationship between risk and return across all selected scrips. However, he could not generalise this relationship across all of them. He knew that the Sensex is primarily composed of these scrips. He was also aware that these scrips are highly traded and many large mutual funds and institutional investors would be interested in them. Using the correlation measure, Sudarshan also observed that relationship in monthly returns across each of the scrips was quite significant (Exhibit II).

He was not sure of what would happen when scrips of different risk characteristics were combined together. To understand the implications of combining the scrips and forming a portfolio, he took an example of SBI and ACC scrips. From a spreadsheet, he obtained the following characteristics of these two scrips:

	ACC	SBI
Mean return (%)	3.86	5.44
Standard Deviation	16.84	26.39
Variance	283.59	696.55
Co-variance of ACC and SBI Returns		152.44
Correlation of SBI and ACC Returns		0.34

Using different proportions of hypothetical investment of Rs. 100 in ACC and SBI scrips, he obtained the following portfolios and their risk and return parameters:

<i>Per Cent Funds Invested in ACC</i>	<i>Standard Deviation</i>	<i>Mean Return</i>
0	26.39	5.44
10	24.38	5.28
20	22.49	5.13
30	20.76	4.97
40	19.22	4.81
50	17.92	4.65
60	16.93	4.49
70	16.30	4.33
80	16.07	4.18
90	16.25	4.02
100	16.84	3.86

He observed that combining SBI and ACC scrips in different proportions resulted in portfolios with different risk and return characteristics. For example, investing 80 per cent of funds in ACC and 20% in SBI gave a portfolio that had a lower risk than investing 100 per cent in ACC or in SBI (see Exhibit VI). Thus, he thought that it should be possible for any investor to minimize the risk. He was not sure whether this would happen under all circumstances. He was also not sure whether he could draw a similar conclusion about maximizing the return. He also wondered that if the expected return and risk profile of each scrip remains same, whether investors will be able to maximize their returns for a given risk without considering all scrips and could generate any combination or portfolio of securities to suit their risk preferences. He tried to work out several possible combinations to see the risk-return implications. Since all scrips have significant relationship with the Sensex, he wondered whether by relating the return of each scrip to the Sensex would make it simpler. He worked out this relationship by regressing each scrip's returns with the Sensex returns using the following regression equation:

$$\text{Scrip Return} = \alpha + \beta \text{ Sensex Return}$$

Table 3 provides value of β (referred to as beta) and its standard deviation (referred to as standard error.) He was not sure how this kind of analysis would help him perform his corporate finance functions such as raising finance and evaluating new projects.

DISCUSSION QUESTIONS

1. What is risk? Do you agree with Sudershan's point that during recent times the fluctuations have reduced therefore the overall risks in the market has reduced?
2. How would you measure risk of a security? Do you think it is appropriate to use the variation in past returns as measure of risk? Are there any other methods?
3. What is the risk return relationship when investment is made in two or more securities? Using the SBI and ACC securities returns, explain this relationship. Why do you think the risk reduces as investment in ACC is increased in proportion from no investment position? Does this reverse at any stage? Why does this happen?
4. Why do you find the risk measure of SenSex is lower than risk of any other security? Are there opportunities to reduce risk? Is it possible to reduce risk to zero through diversification?
5. What will happen if we introduce a risk-free security (such as treasury bill) in our calculations?

Exhibit I

Mean Returns, Standard Deviation and Variance of Monthly Returns of Selected Sensex Companies: January 2004–August 2010

<i>Companies</i>	<i>Mean Return</i>	<i>Standard Deviation</i>	<i>Variance</i>
Arvind Mills	3.64	18.90	357.00
ACC	3.86	16.84	283.63
Bajaj Auto	3.05	11.96	143.13
Colgate-Palmolive	2.36	10.52	110.59
Glaxo	2.63	12.26	150.26
Grasim	1.89	11.51	132.51
Great Eastern	1.34	14.12	199.31
Gujarat Ambuja	4.06	13.71	188.08
Hindalco	2.21	10.54	111.04
ITC	3.99	14.45	208.91
Indian Hotels	3.93	12.13	147.01
ICICI	1.29	18.89	356.71
L&T	1.68	15.67	245.41
Mahindra & Mahindra	3.08	13.29	176.52
Ranbaxy	4.50	13.08	171.18
Reliance	1.61	17.24	297.25
State Bank	5.44	26.56	705.37
Tata Chemicals	3.03	18.95	358.92
TELCO	3.15	12.24	149.70
TISCO	1.48	12.75	162.59
Tata Power	4.13	17.65	311.50
Sensex Index	2.19	10.47	109.59

Exhibit II

Correlation Matrix

	Sen	Arv	Acc	Bal	Col	Clx	Grm	Grt	Gam	Hil	Itc	Ihl	Ici	It	Mm	Ran	Ril	Sbi	Tcl	Tel	Tis	Tpl	
Sen	1.00																						
Arv	0.73	1.00																					
Acc	0.83	0.54	1.00																				
Bal	0.67	0.50	0.48	1.00																			
Col	0.65	0.61	0.57	0.44	1.00																		
Clx	0.61	0.39	0.44	0.38	0.53	1.00																	
Grm	0.82	0.56	0.75	0.56	0.54	0.50	1.00																
Grt	0.62	0.50	0.46	0.36	0.46	0.58	0.55	1.00															
Gam	0.73	0.58	0.68	0.55	0.55	0.49	0.70	0.47	1.00														
Hil	0.77	0.56	0.62	0.41	0.46	0.49	0.74	0.48	0.60	1.00													
Itc	0.88	0.62	0.69	0.54	0.51	0.58	0.69	0.53	0.66	0.68	1.00												
Ihl	0.60	0.43	0.42	0.45	0.34	0.45	0.47	0.32	0.25	0.50	0.59	1.00											
Ici	0.60	0.50	0.52	0.43	0.41	0.45	0.53	0.42	0.33	0.55	0.51	0.54	1.00										
It	0.79	0.69	0.66	0.55	0.60	0.48	0.68	0.52	0.64	0.56	0.66	0.40	0.46	1.00									
Mm	0.66	0.42	0.47	0.63	0.40	0.35	0.64	0.38	0.52	0.50	0.55	0.52	0.39	0.56	1.00								
Ran	0.63	0.55	0.39	0.49	0.43	0.54	0.55	0.58	0.48	0.45	0.48	0.36	0.47	0.54	0.46	1.00							
Ril	0.79	0.63	0.67	0.59	0.52	0.45	0.62	0.52	0.62	0.57	0.67	0.35	0.49	0.73	0.50	0.48	1.00						
Sbi	0.54	0.48	0.34	0.32	0.46	0.31	0.37	0.42	0.30	0.35	0.49	0.39	0.42	0.38	0.36	0.44	0.31	1.00					
Tcl	0.76	0.64	0.64	0.62	0.54	0.41	0.75	0.52	0.69	0.56	0.57	0.37	0.55	0.75	0.70	0.62	0.65	0.51	1.00				
Tel	0.74	0.44	0.64	0.63	0.46	0.43	0.59	0.41	0.56	0.46	0.62	0.36	0.27	0.50	0.55	0.42	0.58	0.35	0.50	1.00			
Tis	0.86	0.63	0.72	0.53	0.55	0.49	0.73	0.54	0.57	0.73	0.70	0.46	0.60	0.67	0.49	0.51	0.71	0.47	0.61	0.58	1.00		
Tpl	0.69	0.66	0.59	0.58	0.54	0.49	0.58	0.55	0.61	0.55	0.61	0.44	0.50	0.66	0.40	0.51	0.64	0.37	0.60	0.46	0.56	1.00	

Exhibit III

Beta and Standard Error of Selected Sensex Companies: January 2004–August 2010

<i>Companies</i>	<i>Beta</i>	<i>Standard Error</i>
Arvind Mills	1.32	0.14
ACC	1.33	0.10
Bajaj Auto	0.77	na
Colgate-Palmolive	0.66	0.01
Glaxo	0.72	0.11
Grasim	0.90	0.12
Great Eastern	0.84	0.12
Gujarat Ambuja	0.96	0.10
Hindalco	0.78	0.07
ITC	1.21	0.08
Indian Hotels	0.70	0.11
ICICI	1.09	0.16
L&T	1.19	0.10
Mahindra & Mahindra	0.84	0.11
Ranbaxy	0.78	0.11
Reliance	1.30	0.12
State Bank	1.36	0.24
Tata Chemicals	1.37	0.13
TELCO	0.87	0.09
TISCO	1.05	0.07
Tata Power	1.17	0.14

Exhibit IV

Monthly Returns on BSE Sensex Index

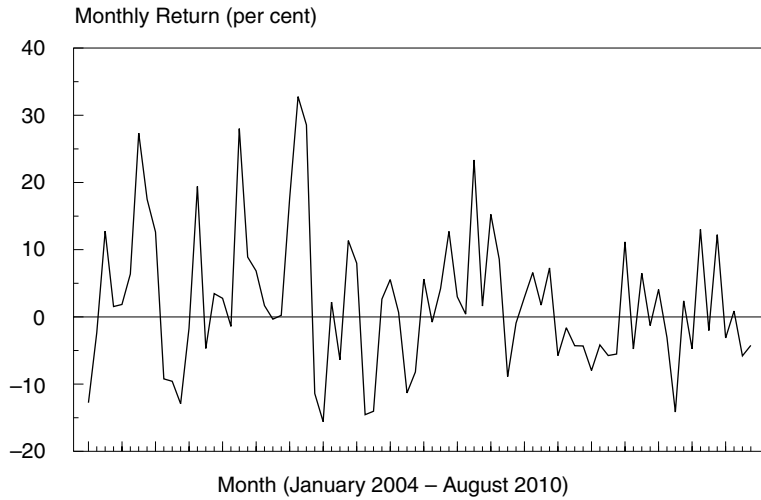


Exhibit V

Mean Returns and Standard Deviation of BSE Sensex Companies

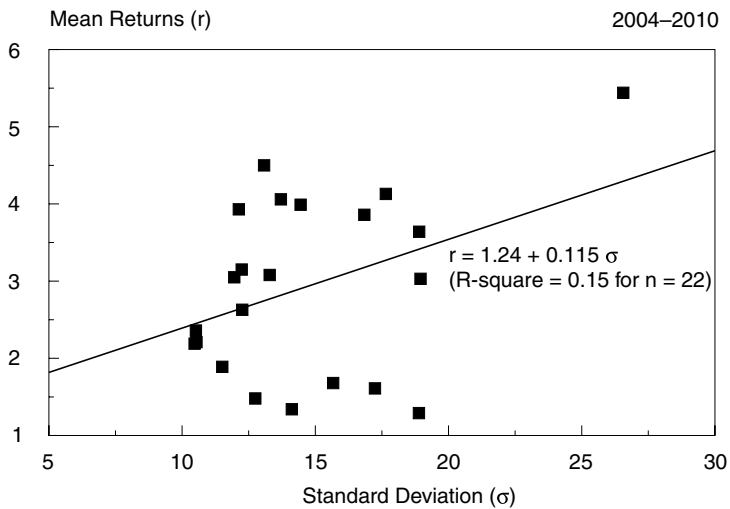
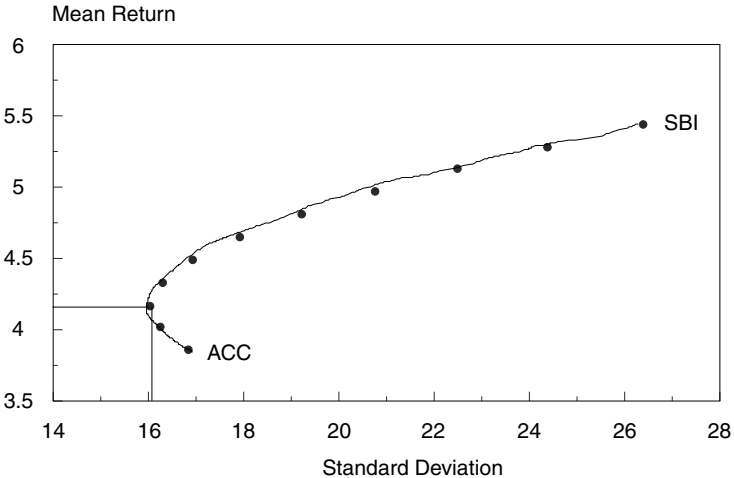


Exhibit VI

Combining SBI and ACC in Portfolio and implications for risk



HINDUSTAN UNILEVER LIMITED

Hindustan Unilever Limited (HUL) was known as Hindustan Unilever Limited (HUL) until May 18, 2007. The company was set up in 1933. It completed 75 years of operations in India on October 17, 2007. It is an important subsidiary of Unilever. Unilever has a large number of subsidiary and associate companies in more than 100 countries. HUL's business areas include home and personal care, foods and beverages, and industrial, agricultural and other products. It is one of the largest producers of soaps and detergents in India. The company has grown organically as well as through acquisitions.

HUL places equal focus on serving both the employees and the shareholders, and it is committed to add value to the both. Over the years, the company has built diversified portfolio of powerful brands, a number of them being household names.

The company requires the cost of capital estimates for evaluating its acquisitions, investment decisions and the performance of its businesses and for determining the value added to shareholders. It needs to develop a methodology of calculating costs of equity and debt and determine the weighted average cost of capital.

HUL'S PERFORMANCE

Table 1 contains a summary of HUL's EPS, DPS, share price and market capitalization. The company has been paying dividends regularly. HUL's shares has enjoyed high price in the stock market. The company's share price has increased from Rs. 138.35 in 1997 to Rs. 213.90 in 2007. The company's sales and assets have shown significant growth, and the company's profitability has also increased over the years (Exhibit I). The company is conservatively financed (Exhibit II).

DISCUSSION QUESTIONS

1. Calculate HUL's cost of equity by using the dividend–growth model.
2. Calculate HUL's cost of equity by using the capital asset pricing model. Do you agree with the company's assumptions regarding the estimates of the risk-free rate and the market premium?

3. Between the dividend-growth model and CAPM, which method do you recommend to HUL and why?
4. Calculate HUL's cost of assets reflecting only the business risk.
5. What is HUL's before-tax and after-tax weighted average cost of capital (WACC)?

Exhibit I

HINDUSTAN UNILEVER LIMITED: EPS, DPS AND SHARE PRICE

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
DPS (Rs.)	1.70	2.20	2.90	3.50	5.00	5.16	5.50	5.00	5.00	6.00	9.00
EPS (Rs.)	2.81	3.67	4.86	5.95	7.46	8.04	8.05	5.44	6.40	8.41	8.73
Share price (Rs.)	138.35	166.36	225.00	206.35	223.65	181.75	204.70	143.50	197.25	216.55	213.90
MCap. (Rs. billion)	275.55	365.25	495.13	454.09	492.31	400.08	450.59	315.87	434.19	477.88	465.75

Note: Data adjusted for bonus shares (stock dividend).

Exhibit II

HUL'S FINANCIAL PERFORMANCE

<i>(Rs. million)</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Net sales	110,606	121,034	137,178
Total income	112,130	122,949	139,426
PBDIT	15,958	18,395	21,105
Interest expense	192	107	255
PBT	16,045	18,617	21,845
PAT (before exceptional items)	13,545	15,397	17,691
Net profit	14,081	18,554	19,255
Share Capital	2,201	2,207	2,177
Reserves & Surplus	20,855	25,028	12,215
Loan Funds	569	736	885

COST OF CAPITAL ASSUMPTIONS AT HUL

The company considers cost of its debt as the effective rate of interest applicable to an 'AAA' rated company. It thinks that considering the trends over the years, this rate is 9.5 per cent in 2007. The risk-free rate is assumed as the yield on long-term government bonds that the company regards as about 8 per cent. HUL regards the market-risk premium to be equal to 11 per cent. The company uses CAPM to calculate its cost of equity. The alternative method is the constant growth model.

Exhibit III charts the monthly rates of return for shares and the stock markets (BSE's Sensex) for the period from April 2003 to December 2007. As shown in the figure, the regression equation given below indicates beta of 0.78. HUL's own estimate of beta is 0.98.

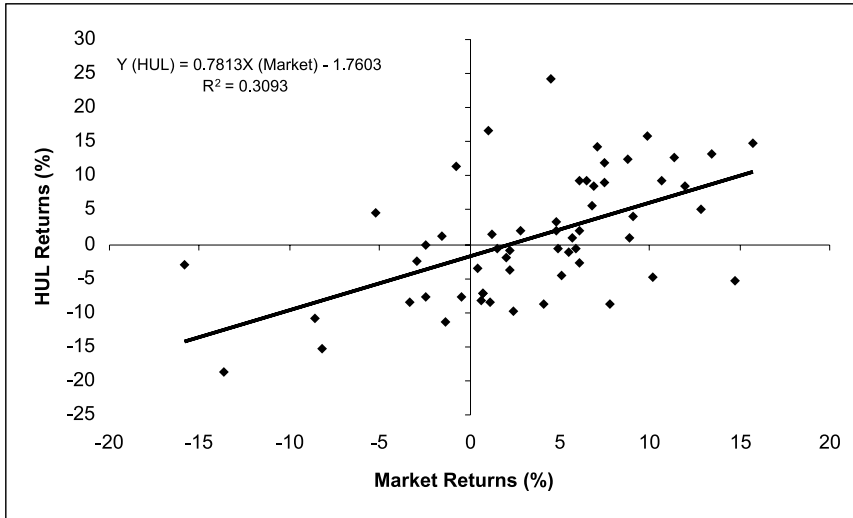
$$Y = \alpha + \beta X + \varepsilon$$

$$R_{\text{HUL}} = -1.7603 + 0.7813 R_{\text{Market}}$$

$$R^2 = 0.3093$$

Exhibit III

HUL'S MONTHLY RETURNS VS MARKET (SENSEX) MONTHLY RETURNS: APR 03-DEC 07



THE NEOGI CHEMICAL COMPANY

The Neogi Chemical Company (NCC) was started in 2001 as a private limited company with an initial investment of Rs. 250 million. Under the able guidance of its chairman, Mr. Chaman Lal Neogi, the company made tremendous progress during the last decade. As a result of its increasing sales and profits and increasing demand of funds for financing the expansion, the company was converted into a public limited company in 2007. On March 31, 2010, the total capitalization of the company was Rs. 1200 million.

Although the company is highly profitable and growing constantly, there is ample scope to introduce more scientific managerial techniques to improve profitability further. For example, the company has not been following a sophisticated approach in screening and evaluating its capital projects. The finance committee is authorised to screen and approve only those projects which involve capital expenditure exceeding Rs. 10 million. Departmental heads are members of the committee and the controller of finance is its chairman. It is the responsibility of the departmental heads to submit a detailed description of proposed projects together with estimates of cost and benefits. Six such projects are currently under consideration (Exhibit I).

The finance committee does not follow a standard procedure to screen capital projects. Rather the committee listens to the views of the various members and decides on the basis of the merits and force of the arguments made by the committee members. After attending an Executive Development Programme on Techniques of Investment Analysis recently, Mr. Chaman Lal Neogi, the chairman of the company, was convinced that his company would be able to allocate funds rationally if it adopts a more scientific approach towards investment decisions. He, therefore, asked the finance committee to standardise its screening procedure and adopt some scientific evaluation techniques to ensure equitable treatment to each project and maximum possible return to the company on its investment expenditure.

Keeping in view the desire of the company's chairman, the finance committee met to consider the current projects. Mr. Neogi was also present at the meeting. A number of issues were raised by the committee members in an attempt to establish a sound screening programme. For example, it was the view of Mr. Jagat, the chief accountant, that the first and foremost concern of the company should be that the money invested in a project be recovered within a short period of time. He opined that a maximum acceptable, payback period, of four years for NCC should be the basis to accept a project. To emphasise his point, he argued that such

an approach was not only simple, but also did not require the calculation of the cost of capital which is a formidable task. Mr. Laxmi Chand, the marketing manager, reacted sharply to this view. He pointed out that following such a policy may result in accepting those projects that were not beneficial to the company and rejecting profitable ones. He added that the desirability of a project depended not only on the speed with which investment was recovered, but also the life of the project over which benefits would be derived. He favoured the use of the internal rate of return (IRR) method. This method, according to him, incorporates all cash flows over the life of the project and adjusts them for the time value as well. He stated further that the computation of the cost of capital was not necessary for the use of this method.

Mr. Jagat reacted to these suggestions by stating that the rate of return method is difficult and at times unrealistic for evaluating projects. Because of the mathematics of the formula for computing internal rate of return, it could give multiple (and also imaginary) rates of return for an investment project. Defending the use of payback, period as an evaluation criterion, he pointed out that besides being simple, payback method can be used as a measure of risk and liquidity. He stated that one simply needs to shorten the maximum acceptable payback period to account for risk and liquidity. He also stated that the method also gives an idea of the project's rate of return, under the conditions of constant cash flows and a sufficiently long life of the project its reciprocal gives an approximation of the project's rate of return.

Mr. Neogi intervened at this stage of the discussion to say that 'payback' may be a useful investment criterion, but its use as the only criterion cannot be defended. Mr. Vinod Mittal, the controller of budgets, felt that the best method to use was the 'net present value' (NPV) method. It clearly indicates what wealth would accrue to the owners of the company from the project. Mr. Mittal also stated that if present values of cash flows are calculated, one can also compute the ratio of the present value of cash inflows to initial cash outlay, in order to assess the relative significance of various investment proposals. He explained further that like 'internal rate of return' (IRR) the NPV method adjusts cash flows for time value and is very simple in its computations. He also stated that since 'internal rate of return' and the 'net present value' methods give the same accept-reject decisions, those who have an objection to the use of the 'internal rate of return' method on account of its involved computations and the possibility of multiple rates of return would have no objection in accepting the use of the net present value method as an investment criterion.

Mr. Neogi reacted to Mr. Mittal's arguments by saying that under certain conditions, particularly when one has to rank mutually exclusive projects, 'internal rate of return' and 'net present value' methods could give conflicting rankings. According to him, this perhaps happens due to the difference in the cash flow patterns of the mutually exclusive projects. He, however, informed the meeting that when this topic was discussed in the executive development programme, which he had attended, there was a controversy regarding the cause of the conflicting rankings given by IRR and NPV methods. One point of view was that this happened because of the different implicit reinvestment assumptions inherent in the formula of the two methods. NPV method assumes that the intermediate cash flows generated by an investment are reinvested at the rate of discount (cost of capital to the firm), while the IRR

method assumes that they are reinvested at the project's internal rate of return. The contrary view was that the ranking conflict arose solely due to the different patterns of the cash flows of the projects; the reinvestment argument was indefensible. He informed further that the majority view in the executive development programme was that NPV method was more consistent with wealth maximization principle than IRR method in the evaluation of the investment projects. To clarify the issues relating to the controversy of NPV vs. IRR, as understood by Mr. Neogi, he illustrated the example given in Exhibit II. Investment projects A and B in Exhibit II require the same initial outlay, although their cash inflow patterns differ. At a required rate of return of 10 per cent, Project A's NPV (Rs. 4,140) is higher than Project B's NPV (Rs. 3,824). However, Project B earns a higher IRR (37.63 per cent) than Project A (26.55 per cent).

Mr. Pramod, the production manager, shifted the discussion to the questions of the cut-off rate. He complained that the committee had been very conservative in the past in approving projects. He felt that there would be no difficulty in financing all those projects that earn rates higher than the cost of debt, which has been historically 12 per cent (before tax) per annum. This view was countered by Mr. Lal, the finance manager. He contended that indiscriminate use of debt financing was risky. It would put the capital structure in imbalance and alarm the lenders. The result was likely to be an increase in effective interest rates and more restrictive loan covenants. This also could have an adverse effect on the sharp prices of the company. He, therefore, felt that a basic change in the capital structure would have serious consequences for the company. He did not know what would be the cost and repercussions if the projects were financed by raising equity capital, instead of debt capital.

Some committee members also raised the question of using retained earnings for financing the project since it is a cost free source. However, the chairman of the committee informed the members that, in his opinion, no source of funds could be said to be free of cost; at least, there was an opportunity cost involved. The chairman also said that the problem would become simple if the cost of capital could be calculated. He also informed the members that as a policy, the company would like to maintain a debt-equity ratio of 3 : 2 at its book values in the long-run. At this juncture, the chairman of the committee adjourned the meeting requesting the members to come with their recommendations regarding Project No. 1 in the light of the discussion in the meeting. The estimates of the costs and benefits of Project No. 1 (Exhibit III) were circulated to each member. The information about the company's capital structure and other relevant data (Exhibit IV) were also circulated. The chairman also informed the members that this year for financing any investment project the company may have to raise debt at before tax interest rate of 15 per cent per annum.

DISCUSSION QUESTIONS

1. Should company accept project 1? How would you evaluate its viability make calculation of cash flows, cost of capital and profitability of the project? Compute the net present value and internal rate of return of the project.

2. What are the limitations of payback period and accounting rate of return as methods in measuring an investment's worth? What factors are usually used to justify the use of the payback period? In what situations is it justifiable?
3. Why is the NPV method considered better than the IRR method? Why do NPV and IRR methods give different results (refer to the Exhibit II of the case)?
4. You just heard Mr. Neogi saying the following: "The Project No 1 if accepted would be financed by raising ten year 15 percent debt." Do you agree that the required rate of return should only exceed after tax cost of debt?
5. Why is it necessary to assume that the capital structure would be maintained at a debt-equity ratio of 1:1 in the long run?

Exhibit I**THE NEOGI CHEMICALS COMPANY****List of Proposed Capital Projects**

<i>Project Description</i>	<i>Type</i>	<i>Basis for Decision</i>	<i>Gross Outlay (Rs. million)</i>
Adoption of New Chemical Mixing Process	Replacement Expansion	Cost Saving and Revenue Generation	450
Starting a New Product Division	Expansion	Increased Revenue	600
Purchase of Land for Possible Future Expansion	Strategic Expansion	Management Strategy	300
Purchase of an Additional Warehouse	Expansion	Increased Profits	500
Improvement of Material Handling Facilities	Replacement	Cost Saving	200
Opening a New Office to Handle Foreign Operations Independently	Strategic Expansion	Management Strategy	400

Exhibit II**THE NEOGI CHEMICALS COMPANY****Illustration of NPV vs. IRR**

<i>Project</i>	<i>Cash Flows (Rs.) in Year</i>				<i>NPV at 10% (Rs.)</i>	<i>IRR (%)</i>
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>		
A	-10,000	2,000	4,000	12,000	4,140	26.55
B	-10,000	10,000	3,000	3,000	3,824	37.63

Exhibit III

THE NEOGI CHEMICALS COMPANY
Estimated Revenue and Costs of Project No. 1

(Rs. in million)

	<i>Present Project</i>	<i>Proposed Project</i>
Annual Revenue Sales	510	692
Annual Costs Raw Material	262	348
Labour Costs	80	65
Supervision	8	6
Power	15	11
Repairs and Maintenance	4	5
Depreciation (Straight-line Method)	3	45
Allocated Corporate Overheads	5	7

Note:

In addition to the gross outlay of Rs. 450 million, the proposed project will require a net increase in working capital of Rs. 32 million. The estimated life of the proposed project is 10 years. The present project has a book value of Rs. 30 million and a market value of Rs. 45 million and if retained for 10 years, its salvage value at the end of the tenth year is expected to be Rs. 15 million. The proposed project has estimated salvage value of Rs. 40 million at the end of its life. Corporate tax rate is 35 per cent, and a 25 per cent written-down depreciation rate for tax purposes (see Appendix I).

Exhibit IV

THE NEOGI CHEMICALS COMPANY
Capital Structure Year Ended March 31, 2011

(Rs. in million)

Paid-up share capital (30 million shares @ Rs. 100)	3,000
Reserves and surplus	1,800
Total Borrowings	7,200
The Capital Employed	12,000

Notes:

1. The Company's share is currently selling for Rs. 200. The company's dividend rate is 17.20 per cent which is expected to grow at 7.5 per cent for a long period of time.
2. The average interest rate on borrowings in past years has been about 12 per cent.

APPENDIX 1

For tax purposes depreciation is allowed as deduction every year in respect of buildings, machinery, plant or furniture till the cost of such asset as fully written off.

1. Conditions for allowing depreciation allowance:

- (a) The asset should be owned by the assessee;
- (b) The assets should actually be used for the purpose of the assessee's business or profession.

2. Basis of calculation of depreciation allowance:

Depreciation will be allowed on the written down value of the block of assets. 'Block of assets' means a group of assets falling within a class of assets, being buildings, machinery, plant or furniture, in respect of which the same percentage of depreciation is prescribed.

3. Written down value:

This is defined under Section 43(6) of the Income Tax Act. In the case of block of assets, the written-down value shall be arrived as under:

- (a) The aggregate of the written-down value of all the assets falling within that block of assets at the beginning of the previous year shall first be calculated;
- (b) The aggregate of the written-down value arrived at as in (a) shall be increased by the actual cost of any asset falling in that block which was acquired during the previous year; and
- (c) The sum so arrived at in (b) shall be reduced by the money receivable together with scrap value, if any, in respect of any asset falling within that block which is sold or discarded or demolished or destroyed during the previous year, so, however, that the amount of such reduction does not exceed the written-down value as so increased.

HIND PETROCHEMICALS COMPANY

The petrochemical plants of Hind Petrochemicals Company (HPC) are situated in the South and East of India. The Company wants to expand in the West. HPC's existing refinery capacity is 9.5 metric ton. The central government has a refinery in a remote area of western India with a capacity of 3.5 metric ton. HPC has strategic interest in acquiring the refinery. As a part of its privatization policy, the central government is willing to sell the refinery for Rs. 1,550 million. The company is in touch with the government for the purchase of the refinery for the last few months.

According to the company-appointed valuers, the refinery would need an additional investment of Rs. 5,950 million in machineries and Rs. 300 million for working capital before starting the operations. According to the valuer, if the company so desired, the refinery including these facilities (including working capital) could be sold for Rs. 3,800 million after the planning horizon of five years. In that case, the company will have to incur Rs. 200 million at the end of the economic life of the refinery to clean the site. The initial cost of valuers' work was Rs. 25 million. They will be paid an additional amount of Rs. 15 million in the first year if the company buys the refinery.

The corporate planning department of the company has estimated the profit from the refinery operation as given in Exhibit I.

The company has a policy of charging depreciation on straight-line basis. However, for tax purposes, the WDV depreciation on the block of assets applies. The depreciation rate is 25 per cent. Corporate overhead costs include the three-fourths costs as the corporate overhead allocations and one-fourth costs incurred by the corporate office exclusively for the proposed project. The company proposes to finance the projects mostly by raising a 5-year 10 per cent loan from a financial institution. The management of the company feels that the investment in the refinery has the same risk and debt capacity as the current business; it must yield a return of 15 per cent.

The executives of the company are not unanimous on accepting the project. The financial controller's recommendation is to reject the project as it earns profits only in the first two years of the five-year period. The production manager considers the location as a strategic advantage since the company will have a plant in the West and could meet the demand easily. The marketing manager argues that the company should look at the investment's payback period. According to

her, the depreciation included in the profit estimates is the recovery of the investment, and in addition, the company also earned profit in the first two years.

DISCUSSION QUESTIONS

1. Should the project be accepted? Use the most suitable method of evaluation to give your recommendation and explicitly state your assumptions.
2. Does your decision to accept the project change if you use other methods of evaluation? Show computations. Do you agree with the views of the financial controller, the production manager and the marketing manager?
3. Why do you think that the method chosen by you is the most suitable method in evaluating the proposed investment?

Exhibit I**PROFITABILITY PROJECTIONS***(Rs. in million)*

	<i>Year</i>				
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Sales	5730	5930	5870	3790	4500
Wages and salaries	1450	1500	1850	1030	1210
Selling and distribution costs	760	770	1080	530	650
Materials and consumables	180	270	290	200	230
Depreciation	1500	1500	1500	1500	1500
Corporate office costs	400	400	400	400	400
Survey costs	40	—	—	—	—
Interest	750	750	750	750	750
Profit (loss) before tax	650	740	0	-620	-240
Less: Tax @ 35%	230	260	0	0	0
Profit after tax	420	480	0	-620	-240

CITY BEAUTIFUL TRAVELS

Sunil Mehra, a resident of Chandigarh, is a commerce graduate, aged 26 years. He does have some experience of working as an assistant in a tourist bus service. He is now thinking of floating a tourist bus service himself. The project requires an estimated cost of Rs. 30 lakh, i.e., Rs. 20 lakh as cost of bus chassis and Rs. 10 lakh as cost of deluxe body with 50 seats. Sunil's father has promised him to contribute Rs. 10 lakh as equity capital on his behalf. His father would like him to earn at least an after-tax return of 13 per cent on equity capital. The remaining amount of Rs. 20 lakh will be borrowed by him from a nationalized bank.

PROJECT IDEA

Chandigarh, where Sunil lives, is situated at about 250 km Northwest of Delhi on the National Highway No. 1, which runs between Delhi to Wagah International Border. The city is so beautifully planned by Mr LeCarbusier, a well-known French architect, that it is known as the City Beautiful. Chandigarh is surrounded by historical places as well as good picnic spots and hill stations. To its north are Shimla and the Pinjore gardens where the Pandavas were said to have lived during their exile. To the north west is Anandpur Sahib where the ninth Sikh Guru, Guru Teg Bahadur, was cremated, and also the Bhakra Nangal Dam. To its west are industrial towns of Ludhiana and Jullunder, and also the famous Golden Temple at Amritsar; and beyond that is the Wagah International Border where the Sounding of the Last Post is an attraction for tourists. To the south of Chandigarh is the famous old city of Patiala with its wonderful museum of old weapons, and to its east is the popular Karna Lake which is a great picnic spot.

With all these attractions in and around Chandigarh, there is a very good potential to run a tourist bus service. At present, there is hardly any good tourist bus service. Train services are available, but they are time-consuming as well as inconvenient.

All this prompted Sunil Mehra to think of starting a tourist bus service based in Chandigarh. He has done some market survey. He is convinced that there are no good services at Chandigarh to cater to the touring needs of the upper class people, who are prepared to pay for a good tourist service, if it is available. He has also contacted some of the hotels in and around Chandigarh and was assured support if he could run a good bus service.

ESTIMATES OF THE PROJECT'S PROFITABILITY AND CASH FLOWS

As stated earlier, the initial cost of the project is estimated as Rs. 30 lakh. On the basis of the project's profitability and cash flow estimates, a nationalized bank has sanctioned a five-year term loan of Rs. 20 lakh at 15 per cent per annum (the bank's letter of approval is given in Annexure I).

Exhibits I, II and III respectively give the estimates of operating costs, and profitability. In preparing the estimates, Sunil has assumed that in spite of good publicity and hard work, it will not be possible for him to operate the bus for more than 70 per cent of its occupancy. With sustained efforts and good contacts, the occupancy is expected to increase to 80 per cent in the second year and to 90 per cent in the subsequent year. He hopes to run the bus for 25 days in a month. Further, he expects the bus to have a useful life of five years, after which it could be sold for Rs. 10 lakh. Depreciation will be charged at 30 per cent per year on the vehicle's written down value.

Fuel cost is the major item of variable cost. It is expected to increase at 10 per cent per year due to change in diesel price. Repairs are semi/fixed costs (they have been assumed as variable cost in Exhibit I); they are expected to increase with increased occupancy over the years. Tax, insurance and rent are assumed to remain constant because of the reduction in insurance premium owing to depreciated value of the vehicle, offset by increase in road tax and rent. Miscellaneous expenses for office rent and furniture include Rs. 50,000 per year.

Revenue is calculated assuming Rs. 350 per running km. In spite of the increase in the fuel cost, the rate is assumed to remain constant during the project's life because of the expected competition from other bus operators. Bank interest is payable at 15 per cent per year, taking into account the monthly repayments. It is estimated that Sunil will be paying tax approximately at 25 cent per annum. Exhibits II and III show the detailed estimates of the project's before-and-after-tax profitability. The project earns an average rate of return of 18.2 per cent before tax and a 13.6 per cent after tax—which is slightly higher than the minimum required rate of return on equity capital.

Sunil has also prepared estimates of net cash flows (Exhibit IV). His estimates show that after repaying the instalments of the term loan and allowing an average 13 per cent dividend on equity capital, he will have a total cash surplus of Rs. 5,34,000 at the end of the project's life. This amount would be much more if the project's after-tax salvage value is also included.

DISCUSSION QUESTIONS

1. Determine cash flows and find NPV.
2. Should the proceeds of debt and equity and payments of interest, dividends and principal be considered in the computation of the investment's net cash flows?

ANNEXURE I

XYZ BANK

Ref: 1/XX

Branch: Chandigarh
4.1.20XXMr Sunil Mehra
Proprietor,
City Beautiful Travels,
Chandigarh.

Dear Sir

With reference to your application for a vehicle loan dated 15.2.2011, we have the pleasure to inform you that we are sanctioning you a credit limit of Rs. 20 lakh as per terms and conditions stated below. You may call on us during office hours to execute the necessary loan papers.

1. Nature of Facility	Other Secured Loan (Vehicles)
2. Amount of Loan	Rs. 20 lakh (Rupees Twenty Lakh only)
3. Interest	6 per cent above the Bank Rate with a minimum of 15 per cent p.a.
4. Security	One new deluxe bodied Ashok Leyland bus costing Rs. 30 lakh.
5. Margin	35 per cent.
6. Repayment	Rs. 40,000 (Rupees forty thousand) per month.
7. Surety	Mr - - - - -
8. Other conditions	The vehicle shall be insured for its full value with Bank clause and SRCC clause and the policy shall be handed over to the Bank. The Bank's lien shall be noted in the R.C. Book. Service Charges was Rs. 500.

The Bank reserves to itself the right to cancel the above said limit and alter the conditions without assigning any reasons whatsoever.

Thanking you,

Yours sincerely.
(sd)

Exhibit I**CITY BEAUTIFUL TRAVELS**

Estimate of Costs

(Rupees in thousand)

Year	Occupancy (per cent)	Variable Costs				Fixed Cost		
		Fuel Oil Grease	Repairs	Publicity and other expenses	Other	Wages and Bonus	Tax Insurance and Rent	Depreciation
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	70	675	15	50	50	250	340	900
2	80	817	16	150	60	260	340	630
3	90	988	18	200	70	270	340	441
4	90	1087	18	250	80	280	340	309
5	90	1196	18	300	90	290	340	216

Exhibit II**CITY BEAUTIFUL TRAVELS**

Estimate of Revenues, Costs and PBIT

(Rupees in thousand)

Year	Revenue	Variable	Fixed	Total	PBIT
	Rs.	Rs.	Rs.	Rs.	Rs.
1	2205	740	1540	2280	(75)
2	2520	983	1290	2273	247
3	2835	1206	1121	2327	508
4	2835	1355	1009	2364	471
5	2835	1514	936	2450	385

Exhibit III

CITY BEAUTIFUL TRAVELS
Estimate of Interest Tax and PAT

(Rupees in thousand)

<i>Year</i>	<i>PBIT</i>	<i>Interest</i>	<i>PBT</i>	<i>Tax</i>	<i>PAT</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4) = (2) – (3)</i>	<i>(5)</i>	<i>(6) = (4) – (5)</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
	(75)	258	(333)	-	(333)
2	247	192	55	-	55
3	508	120	388	26	362
4	471	48	423	106	317
5	385	02	383	96	287

Exhibit IV

CITY BEAUTIFUL TRAVELS
Estimate of Net Cash Flows

(Rupees in thousand)

<i>Year</i>	<i>PAT</i>	<i>Depreciation</i>	<i>(2)+(3)</i>	<i>Loan</i>	<i>Equity</i>	<i>NCF</i>	<i>Cumulative</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>Repayment</i>	<i>Dividend</i>	<i>(4)-(5)-(6)</i>	<i>NCF</i>
				<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>
1	(333)	900	567	480	80	07	07
2	55	630	685	480	120	85	92
3	362	441	803	480	150	173	265
4	317	309	626	480	150	(04)	261
5	287	216	503	80	150	273	534

DELUXE AUTO LIMITED

In the beginning of 2011, the board of directors of Deluxe Auto Limited (DAT) was considering an investment proposal for the introduction of a new model two-wheeler scooter. The break-up of the project cost is given in Exhibit I. Mr. N Ranganathan, the Production Manager of the company, explained the technical features of the project and impressed upon the board members that it was technically an excellent product to be introduced in the highly competitive two-wheeler market. According to him, the company will be able to gain a technical lead over its competitors if the project is undertaken. Mr. G Ramesh, the finance manager, who presented the financial analysis of the project, agreed with Mr. Ranganathan that it was an attractive investment opportunity.

DAT is a large manufacturer of two-wheeler scooters. The company has passed through financial ups and downs in the recent past. In the late seventies, the company performed very badly and accumulated heavy losses. This performance was attributable to one of its models which was technically superior to the existing models of the competitors, but could not find favour with customers and failed in the market. The company has now recovered from its setback. It has wiped out its accumulated losses and has shown surplus in the last two years. The management has, however, become quite cautious in undertaking any new investment projects. It is generally very reluctant to undertake a project unless its profitability is very high. The minimum cut-off rate is 18 per cent. This rate includes compensation for various kinds of risks including general price-rise. The company has recently introduced the discounted cash flow method of project evaluation, although it continues calculating payback period for the projects.

In his financial analysis of the current project under consideration, Ramesh has assumed input and output prices to remain constant. His logic was that adjusting these projections for inflation will not change the results in a significant manner, because if the cost of production goes up, this will be followed by increase in sales prices. He reasoned that the impact of inflation could be passed on to customers. One of the directors disagreed with him and argued that it was not possible for the company to increase the sales price due to the inflation as the company operates under a highly competitive environment. Yet another director felt that even if it was possible to increase prices for any increase in input costs, ignoring inflation in the project analysis could give misleading signals. A director nominated by a financial institution stated

that it was incorrect to assume rates of expenses such as power and fuel, wages and salaries, etc. to remain constant. He suggested that an increasing trend was visible in the Electricity Price Index. This implies that power and fuel expenses would increase over the years. Other expenses may also increase in the same manner. He argued further that raw material for DAT consists of mainly tyres and tubes, and that the Tyres and Tubes Index has been showing an upward trend. He therefore doubted the validity of the financial analysis.

Mr. Ramesh has prepared cash flow projections only for five years as he thought that it was difficult to make reasonable forecasts beyond this period (see Exhibit II). He however estimated the terminal value of the project at the end of five years (see Exhibit III). In making these estimates, he considered the likely market price of various assets at that time. Most of the board members generally agreed with the assumptions.

Mr. A K Chaterjee, Chairman of the company, after listening to the views of the board members, asked Mr. Ramesh to gather more information on likely changes in the prices of input and output and to appropriately incorporate them in the financial analysis of the project. Mr. Ramesh decided to first obtain relevant price indices for the past one decade and analyze them to determine the expected inflation rates. Exhibit IV contains the information on various price indices collected by Mr. Ramesh. He worked out the changes in the prices over the years as given in Exhibit V. He was wondering how he could use this information in his analysis. He was not sure whether he should use the general inflation rate or the specific inflation rate in his calculations. He was also not sure how inflation would affect the cut-off rate.

DISCUSSION QUESTIONS

1. The finance manager has assumed the input and output prices to remain constant. He reasons that adjusting cash flow projections for inflation will not change results because if the cost increases this will be immediately followed by increase in sales price. Thus the impact of inflation could be passed on to customers. Do you agree with the finance manager's argument?
2. How would you incorporate inflation in the calculations of cash-flows as given in Exhibit II of the case?
3. Would you like to adjust cost of capital of 18 per cent for inflation? In what manner?

Exhibit I**DELUXE AUTO LIMITED****Break-up of Project Cost***(Rupees in million)*

	<i>Rupee Cost</i>	<i>Rupee equivalent of Foreign Cost</i>	<i>Total Cost</i>
1. Land and site development	86.06	0.00	86.06
2. Buildings	561.65	0.00	561.65
3. Plant and machinery			
Imported	810.76	1,256.91	2,067.68
Indigenous	1,961.24	0.00	1,961.24
4. Technical know-how	49.82	203.82	253.65
5. Training	4.53	4.53	9.06
6. Other fixed assets	231.00	29.44	260.44
7. Working capital margin	296.68	0.00	296.68
<i>Total</i>	<u>4,001.74</u>	<u>1,494.70</u>	<u>5,496.44</u>

Exhibit II**DELUXE AUTO LIMITED****Operating Cash Flows***(Rupees in million)*

	2011-12	2012-13	2013-14	2014-15	2015-16
Sales	173.58	1,144.02	3,411.37	4,785.10	6,382.45
Cost of sales					
Material	37.75	545.20	1,832.27	2,618.72	3,410.20
Power	1.08	19.42	61.90	85.20	112.91
Wages	3.13	100.94	181.51	291.61	340.03
Overheads	2.26	27.28	49.28	81.53	108.71
COP	44.22	692.84	2,124.96	3,077.06	3,971.85
Admn. exp.	3.43	44.02	58.33	67.45	75.10
Sales exp.	1.86	44.12	120.59	159.71	214.21
Royalty	0.00	23.92	71.67	94.90	121.18
<i>Total cost</i>	49.51	804.90	2,375.54	3,399.12	4,382.34
PBDIT	124.07	339.12	1,035.83	1,385.98	2,000.11
Depreciation*	1,455.30	985.23	668.76	455.43	311.29
PBDT	-48.24	-225.00	9.12	318.04	802.65
ATCF	789.69	662.18	852.29	920.70	1,155.70

Note:

* Depreciation has been computed as per the income-tax rates.

Exhibit III**DELUXE AUTO LIMITED**
Estimates of Terminal Values*(Per cent of original cost)*

Land	200
Building	75
Plant and equipment	50
Other fixed assets	60
Working capital release	90
Technical know-how	130

Exhibit IV**DELUXE AUTO LIMITED**
Indicative Price Indices

<i>Year</i>	<i>Electricity</i>	<i>Tyres and Tubes</i>	<i>Motor Vehicle</i>	<i>Cycle parts</i>	<i>WPI</i>	<i>CPI</i>
2001-02	158.1	154.8	177.3	141.3	173.0	313.0
2002-03	171.6	155.1	173.4	143.6	176.6	301.0
2003-04	182.5	153.7	177.4	146.0	185.8	324.0
2004-05	209.1	181.5	193.2	157.6	185.8	331.0
2005-06	225.6	215.9	240.3	182.4	217.6	360.0
2006-07	239.7	252.1	278.1	193.7	256.9	401.0
2007-08	279.6	291.0	316.5	213.4	281.3	451.0
2008-09	328.2	315.5	326.8	226.1	288.7	486.0
2009-10	387.7	325.2	323.3	234.9	316.0	547.0
2010-11	414.1	344.5	339.0	252.8	338.3	582.0

PALLAVI TEXTILES LIMITED

At the end of 2010, Mr. R Ravindran, Director of Finance of Pallavi Textile Limited (PTL), was facing a problem of developing some basis for selecting among five investment projects, four being replacement/modernization projects and one being a diversification project. All the projects were financially attractive on the basis of profitability calculations. Mr. Ravindran's dilemma was that the company has rationed capital expenditures for the next two years. The total funds available in 2011 for capital expenditure were Rs. 12 crore while the five investments projects together required Rs. 20 crore.

THE COMPANY

PTL is a reputed textile firm in South India. The company is appreciated by customers for its quality products. In spite of the textile industry passing through a severe recessionary phase in the past few years, PTL's performance has been quite impressive; it has grown at an annual rate of 18 per cent during the last five years. The textile industry's problems, which are also PTL's problems, include shortages and increasing prices of inputs, low productivity, surplus labour, technological obsolescence, changing preferences of consumers, etc. The major problem, of course, is posed by escalating prices of raw materials which cannot be immediately passed on to the customers. Prices of viscose and acrylic fibre, which are the main raw materials for PTL, have been continuously rising. The recent liberalization of the government policies has, however, provided some hope of recovery to the ailing textile industry.

PTL achieved significantly good results in 2010. Sales in 2010 increased to Rs. 300 crore from Rs. 240 crore in 2009, and profits to Rs. 13.5 crore from Rs. 8.50 crore. This performance was the result of the company's policy of continuous replacement/modernization and stringent measures for upgrading standards of performance. There has been a consistent improvement in the product quality, productivity, and product mix. Further, the excellent marketing set-up has also contributed to the company's growth and performance. It has a network of 12 sales offices in India and an overseas office. The sales offices have created a very efficient infrastructure of retailers, distributors, and stockists throughout the country. The company's financial management is prudent and balanced, although somewhat conservative.

It uses both equity and debt, but does not indulge in higher borrowing which it cannot service conveniently. The company's current debt-equity ratio is 0.45. The company has employed highly qualified tax experts to take advantage of all possible tax and fiscal incentives provided by the government.

PROPOSED INVESTMENTS

The company's investment policy has contributed to its growth in the past. It has consciously emphasized replacement and modernization decisions. In the current year, the finance department has received five investment projects involving total expenditure of Rs. 20 crore for its evaluation. The replacement/modernization projects related to installation of high pressure and high temperature dyeing and bleaching machines, computerized colour-matching machines and latest drafting machines. There is also a diversification proposal. Detailed cash flows and profitability of projects have already been worked out (see Exhibit I).

The company's philosophy in making investment decision is to give to the shareholders' maximum value for their money. Therefore, in evaluating investment projects, it is concerned about their impact on the price of the company's share. Its shares are actively traded on the stock exchange and are owned by a large number of investors. About 7.5 per cent of the shares are held by six board members who belong to the family which had originally promoted PTL. Given the company's earnings, dividends, and the share performance in the recent past, Mr. Ravindran considers at least 15 per cent as the required return from any investment project.

In spite of favourable government policies, the company expects recession to continue. But it does expect increase in its sales and profitability. What the management is not sure about is the company's liquidity position. It is also concerned about the reaction in the capital market to the shares of the textile companies. Generally they are being quoted at prices lower than many other shares. PTL may not like to enter the capital market in the next two to three years as it fears that its share price may dip. It also does not want to borrow, as during a crisis of recession, it may face difficulties in servicing the debt. Management has, therefore, decided to put a constraint on capital spending. It would use only the internally generated funds to invest in most profitable projects. After adjusting for depreciation and allowing for the payment of dividend, the company has estimated that about Rs. 12 crore of internal funds generated in 2011 will be available for investment in the current year. The fund position is likely to deteriorate during the next year. The company has estimated that only Rs. 7 crore internal funds will be available for capital expenditure next year. It is under these circumstances that Mr. Ravindran has to decide about the choice of projects given in Exhibit I.

DISCUSSION QUESTIONS

1. Which portfolio of projects would you select using different approaches? Further, if the objective was to obtain highest NPV would you like to change portfolio of projects to be selected?

2. Explain the concepts of multi-period capital constraints and project indivisibility with the help of facts of case.
3. To what extent the programming approach helps in making better investment decisions under capital rationing? Show the application in the case. What are the implications and limitations of such approaches?

Exhibit I

PALLAVI TEXTILES LIMITED
Cash Flows and Profitability Projects

(Rupees in lakh)

<i>Year</i>	<i>Projects</i>				
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
2011	-200	-500	-500	-300	-500
2012	76	183	117	67	-1000
2013	62	164	113	67	60
2014	52	90	113	67	90
2015	46	76	108	67	100
2016	42	70	34	67	100
2017	36	100	113	67	300
2018	32	65	108	67	650
2019	56	64	103	67	850
2020	00	58	100	67	800
2021	00	122	228	67	1400
NPV	402	558	480	363	673
IRR (%)	21.83	18.58	17.39	18.10	15.79

HINDUSTAN PETROLEUM CORPORATION LIMITED (HPCL) PRITAMGAON RETAIL OUTLET

Bhaskar Ghosh, Sales Officer in Western Region of HPCL, had been closely following the developments in his region of operations. During the last few years, the work on the Expressway connecting the two busiest cities in his region had sped up and it was expected that it would get completed in next six months' time. State Road Development Corporation (SRDC), an infrastructure development corporation under the control of state government, was handling this project. The Regional Office of HPCL had developed a close association with SRDC since inception and was operating four sites on temporary basis to cater to the fuel requirements during the construction period of Expressway. Time had come to decide on putting up permanent fuelling facility on that Expressway. Bhaskar had travelled on this route extensively during the last several years and after close follow-up and evaluation of locations, he identified one place, which SRDC had approved in principle. The site was located connecting to Pritamgaon and is about mid-way on that Expressway. The site is located on the left-hand side of Expressway while approaching from Bhaskar's office and will be about 2 km away from Toll Plaza. The location was considered to be prime because all motorists should have to halt necessarily for payment; thus, they should automatically divert for fuel purchase, etc., being the first outlet on the Expressway. There were no wayside facilities/amenities, such as petrol pump, first aid, recreation and restaurant. The development of this area was in progress.

Bhaskar had discussed these developments and the specific location with his Regional Manager and his team. They all considered this to be good location for setting up HPCL retail outlet to begin with. Since he had one year of time, he needed to proceed fast to initiate steps to put things together. This also involved several decisions, which he needed to take to develop proposal for the head office. He instructed his team to collect all information and started putting things together. He knew from his sources of information that IOC and BPCL were also planning to put up the filling station on that Expressway. Given this competitive scenario, he was wondering that how should he evaluate this proposal and discuss any risks in setting up retail outlet at this site.

VALUATION REPORT

In order to ascertain the fair present market value of this land, HPCL appointed a valuation agency. Under instructions from HPCL, the valuation agency inspected the site near Toll Plaza and Pritamgaon village. The valuation report brought out some more facts about that location. According to the report, the proposed site was about 25 km from a place where a flyover was under construction at the junction of Expressway Highway and about 2 km from Toll Plaza. In close vicinity of the site, there was no other development except for few industrial units. It was observed that from the junction to the site, there were no wayside facilities/amenities, such as petrol pump, restaurants, hotels, health facility for first aid and recreation area at present. SRDC had already acquired some pieces of land at different locations on the Expressway for wayside facilities/amenities. According to the SRDC plan, the developed lands/plots would be given on lease to different organizations. Work for development of site was in progress only at Pritamgaon. The total site area at Pritamgaon measured 29 hectares, out of which 16 hectares was on east and 13 hectares was on west of the Expressway.

For access to the above sites, SRDC had planned entry from the Expressway through service roads between the sites and Expressway. As regards to electric and water supply, electric supply would be made available by SRDC. However, for water, no arrangements had been made. At present, the only source of water would be either well or borewell. For disposal of night soil, there were no sewer lines and for the purpose, septic tank and soak pit would have to be provided. The land required about 2 m depth/height of earth filling, which, along with the work of service road between the site and the Expressway, was in progress. Through the site, overhead telephone and electric supply lines were passing, for which SRDC had already requested to the concerned authorities to shift those to suitable locations.

The other salient features of the Expressway as available from different sources were as follows:

- Six lanes expressway with cement concrete pavement covering a distance of about 94 km would be the first of its kind in India.
- SRDC had planned to transplant about 500 trees, which were coming under the carriage of the Expressway. In addition, 70,000 new trees would also be planted along the alignment.
- With a view to avoid accidents due to animals/human beings walking on the Expressway, fencing was to be provided on either side throughout the length of the Expressway. For pedestrian ducts and for vehicular traffic, flyovers were to be constructed.
- It was proposed to provide wayside facilities at different locations and except for wayside facilities/amenities, no other development would be allowed along the Expressway by SRDC.

For evaluation of this proposal, it was important to know the value of this land. The inquiries regarding the rate of non-agriculture land in that area indicated no comparable rates were available. Hence, for the purpose of valuation, the rates fixed by Industrial Development Corporation (IDC) were used. These rates were based on commercial use and were fixed at

Rs. 1500 per sq m for plots in industrial area nearest to IDC from the site. On inquiry with IDC office, it was informed that there has been no revision in these rates for quite sometime.

Considering the above particulars, location of the site, infrastructure facilities either existing or that would be made available, type of development to be allowed along the Expressway and given the time frame, the valuation agency in their opinion estimated a rate of Rs. 1750 per sq. m. as a fair present rate for developed non-agriculture land near Toll Plaza, Pritamgaon village.

Regarding the enquiry about the rate of the property tax and other applicable charges, it was clarified that the property tax and any other taxes, cess, etc. might be levied by the competent authority having jurisdiction over Pritamgaon and the details could be obtained directly from them. Those charges would have to be borne by HPCL.

FEEDBACK FROM FEASIBILITY STUDY

The feasibility studies of the retail outlet also carried out feedback studies. For this purpose, various segments of expressway users or potential users were interviewed. The following are the extracts of the feedback received from various segments of expressway users or potential users:

Private/Tourist Cars: This segment indicated that it is a good concept to have all the needs of highway users in one place. The facilities that they would require:

- Restaurants (fast food joints)
- Petrol pump
- Clean toilet
- Ample parking space
- Communication centre
- Small shopping outlet

Truck Drivers: This segment indicated that to use Expressway was expensive. However, they observed that once the Expressway was completed, they might use it to avoid driving in hilly terrain (Ghats). The facilities they would require on this route are:

- Petrol pump
- Secured parking place
- An inexpensive, clean and good dhaba
- Clean toilet
- Communication centre
- Tyre repair shop
- Spare part shop

- Mechanic
- Alcohol
- Recreation facility

Fleet Owners/Tour or Bus operators: This segment indicated that it is a good concept to have all the needs of highway users in one place. Such facilities are not yet available on Indian highways. It was observed that only large fleet owners are using Expressway. Small fleet owners indicated that it was too expensive for them to use Expressway. They indicated that once the Expressway was completed, they would use it to avoid the Ghat section. In order to use this outlet, they would need credit facility to their fleet.

Traffic Count

The following is the total average per day traffic count in both directions for the recent month:

<i>Segments</i>	<i>Number of vehicles</i>	
	<i>Last year May</i>	<i>Recent month May</i>
Car/Jeep	3187	5980
Minibus	356	683
Truck	692	2127
Bus (include state transport buses)	232	544
Heavy Truck	23	142

Over the last one year, it was observed that the traffic on the Expressway had increased on an average by three times. It is expected that the traffic would increase a minimum by 30 per cent once the Expressway is operational completely.

Project

Given the time schedule of the Expressway, Bhaskar projected that the retail outlet could be started on July 1, 2003. He had about six months of time to put this retail outlet in operation.

During his visit to the area, Bhaskar had already obtained information on costs and various expenditures involved in setting up the outlet at Pritamgaon. He estimated that the land for the retail outlet would cost about Rs. 180 lakh (one-time lease for 30 years). Bhaskar also got evaluated the location from a government-approved valuer, M/s Jain and Associates. The cost of land included all charges levied by various competent authorities having jurisdiction in Pritamgaon. This needed to be finalized over next couple of months and the deal needed to be closed at an earliest.

The cost of various assets (in lakh of rupees) for the proposed outlet is given in the following:

<i>Assets</i>	<i>Rs. in lakh</i>
Land (one time payment for 30 years)	180
Civil works	150
Roads	40
Plant and machinery	60
Total	430

For procuring the land, HPCL had two options. One was making single payment of Rs. 180 lakh for land. In this option, the land would be on lease basis and to be renewed after every 30 years period. HPCL had other option to take the land on annual lease rental basis. The lease rental was Rs. 30 lakh per annum for next 30 years. Each lease rental had to be paid in advance for the next year use. Bhaskar was wondering whether HPCL should go for first option or take land on lease rental basis.

Bhaskar estimated that if this outlet had to start functioning on July 1, 2003 all these facilities would need to be installed and completed by March 2003. He thought it appropriate to assume these expenditures to take place on January 1, 2003.

Besides the capital costs, Bhaskar also estimated that in case this was going to be company-operated retail outlet they would need about Rs. 52 lakh as working capital.

The operations of this retail outlet would include selling motor spirits (MS), high-speed diesel (HSD) and lubes. Estimating volume turned out to be very difficult. Bhaskar knew that the proposed projects viability ultimately depended on the volume estimate. In the past, most of the decisions of setting up new retail outlets had been easy as the demand–supply gap were considerable. However, under changed situation, the competition had intensified and one needed to consider a number of factors in estimating this demand. Based on his experience, he began listing down factors, which he needed to take into account to estimate the demand. He listed the following factors:

- Traffic count based on existing traffic in that region
- Buying behaviour
- Market size
- Retail outlet's market share

He knew that the above list of factors is not a comprehensive list. There are many other factors and dimensions, which needed to be taken into account. Based on his past experience, he knew that in past he had to deal with number of issues in ensuring that the outlet was put in place. For example, these included statutory approvals for acquiring land and various clearances needed at various levels. While HPCL was exploring opening of outlet, other competitors are also working on the similar project. He remembered from his experience that once the competitor had raised the objection of opening of an outlet as the land records indicated the proposed outlet's approach was located on a small river stream. The approvals were not granted. In order to solve the problem, they had to propose an alternative approach to the outlet.

Trading Potential

HPCL would be the first oil company to receive such an offer from SRDC. Pritamgaon location was just next to the Toll Station, where motorists would be required to halt necessarily for payment. They would have an option to divert for fuel purchase, etc., being the first outlet on Express Highway.

Existing trading area potential was as follows:

<i>Name of company</i>	<i>Retail Outlets</i>	<i>MS</i>	<i>HSD</i>
HPCL	12	6117	54,417
BPCL	8	4287	25,665
IOCL	8	1920	15,883
IBPL	5	440	11,846
Total	33	12,764	1,07,811

It was estimated that 40 per cent of the existing traffic would be diverted to Expressway and thus the volume worked out to be as follows:

MS	40% of 12,764	5,105 kl
HSD	40% of 1,07,811	43,124 kl
Total		48,229 kl

Bhaskar had to make number of assumptions in arriving at these estimates. For example, one assumption how much traffic will get shifted from existing route to the Expressway was based on discussion he had with colleagues who had handled similar projects in other parts of the country. He was told that about 40 per cent of the traffic can be assumed to get diverted from the existing route to new Expressway. However, he was not sure what per cent of this traffic will use the fuelling facility. On being conservative, he assumed this to be about 45 per cent for MS and 33 per cent for HSD. Therefore, out of the above average volume diversion, it was estimated that the volumes of 45 per cent of MS and 33% per cent of HSD vehicles would utilise fuelling facility. Based on this, the volume for proposed outlet worked out to be as follows:

- 45 per cent of 5105 say 2200 kl per annum-MS
- 33 per cent of 43124 say 14,200 kl per annum-HSD
- Lubes volume of 25 kl per annum.

The gross margins as communicated by the corporate office were Rs. 1414 per kl, Rs. 919 per kl and Rs. 9000 per kl for MS, HSD and lubes, respectively.

Bhaskar was sure that the demand would not remain same over the years. He culled out the broad estimates of growth rates for these three product segments as indicated in the 9th and the 10th Plans of the Government of India. These estimates are given in Exhibit I. Given the

competitive scenario, he was not sure whether these growth rates should be used for estimating future sales of this outlet. For MS, he anticipated that in initial periods (first three years) the actual growth rate was likely to be 12 per cent. As competition intensified, the growth rates might dip to 7.5 per cent in next five years and later the sales might grow at only 3 per cent per annum. For HSD, the growth in first five years was expected to be about 9 per cent and later it would grow at 4 per cent per annum. The lubes were difficult segment to predict. He decided to go by the estimates provided in 9th and 10th plan documents. He was curious to find how sensitive the retail outlet's performance would be with respect to these growth rates.

While estimating the cash flows of the proposed retail outlet, it was important to find what other expenses would be needed to run this retail outlet. In some way, gross margin figures accounted for the variable cost of operating the outlet. In addition to that, a standard variable cost of Rs. 12 per kl was taken into account while evaluating profitability of the proposed initiatives. The other fixed costs were estimated to be about Rs. 65.50 lakh per annum.

Bhaskar was planning to spend some time to work out cash flows of the proposed outlet. Taxes required an important adjustment as payment of taxes was an important cash flow and the evaluation needed to take into account the tax implications of the proposal. He collected information about the tax rates and depreciation rates of various assets which needed to be taken into account while considering tax implications. This information is as follows:

<i>Asset</i>	<i>Tax Depreciation Rates</i>
Building	10.00%
Roads	10.00%
Plant & Machinery	25.00%

Also since these cash flows occurred at different points of time, he was wondering how to adjust the time differences in these cash flows. The timing differences are generally adjusted using discounted cash flow technique. For this purpose, he needed an appropriate discount rate.

While evaluating the project proposals, Bhaskar considered that his first and foremost concern should be that the money invested in a project be recovered within a short period of time. For this purpose, he needed to compute payback period of the project. He considered that this approach was not only simple, but also did not require the calculation of the cost of capital which is a formidable task. However, he felt that using this method alone would not result in accepting most profitable projects. Since this project was going to have a long life (at least 30 years), the project's desirability depended not only on the speed with which investment was recovered, but also the life of the project over which benefits would be derived. He favoured the use of the internal rate of return method. He found this is also the policy of HPCL. This method incorporated all cash flows over the life of the projects and adjusted them for time value as well. He stated further that the computation of the cost of capital is not necessary for the use of this method. However, he was not clear about what should be the minimal acceptable internal rate of return.

From his past experience, Bhaskar was concerned about the limitations of the IRR method. At times, he had faced difficulty in computing it. By sheer mechanics of computing the IRR, it might result into multiple rates of return. Bhaskar was not sure how to handle these complexities. Bhaskar had also made an attempt in past to use NPV method for estimating profitability of proposals. This method has an advantage of clearly estimating the net effect of accepting the proposed project on the wealth of company. This method is free from any complications, which one sometimes experiences in IRR method. Bhaskar observed that under certain conditions, particularly when one has to rank mutually exclusive projects, internal rate of return and net present value methods could give conflicting results (see Exhibit II). He was not sure what to do under such situations. However, the use of NPV requires cost of capital calculation. Bhaskar felt that there should be no difficulty in financing proposals, which earn rates higher than the cost of debt. But he was not sure how to make tax adjustments to this rate, and whether it was appropriate to use that rate. From HPCL balance sheet, he found that current debt–equity ratio of the company is 0.20:1 and the company would like to follow this as their target debt–equity ratio. From HPCL finance department, he obtained the following information:

Corporate income tax rate	36%
Current pre-tax borrowing rate (from balance sheet)	14%
Cost of equity	15%

Senior management team had told Bhaskar that this project would be financed using borrowing, which the company would be able to borrow at 12 per cent per annum. In any case, the use of debt to finance the projects was not feasible all the time and in the long run, this strategy would be risky.

He also pondered over the fact that simply by setting up retail outlet; the sales were not going to happen on its own. He considered that the outlet needed to provide a portfolio of services, which would make this outlet as preferred destination for the buyers of MS, HSD and lubes. He was wondering what proposals he should include in his note, and how he should assess the revenue generating potential for HPCL.

He was also not sure whether he should recommend the company to set up the new initiative as company-owned outlet or dealer-managed outlet. In latter case, he was wondering how he should be using information and data in making assessment of whether this venture is profitable to the dealer or not. He would need this information as some dealers in his region had been complaining of lower profitability because of increasing competitive pressures.

DISCUSSION QUESTIONS

1. Estimate the initial cash outflows of the project assuming that Bhaskar decided to take the piece of land on annual lease rental basis and the annual lease rentals are tax-deductible expense.

2. Using Bhaskar's assumptions of growth rates estimate the cash flows of the project. Also assume the salvage value of remaining assets to be equal to 50 per cent of their book values.
3. As indicated in the case the company proposes to finance this project using borrowings. How do you propose to discount the cash flows of this project and what discount rate would you use?
4. Compute the net present value of the project using Bhaskar's assumptions of growth. What do you think would be value of NPV under alternate growth scenario?
5. HPCL has three strategic business units, two production units and one operations unit. These are: Retail, Direct Sales, LPG, Mumbai Refinery, Visakhapattanam Refinery, Supply, Operations and Distribution (including Engineering and Projects). Discuss the issues in evaluating this project.
6. How would you assess the risk of this project? Evaluation will be based on using information provided in the case.

Exhibit I

Ninth and Tenth Plans: Projected Growth Rates

YEAR	MS	HSD	Lubes
2001-02	7.5%	5.5%	4.7%
2002-03	7.5%	5.5%	4.7%
2003-04	7.5%	5.5%	4.7%
2004-05	7.5%	5.5%	4.7%
2005-06	7.5%	5.5%	4.7%
2006-07	7.5%	5.5%	4.7%
2007-08	5.0%	5.0%	3.5%
2008-09	5.0%	5.0%	3.5%
2009-10	5.0%	5.0%	3.5%
2010-11	5.0%	5.0%	3.5%
2011-12	5.0%	5.0%	3.5%
2012-13	5.0%	4.5%	3.0%
2013-14	5.0%	4.5%	3.0%
2014-15	5.0%	4.5%	3.0%
2015-16	5.0%	4.5%	3.0%
2016-17	5.0%	4.5%	3.0%

Exhibit II

Illustrations of NPV vs IRR Cash flows in Rupees ('000)

	C_1	C_2	C_3	C_4	NPV at 10%	IRR (%)
A	-1500	300	600	1800	620	26.5%
B	-1500	1500	450	450	573	37.6%

Investment projects A and B in Exhibit II require the same initial outlay, although their cash inflow patterns differ. At a required rate of return of 10 per cent, project A's NPV (Rs. 620) is higher than Project B's NPV (Rs. 573). However, Project B earns a higher IRR (37.6 per cent) than Project A (26.5 per cent).

APPENDIX 1

Depreciation is allowed as deduction every year in respect of buildings, machinery, plant or furniture till the cost of such asset is fully written off.

1. Conditions for allowing depreciation allowance:

- The assets should be owned by the assessee.
- The assets should actually be used for the purpose of the assessee's business or profession.

2. Disallowance of depreciation on land

Depreciation is not allowable on the cost of the land on which the building is erected, but only on the superstructure.

3. Depreciation in respect of machinery acquired on hire purchase agreement: Under Section 32(1), depreciation on machinery and plant is to be allowed only to the owner thereof who actually uses it for the purpose of his business or profession. In the case of machinery or plant acquired under hire purchase agreement, the owner is not entitled to depreciation because it is not used for his business purpose. Legally, the lessee is also not entitled to depreciation, as he is not the owner. However, in actual practice, depreciation is allowed in the assessment of the lessee under executive instructions.

4. Basis of calculation of depreciation allowance:

Depreciation will be allowed on the written down value of the block of assets. 'Block of assets' means a group of assets falling within a class of assets, being buildings, machinery, plant or furniture, in respect of which the same percentage of depreciation is prescribed. Ocean-going ships also will be included in the block of assets.

5. Written down value:

This is defined under Section 43(6) of the Income Tax Act. In the case of block of assets, the written down value shall be arrived as under:

- The aggregate of the written down value of all the assets falling within that block of assets at the beginning of the previous year shall first be calculated;
- The aggregate of the written down value arrived at as in (a) shall be increased by the actual cost of any asset falling in that block which was acquired during the previous year; and
- The sum so arrived at in (b) shall be reduced by the moneys receivable together with scrap value, if any, in respect of any asset falling within that block which is sold or discarded or demolished or destroyed during the previous year, so, however, that the amount of such reduction does not exceed the written down value as so increased.

NATIONAL STEEL INDUSTRIES LIMITED (A)

“To sum up, the Gas Cylinder project offers an excellent diversification opportunity for our company. No doubt there are a few risk factors, inevitable as they are in any investment of this nature; yet the positive features are overwhelming. The project should give a new strategic thrust to the company. We would, therefore, seek the ECD’s (Executive Committee of Directors) early clearance for a ‘go-ahead’. The project can be commissioned within 13 to 15 months after approval.”

So concluded Mr. Raman Dhawan, Vice-President, Planning and Development (P&D) of the National Steel Industries Ltd. (NSIL), in his presentation on the proposed Gas Cylinder Project to a meeting of the Executive Committee of Directors (ECD), convened in May 1988 to consider a major investment decision. The proposal envisaged setting up of a unit to produce high pressure (H.P.) seamless industrial gas cylinders at its Bangalore works. The project cost is estimated at Rs. 122 million.

BACKGROUND OF NSIL

NSIL was incorporated at Bangalore in early 1940 as a subsidiary of National Steels Inc., USA, NS (USA). NS (USA) has been a leading producer of precision steel tubes, consumer appliances, defence-related products, auto components, gas cylinders, etc. The Indian promoters of NSIL were the Alva Group of the old Mysore State. In the early years, NSIL was merely a vehicle for distributing the various products of the US parent company in the home market, in keeping with the changed economic priorities of the post-independent India, facilities were established in 1955 on the outskirts of Bangalore, to manufacture precision tubes—one of the major products hitherto imported from NS(USA). Today, NSIL has fully integrated tube mills which produce precision tubes of a wide variety of sizes catering to the needs of bicycle, automobile, boiler, and general engineering industries.

It has also adequate cold rolling facilities which, besides meeting the input requirements of tube mills (viz. Cold Polled Strips) also produce some surplus for external sales. Following rapid development of the two-wheeler and auto ancillary industries in the south, NSIL developed greater focus on the southern market. At the same time, the company developed and

maintained an all-India presence by establishing a network of regional offices and warehouses close to major customers. NSIL supplied tubes to all the four bicycle manufacturers in the country, its share of supplies ranging from 15 to 55 per cent. Fortunately, despite its location in deep south, NSIL does not suffer any serious cost disadvantage in terms of freight on raw materials (wide width steel coils) hauled from the faraway steel plants, as the Government of India is operating a freight equalization scheme for iron and steel. Consistent with this, the manufacturers of steel-based products like tubes, have in turn extended a uniform policy for their products all over the country. There is, however, considerable clamour from the eastern states to scrap the freight equalization scheme.

While NSIL was one of the early entrants in the tube industry—thanks to its access to the parent company's technology and support—over the years a number of newcomers have entered the field. The technology barrier has been crashing, and it has almost become a commodity business. Consequently, some of the established players like NSIL have been moving upmarket by focusing on quality and higher value-added speciality products. With competition intensifying, many others have followed suit and are also countering with attractive discount structure and credit terms. NSIL's current market share is about 25 per cent for tubes and five to six per cent for CR strips.

MANAGEMENT

Right from its inception, the day-to-day management of NSIL was entrusted to the Indian promoters, the Alva Group. Until mid-seventies, there was a resident technical director from NS(USA) who, besides looking after the parent company's interests, also served as the chief of manufacturing. In 1978, following a series of poor results for NS(USA) and also the compulsions of FERA regulations, NS(USA) disinvested half of its shareholding of 60 per cent in NSIL. This was through an offer for sale to resident Indian shareholders. Currently, of the equity-capital of Rs. 63 million, Alva Group and NS(USA) hold 30 per cent each, financial institutions 20 per cent and the balance is scattered amongst a large body of shareholders. NS(USA) continues to take serious interest in the NSIL affairs through regular consultations and active participation in board meetings. Over the year, the operating management has been largely professionalized by the appointment of competent technocrats in various functional areas.

PERFORMANCE

Under the conservative management of the Alva Group, gained NSIL reputation as a "solid, though sedate" company. The management had consciously "stuck to its knitting" and in the process, developed excellent reputation for product quality, customer service and financial prudence. The management is proud of the fact that the company has "never skipped dividend in the last 40-odd years". In the year ended September 1987, NSIL has netted earnings before-tax of Rs. 49 million on sales of Rs. 1,007 million. Earnings, sharply down in 1985–86, bounced back because of gains in operational efficiencies and improved market conditions. It may be

mentioned that 1985–86 in operations were adversely affected by steep increase in the landed cost of imported raw materials due to sharp depreciation of the Rupee vis-a-vis DM and Yen, erratic availability of domestic raw materials (i.e., HR coils), and generally depressed market conditions in the auto sector. Key operational figures are given in Exhibits I and II.

In the early eighties, NSIL's management directed its attention and financial resources to modernizing and upgrading the facilities, and providing captive power generation back-up. The capital expenditure during the period 1981–1987 amounted to about Rs. 230 million compared to Rs. 65 million during the entire seventies. The focus of modernization was on cost reduction, yield enrichment (scrap reduction), quality improvement and product upgradation.

It may be noted that a number of letters of intent/industrial licences were issued since 1983 (totalling about 1,00,000 tons of steel tubes, nearly 50 per cent of current capacity) coinciding with the two-wheeler boom. All of them were to be located in the eastern or northern India. Two of them were proposed by the top two bicycle manufacturers.

DIVERSIFICATION PROJECT

Conscious of the vulnerabilities of current business, and having largely completed major modernization requirements. NSIL's management has been seriously looking out for diversification opportunities in the engineering field, a business "we know well". NSIL also preferred industrial products that exploited its technical strengths and reputation, rather than consumer products which needed an entirely different ethos. Investment size would preferably be in the range of Rs. 120 to 150 million which, NSIL's management felt the company could 'absorb' without adverse effects. While a post tax return of 14 to 15 per cent was considered acceptable, equally important was what NSIL considered as "low negative risk." The Gas Cylinder Project, the P&D cell felt, neatly fitted the bill.

High pressure (H.P.) seamless gas cylinders are used for storage and transportation of industrial oxygen, nitrogen, carbon dioxide, medical oxygen, argon and hydrogen. Though acetylene is one of the major gases produced by the gas industry, it is generally delivered in low pressure welded cylinders. However, lately acetylene manufacturers have also begun using HP seamless cylinders in a small way.

The current annual requirements of HP cylinders are estimated at about 2,40,000 nos. In view of the low domestic availability of cylinders, the gas manufacturers have been allowed to import cylinders on a 1:1 basis. The Indian market is in its growth stage. The gas manufacturing industry has been delicensed as a result of which a number of units are being set up in various parts, of the country. The industry growth rate is estimated at around 10 per cent in view of the rapid expansion of the end-user industries. The firms in the industry are by and large located evenly in the four regions.

Though in western countries, there is a gradual shift to distribute gases in liquified form in large tankers and through direct pipelines, in India this shift is unlikely to take place to any great extent due to poor road conditions, restrictions on payload and vehicle movement period

and heavy initial investment required. Gas distribution through pipelines is mostly confined to large captive plants.

The supplies of about 1,90,000 cylinders in the year 1985–86 are estimated to have been made up of domestic production and imports in equal proportion. Though the domestic production is estimated to have increased to 1,30,000–1,40,000 in the next two years, there is still significant dependence on imports. The market has been so far largely supply-driven; the fluctuations in imports render it difficult to estimate precisely the unsatisfied demand. Growth projections for the various user industries are estimated as follows:

	<i>Growth Percentage p.a.</i>
Industrial oxygen and nitrogen	12
Carbon dioxide	10
Medical oxygen	5
Others	5

The demand-supply gap position based on the above is given in Exhibit III.

Until recently, there was only one HP cylinder producer in the country, the Hindustan Engineering Ltd. (HEL), a public sector company based in North India. This company with an installed capacity of 60,000 cylinders has been producing about 40,000 to 50,000 cylinders per annum. Though a multi-product unit, HEL is believed to attach a fair amount of importance to its cylinder operations. Certain data relating to this company are given in Exhibit IV.

Two new companies have entered the field with an estimated combined capacity of 1,20,000. Both are promoted in the private sector. The promoters are first generation entrepreneurs, basically with strong production background. One of the companies has been in operation for the last three to four years and appears to have stabilized operations after initial production problems. The second one has been recently commissioned, after significant time and cost overruns.

Cylinders have to meet very stringent quality norms; every single cylinder is required to be certified by the Department of Explosives, Government of India. Since 100 per cent depreciation is allowed for cylinders for tax purposes, often the gas manufacturers purchase cylinders in large numbers during high-profit years as an effective tax shield.

There are two alternative processes/technologies for the manufacture of large HP cylinders. One involves piercing hot billets and drawing them to form cylinder blanks. The open end of the cylinder blank is heated and spun to form the neck. The other process starts with seamless tubes which are cut to size and spun. The former is capital and power intensive and not economical for the volume levels of the Indian market. Even in the spinning route, there are two alternatives—manually operated spinning machine and CNC spinning machine. In view of the substantially lower scrap rate (2 per cent v. 15 per cent), cylinder manufacturers generally prefer the CNC machine despite its higher capital cost.

The NSIL's project envisages an installed capacity of 1,20,000 cylinders of assorted sizes, varying from 3.0 litre to 46.7 litre water capacity by the CNC spinning process. The basic raw materials, viz. seamless tubes are currently entirely imported, free of customs duty. It is likely

that seamless tubes of the required variety would be manufactured in India in the course of next five years.

The project would provide employment to about 80 persons.

The project cost details along with the financing scheme are given in Exhibit V. The basic profitability and cash flow projections of the project are given in Exhibits VI to X.

Major assumptions are given in Appendix I.

DISCUSSION QUESTIONS

1. Should NSIL undertake the project?
2. What are the operating and strategic factors which would influence this decision?

APPENDIX I

NATIONAL STEEL INDUSTRIES LIMITED

Assumptions Made

Product mix: Based on current mix pattern expected to continue, larger cylinders (34.0 lit, 40.2 lit and 46.7 litre capacity) would account for about 70% of the total volume. However, product mix can be easily varied by changing the machine settings.

Selling price: Taken at 3–5% lower than the current prices.

Principal raw materials seamless tubes: CIF cost of (cost, insurance and freight) \$ 700/tonne which is about 10% more than the current price; customs duty: nil.

Exchange rate: Rs. 13.75/US \$. The P&D department felt that the US \$ rate was relatively steady at about Rs. 13.00–13.25. Still a high rate of Rs. 13.75 has been taken in the workings as a measure of caution.

Scrap, power, consumables, and manpower requirements are based on detailed discussions with the collaborator.

Term loan interest rate: 14.0% per annum

Term loan repayments: In five equal annual instalments after 2 years initial moratorium.

Income tax depreciation rates:

Buildings	:	10.00%
Plant & Machinery	:	33.33%
Other Assets	:	10.00%

The preliminary expenses/contingencies, etc. to be prorated on various assets for charging depreciation. Engineering/known-how fees to be written off in 6 equal instalments for tax purposes. Investment allowance @ 20% on plant and equipment, pending the necessary legislation. This is on the basis of the Finance Minister's assurance in the course of Parliamentary debate on 1988 Finance Bill.

Exhibit I**NATIONAL STEEL INDUSTRIES LIMITED****Income Summary Year Ended September***(Rupees in thousand)*

	1983	1984	1985	1986	1987
1. Earnings Summary					
Sales					
Products	4,75,155	6,20,385	7,56,714	7,94,316	9,42,844
Scrap	45,265	51,125	58,210	60,074	64,216
	<u>5,20,420</u>	<u>6,71,510</u>	<u>8,14,924</u>	<u>8,54,390</u>	<u>10,07,060</u>
Other income	15,360	14,457	15,013	16,166	16,022
	<u>5,35,780</u>	<u>6,85,967</u>	<u>8,29,937</u>	<u>8,70,556</u>	<u>10,23,082</u>
<i>Total Revenue</i>					
Earnings before depreciation and interest	77,592	1,04,858	1,21,716	1,03,920	1,28,495
Depreciation	15,270	18,375	22,410	24,810	26,700
Interest	26,156	38,450	52,065	54,100	52,651
	<u>36,166</u>	<u>48,033</u>	<u>47,241</u>	<u>25,010</u>	<u>49,144</u>
Earning before taxes					
Tax Provision	5,000	15,000	13,500	6,000	15,000
	<u>31,166</u>	<u>33,033</u>	<u>33,741</u>	<u>19,010</u>	<u>34,144</u>
Earnings after taxes					
Dividend	8,550	9,900	11,340	10,710	13,230
	<u>22,616</u>	<u>23,133</u>	<u>22,401</u>	<u>8,300</u>	<u>20,914</u>
<i>Retained Earnings</i>					
Earnings per share (Rs.)	6.93	7.34	5.36*	3.02*	5.42*
Dividend per share (Rs.)	1.90	2.20	1.80*	1.70*	2.10*
2. Index of Sales Volume					
Tubes	100.0	107.1	126.9	121.5	132.7
Cold Rolled Strips	100.0	137.8	178.4	167.6	177.5
<i>Total</i>	100.0	115.1	140.4	133.6	144.4

* On capital increased by 2 for 5 bonus issue in 1985.

Exhibit II**NATIONAL STEEL INDUSTRIES LIMITED**
Balance Sheet Summary*(Rupees in thousand)*

	1983	1984	1985	1986	1987
Assets					
Long-term assets (Net)*	1,77,415	1,98,714	2,36,410	2,57,594	27,291
Net current assets	1,82,305	2,41,115	3,39,412	3,49,011	3,52,024
	<u>3,59,720</u>	<u>4,39,829</u>	<u>5,75,822</u>	<u>6,06,605</u>	<u>6,24,939</u>
Financed By					
Share capital	45,000	45,000	63,000	63,000	63,000
Reserves and surplus	1,58,150	1,80,033	1,83,184	1,90,234	2,09,898
	<u>2,03,150</u>	<u>2,25,033</u>	<u>2,46,184</u>	<u>2,53,234</u>	<u>2,72,898</u>
Long-term borrowings*	73,300	1,01,400	1,50,400	1,66,500	1,60,000
Short-term borrowings*	83,270	1,13,396	1,79,238	1,86,871	1,92,041
	<u>1,56,570</u>	<u>2,14,796</u>	<u>3,29,638</u>	<u>3,53,371</u>	<u>3,52,041</u>
	<u>3,59,720</u>	<u>4,39,829</u>	<u>5,75,822</u>	<u>6,06,605</u>	<u>6,24,939</u>
	<u>46,500</u>	<u>45,250</u>	<u>44,000</u>	<u>42,750</u>	<u>41,500</u>
Share Price Movement					
	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Equity Share of Rs. 10 each					
High	21.80	24.50	35.00	24.75	21.00
Low	17.50	17.25	18.00	21.25	20.00

* Term loan maturities:

1987-88	32,000
1988-89	30,000
1989-90	50,000
1990-91	30,000
1991-92	18,000

Exhibit III

NATIONAL STEEL INDUSTRIES LIMITED
HP Gas Cylinders: Demand-Supply Gap Estimates

<i>Year</i>	<i>Demand</i>	<i>Estimated Domestic production*</i>	<i>(Nos.) Gap</i>
1987-88	2,35,000	1,40,000	95,000
1988-89	2,55,000	1,80,000	75,000
1989-90	2,82,000	2,05,000	77,000
1990-91	3,12,000	2,20,000	92,000
1991-92	3,45,000	2,20,000	1,25,000
1992-93	3,83,000	2,20,000	1,63,000

* By existing manufacturers (excluding NSIL's proposed project).

Exhibit IV

NATIONAL STEEL INDUSTRIES LIMITED

Key Operational Data of Hindustan Engineering Ltd. (HEL)

1. Production of High Pressure Gas Cylinders

Cylinders per annum	
Capacity	60,000
Production	
1986-87	47,500
1985-86	53,600
1984-85	42,100
1983-84	56,200
1982-83	49,400
1981-82	41,000

2. Other Products in HEL's range

- LPG cylinder
- Shell forgings (for defence purposes)
- Pumps
- Compressors

3. Financial Highlights

<i>(Rupees in thousand)</i>			
	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>
Earnings Summary:			
Sales	2,43,109	4,32,014	4,18,546
Profit before interest	28,906	71,414	-7,506
Interest	55,710	65,502	66,014
Profit before tax	-26,804	5,912	-73,520
Balance Sheet Summary			
Net fixed assets	1,73,144	1,79,243	1,78,103
Net current assets	2,58,112	2,60,265	2,66,324
	4,31,256	4,39,508	4,44,427
Net worth*	51,903	65,905	29,603
Borrowings	3,79,353	3,73,603	4,14,824
	4,31,256	4,39,508	4,44,427

* Includes share capital

1,56,000

1,72,406

1,83,107

Exhibit V**NATIONAL STEEL INDUSTRIES LIMITED****HP Industrial Gas Cylinder Project
Project Cost and Scheme of Financing***(Rs. in thousand)*

1. Project Cost			
Land and Site Development		200	
Buildings		5,000	
Plant & Machinery			
• Imported	66,500		
• Indigenous	31,000	97,500	
Detailed Eng. Fees		2,100	
Misc. Fixed Assets		1,000	
Prelim. and Pro-Oper. Expenses		5,000	
Provision for Contingencies		5,350	
Margin Money-working Capital		5,850	
			<u>1,22,000</u>
2. Scheme of Financing			
Term Loans			
Forex	43,000		
Rupee	37,500	80,500	
NSIL Investment		41,500	<u>1,22,000</u>

Exhibit VI

NATIONAL STEEL INDUSTRIES LIMITED

HP Industrial Gas Cylinder Project Sales and Raw Materials

(Rupees in lakh)
(Volumes in numbers)

Product Mix	Unit S.P. (Rs.)	Per cent (Mix)	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6 to 10	
			Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
3.0 litre Capacity	275.00	4.00	1,200	330	1,800	495	2,400	660	3,400	935	4,000	1,100	4,000	1,100
4.8 litre	350.00	2.00	600	210	900	315	1,200	420	1,700	595	2,000	700	2,000	700
5.0 litre	375.00	4.00	1,200	450	1,800	675	2,400	900	3,400	1,275	4,000	1,500	4,000	1,500
6.8 litre	400.00	6.00	1,800	720	2,700	1,080	3,600	1,440	5,100	2,040	6,000	2,400	6,000	2,400
10.2 litre	500.00	9.00	2,700	1,350	4,050	2,025	5,400	2,700	7,650	3,825	9,000	4,500	9,000	4,500
14.0 litre	625.00	7.00	2,100	1,313	3,150	1,969	4,200	2,625	5,950	3,719	7,000	4,375	7,000	4,375
34.0 litre	1,325.00	8.00	2,400	3,180	3,600	4,770	4,800	6,360	6,800	9,010	8,000	10,600	8,000	1,600
40.2 litre	1,425.00	10.00	3,000	4,275	4,500	6,413	6,000	8,550	8,500	12,113	10,000	14,250	10,000	14,250
46.7 litre	1,525.00	50.00	15,000	22,875	22,500	34,313	30,000	45,750	42,500	64,813	50,000	76,250	50,000	76,250
Total		100.00	30,000	34,703	45,000	52,055	60,000	69,405	85,000	98,325	1,00,000	1,15,675	1,00,000	1,15,675
Add: Excise duty @ 20.00%				6,941		10,411		13,881		19,665		23,135		23,135
Total gross sales			41,644		62,466		83,286		1,17,990		1,38,810		1,38,810	

Contd . . .

Exhibit VI Contd

B: Raw Materials		1. Quantity											
Product Mix	Unit Net W (kg)	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6 to 10	
		Volume	Tonnes	Volume	Tonnes	Volume	Tonnes	Volume	Tonnes	Volume	Tonnes	Volume	Tonnes
(a) 3.0 litre capacity	6.5	1,200	7.8	1,800	11.7	2,400	15.6	3,400	22.1	4,000	26.0	4,000	26.0
(b) 4.8 litre	8.0	600	4.8	900	7.2	1,200	9.6	1,700	13.6	2,000	16.0	2,000	16.0
(c) 5.0 litre	10.0	1,200	12.0	1,800	18.0	2,400	24.0	3,400	34.0	4,000	40.0	4,000	40.0
(d) 6.8 litre	10.4	1,800	18.7	2,700	28.1	3,600	37.4	5,100	53.0	6,000	62.4	6,000	62.4
(e) 10.2 litre	15.5	2,700	41.9	4,050	62.8	5,400	83.7	7,650	118.6	9,000	139.5	9,000	139.5
(f) 14.0 litre	20.0	2,100	42.0	37,150	63.0	4,200	84.0	5,950	119.0	7,000	140.0	7,000	140.0
(g) 34.0 litre	42.0	2,400	100.8	3,600	151.2	4,800	201.6	6,800	285.6	8,000	336.0	8,000	336.0
(h) 40.2 litre	48.0	3,000	144.0	4,500	216.0	6,000	288.0	8,500	408.0	10,000	480.0	10,000	400.0
(1) 46.7 litre	54.0	15,000	810.0	22,500	1,125.0	30,000	1,620.0	42,500	2,295.0	50,000	2,700.0	50,000	2,700.0
Total		30,000	1,182.0	45,000	1,773.0	60,000	2,363.9	85,000	3,348.9	1,00,000	3,939.9	1,00,000	3,939.9
Add: Scrap %	2.00%		36.6		36.2		48.2		68.3		80.4		80.4
Total Raw Mat. Required (Seamless tubes)			1,218.6		1,809.2		2,412.1		3,417.2		4,020.3		4,020.3
(** First Yr. Scrap	3.00%												
2. Value/(Rs. in thousand)													
(a) Seamless tubes													
CIF per tonne	\$ 700.00												
CIF (in Rs.)													
9,625.00													
Clearing/ft, etc.	175.00												
Total	9,800.00												
(b) Guard/neck-ring	50.00/Unit -> 10.2 litre		11,942		17,730		23,639		33,489		39,399		39,399
(c) Total R.M. Cost			1,260		1,890		2,520		3,570		4,200		4,200
			13,202		19,620		26,159		37,059		43,599		43,599

Conversion rate Rs. 13.75/US \$

Exhibit VII

NATIONAL STEEL INDUSTRIES LIMITED HP Industrial Gas Cylinder Project Depreciation

(Rupees in thousand)

Item	Rate %	Cost**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Depreciation (Books)												
(i) Land	0.00%	220	0	0	0	0	0	0	0	0	0	0
(ii) Buildings	5.00%	5489	274	274	274	274	274	274	274	274	274	274
(iii) Plant & Mach. @	12.00%	109343	13,121	13,121	13,121	13,121	13,121	13,121	13,121	13,121	13,121	4375
(iv) Misc. Assets	5.00%	1098	55	55	55	55	55	55	55	55	55	55
		1,16,150	13,450	13,450	13,450	13,450	13,450	13,450	13,450	13,450	4,704	329
** Includes prelim. exp. and contingencies prorated												
@ Includes Eng. fees												
B. Depreciation (Tax)												
Item	IT Rate %	Cost**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
(i) Land	0.00%	220	0	0	0	0	0	0	0	0	0	0
(ii) Buildings	10.00%	5,489	549	494	445	400	360	324	292	263	236	213
(iii) Plant & Mach.	33.33%	1,07,038	35,676	23,785	15,857	10,572	7,049	4,699	3,133	2,089	1,393	928
(iv) Eng. Fees*	16.67%	2,305	384	384	384	384	384	384	1	0	0	0
(v) Misc. Assets	10.00%	1,098	110	99	89	80	72	65	58	53	47	43
		1,16,150	36,719	24,762	16,775	11,436	7,865	5,472	3,484	2,405	1,676	1,184

* 16.67% SLM

** Includes prelim. exp. and contingencies prorated.

Exhibit VIII

NATIONAL STEEL INDUSTRIES LIMITED

HP Industrial Gas Cylinder Project Profitability Projections

(Rupees in thousand)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sales Volume (Nos)	30,000	45,000	60,000	85,000	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000
A. Revenue										
Gross Sales	41,644	62,466	83,286	1,17,990	1,38,810	1,38,810	1,38,810	1,38,810	1,38,810	1,38,810
Less: Excise Duty	6,941	10,411	13,881	19,665	23,135	23,135	23,135	23,135	23,135	23,135
Net Sales	34,703	52,055	69,405	98,325	1,15,675	1,15,675	1,15,675	1,15,675	1,15,675	1,15,675
B. Variable Expenses										
Raw Materials	13,202	19,620	26,159	37,059	43,599	43,599	43,599	43,599	43,599	43,599
Stores & Spares	2,250	3,375	4,500	6,375	7,500	7,500	7,500	7,500	7,500	7,500
Power & Fuel	2,400	3,600	4,800	6,800	8,000	8,000	8,000	8,000	8,000	8,000
Others	450	675	900	1,275	1,500	1,500	1,500	1,500	1,500	1,500
Sub-total	18,302	27,270	36,359	51,509	60,599	60,599	60,599	60,599	60,599	60,599

Contd . . .

Exhibit VIII Contd . . .

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
C. Contribution										
(Item A Minus B)	16,401	24,785	33,046	46,816	55,076	55,076	55,076	55,076	55,076	55,076
D. Fixed Expenses										
Salaries & Wages	1,500	2,050	2,600	2,730	2,870	3,010	3,160	3,320	3,490	3,660
Repairs & Maintenance	900	1,100	1,250	1,310	1,380	1,450	1,520	1,600	1,680	1,760
Other Admin. Expenses	1,000	1,100	1,200	1,230	1,260	1,290	1,320	1,350	1,380	1,410
Depreciation	13,450	13,450	13,450	13,450	13,450	13,450	13,450	13,450	13,450	13,450
Sub Total	16,850	17,700	18,500	18,720	18,960	19,200	19,450	19,720	11,254	7,150
E. Profit Before Interest										
(item C Minus IT)	-449	7,085	14,546	28,096	36,116	35,876	35,356	35,356	43,822	47,917
F. Interest										
On Term Loans	10,885	10,143	7,889	5,635	3,381	1,127	0	0	0	0
On NSIL Current Account	0	0	0	0	0	0	0	0	0	0
Sub Total	10,885	10,143	7,889	5,635	3,381	1,127	0	0	0	0
G. Profit Before Taxes										
(E Minus F)	-11,334	-3,058	6,657	22,461	32,735	34,749	35,626	35,356	43,822	47,917
H. Less:										
Taxation**	-17,302	-7,185	1,666	12,238	19,160	21,364	22,796	23,201	23,425	23,531
I. Profit After Tax										
(G Minus H)	5,968	4,127	4,991	10,223	*13,575	13,385	12,830	12,155	20,397	24,386
J. Gross Cash										
Generation	10,934	19,418	17,577	18,441	23,673	27,025	26,885	25,605	25,101	24,715

** Negative taxation represents tax savings due to setting off against NSIL's mainstream profits.

Exhibit IX

NATIONAL STEEL INDUSTRIES LIMITED

HP Industrial Gas Cylinder Project Balance Sheet Projections

		(Rupees in thousand)										
		Year 0**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Capital Employed												
A. Long-term Assets												
Gross Fixed Assets O/B		0	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150
Add: Additions During the Year		1,16,150	0	0	0	0	0	0	0	0	0	0
Less: Depreciation-to-date		1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150	1,16,150
Net Fixed Assets		0	13,450	26,900	40,350	53,800	67,250	80,700	94,150	1,07,600	1,12,304	1,12,633
Net Current Assets		1,16,150	1,02,700	89,250	75,800	62,350	48,900	35,450	22,000	8,550	3,846	3,517
B. Net Current Assets												
1. Inventory												
(No. of months)												
(a) Raw Materials		3.00	3,301	4,905	6,540	9,265	10,900	10,900	10,900	10,900	10,900	10,900
(b) Work-in-progress		0.50	1,465	1,874	2,286	2,926	3,315	3,325	3,335	3,347	2,994	2,823
(c) Finished Goods		0.75	2,197	2,811	3,429	4,389	4,972	4,987	5,003	5,020	4,491	4,235
(d) Stores & Spares		6.00	1,125	1,688	2,250	3,188	3,750	3,750	3,750	3,750	3,750	3,750
<i>Sub-total (Items 1 to 4)</i>		0	8,088	11,278	14,505	19,768	22,937	22,962	22,988	23,017	22,135	21,708
2. Receivables		1.00	3,470	5,206	6,941	9,833	11,568	11,568	11,568	11,568	11,568	11,568
3. Loans & Advances			800	800	800	800	800	800	800	800	800	800
4. Cash & Bank			1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5. Gross Current Assets (Item 1 to 4)		1.00	1,000	13,358	18,284	23,246	31,401	36,305	36,330	36,356	36,385	35,503
6. Less: Creditors & Liabilities			1,809	2,627	3,451	4,732	5,509	5,529	5,550	5,572	5,596	5,619
7. Net Current Assets (5 to 6)			1,000	11,549	15,657	19,795	26,669	30,796	30,801	30,806	30,813	29,907
Total capital employed (A Plus B)			1,17,150	1,14,249	1,04,907	95,595	89,019	79,696	66,251	52,806	39,363	33,753
												32,974

** Construction period.

Exhibit X

NATIONAL STEEL INDUSTRIES LIMITED

HP Industrial Gas Cylinder Project*

Cash Flow Summary

(Rupees in thousand)

	Year 0**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Profit Before Interest & Taxation	0	-449	7,085	14,546	28,096	36,116	35,876	35,626	35,356	43,822	47,917
B. Add: Book Depreciation	0	13,450	13,450	13,450	13,450	13,450	13,450	13,450	13,450	4,704	329
C. Sub-Total	0	13,001	20,535	27,996	41,546	49,566	49,326	49,076	48,806	48,526	48,246
Taxation											
1. Sub-total as "C" above	0	13,001	20,535	27,996	41,546	49,566	49,326	49,076	48,806	48,526	48,246
2. Less: IT Depreciation	0	36,719	24,762	16,775	11,436	7,865	5,472	3,484	2,405	1,676	1,184
3. Sub-Total	0	-23,718	-4,227	11,221	30,110	41,701	43,854	45,592	46,401	46,850	47,062
4. Less: Investment Allowance	0	21,869	0	0	0	0	0	0	0	0	0
5. Taxable Income	0	-45,587	-4,227	11,221	30,110	41,701	43,854	45,592	46,401	46,850	47,062
6. Taxation @ 50.00%	0	-22,794	-2,114	5,611	15,055	20,851	21,927	22,796	23,201	23,425	23,531
D. Less: Taxation as above	0	-22,794	-2,114	5,611	15,055	20,851	21,927	22,796	23,201	23,425	23,531
E. Gross funds generated											
(C minus D)	0	35,795	22,649	22,385	26,491	28,715	27,399	26,280	25,605	25,101	24,715
F. Add: Central Govt Subsidy	0	0	0	0	0	0	0	0	0	0	0
G. Less: Capital Expenditure	-1,16,150	0	0	0	0	0	0	0	0	0	0
H. Less: Working Capital	1,000	10,549	4,108	4,138	6,874	4,127	5	5	7	-906	-450
I. Add: Release of Working Capital											
J. Add: Asset Disposal-assumed @ 20.00%											
K. Net Cash Generated/Absorbed (-)	-1,17,150	25,246	18,541	18,247	19,617	24,588	27,394	26,275	25,598	26,007	76,852
{(E + F + I + J) - (G + H)}											

** Construction period.

NATIONAL STEEL INDUSTRIES LIMITED (B)

Contrary to the expectations of the Vice-President, Planning and Development, who had expected a smooth passage, there was a lively discussion at the ECD meeting on the viability of the Gas Cylinder Project, referred to in Part A of the Case. The meeting was attended by the following members of the ECD:

- Mr. S K Krishnan (Formerly a Senior Civil Servant), Chairman.
- Mr. D W Hacking (of NS-USA), Deputy Chairman.
- Mr. J K Alva, Managing Director.
- Mr. S S Bam (Senior Partner of a leading Chartered Accountants' firm), Director.
- Mr. K S Kotnis (Nominated by financial institutions in terms of existing loan covenants), Director.

By Invitation

- Mr. R Dhawan, Vice-President (P&D).
- Mr. D Rajagopalan, Vice-President (Finance), and Secretary.
- Mr. K R Shenoy, Vice-President (Technical).

While broadly agreeing that the project was *prima facie* attractive, especially for an engineering unit, the Committee members expressed apprehensions about the criticality of some of the factors.

Excerpts from the meeting are given as follows:

S K Krishnan (SKK) “Raman, I am particularly worried about the uncertainties clouding the raw material scenario. The whole thing depends on the vagaries of the import policies. And you know how violent fluctuations can be in the international prices of items like seamless. Incidentally, who is getting into the production of seamless in India? There is also the big Damocles Sword of a customs duty clamp.”

R Dhawan (RD) “We ourselves have given thought to the very valid issues raised by you. Seamless is currently quoting around \$ 600–650 a tonne, but we have taken \$ 700 in our computations; thus building a 10 per cent provision for possible price increase. Even these prices are indicative quotes and you know that one always pares these down by 5–10 per cent negotiations.

Regarding possible government policy changes, we feel that the fact that a public sector unit (HEL) is at the front itself is good enough protection. We understand that this unit does make some money in cylinders, and it is very unlikely that government will do anything that would drive them deeper into the red.”

“ . . . At best there may be a 10 to 20 per cent customs which will be easily passed on to the customers”.

. . . I understand BML (another public sector undertaking) is seriously looking into the production of seamless tubes in India. Their team has just returned from abroad after shopping around for technology. They themselves are keen that we should go ahead with the project. They have a vested interest in our success . . .”.

D W Hacking (DWH) “What about the potential exchange risks? I remember NSIL lost a lot of money in 1986 from sharp rupee depreciation; the risks are many times over here as the project will be carrying foreign risks virtually all through its life.”

S S Bam (SSB) (Interjecting before Mr. R Dhawan replied) “One may remember that Indian Income Tax Law does not allow exchange loss on term loan instalments as straight forward write off. They have to be capitalized with the result that one enjoys only the depreciation benefits . . .”.

D Rajagopalan (DRG) (Clarifying) “. . . The 1986 imports were mostly denominated in DM and Yen. While the US dollar has been largely moving within a narrow range lately, (Exhibit I) this should not delude us. In fact, if one goes by what happened overseas, the US dollar should have fallen against the Rupee. You know this has not happened as RBI is reported to follow a ‘weak-rupee’ policy to maintain export competitiveness. In view of this, I am afraid, if and when the US dollar starts firming up in international markets, it will jump against the rupee . . .”.

RD “Raw material cost increases due to higher foreign exchange rates could also be largely passed on through price adjustments.”

J K Alva (JKA) “May not be always possible especially if competitors decide to stay out. It would be worthwhile to work out the sensitivities of, say, a five to six per cent rupee depreciation every year assuming that we will have to absorb this . . . I know, at some point of time, one will be adjusting the selling price, . . . but let us ignore this for the present.”

(DRG) (quickly doing some calculations) “A six per cent annual increase means about 34 per cent increase five years hence and 80 per cent after 10 years. This sort of depreciation is quite plausible. Who would have thought in 1984 or early 1985 that DM and Yen would double in two to three years? . . .”

RD “I will have the figures worked out and circulated to the Committee members in the course of next week . . .”

K S Kotnis (KSK) “. . . Perhaps we should examine if this project can be implemented under a new company. This will help in insulating NSIL’s performance from adverse consequences, should anything go wrong with the project. Anyway, gas cylinders are not quite the same as tubes. . . . *prima facie*, I do agree that there may be a number of advantages in implementing the project as a division of NSIL. It may perhaps be still worthwhile to study the full implications in terms of financing, taxation control, etc. of floating a new company for implementing the project.

. . . I must admit that my fears are primarily from our experience of many problem projects which have threatened the very fabric of otherwise successful existing operations. Metal Boxes are becoming common too often . . . This is not to cast any reflections on NSIL management, whom I hold in high esteem . . .”

JKA (laughingly) “Thank you for the small mercies. . . . The point is very well taken. I also find that a number of factors need to be quantified. . . . All of them are not negative . . . You will see from the proposal papers that the evaluation does not reckon the effects of income-tax reliefs under 80I (*see* Appendix for details).

May be the pluses and minuses will cancel out each other. Still let us have them quantified, so that the decision we take is based on conscious knowledge . . .

I hate mid-course surprises . . . Let us also see the overall effects on NSIL in dark scenarios, as rightly suggested by Mr Kotnis.”

DRG “. . . *prima facie*, it would appear that a new company would attract the 115J provisions (*see* Appendix). I will have the full details worked out as suggested . . .”

K S Kotnis (KSK) “. . . Have you looked at any backward areas for setting up the project? As you know, besides the Rs. 2.50 million subsidy, there is interest concession of one and-half per cent on Rupee loans as well . . .”

SSB “. . . Since the project is forecast to make good profits, even 80 HH benefits should be quite a bit . . .”

K R Shenoy (KRS) (Exchanges glances with J K Alva) “. . . For any other location, the project cost will go up by another Rs. 7.0 million: Rs. 1.0 million for land and Rs. 6.0 million for a diesel generator. You know here at Bangalore, we can save on land, and also optimize the use of the existing generators.”

KD “. . . Besides, it will be a lot more easier from administrative angle . . .”

SKK “I don’t think the generator argument will last long. I thought we consciously created surplus generation capacity at the tube mills for strategic reasons . . . That surplus won’t be available

for long especially when tube mills' requirements go up. Which means in another three to four years, you will have to come up with a capex proposal for yet another genset . . .”.

KSK “. . . I guess backward area concessions should far outweigh the additional costs especially if the benefits of sales tax deferrals are also considered. And a place like Tumkur, which is just a couple of hours drive from here (Bangalore), will give us the advantage of the best of both the worlds . . .”.

SKK “. . . What do you think, J K? . . .”

JKA “. . . I do agree and I am quite open on the location aspect . . . though I had indicated to Raman and others to limit the locational choice to our Bangalore works only. I now see it could be quite worthwhile looking at a location like Tumkur . . .”.

SKB “And I guess, it will go with the government.

JKA “Oh! . . . That is true . . .”.

SKK “What would be the effects of a one-year delay, along with, say, a 10 per cent overrun in capital cost?”

RD “In financial terms, this shouldn't be much . . .”.

SSS “A volume of 100,000 cylinders p.a. has been assumed from the fifth year. This means a virtual doubling of the market size over a seven to eight year period. If this does not happen, where do we go? Do you think we can cut into competitors' volumes, by price-cuts?”

RD “I see two reasons why this sort of market growth should take place. The first is from the expected growth of the gas industry. The other is from the replacement of old cylinders, which would be undertaken by gas manufacturers in view of improved domestic availability . . .”.

SKK “In fact, quite the opposite can happen . . . With improved supplies, the so-called premium will disappear and the users will stop cornering cylinders which they do now, as they can always buy at leisure . . . What happened to the two-wheeler market?”

RD “I agree this can happen. We feel we are still better placed than the competitors in such a situation. The large, organized sector in the gas industry will definitely go by our image, quality standards and long familiarity with the NS (USA) cylinders. Being an industrial product, this is not highly price-elastic, though one can cut into competitors' volumes with lower prices. We don't expect any price war to develop as the competitors can't afford to lose money for any length of time . . . Even if it develops, we are better geared to face . . . “We also propose to attract the gas producers, especially the smaller ones, to our fold by offering them leasing company. Being 100 per cent tax write-off items, cylinders have attracted fancy of leasing companies. The smaller gas manufacturers are often stuck for funds to buy cylinders. We think we can marry these two into a viable sales promotion aid for ourselves.”

DWH “The last one, I guess is a pretty good arrangement.”

SKK “Still let us find out how sensitive the project is to volume fluctuations.”

RD “Yes.”

JKA “How about fixed expenses? I guess except manpower there is hardly any scope.”

RD “. . . That’s true. Even in manpower we have assumed barest minimum requirements. The organization will be kept lean and trim.”

JKA “. . . Raman, when do you think these additional details will be ready? . . .”

RD “. . . Within a week, I guess . . .”

The Chairman adjourned the meeting for a week and directed Mr. Dhawan to have these details ready in the meanwhile.

DISCUSSION QUESTIONS

1. Given the assumptions in NSIL (A), what are the implications of undertaking the gas cylinder project a division of the existing company versus a new company?
2. In view of the discussions in the ECD meeting (as contained in this case), critically evaluate the desirability of undertaking the gas cylinder project. What kinds of risks the project is exposed to? How would you incorporate them in the evaluation of the project?

APPENDIX 1**NATIONAL STEEL INDUSTRIES LIMITED**

1. *Sales Tax Deferral*: In the instant case, sales tax (reckoned at 4 per cent of gross sales) collected from customers is allowed to be retained* by the unit set up in a notified backward area, interest-free for a period of seven years. Thus, the sales tax collected during a year needs to be remitted to the State government only in the eighth year. This concession will be available for a period of six years from commercial production.
2. *80HH/80I Deductions*: 20 per cent of the profits and gains of business derived from an industrial undertaking set up in a specified backward area is allowed as a deduction for a period of 10 years (80HH).

25 per cent of the profits and gains of any new industrial undertaking manufacturing articles, except certain specified low-priority items, is allowed as a deduction for a period of eight years (80I).

In computing the quantum of these deductions, the relevant profit will be reckoned as if it were the sole source of income of the company. Also, deduction under 80-I is allowed after deduction 80HH benefits, if any.

3. *115J of the Income Tax Act states*: “. . . Notwithstanding anything contained in any other provision of this Act, where in the case of an assessee being a company, the total income, as computed under this Act in respect of any previous year relevant to the assessment year commencing on or after the 1st day of April, 1988 (hereafter in this section referred to as the relevant previous year), is less than thirty per cent of its book profit, the total income of such assessee chargeable to tax for the relevant previous year shall be deemed to be an amount equal to thirty per cent of such book profit** . . . ”

* In actual practice, to comply with certain income-tax eligibility requirements, there will be simultaneous exchange of cheques between the government and the unit.

** (Book profit = book profit before tax and dividend).

Exhibit I

NATIONAL STEEL INDUSTRIES LIMITED

*Exchange Rate of the Rupee
against four major currencies

(in Rupees)

	<i>1970</i>	<i>1980</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>
1. 1 US \$	7.50	7.93	10.49	12.45	12.17	13.12	12.86
2. 1 British Pound	18.50	18.88	15.22	14.40	17.57	19.35	24.10
3. 1 DM	2.05	4.05	3.86	3.95	4.95	6.76	8.14
4. 100 Yen	2.10	3.91	4.52	4.96	6.07	8.25	10.43

* These are indicative exchange rates at the year end.

RICHA FOODS COMPANY

Situated in Ahmedabad, Richa Foods Company is a medium-sized firm specializing in packaged food items. The R&D department of the company has developed a new product with an expected life of six years. The manufacturing facilities of the product will require a cash outlay of Rs. 300 million that the firm would depreciate over six years. The salvage value is assumed to be zero. The company expects to sell 10 million units per annum at a price of Rs. 60 per unit. The marketing manager has informed that depending on competition and Richa Foods' response to it, both actual volume and price could differ from the expectations. The selling price could decrease as much as by 10 per cent under adverse economic conditions and increase as much as by 15 per cent under favourable economic conditions. Similarly, actual volume could vary from the expected volume between –10 per cent to +10 per cent. The accountant felt that the actual outlay and variable costs could also be different from the forecasts. The actual outlay could increase by 10 per cent and variable costs by 5 per cent to 10 per cent from the expected values. Exhibit I gives financial forecasts based on the most expected assumptions.

Fixed costs include depreciation on straight-line basis. Assume that the company can charge straight-line depreciation for tax purposes. The company has after-tax required rate of return of 12 per cent.

DISCUSSION QUESTIONS

1. Identify the factors that are most critical to the decision. Answer this question by calculating the volume, selling price, unit variable cost and cash outlay at which the investment's NPV would be zero, other things remaining the same.
2. What is your recommendation to the company? State any additional information that will be helpful to answer this question.

Exhibit I**FINANCIAL FORECASTS BASED ON
Expected Sales 10 million units**

	<i>Per unit Rs.</i>	<i>Total Rs. million</i>
Selling price	60	600
Variable costs:		
Material	16	160
Labour	8	80
Overhead	6	60
Total	30	300
Contribution	30	300
Fixed costs	10	100
Profit before tax	20	200
Tax @ 30%	6	60
Profit after tax	14	140

PART
FOUR

Financing and Dividend Decisions

CENTRAL EQUIPMENT COMPANY LIMITED

In the beginning of January 2011, Mr. L C Tandon, Director of Finance of Central Equipment Company (CEC), was evaluating the pros and cons of debt and equity financing for the purpose of expansion of CEC's existing production facilities. At a recent meeting of the board of directors, a heated discussion took place on the best method of financing the expansion. Mr. K C Soni, Chairman and Managing Director (CMD), had therefore directed Mr. Tandon to critically evaluate the points made by the various members of the board, and to prepare a report on behalf of the company's management to be presented at the board meeting to be held in the last week in January 2011.

BACKGROUND OF THE COMPANY

CEC was started in the late fifties as a government company. It is one of the important engineering companies in the public sector, manufacturing a wide range of products. CEC's products include industrial machinery and equipments for chemicals, paper, cement, and fertilizers industries, super heaters, economizers, and sold material handling and conveying equipments.

CEC had started with a paid-up capital of Rs. 1 crore in 1971. As per the estimated balance sheet at the end of the year 2010–11, it has a paid-up capital of Rs. 18 crore (divided into 18 lakh shares of Rs. 100 each) and reserves of Rs. 45.96 crore. The company's sales have shown a general increasing trend despite a number of difficulties such as recessionary conditions, high input cost, frequent power cuts and un-remunerative regulated prices of certain products. In the last decade, CEC's sales have increased from Rs. 180 crore in 2001 to Rs. 304 crore in 2009–10. The sales for year ending March 31, 2011 are estimated to be Rs. 338 crore. Profit after tax (PAT) has increased from Rs. 1.71 crore in 2001–02 to Rs. 4.35 crore in 2009–10. The company is projecting a profit after tax of Rs. 5.03 crore in the year 2010–11. Due to the recessionary and other economic factors, sales and profit of the company have shown a cyclical behaviour over the last decade. Exhibit I gives sales and profit data for the ten-year period.

THE EXPANSION PROJECT

The need for expansion was felt because the market was fast growing and the company has at times reached its existing capacity. The project is expected to cost Rs. 20 crore, and generate an

average profit before interest and taxes (PBIT) of Rs. 4 crore per annum, for a period of eight to ten years. The management has already evaluated the financial viability of the project and found it acceptable even under adverse economic conditions. Mr. Soni felt that there would not be any difficulty in getting the proposal approved from the board and relevant government authorities. He also thought that the production could start as early as from September 2011.

FINANCING OF THE PROJECT

CEC has so far followed a very conservative financing policy. All these years, the company has financed its growth through budgetary support from the government in the form of capital and internally generated funds. The company has also been meeting its requirements for working capital finance from the internal funds. The company has, however, negotiated a standing credit limit of Rs. 5 crore from a large nationalized bank. In the past, it has hardly used the bank limit because of sufficient internal resources. As may be seen from the estimated balance sheet as on March 31, 2011 in Exhibit II, CEC's capital employed included paid-up share capital and reserves without any debt. The CMD feels that given the government's current attitude whereby it would like profitable companies to raise funds from the capital markets for their investments, it may look odd for CEC to obtain budgetary support from the government. However, in his assessment, CEC being a profitable company, government may be willing to provide budgetary support for the project. More significantly, he felt that raising equity capital may dilute equity earnings. Thus, he decided to reconsider the company's policy of avoiding long-term debt. It was thought that the use of debt could be justified by the expected profitable position of the company.

Mr. Tandon has determined that the company could sell Rs. 1,000 denomination bonds for an amount of Rs. 20 crore either to the public or to financial institution through private placement. The interest rate on bonds would be 14 per cent per annum, and they could be redeemed after seven years in three equal annual instalments. The bonds and interest thereon would be fully secured against the assets of the company. In Mr. Tandon's view, the company would have to sell a large number of bonds to financial institutions as CEC being a new company in the capital market, the public may not fully subscribe to the issue. He also felt that from the individual investors' point of view, CEC may have to give an option to the bondholders to sell back to the company bonds up to an amount of Rs. 1 crore each year. Also, bond-holders shall have the right to appoint one nominee director on the board of the company which shall, however, be exercised by the bond trustees only if the company defaults in the payment of interest or repayment on the due date.

In Mr. Tandon's opinion, the bond was a cheaper source of finance, since interest amount was tax deductible. Given the company's tax rate of 35 per cent, the 14 per cent interest rate was equal to 9.1 per cent from the company's point of view. On the other hand, he thought that equity capital would be costly to service, as CEC is currently paying a dividend of 15 per cent on its paid-up capital. Thus, the bond alternative looked attractive to Mr. Tandon on the basis of the comparison of costs.

The expansion proposal was discussed in the January 2011 meeting of the board. As most of the members were convinced about the profitability and desirability of the project, they did not take much time to approve it. Immediately after this decision, Mr. Tandon informed the members about the possibility of raising finance through a bond issue. He then presented his report highlighting the comparison between bond and equity financing. His conclusions clearly showed that bond financing was better for the company. Mr. Tandon was surprised to note that substantial disagreement existed among the members regarding the use of bond.

One director questioned the correctness of Mr. Tandon's calculation of the cost of the bond as he had ignored the implications of the annual requirement arising out of investors exercising the option. According to him, this would mean higher cost of bond as compared to equity capital. Yet another director emphasized that a lot of annual cash outflow would also take place under the bond alternative. He felt that the issue of bond would thus add to the company's risk by pressurizing its liquidity. Most of the directors, however, were in agreement with the estimate of post expansion profit before interest and taxes (PBIT) of Rs. 12.5 crore.

One of the directors argued that given the expected higher PBIT, the post-expansion equity return would significantly increase if the funds were raised by issuing bonds. He even emphasized that the job of the management should be to maximize profitability of equity owners by taking reasonable risks. This argument was countered by another director by stating that the equity return could be diluted if the company was unable to earn sufficient profit from the existing business and the new project. The discussion on bond versus equity financing was so involved that there did not seem to be any sign of an unanimous agreement being reached. At this juncture, Mr. Tandon suggested that the discussion on financing alternatives may be postponed until January end to allow him sufficient time to come up with a fresh analysis incorporating the various points raised in the current meeting. Mr. Tandon was wondering what he should do so that a unanimous decision could be reached.

DISCUSSION QUESTIONS

1. Calculate EPS under the alternatives of employing (a) Rs.20 crore debt and no fresh equity, (b) Rs 10 crore debt and Rs 10 crore equity and (c) Rs 20 crore equity and no debt. Also make calculations for uncommitted-EPS. Draw a chart showing PBIT on x-axis and EPS and uncommitted-EPS on y-axis for debt-equity mix. What inferences do you derive?
2. Debt issues raised in the case for and against the use of debt. Why do a large number of board members seem to be against the use of debt? What are the real risks involved? How would you measure them?
3. In addition to profitability and risk factors, what are other considerations before CEC to decide about its debt policy? Should it employ debt to finance its expansion?

Exhibit I

CENTRAL EQUIPMENT COMPANY
Selected Financial and Operating Information

(Rupees in lakh)

<i>Year ending March 31</i>	<i>Sales</i>	<i>PBIT</i>	<i>PAT</i>	<i>Dividend</i>	<i>EPS (Rs.)</i>
2001-02	18,040.00	343.00	171.00	90.00	9.50
2002-03	17,078.00	1.55.00	78.00	90.00	4.33
2003-04	18,940.00	412.00	206.00	90.00	11.44
2004-05	22,708.00	522.00	261.00	90.00	14.50
2005-06	25,200.00	580.00	290.00	108.00	16.11
2006-07	27,750.00	666.00	333.00	108.00	18.50
2007-08	29,492.00	768.00	384.00	144.00	21.33
2008-09	24,338.00	-53.00	-53.00	90.00	-
2009-10	30,423.00	821.00	435.00	180.00	24.17
2010-11 ^{\$}	33,769.00	946.00	503.00	180.00	27.94
2011-12*	35,795.00	850.00	552.00	180.00	30.67
2011-12 [#]	40,323.00	1,250.00	813.00	380.00	21.39

\$ Estimates

* Projections excluding the proposed expansion.

Projections include financial impact of proposed expansion and equity financing is assumed.

Note:

It is expected that a new plant will cause significant increase in the firm's fixed costs. The annual total expenses of the company after expansion in 1999 are expected to consist of 45 per cent fixed and 55 per cent variable expenses.

Exhibit II

CENTRAL EQUIPMENT COMPANY
Estimated Balance Sheet as on March 31, 2011

(Rupees in lakh)

Cash and bank balance	890	
Sundry Debtors	1,807	
Inventory	411	
Other current assets	471.00	
Current assets		3,579
Gross block	8,199	
Less: accumulated depreciation	2,346	
Net block		5,853
<i>Total assets</i>	9,432	
Sundry creditors	1,518	
Tax provision	303	
Other current liabilities	1,215	
Current liabilities		3,036
Paid-up share capital	1,800	
Reserves and surplus	4,596	
Net worth		6,396
<i>Total liabilities and capital</i>		9,432

DEEPAK FERTILIZERS AND PETROCHEMICALS CORPORATION LIMITED

“I appreciate the fact that you have written to me about the innovative features of the forthcoming issue of Deepak Fertilizers and Petrochemicals Corporation Limited. It has been our sincere endeavour and intention, that along with growth in business and increased productivity, every industrialist has to strive to improve the capital market and introduce more and more sophisticated modes of capital accumulation and appreciation”.

This is how Mr. C K Mehta, Chairman and Managing Director of Deepak Fertilizers and Petrochemicals Corporation Limited (DFPCL) replied to a letter written to him by the authors of this case. To finance its capital outlay of Rs. 390 crore for its diversification and expansion programme under various foreign collaborations, which is expected to bring in its wake the world's latest efficient technologies, the company came with a public issue of convertible debentures of Rs. 190 crore in January 1987. The issue was full of first-time innovations in the Indian capital market, and had significant financial implications for the company, investors and policy makers.

BRIEF HISTORY OF THE COMPANY

The company was promoted in 1979 by Deepak Nitrite Limited and Shri C K Mehta for establishing a plant at Taloja, near Mumbai, in technical collaboration with Fish International Engineers Inc USA, for manufacture of anhydrous liquid ammonia, a heavy chemical as well as fertilizer, based on Bombay High Gas, with a capacity of 272 tonnes per day. The company also entered into an agreement with Holdor Topsoe, Denmark for supply of design for ammonia converter and review of synthesis loop design. It obtained patent licence and transfer of technology from Union Carbide Corporation, New York, USA, for its amine guard process for carbon dioxide removal. After overcoming the initial problems, the company's plant was commissioned in November 1983. Commercial production of ammonia was started from December 1, 1983. The plant achieved 100 per cent capacity utilization in February 1984. The plant was operating at 107 per cent capacity utilization in 1988.

The project was completed at a cost of about Rs. 63 crore. It was financed by the Indian financial institutions and banks, the International Finance Corporation, Washington, by way of

a term loan of US \$ 7.5 million and equity participation of Rs. 1.15 crore. The Deepak Nitrite and Mr C K Mehta, through firm allotment, contributed Rs. 4.60 crore of equity capital. For part financing this project, the company had, in May 1982, made a public issue of equity shares worth Rs. 5.75 crore, which was over-subscribed.

FINANCIAL HIGHLIGHTS

The company commenced commercial production in December, 1983. It turned out impressive results within a short period and in 1987–88, a very bad year for the fertilizer industry, its results for the 15-month period ending 31st March, 1988 were satisfactory and its capacity utilization was amongst the best in the fertilizer industry. A summary of the financial indicators of the company for the last three years is given in Exhibit I. The high and low prices of DFPCL's equity share during the years 1984–1987 are given in Exhibit II.

DIVERSIFICATION PROGRAMME

The diversification plan of the company was motivated by the large potential demand for the nitrogenous fertilizers. There are 42 large fertilizers plants with a total installed capacity of 58.94 lakh tonnes of nitrogenous fertilizers. The production of nitrogen during the years 1983–84 and 1984–85 amounted respectively to 34.87 lakh tonnes and 39.17 lakh tonnes. The imports of nitrogenous fertilizers during the years 1980–85 were as under:

<i>Year</i>	<i>Thousand tonnes</i>
1980–81	1,510
1981–82	1,055
1982–83	425
1983–84	656
1984–85	2,009

Source: Bombay Stock Exchange Directory

The consumption of nitrogenous fertilizers is expected to be 73 lakh tonnes during the year 1989–90 and may reach to a level of 98 lakh tonnes by the year 1994–95. Having established and operated its ammonia plant satisfactorily and considering the demand potential of nitrogenous fertilizers, the company embarked upon a massive expansion and diversification programme in the year 1987–88. The expansion and diversification of the company included the company's forward integration programme which will help the company to capitalize on its own gas pipeline and the existing ammonia production. It is expected that the turnover of the company from the present level of Rs. 42 crore will increase to over Rs. 250 crore once the projects come on stream in 1991. The closely integrated complex developing after expansion and diversification is also likely to bring about significant cost advantage to DFPCL and is

expected to give an 800 per cent value addition within the same premises. The programme envisages setting up of plants for the manufacture of the following products, for which the necessary Letters of Intent/Letters of Registration/Approval have been obtained from the Government of India.

- (a) 765 MT per day of ammonium nitrophosphate (ANP) fertilizers.
- (b) 2,00,000 MT per year of dilute nitric acid (DNA) (which includes 1,00,000 MT per year of dilute nitric acid for captive consumption).
- (c) 36,000 MT per year of low density prilled ammonium nitrate (LDAN).
- (d) 33,000 MT per year of concentrated nitric acid (CNA).
- (e) 1,00,000 MT per year of methanol.

The company has received approval of the Government of India for the technical collaborations for the new projects and has already entered into agreement with the foreign collaborators. The capital goods clearances for imported machinery and equipment for the projects have also been obtained. An import licence for part of the equipment needed for the ANP project has been received and important licenses for the equipment are expected to be received shortly.

Under the diversification programme, the company will convert its entire ammonia production into high value-added products, namely ANP, DNA, LDAN and CNA. Since the company will obtain the required natural gas for the methanol project through its own pipeline from ONGC, it will be assured of continued availability of this raw material at a low price without having to incur any additional transport cost.

FINANCING OF EXPANSION/DIVERSIFICATION

The expansion and diversification plan of the company has been appraised by the IDBI as the lead lending institution. The total capital cost of the plan estimated at Rs. 346 crore, which is proposed to be financed by a convertible debenture issue of Rs. 190 crore and the balance of Rs. 156 crore through term loans from financial institutions, banks and internal accruals of the company. The debenture issue of Rs. 190 crore will be offered as under:

	<i>(Rupees in crore)</i>
On rights basis to existing shareholders	60.0
Firm allotment to ICICI, UTI, LIC, & GIC	20.0
Preferential offer to:	
Non-resident Indians	26.0
Farmers	13.0
Employees	9.5
Offer to Indian public	61.5

PRINCIPAL TERMS OF THE DEBENTURE

Each debenture shall have a face value of Rs. 100 and will carry an interest rate of 14 per cent per annum payable every six months. Each debenture will consist of three parts viz., Part A of Rs. 20, Part B of Rs. 30 and Part C of Rs. 50 with a detachable warrant.

The fully paid debentures shall carry an obligation on the part of the company to issue to the holders thereof equity shares of the company as stated below:

- (i) *Fully paid Part A* of Rs. 20 will be compulsorily and automatically converted into one equity share of the face value of Rs. 10 at a premium of Rs. 10 on 1st January, 1990.
- (ii) *Fully paid Part B* of Rs. 30 will be compulsorily and automatically converted into one equity share of the face value of Rs. 10 at a premium of Rs. 20 on 1st January, 1991.

In the event of any issue of bonus shares by the company before the stipulated dates of conversion in respect of Part A and Part B of the debentures, the premium payable per share shall be adjusted accordingly.

- (iii) *Fully paid Part C* of Rs. 50 will have a detachable warrant (see table on page 291) attached to it. The warrant will entitle the holder to apply for one equity share of Rs. 10 between 1993 and 1995 at a price to be approved by the Controller of Capital Issues (CCI) but not exceeding Rs. 50.

The warrant of DFPCL entitles its holder to apply for one equity share. The warrant is detachable from Part 'C' of the debenture and will be separately listed, and traded on stock exchanges. The following options will be available to the investors:

- Option 1:* Exchange Part C of the debenture and the warrant for one equity share.
- Option 2:* Acquire one equity share by surrendering the warrant along with the appropriate payment. Sell Part 'C' of the debenture separately.
- Option 3:* Acquire one equity share by surrendering the warrant along with the appropriate payment and continue to hold Part C of the debenture yielding regular returns of 14 per cent per annum.
- Option 4:* Sell the warrant in the market and hold Part C of the debenture yielding regular returns of 14 per cent per annum.
- Option 5:* Sell both the warrant and Part C of the Debenture in the market.

If Part C of the debenture is not surrendered in lieu of the payment for allotment for one equity share under warrant, it will be redeemed at par after seven years and before ten years from the date of allotment of debenture. The payment terms for the debenture are as follows:

On application	:	Rs. 25 per debenture
On allotment	:	Rs. 25 per debenture
On first & final call	:	Rs. 25 per debenture

The non-resident Indian applicants are required to pay Rs. 50 on application and Rs. 50 on the first and final call. For them the issue opens on 5th January 1989 and for the Indian public on 9th January 1989. The first and the final call money is payable by 16th October 1989.

The amounts paid on application, allotment and on first and final call will be appropriated towards Parts A, B and C as under:

	<i>Total</i>	<i>Part A</i>	<i>Part B</i>	<i>Part C</i>
Application Money	25	5.00	7.50	12.50
Allotment Money	25	5.00	7.50	12.50
First & Final Call	50	10.00	15.00	25.00
<i>Total</i>	100	20.00	30.00	50.00

The equity shares to be issued upon conversions of the debentures or on exercise of the option attached to the warrant, as aforesaid, shall rank *pari passu* in all respects with the existing equity shares of the company and shall rank for dividend *pro rata* from the respective date of conversion(s)/allotment and will be subject to the provisions of the Memorandum and Articles of Association of the company.

DISCUSSION QUESTIONS

1. What are the key similarities and differences between the effects of the convertible debentures in Part A and B and detachable warrant attached with Part C on the company's dilution of control and earnings and its ability to raise new capital in future? What effects do these instruments have on the company's capital structure?
2. How does a warrant differ from the rights issue? What are the financial implications in case of warrant if the company makes bonus issue before the expiry of option?
3. What are going to be the determinants of the market value of a warrant? Assuming that the market price of a share of DFPCL at the time of exercising the option will be Rs.60, at what price the warrant is likely to sell? Make your own assumptions, giving justifications about the exercise price of the option.
4. Assuming that the exercise price of option at the time of its maturity would be Rs.45, what kind of relationship do you expect between value of warrant and market price of the share?
5. How market value of warrant likely to behave when both exercise price and market price of share on the date is uncertain? What are the implications (from both company's and investors' point of view) of specifying the exercise price in advance at the time of making public issue?
6. It is argued that warrant is attached to debt issues as sweeteners. The attachment of warrants with a large issue of debt may add to the marketability of issue. Also, when the money supply is tight and company is believed to be financially and operationally risky, warrants may enable the company to raise needed funds from the market. Critically evaluate this public issue in the light of above factors.
7. Can you think of any other innovative features which the company could have used (assume no CCI approval is required)?
8. Evaluate options available to the investors.

Exhibit I**DEEPAK FERTILIZERS AND PETROCHEMICALS
CORPORATION LIMITED****Summary of Financial Information***(Rupees in crore)*

	31.12.85	31.12.86	31.03.88 (*)	30.09.88 (**)
Equity capital	11.50	11.50	14.82	14.82
Net worth	13.55	16.82	21.88	24.61
Long-term loans	45.70	46.37	36.39	n.a.
Current liabilities	8.95	8.54	11.49	n.a.
Current assets	20.94	27.95	29.07	n.a.
Gross fixed assets	61.59	64.23	65.36	65.57
Net fixed assets	48.65	45.18	41.62	38.69
Sales & other income	33.88	41.33	48.58	23.73
Profit before depreciation and interest	15.49	19.74	20.09	8.79
Profit before depreciation	8.91	13.57	13.38	6.38
Profit before tax	2.64	5.90	5.33	3.25
Profit after tax	2.64	5.90	4.49	2.73
Dividend	-	15%	18.75%	-

Note: (*) 15-months period (**) 6-months period**Exhibit II****DEEPAK FERTILIZERS AND PETROCHEMICALS
CORPORATION LIMITED****High and Low Prices of DFPC's Share**

<i>Year</i>	<i>High</i>	<i>Low</i>
1984	27.50	19.50
1985	56.00	22.00
1986	60.00	35.00
1987	46.50	27.50

Source: Bombay Stock Exchange Directory.

ITC LIMITED

The systematic diversification strategy of ITC Limited has resulted in high growth rate in sales and profits, particularly in the last 4–5 years. To improve its performance further, the company in late 1982 has decided to expand, update and modernize its facilities. The total capital cost of expansion and modernization has been estimated at Rs. 44.10 crore, of which Rs. 15.40 crore is the margin money requirement for the incremental working capital needs. The company has planned to finance Rs. 11.36 crore of the total cost through internally generated funds. The company would borrow Rs. 0.84 crore (foreign currency loans) from the ICICI and Rs. 1.90 crore from banks. To finance the remaining cost of Rs. 30 crore (68 per cent of the total cost), given its past performance and financial policy, future prospects, investors' expectations and the capital market trends, the company has thought it more appropriate to issue 6,00,000 15 per cent secured and fully redeemable bonds of Rs. 500 each at par. The innovative terms and conditions of the bond make it a unique issue.

HISTORY OF THE COMPANY

Today ITC is among India's top ten private sector corporations. The company's policy of diversification through acquisitions has transformed it from a purely tobacco company to a largely diversified company, comprising unrelated businesses such as hotel, printing and packaging, food and marketing, and export (Exhibit I). ITC Limited was incorporated in 1910 in India, under the name of the Imperial Tobacco Company of India Ltd. as a private limited company. The main objective of the company then was to acquire and carry on the business of the British and American Tobacco Company. Following the partial Indianization of its share capital, it changed its name to India Tobacco Company Limited in 1970, and to ITC Limited in 1974. ITC's overseas shareholding was reduced to 40 per cent after the disinvestment by the foreign shareholders in 1976. About 29 per cent of the company's shares are held by financial institutions and individuals hold about 31 per cent of its shares besides 40 per cent foreign shareholding.

In 1953, the company acquired the manufacturing business of Tobacco Manufactures (India) Ltd. and the complementary lithographic printing business of Printers (India) Ltd. It thus became the owner of three large factories and lessee of two smaller factories equipped for the manufacture of cigarettes and pipe tobacco and also became the owner of two printing

factories. The printing factories, in addition to the printing job for internal use, also produce printed and packaging material for outside customers'. The company has also developed an extensive marketing organization with offices all over India.

The progressive Indianization of the company's shareholdings has enabled it to follow the policy of diversification and to transform itself from uni-business to multi-business operations. The diversified activities of ITC are organized into six main divisions: Indian Tobacco Division (ITD), Indian Leaf Tobacco Development Division (ILTD), Packaging and Printing Division (PPD), Hotels Division (HD), Marketing and Export Division (M&ED) and Management Services and Consultancy Division (MS&CD).

ITD is a market leader in cigarette manufacture and retails its 34 brands over 7,00,000 outlets all over India. In fact, ITC is the pioneer of the growth of cigarette manufacturing industry in India. It produces a large variety of filter and plain cigarettes in a broad price range. Its brands include prestigious brands such as India Kings, Classic International, Wills Gold Flake, Wills Filter Kings, Capstan, Scissors, Berkeley, Bristol and many others. ITD is committed to providing the maximum value to the consumer for his money. Therefore, it engages in sophisticated product development backed by a comprehensive scientific research and development programme at its integrated Research Centre. In the cigarette business, the company's competitors are Vazir Sultan, Godfrey Philips, National Tobacco, Marcopolo and Golden Tobacco. ITC has, however, been able to maintain its superiority over its competitors; it is undoubtedly the market leader. ITC does face indirectly a threat from the government supported *bidi* manufacturers. The vast majority of Indian population smokes low-priced *bidis* the prices of ITC's cigarettes are not within the means of masses in India.

ITC acquired the Indian Leaf Tobacco Development Company Limited (ILTD) in April 1975, whereupon it became a division of the company, ILTD is engaged in developing and propagating the production of various styles of tobacco leaf which are in demand both nationally and internationally. ILTD introduced Virginia tobacco to India, and over the years has become a large exporter of tobacco. ILTD was the first to export leaf tobacco to West German and USA markets. This division (ILTD) also ensures the availability of all the various tobacco requirements of ITD for the manufacture of all types of quality cigarettes. The division undertakes extensive tobacco research ranging from pure seed production to improved cultural practices for the purpose of increasing productivity in the agro-based industry providing higher yields for the farmers.

The Printing and Packaging Division of the company fully meets internal packaging and printing requirement of the company. It also delivers a complete packaging/advisory service to the packaged consumer goods industry in India and caters to a vast range of consumer industries like soap, toiletries, distilleries, leather, tobacco, matchboxes, etc. The division is the largest convertor of paper and board in the country. A major achievement of the division was the development of indigenous technology for cardboard match packaging and in particular in developing a moisture resistant striking surface effective even in humid monsoon conditions.

The Hotels Division of the company today is the largest private sector organization with 20 hotels at present and 30 more hotels in the offing within a short span of seven years. It was in

the year 1974–75 that Hotel “Chola” at Madras was partly opened. It became fully operational and was able to achieve satisfactory average occupancy in the year 1975–76. The company then added Hotel “Mughal” in Agra, Hotel “Maurya” in Delhi, and so on. The chain of the company’s hotels is known as “Welcomgroup”. “Welcomgroup” is firmly established as a Hotel Management Corporation, and therefore, the company is determined to venture abroad and market its services in competition with international hotel chains. The company has entered into a marketing services and reservations agreement with the Sheraton International incorporated in 1979. The agreement is intended to obtain marketing and reservation services. The Hotels Division of the company faces the stiffest competition from the giant groups such as Oberoi, Taj and ITDC.

Marketing and Exports Division (M&ED) was set up midway during the last decade, with the primary objective of promoting non-traditional exports, particularly from the small-scale and unorganized sectors. This division has undertaken development of markets and customers, both at home and abroad, for the products of these unorganized sectors. M&ED presently deals in branded marine foods, fashion garments, light engineering goods and carpets.

ITC has made an investment of Rs. 3.40 crore in the core sector paper and board industry. Bhadrachalam Paper Boards Limited (BPL), in the year 1981, its very second year of operations, achieved 105 per cent plant utilization. BPL is expected to cater to all the paper and board needs of the tobacco division.

The company set up a Management Service and Consultancy Division (MS&CD) in 1981. The creation of this division was accentuated because of the ever-increasing demand for data management and processing within ITC. MS&CD provides an integrated management information system to all divisions. The division is poised to export “software” services.

ITC has a clear-cut corporate philosophy. “ITC subscribes to the concept, that industry is an organ of society, specifically charged with the responsibility of organized economic advance by making resources productive, and that economic progress can be made into a powerful driving force for human betterment and social justice. In pursuit of this, ITC endeavours to subordinate company objectives to, and enmesh them with those of, the national, in the conviction that the enterprise will progress to the extent that our society and country prosper”. The company considers its corporate purposes to be: profit, growth and good citizenship. Thus, the company wants to make profits by being good to its employees, shareholders, customers and the country at large. ITC has a team of well-qualified professional managers. The company has maintained very harmonious industrial relations for quite a long time due to very liberal personnel policy for human resource development and lot of emphasis on internal promotion. The company has one recognized union and the relationship between the management and the union is quite satisfactory. In 1980, the company did suffer from a prolonged strike of four months in its Bangalore unit.

FINANCIAL PERFORMANCE OF THE COMPANY

Exhibits II and III give ITC’s balance sheets and profit and loss accounts for the decade 1972–73 to 1981–82. Exhibit IV contains main financial highlights of the company between 1960–61 to 1971–72. ITC’s sales and profits have shown impressive growth rates. Between the period

1972–73 to 1981–82 sales have grown from Rs. 217 crore to Rs. 578 crore, an increase of more than 250 per cent. The net profits have also been increasing steadily, although there was a slight downturn during the year 1975–76. ITC's net profits have increased from Rs. 2.33 crore in the year 1972–73 to Rs. 7.77 crore in the year 1981–82. If the recent period of four years is taken, the company's sales and profits have grown at compound growth rates of 11 per cent and 18 per cent, respectively. The earnings per share of the company have grown from Rs. 1.23 in the year 1972–73 to Rs. 2.85 in the year 1981–82. It may be seen that compared to the company's sales growth, the growth in EPS has been slow. For more than two decades, ITC has never defaulted in paying dividends to its equity shareholders. In the year 1981–82, the company paid a dividend of 18 per cent. The company issued bonus shares on two occasions in the years 1979 and 1981, in the ratio of 1:5.

The government's policy of customs and excise duties' has a great impact of ITC's performance. The government has been increasing excise duties on cigarettes over the years. Like other manufacturers, ITC has also been passing on the entire excise burden to the customers and managing to improve its price realization, more than covering any shortfall in demand. In the year 1972–73, the cigarette industry witnessed two hikes in excise. ITC's sales during this period had increased by Rs. 17 crore over the previous year, out of which increase of about Rs. 12 crore was by way of excise. The company had to increase the prices of most brands which resulted in lower volume of sales. Again in the year 1973–74, the increased sales resulted from price increases consequent upon yet another increase in the rate of excise duties as well as improvement in volume of sales. In the year 1975–76, the company recorded an impressive sale of Rs. 360 crore; but net profit was slightly lower than that of the previous year. Again the rising costs and the escalating excise duties resulted in complete stagnation of volume. In spite of these adverse factors, the company could maintain the trading results of its tobacco division at a satisfactory level. The company also started exporting products manufactured by others. Total exports for the year 1975–76 amounted to Rs. 30.70 crore. Sales registered further improvements in the years 1976–77 and 1977–78. In the year 1977–78, the company maintained the prices of its major brands despite another round of excise increase in June 1977. This resulted in further pressure on unit profit margins.

The company realized a 7 per cent growth in the volume of sales of its own brands of cigarettes in the year 1978–79. During this period the export sales were Rs. 34.40 crore. In the year 1979–80, the sales of the company increased to Rs. 456 crore, out of which export sales were Rs. 26.32 crore. The sales of the company declined to Rs. 430 crore in the next year because of a prolonged strike of 4½ months in the Bangalore cigarette factory. The foreign exchange realizations of the company during the year 1980–81 were Rs. 35.57 crore. ITC reached an all-time high sales volume of Rs. 578 crore during the year 1981–82, and a handsome profit of Rs. 7.77 crore.

FUTURE PLANS AND GROWTH PROSPECTS

An idea of the company's future diversification policy can be had from its recent advertisements in the various newspapers and magazines. ITC intends to diversify in cement, electronics,

engineering, chemicals, renewable energy, etc. It also expects to make an investment of about Rs. 300 crore in the next decade. The company's prospectus of bonds issue mentions about its expansion/modernization plans in the very near future.

The India Tobacco Division is undertaking a substantial modernization programme of its plant, equipment and process using advanced technology to achieve greater product sophistication and to keep in step with international trends. It proposes to participate soon in a joint venture company in Nepal for commissioning a modern cigarette factory. The division will provide a comprehensive package of technical and consultancy services, operating know-how and expertise, training of local manpower and supply of raw materials pending indigenous development which the division will spearhead. The economic returns from this joint venture would be appreciable.

The Indian Leaf Tobacco Development Division, committed to protecting the competitive edge of India's traditional exports of tobacco, is in the process of completing its mechanical handling programme through Green Leaf Threshing Plant. This process is not only cost-efficient but is capable of producing a superior and more acceptable produce to overseas buyers in terms of quality. The division looks forward to greater value-added income from this operation.

The Printing and Packaging Division is poised for rapid expansion with the infusion of further latest technology and expansion of its capability profile, embracing the use of raw materials other than paper and board, thus widening the horizon of the end use of its products.

The rapid growth of ITC's 'Welcomgroup' chain of hotels will continue with the addition of its own properties as well as other properties to which will be provided services in the manner of a Hotel Management Corporation. It is expected that the prestigious Windsor Manor Hotel at Bangalore will be acquired with government consent. Six serviced properties are expected to be added to the current chain in the immediate future and another 24 are in the pipeline. Plans are afoot to upgrade ITC's prime properties to super-luxury status, where desirable, in order firstly to create products of distinction with service to match and secondly, to reinforce the standing appropriate for launch overseas, into the capitals of the world and other travel destinations.

The company is also exploring the possibility of setting up production facilities in the duty-free zones, and the use of its skilled manpower base available in the MS&CO for systems design and software exports is being explored.

The management of ITC feels: "The perspective plan of growth and diversification would reflect integration of ITC's goals with national economic priorities in areas such as electronics, engineering, renewable energy, cement, chemicals and agro-forestry, where the size and scope of enterprise and challenge would be commensurate with ITC's record of proven capability." Further: "The company has achieved excellent results in the past four years culminating in record sales and profits in 1982 reflecting the healthy returns being made by the major divisions of the company. With the expansion plan currently in progress and others that are imminent, the rates of the company are forecast to show an all-round and progressive increase, substantially enlarging the profit generating capacity of the company and providing growing cash surplus from operations each year."

The management is confident of the company's sustained growth and improved profits in the future, enabling the company to continue paying a fair and equitable dividend on its capital as enlarged from time to time.

FINANCING OPTIONS

ITC could choose from several alternatives to meet its financial requirements of Rs. 44.10 crore. It can be seen from the company's balance sheets (Exhibit II) that it has too heavily depended upon its internally generated funds for its expansion/diversification programmes in the past. The equity base of the company is quite thin looking at its huge operations. The company has not raised capital by issue of equity shares in the last ten years. The paid-up share capital increased in the year 1977-78 and 1980-81 because of the capitalization of earnings. The company's share has been performing well in the stock market, particularly during the last four years. The market price of ITC's share is fluctuating around Rs. 37 in the recent months (against a book value of Rs. 19.76 and paid-up value of Rs. 10). In view of the impressive performance of the company's shares in the recent periods, the company had good prospects of issuing common shares. The issue of the common shares, besides strengthening the equity base, could also accord flexibility to the company. However, the high cost of equity financing and the dilution of earnings per share could have been matters of great concern to the management of the company. The company would have to issue a large number of shares to raise the huge amount of Rs. 44.10 crore. One therefore wonders whether it would have been a wise strategy to issue common shares.

Alternative to equity financing was to raise funds from banks and financial institutions. The company's balance sheets show that it has adopted a very conservative financial policy. It is only in the recent years (1967 onwards) that the company has started borrowing on long-term basis in a significant manner. Given the large cash flows of the company, it may seem to have utilized debt capacity. Perhaps the company's shareholders could have gained more if it would have adopted an aggressive financing policy. Loans from banks and financial institutions are less costly (bank and financial institutions' loans may cost about 14 to 15 per cent on before-tax basis), but they impose severe restrictions on the company's operations, restrictions on payment of dividend, capital expenditures, level of working capital, future raising of funds, etc. are the usual terms of the loan agreements. Thus, this alternative of financing introduces rigidities and inflexibility in the company's operations. ITC chose to utilize this source of financing only to a limited extent to maintain flexibility which is so essential to achieve rapid growth and diversification. It would be borrowing only about Rs. 2.74 crore from banks and financial institutions.

ITC has adopted a unique, first-time tried, alternative for financing a substantial part of its expansion/modernization plans. It has issued bonds which combine the benefits of both convertible and non-convertible bonds. The bonds offered carry two alternative schemes: (i) perpetual interest scheme and (ii) share exchange scheme. The first scheme is like any other company's non-convertible bonds/debentures. It carries interest at the rate of 15 per cent per

annum, the maximum rate currently permitted by the Controller of Capital Issues. Interest will be compounded half-yearly and payable annually on 1st July, 1984 covering interest for broken period from 14th February, 1983 (allotment date) to 30th June, 1983 and the annual interest rate for the period 1st July, 1983 to 30th June, 1984. The interest to be paid will be net of statutorily deductible tax.

The second scheme also offers interest at 15 per cent per annum (unlike 13.5 per cent per annum in the case of convertible debentures). In addition, it entitles the bondholder to acquire shares. Under this scheme, the bondholder will not be paid any interest for the period from 14th February, 1983 to 30th June, 1985. Instead, his account will be credited with the *gross interest* at 15 per cent per annum on monthly rests, on the amount of the application/called-up money on each bond. The gross interest so credited in respect of every such bond shall be exchanged by the company for fully paid ordinary shares of the company to be allotted as: 5 ordinary shares of Rs. 10 each on 1st July, 1984 and 5 ordinary shares of Rs. 10 each on 1st July, 1985. Further, the amount of tax deductible at source from the gross interest so credited will be paid by the company at the appropriate time and the amount so paid shall be treated as amount recoverable from such bondholder by debiting his *Recovery Account* with the company. The accumulated balance in the recovery account of such bondholder shall be adjusted out of the interest (net of tax) payable to such bondholder for the period 1st July, 1985 to 30th June, 1986 and only the balance, if any, shall be paid as the net interest due to him for that period. The ordinary shares allotted in exchange of interest shall rank *pari passu* with the then existing ordinary shares in the capital of the company from the date of their allotment. In the year in which these shares are allotted, the dividend will be paid proportionately from the date of allotment to the end of the relevant financial year. The number of ordinary shares to be allotted to the bondholders shall stand proportionately augmented if the company issues any bonus shares before the allotment of such ordinary shares.

Under both the schemes, the payment towards the value of the bond is staggered over a 18-month period. This allows convenience to investors to plan their finances. The payment schedule is as follows:

<i>Payment</i>	<i>Amount per bond</i>
On application	Rs. 125 (25 per cent of face value)
On allotment (14-2-83)	Nil
On first call (31-5-83)	Rs. 125 (25 per cent of face value)
On final call (31-5-84)	Rs. 250 (50 per cent of face value)

The bonds are fully redeemable at a 5 per cent premium of the face value under both schemes. The redemption schedule is as follows:

<i>Redemption</i>	<i>% of face value redeemable</i>	<i>Amount to be redeemed Rs.</i>	<i>% of premium on redemption</i>	<i>Amount of premium Rs.</i>
31-12-1991	30	150	2.5	12.50
31-12-1992	35	175	2.5	12.50
31-12-1993	35	175	-	-
	100	500	5.0	25.00

The bonds are fully secured by a charge on the assets of the company. The bonds will be listed on nine stock exchanges to provide opportunities to investors for subsequent trading. Besides, the company has offered a repurchase scheme at par under which repurchase limits will increase annually and add up to a total of Rs. 750 crore.

As it is a general practice these days, the entire issue of the ITC bonds of Rs. 30 crore is underwritten by banks (about Rs. 18 crore) and individual brokers (about Rs. 12 crore). The estimated total expenses of the issue are Rs. 2 crore. These expenses include underwriting commission, brokerage, fees of managers of issue, fees of consultants to the issue, managing and principal brokers to the issue trustees for the bondholders and registrars to the issue, advertising charges, stamp duty, printing, distribution and publication expenses, registration fees, legal charges, bank charges and auditors' fees, etc. ITC management decided to issue bonds which offer the advantages of both convertible and non-convertible bonds for financing a substantial part of its funds requirement. It will have important effects on the company's debt-equity ratio, coverage, shareholders' return and cost of capital. In view of the growing sales and profits, shareholders can hope to benefit from the increased financial leverage. On the other hand, the flexibility and enlarged borrowing base accorded by the equity financing could be valuable in future.

DISCUSSION QUESTIONS

1. Assess ITC's operating performance in light of its strategy and environmental factors.
2. Critically explain the features of ITC's proposed issue of debentures.
3. What factors have influenced ITC's debt policy? Is it consistent with its corporate strategy?

Exhibit I

ITC LIMITED Important Events

- 1910 The inception of the company to carry on mainly the business of British American Tobacco Company in India.
- 1952 R&D Centre was established at Rajahmundry, Andhra Pradesh for tobacco development.
- 1953 Company acquired the manufacturing business of Tobacco Manufacturers (India) Ltd., and the lithographic printing business of Printers (India) Ltd.
- 1964 Company started exporting cigarettes to countries other than Pakistan and Nepal.
- 1966 Company started a modernization programme of its production plants to increase their productivity and efficiency.
- 1969 Mr. A N Haksar took over as the company's first Indian Managing Director/Chairman.
- 1970 With new equity issue, the foreign shareholding was reduced from 94 per cent to 75 per cent.
- 1971 Company decided to diversify into fields like marine food processing, hotels, general exports, and paper board.
- 1973 Integrated Research Centre was established at Bangalore.
- 1974 Company adopted the multidivisional organization structure.
- 1975 Entered into Hotel business with Hotel Chola in Madras.
- 1975 Company acquired the business of Indian Leaf Tobacco Development Company (ILTD Co.), with which it was associated for the last forty years.
- 1976 Further dilution of foreign equity holding in phased manner to 40 per cent.
- 1976 Started another hotel, Hotel Moghul, Agra.
- 1977 Started the third hotel, Hotel Maurya, New Delhi.
- 1979 Company got its Bhadrachalam Paper Boards Ltd., (Andhra Pradesh) commissioned as an independent division in the core sector.

Exhibit II

ITC LIMITED

Balance Sheets as on 31st March

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
	<i>(Rupees in crore)</i>									
<i>Current Assets</i>										
Cash and bank	2.06	1.00	3.30	4.09	3.22	4.95	4.22	8.12	8.67	9.74
Marketable securities	0.06	0.17	0.18	0.24	0.22	2.96	3.85	4.22	4.47	4.69
Debtors	2.86	8.80	10.40	14.44	20.67	25.70	22.80	12.67	23.30	40.14
Inventory	38.06	44.71	49.74	60.54	63.89	57.97	61.16	70.39	77.97	93.00
Loans, advances and others	6.21	4.57	4.21	2.35	4.18	1.07	1.28	12.07	12.93	19.41
<i>Total</i>	49.25	59.25	67.83	81.66	92.18	92.65	93.31	107.47	127.34	166.98
<i>Fixed Assets (Net)</i>										
Land and Buildings	3.68	4.28	5.79	7.11	14.69	14.70	15.60	15.86	16.06	17.10
Plant and machinery	10.88	12.77	17.14	19.66	22.68	28.48	30.85	32.72	35.00	42.41
Trademarks and goodwill	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90
Other	2.62	3.81	3.19	4.65	7.44	6.35	6.35	6.40	9.72	11.50
Total fixed assets	22.08	25.76	31.02	36.32	49.71	54.43	57.70	59.88	65.68	75.91
Less: depreciation	8.59	9.57	11.13	12.93	15.21	18.03	21.24	24.85	28.39	32.70
<i>Total</i>	13.49	16.19	19.89	23.39	34.50	36.40	36.46	35.03	37.29	43.21
<i>Total assets</i>	62.74	75.44	87.72	105.05	126.68	129.05	129.77	142.50	164.63	210.19

Contd . . .

Exhibit II Contd . . .

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<i>Current Liabilities</i>										
Bank and other loans	12.62	9.53	22.67	31.27	43.61	50.36	47.60	48.17	54.60	53.06
Creditors	5.61	13.73	14.74	23.13	22.72	18.92	23.29	28.23	35.03	84.98
Provisions and other										
Current liabilities	4.92	7.06	7.12	4.05	2.95	4.02	4.22	7.04	12.80	4.79
<i>Total</i>	23.15	30.32	44.53	58.45	69.28	73.30	75.11	83.44	102.43	142.83
<i>Long-term Liabilities</i>										
Debentures	1.80	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.05
Other long-term loans	-	3.00	-	2.03	6.79	8.72	6.29	8.48	9.53	12.44
<i>Total</i>	1.80	4.60	1.60	3.63	8.39	10.32	7.89	10.08	11.13	8.59
<i>Net Worth</i>										
Share Capital	18.95	18.95	18.95	18.95	18.95	18.95	22.74	22.74	27.29	27.29
Reserves	18.86	21.46	22.65	24.05	25.17	26.48	24.04	26.24	23.80	26.66
<i>Total</i>	37.81	40.41	41.60	43.00	44.12	45.43	46.78	48.98	51.09	53.95
<i>Total liabilities</i>	62.74	75.44	87.72	105.08	126.68	129.05	129.77	142.50	164.63	210.19

Exhibit III

ITC LIMITED

Profit and Loss Account for the year ending on March 31

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Net sales	217.18	264.04	324.52	361.17	366.40	383.74	420.51	455.60	430.57	577.91
Less: Cost of goods sold:										
Materials consumed	70.58	71.41	100.31	113.11	97.80	98.68	90.17	74.13	69.16	102.17
Wages and Salaries	11.74	12.37	13.85	22.44	19.33	20.86	29.70	23.92	24.60	29.05
Direct Mfg. Expenses	121.75	162.37	193.31	208.80	227.12	240.64	277.78	326.97	306.02	413.35
<i>Total</i>	204.07	246.15	307.47	344.35	344.25	360.18	397.65	425.02	399.78	544.57
Gross Profit	13.11	17.89	17.05	16.82	22.15	23.56	22.86	30.58	30.79	33.34
Less: Operating expenses:										
Admn. and General	5.52	6.20	5.34	6.48	7.89	7.91	8.74	9.93	11.58	15.05
Interest	1.42	1.38	2.91	3.84	4.28	6.02	6.36	7.01	7.86	8.40
Depreciation	1.09	1.22	1.71	2.12	2.57	3.51	3.66	3.83	3.80	4.55
<i>Total</i>	8.03	8.80	9.96	12.44	14.74	17.44	18.76	20.77	23.24	28.00
Operating profit	5.07	9.09	7.09	4.37	7.40	6.00	10.09	9.81	7.95	5.34
Non-operating surplus	0.18	0.25	0.71	5.06	1.34	2.45	2.36	3.80	5.81	11.55
Profit before tax	5.25	9.34	7.80	9.43	8.74	8.45	12.45	13.61	13.76	16.89
Less: Provision for taxes	2.92	5.43	3.77	5.62	4.79	4.32	7.84	8.01	7.34	9.12
Net Profit	2.33	3.91	4.03	3.81	3.95	4.13	4.61	5.60	6.42	7.77
Profit distributed	2.75	1.33	2.84	2.84	2.84	2.84	3.30	3.41	4.37	4.91
Profit retained	-0.42	2.58	1.19	0.97	1.11	1.29	1.31	2.19	2.05	2.86

(Rupees in crore)

Exhibit IV

ITC LIMITED

Financial Highlights 1961-1972

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Profit before tax	3.59	3.23	4.46	2.89	4.32	4.87	4.09	5.93	7.07	7.83	7.42	7.59
Taxation	1.71	1.77	2.66	1.90	2.70	2.81	2.03	3.27	3.48	4.60	3.84	3.56
Profit after tax	1.88	1.46	1.80	0.99	1.62	2.06	2.06	2.66	3.59	3.23	3.58	4.03
Dividends	1.36	1.36	1.21	0.98	1.37	1.51	1.51	1.67	1.97	2.31	2.65	2.75
Retained profit	0.52	0.10	0.59	0.01	0.25	0.55	0.55	0.99	1.62	0.92	0.93	1.28
Working capital	15.56	16.38	17.53	17.86	17.88	18.27	21.22	25.19	29.86	33.49	34.34	34.71
Net assets employed	25.18	25.28	26.65	26.51	26.68	27.27	30.56	34.82	40.00	44.64	46.94	47.75
Equity capital	25.18	25.28	25.87	26.51	26.68	27.23	27.78	28.77	30.40	36.02	36.94	38.23
Loan capital								1.85	2.00	2.00	5.00	5.00
Bank and other loans			0.78				2.78	4.20	7.60	6.62	5.00	4.32

Exhibit V

ITC LIMITED

Earning, Dividend and Data

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Net sales per share (Rs.)	114.61	139.34	171.25	190.59	193.35	202.50	186.93	200.67	157.80	211.68
Earning to equity (%)	6.16	9.70	9.70	8.87	8.94	9.07	9.89	11.43	12.57	14.40
Dividend to equity (%)	7.27	3.28	6.83	6.61	6.44	6.26	7.04	6.96	8.55	9.10
Earning per share (Rs.)	1.23	2.07	2.13	2.01	2.08	2.17	2.03	2.44	2.35	2.85
Earning-price ratio (%)	6.99	9.45	17.08	16.72	16.08	12.47	9.14	9.89	12.13	12.39
Earning distributed (%)	118.00	33.84	70.45	74.53	72.06	68.98	71.23	60.94	68.01	63.19
Dividends per share (Rs.)	1.45	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.60	1.80
Dividend (%)	14.50	7.00	15.00	15.00	15.00	15.00	15.00	15.00	16.00	18.00
Dividend yield	8.24	3.20	12.03	12.48	11.60	8.62	6.76	6.03	8.26	7.83
Book-value per share (Rs.)	17.36	18.73	19.36	20.10	20.69	21.38	18.41	19.36	16.92	19.76
Market price										
High (Rs.)	18.12	22.81	24.75	14.12	14.00	19.15	24.10	26.75	26.25	24.75
Low (Rs.)	15.87	16.62	11.81	9.69	10.87	13.00	17.10	21.00	17.50	19.50
Average (Rs.)	17.00	19.72	18.28	12.50	12.44	16.08	20.60	23.88	21.88	22.12

Exhibit VI**ITC LIMITED****Extent of Bonds Offer to Various Categories of Investors***(Rupees in crore)*

	<i>Number</i>	<i>Per cent</i>	<i>Rs.</i>
A. Offered on preferential basis		50.5	
To resident Indian shareholders	2,60,000	43	13.00
To resident Indian 11 % debenture holders	25,000	4	1.25
To resident Indian 13.5% non-convertible debenture holders	21,000	3.5	1.05
B. To employees, directors and business associates	30,000	5	1.50
C. Offered on preferential basis with repatriation rights	21.5		
Overseas corporate shareholders	65,280	1.1	3.26
To non-resident individual shareholders	360	1	0.18
To non-resident Indians and persons of Indian origin resident abroad	63,360	1.1	3.17
D. Resident Indian Public	1,35,000	22.5	6.75
<i>Total</i>			<u>30.16</u>

Exhibit VII**ITC LIMITED****Market Price Data (Monthly High and Low)**

	<i>1980</i>		<i>1981</i>		<i>1982</i>	
	<i>High</i>	<i>Low</i>	<i>High</i>	<i>Low</i>	<i>High</i>	<i>Low</i>
January	21.90	22.50	29.35	19.00	23.30	22.40
February	24.65	23.65	19.15	18.90	24.10	24.00
March	24.65	24.75	20.75	20.30	24.00	22.70
April	24.75	24.75	20.90	20.30	25.15	23.10
May	24.85	24.60	23.80	20.40	28.00	25.90
June	25.00	24.60	23.60	22.00	28.00	27.10
July	25.80	25.30	23.00	21.75	31.80	28.40
August	22.90	22.10	22.25	20.70	34.70	30.30
September	22.00	20.75	20.60	20.50	36.80	34.40
October	20.40	19.40	20.80	20.50	39.90	37.10
November	20.20	19.70	21.30	20.60	41.10	37.10
December	19.90	19.20	21.45	20.70	-	-

Source: Bombay Stock Exchange Directory.

ESSAR GUJARAT LIMITED¹

Essar Gujarat made a US \$75 million Eurodollar Convertible Bond (ECB) issue in July 1993. As part of the process of financial liberalization Indian companies could raise funds from foreign investors after obtaining government's approval. Reliance, Grasim, Essar and Hindalco were the first companies to obtain the approval in 1992. Prior to the Essar issue, Reliance and Grasim had issued Global Depositary Receipts (GDRs) in May and November 1992, respectively. The Reliance issue was for US \$ 150 million at a price of US \$ 16.3 per GDR, each representing two shares. This represented a discount of approximately 15 per cent of the market price. Grasim made a GDR issue of US \$ 90 million at a price of US \$ 12.98 per GDR representing one share. This represented a discount of approximately 14 per cent over the current price. Just a week before the Essar issue, Hindalco had completed its offering of \$72 million GDRs at \$ 16.10 per GDR. Each GDR was for one share and half a warrant to purchase one share, represented by a GDR, during the period November 3, 1993–November 2, 1995 for \$ 16.10. This represented a discount of approximately 10 per cent of the current market price. The Essar issue was the first one for Eurodollar Convertible Bonds.

COMPANY BACKGROUND

The company was incorporated in Tamil Nadu on June 1, 1976 under the name Essar Construction Limited, to primarily engage in marine construction, pipeline laying, dredging and other port-related activities. It was a wholly-owned subsidiary of Essar Investment Limited, a company controlled by Shashi Kant Ruia and his families and business associates. To capitalize on the expansion of business in western India, it moved its offices to Bombay in 1979. In 1984, it became the first private sector company to enter the field of exploration and development drilling of onshore and offshore oil and gas wells for Indian public sector exploration companies. Its name was changed to Essar Offshore and Exploration Limited in 1987 to reflect the change in operations. The present name was adopted shortly afterwards following the decision to set up India's first sponge iron plant in Hazira, near Surat in Gujarat State. In 1988, it made an initial public offering of its shares which were listed on the BSE and five other Indian stock exchanges. The current shareholding pattern is given in Exhibit I.

BUSINESS

The company's primary business is the production of sponge iron, which is a substitute for ferrous scrap metal, used in the production of steel. There has been a persistent shortage of scrap in India for several years which has encouraged secondary steel producers to use sponge iron increasingly in place of scrap. Essar Gujarat was the first to establish a gas based hot briquetted sponge iron plant in India with a view to meeting the growing shortage of scrap. It is currently the largest producer of sponge iron in India with a domestic market share of approximately 58 per cent in the year ended March 31, 1993 based on volume sold. An expansion project is currently being implemented that involves forward integration through the construction of a plant to manufacture steel in the form of hot rolled products. This projects involves an associated increase in sponge iron capacity from 0.88 million tonnes to the current level of approximately 1.76 million tonnes, which was completed in June 1993, making the plant the largest of its kind in the world. The steel plant will utilize approximately 565,000 tonnes of the sponge iron output annually.

Until recently, the company had three other areas of operations, which it carried on through its Energy, Offshore and Construction Divisions. As part of its business strategy of focussing on steel operations, the business and assets of the Offshore and Energy Divisions were transferred to Essar Oil Limited ('Essar Oil'), a wholly-owned subsidiary, with effect from May 30, 1992, and the business and assets of the Construction Division were transferred to another subsidiary, Essar Project Limited ('Essar Projects'), with effect from March 31, 1993.

RAW MATERIALS

The company's primary raw material is iron oxide in the form of iron ore and iron ore pellets. These are obtained from domestic sources through long-term contracts with the National Mineral Development Corporation (NMDC) and other private mine-owners. Nearly all of its iron ore pellets are obtained from Mandovi Pellets Limited in Goa. The company has contracts for supply of natural gas with the Oil and Natural Gas Commission (ONGC) and the Gas Authority of India Ltd. (GAIL).

DOMESTIC MARKET

Before mid-1992 sponge iron was marketed only domestically. The domestic customer base covers over 250 steel producers, representing over 76 per cent of the secondary steel producers in India. The ten largest customers accounted for 47.8 per cent of the total sales of sponge iron during the ten months period ended March 31, 1993. The bulk of the sales are against letters of credit opened by customers with a typical usance period of 90 days. There are no long-term contracts with customers due to the fluctuating price of scrap.

The domestic pricing policy has been aimed at encouraging customers to use sponge iron rather than scrap. In February 1992 an excise duty of Rs. 460 per tonne was imposed on

sponge iron which was subsequently raised to Rs. 500 per tonne in the February 1993 Budget. However, Indian steel producers who purchase sponge iron are able to set off this duty against excise duty payable on the finished product supplied by them.

The principal domestic competition comes from imported shredded scrap. This competition has increased since early 1992 when import of shredded scrap was permitted without a licence and the rate of import duty on scrap was reduced from 35 per cent to a rate which is currently 12.5 per cent. Such import duty cannot be offset by importers of scrap against excise duty payable on sales of their finished product.

For the year ended March 31, 1993, the Company had a 58 per cent market share of the Indian sponge iron market based on volume sold. No other Indian producer had more than a 10 per cent market share during the same period. Based on public information, there is likely to be a significant increase in the availability of sponge iron in India over the next few years. The main competition is expected from the gas-based units of companies which are part of other large business groups, including Grasim Industries Limited and Nippon Denro Ispat Limited.

INTERNATIONAL MARKET

Exports of sponge iron are made through Essar World Trade Ltd. ('EWTL'), an Essar Group company. EWTL is actively involved in exporting various other commodities, such as textiles, soybeans and granite, and therefore has the necessary infrastructure, both in India and abroad, to market the sponge iron.

Exports have been mainly to Italy, Indonesia, Japan, South Korea, China, Bangladesh and Taiwan. Such exports constituted 26.75 per cent of the total sponge iron sales made during the 10 month period ended March 31, 1993.

At present, apart from Essar Gujarat, there are four other manufacturers worldwide of hot briquetted sponge iron ('HBI') (excluding Vikram Ispat in India which has very recently commissioned its HBI plant). Three HBI plants are in Latin America and the fourth is Sabah Gas Industries in Malaysia ('SGI') (capacity 6,50,000 tonne per annum). In addition, there are a large number of manufacturers of direct reduction sponge iron (i.e., sponge iron which is not moulded into briquettes—'DRI').

FINANCIAL PERFORMANCE

The financial statements of the company for the last five years are shown in Exhibits II to Exhibits IV, Exhibit V describes the Capital History of the company.

CAPITAL EXPENDITURE

The following table sets out the capital expenditure for the five financial periods ended March 31, 1993.

<i>Financial Period Ended</i>	<i>Amount (Rupees million)</i>
1989	1,882
1990	2,254
1991	1,401
1992	5,449
1993	5,359

In the years ending March 31, 1994 and 1995, capital expenditure is expected to be approximately Rs. 18,782.9 million (US\$ 597.2 million) and Rs. 2,010.0 million (US\$ 63.9 million), respectively, for its steel project and the upgrading and maintenance of its sponge iron plant.

STEEL PLANT AND SPONGE IRON EXPANSION PROJECT

The company is currently implementing a project which involves forward inte-gration into steel production and an associated expansion of sponge iron production capacity. Sponge iron capacity has already increased to approximately 1.76 million tonne per annum. On completion of the project, the company will have established, adjacent to its sponge iron plant, a plant for the production of hot rolled steel coils and derivative products with an annual capacity of two million tonnes, which will make it the second largest private sector steel plant in India.

The project falls into three separate parts each of which has been designed to operate either independently as a viable business on its own right or together with the other parts as an integrated steel mill. The three parts are:

1. The expansion and upgrading of the existing sponge iron plant;
2. A steel melt shop, including a continuous slab caster; and
3. A hot strip mill, including related facilities. The steel melt shop and the hot strip mill together comprise the steel plant. The steel melt shop and the hot strip mill will have capacity of 1.6 and two million tonnes per annum, respectively. To ensure that the additional capacity of the hot strip mill is utilized steel slabs for processing will be purchased from outside.

Work is already well advanced on the other parts of the project. Orders for 95 per cent of the major equipment have been placed and equipment started arriving at the site in December 1992. Erection and installation are expected to be completed by March 1994 and trial production will start thereafter. Commercial production is expected to commence from June 1994.

The total cost of the project (including the sponge iron expansion, the steel plant and the investment in Essar Power) is estimated at Rs. 32.25 billion (US\$ 1.1 billion). The total estimated cost of the project and the more of financing are given in Exhibits VI and VII respectively.

EURODOLLAR CONVERTIBLE BOND OFFERING

Essar made a Eurodollar convertible offering on July 29, 1993. The proceeds of the offering will be used towards the company's expansion project.

Size of offering:	\$65 million with an over allotment option of \$10 million. Aggregate net proceeds will be \$62.8 million.
Face value:	\$5000 per bond.
Maturity:	5 years.
Coupon rate:	5.5 per cent (net of withholding tax) payable annually on August 5 each year.
Conversion price:	Rs. 62.21 (5 per cent over average price of last 5 trading days) with a fixed rate of exchange on conversion of Rs. 31.3725 = US\$ 1. The conversion price will be adjusted for stock splits and stock dividends.
Conversion option:	Convertible by bondholder at any time during the tenure of the bond.
Call option:	Redeemable by the company in part or full after two years if Indian market price of 130 per cent of conversion price in US\$ terms with a 30 days notice. Also unless the government of India gives its consent no such redemption may be made unless the closing price of the share is at least 140 per cent of the conversion price.
Put option:	Bondholder can ask company to redeem in part or full precisely at the end of three years.

1992 had been a year of extreme volatility for the stock markets and the volatility of returns on Essar shares was as high as 60 per cent. However, in the first half of 1993 the volatility was only about 45 per cent. The share price performance for the last five months are given in Exhibit VIII.

It was believed that given the low investment grade rating for India, a straight debt offering by Essar would require a coupon rate of 10 per cent. Even at this coupon rate, it might not have been possible to place straight bonds. Exhibit IX shows the movements in the US dollar interest rates over the last seven years.

The pricing of the offering had generated some discussions in the media. According to an article in an investment magazine,

"In the case of Essar, apart from the generous coupon rate of 5.5 per cent on its bonds, when the US yield on bonds is just 2 per cent and it is at the most 3.5 per cent internationally, there was a warrant to convert the bond into equity shares at a premium of just 5 per cent on the market rate, on the date preceding the Euro-launch issue... No wonder the bonds, which have been snapped up by Swiss institutional investors, are being quoted at a premium on the Luxembourg Stock Exchange."

Says a foreign investment banker: 'Essar has spoiled the market for other bond issues. Now foreign investors will expect similar generous terms from other companies, too.' But Essar's Venkatesan has a sprightly defence to put up: 'We have managed to wrangle out the best deal for the company. Merrill Lynch, our lead manager, had told us to price the bonds between 5.5 per cent and 6.5 per cent and fix the conversion premium between 0 per cent and 5 per cent. We have sold the bonds at the lowest coupon rates and the highest premium possible.' Probably, as Essar was the first company to debut with a convertible bond issue, it perforce had to make it attractive.

Essar says that as its debt-equity ratio was just 0.8 per cent it made sense for the company to come out with a debt instrument. Says Venkatesan: "Investors are asking for a discount even on a GDR offering." So whether it is a bond or an equity issue, Indian companies have to price it generously in the initial stages.

Exhibit X gives information on the pricing of other Asian Euro-convertibles during 1993.

CONDITION OF INDIAN SECURITIES MARKETS IN 1993

A series of transactions involving alleged securities fraud perpetrated during 1991 and 1992 were uncovered in mid-1992. These transactions prompted the Central Bureau of Investigation (CBI) to commence a comprehensive investigation into the activities of a number of securities market participants, including prominent stockbrokers. The Indian Parliament subsequently constituted a special Joint Parliamentary Committee (JPC) to investigate these transactions and the Reserve Bank of India (RBI) also started its own investigation. The Government also constituted a special court to adjudicate cases arising in connection with these transactions.

In the wake of these investigations, the Bombay Stock Exchange (BSE) was closed for most of the period from June 11, 1992 to July 16, 1992 and there was a significant decline in share prices. Exhibit XI shows the movements in the BSE National and Sensitive Index since 1985.

FOREIGN INVESTMENT IN INDIAN SECURITIES

Investment by non-residents and foreigners in the securities of Indian companies has been tightly controlled for many years, although recent regulations have lifted the restrictions in several significant respects. Foreign investment in Indian securities is generally regulated by the Foreign Exchange (Regulation) Act, 1973 (FERA). Under Section 29 (1) (b) of the FERA, no person resident outside India and no company that is not incorporated in India (other than a banking company) can purchase the shares of any company. Also, under Section 19 (1) (d) of the FERA, the transfer and issuance of any security of an Indian company in favour of or to a person resident outside India requires permission of the RBI. Under Section 19 (5) of the FERA, no transfer of shares in a company registered in India by a non-resident to a resident of India is valid unless the transfer is confirmed by the RBI upon application filed by the transferor or the transferee. Under guidelines issued by the RBI, the RBI will approve such transfers if it is transacted on a stock exchange through a registered stock-broker. Furthermore, the issuance

of rights and other distribution of securities to a non-resident also requires the prior consent of the RBI.

In September 1992, the Government of India issued guidelines which enable Foreign Institutional Investors (FIIs) to invest in all the securities traded on the primary and secondary markets in India. Under the guidelines, FIIs are required to obtain an initial registration from Securities and Exchange Board of India (SEBI). When it receives the initial registration, the FII also obtains general permission from the RBI to engage in transactions regulated under the FERA. The initial registration and RBI's general permission enables the registered FII to—freely buy and sell securities issued by Indian companies to realize capital gains on investments made through the initial amount invested in India, to subscribe or renounce rights offerings of shares, to appoint a domestic custodian for custody of investments held, and to repatriate the capital, capital gains, dividends, income received by way of interest, and any compensation received from sale or renunciation of rights offerings of shares.

Under the guidelines, there is no restriction on the volume of investment made in India by any FII and nor is there any lock-in period on the investments. However, the aggregate holdings of all registered FIIs cannot exceed 24 per cent of the issued share capital in any Indian company. The holding of a single FII in any Indian company is also subject to a ceiling of 5 per cent of the company's total issued capital. The maximum holding of 24 per cent for all non-resident portfolio investments made under the Indian laws governing financial collaboration (i.e., non-portfolio investments) or investments by FIIs authorized offshore funds and offshore equity issues.

FIIs investing under the new scheme are subject to a beneficial rate of tax of 20 per cent on dividend and interest income and 10 per cent on long-term (one year or more) capital gains and 30 per cent of short-term gains.

EXCHANGE RATES AND CONVERTIBILITY OF THE RUPEE

Until March 1, 1992, the official value of the Rupee was determined by the RBI in relation to a weighted basket of currencies of India's major trading partners. In the 1992 budget, a new dual exchange rate mechanism was introduced to make the Rupee partially convertible by permitting conversion of 60 per cent of the foreign exchange received on a trade or revenue account at a market determined rate and the remaining 40 per cent at the official rate. All importers were, however, required to buy foreign exchange at the market rate. The 1993 budget eliminated the system of dual exchange rates and made all receipts and outflows of foreign currency convertible at the market rate while the official rate has ceased to exist.

On an annual average basis, the Rupee has consistently declined against the dollar since 1982. The Rupee lost approximately 32 per cent of its value relative to the dollar in the two years ended March 31, 1993, including a downward adjustment by the government in early July 1991 of an aggregate of approximately 20 per cent against the dollar. This was undertaken as part of an economic package designed to overcome economic and foreign exchange problems. However, since 1993 the Rupee has been stable against the dollar at Rs. 31.37 per US dollar.

DISCUSSION QUESTIONS

1. Examine the financial implications of raising the finances through euro convertible bond.
2. What are the salient features of this bond issue? Discuss the implication of each of its features?
3. How is this issue different from raising funds from domestic markets? What is the purpose of including the convertible option? Given the volatility of the share market in India, do you think it make bond issue more attractive?
4. How does the cost of this source differ from raising funds from domestic market? What are the implications of foreign exchange risk to Essar?
5. Do you think that future of such issues would be affected by the pricing decision of this bond? What are the factors which have affected the pricing of this bond?

NOTE

1. This case is based on information obtained from the company's offer document for the Eurodollar Convertible Bonds and Annual Report information from the CIMM database.

Exhibit I

ESSAR GUJARAT LIMITED

Shareholding Pattern

The Company had just under 600,000 shareholders as at March 31, 1993 with a total of 162,896,438 shares outstanding. The following table sets forth the composition of shareholdings in the Company as shown on the Company's share register as at March, 1993:

<i>Shareholder</i>	<i>Per Cent</i>
Ruia Associate Interests:	
Essar Investments Ltd. and subsidiaries	19.5
Essar Shipping Ltd.	4.9
South India Shipping Corporation Ltd.	1.0
Others	1.6
	<u>27.0</u>
Unit Trust of India	6.9
Canbank Mutual Fund	2.0
Other financial institutions & mutual funds	4.1
Public including non-resident Indians	60.0
<i>Total</i>	<u>100.0</u>

The shareholders which own 27 per cent of the shares have entered into a shareholder's Undertaking in favour of Merrill Lynch International Limited and the other Managers in which they have undertaken that they will not, inter alia, (except with the prior written approval of Merrill Lynch International Limited) offer, sell, contract to sell or otherwise dispose of any of the shares of the Company held by each of them at the date of the Undertaking for a period of 6 months after the Closing Date.

Exhibit II

ESSAR GUJARAT LIMITED

Financial Summary

(Rupees in crore)

	<i>May 89</i> <i>12 mths</i>	<i>May 90</i> <i>12 mths</i>	<i>May 91</i> <i>12 mths</i>	<i>May 92</i> <i>12 mths</i>	<i>Mar 93</i> <i>10 mths</i>
Sales	85.87	66.72	280.37	571.56	408.80
Other Income	2.62	4.29	8.24	3.63	13.46
Total Expenses	25.21	45.25	192.84	402.36	295.59
Interest	5.81	6.59	40.61	63.61	44.56
Depreciation	8.68	8.89	37.56	49.87	40.85
Tax	0.95	1.50	0	0	0
Net Profit	10.27	12.51	30.66	71.27	102.75
Equity Dividends	5.41	7.61	18.05	19.86	34.53
Net Worth	89.78	98.83	304.08	357.17	843.33
Equity Capital	20.95	22.00	70.16	70.58	161.01
Reserves	68.83	76.83	233.92	286.59	682.32
Borrowings	242.85	539.65	463.59	754.99	1114.80
Gross Fixed Assets	301.41	527.18	660.82	1070.58	1484.50
Net Fixed Assets	272.95	488.37	583.01	990.91	1472.82
Total Assets	362.72	790.32	947.11	1394.05	2134.49
Exports				18.91	65.00
Imports				182.54	92.00
Key Ratios					
Profitability Ratios (per cent)					
PBIDT/Sales	29.94	44.2	38.82	32.32	46.03
PBT/Sales	13.07	21.0	10.94	12.47	25.13
NPT/Sales	11.96	18.75	10.94	12.47	25.13
Balance Sheet Ratios (per cent)					
Debt/Equity Ratio	2.7	5.46	1.52	2.11	1.32
Current Ratio	2.93	1.98	2.01	1.41	3.67
Net Worth/Total Assets	24.75	12.51	32.11	25.62	39.51
Current Assets/Total Assets	24.3	37.97	38.11	28.46	30.28
Working Capital/Total Assets	16.01	18.76	19.17	8.24	22.02
Total Borrowings/ Total Assets	66.95	68.28	48.95	54.16	52.23

Contd . . .

Exhibit II Contd . . .

	<i>May 89</i> <i>12 mths</i>	<i>May 90</i> <i>12 mths</i>	<i>May 91</i> <i>12 mths</i>	<i>May 92</i> <i>12 mths</i>	<i>Mar 93</i> <i>10 mths</i>
Stock Prices Indicators:					
EPS (Rs.)	4.83	5.68	4.25	9.87	6.31
Price/Earning Ratio	0	9.46	14.37	21.28	10.70
Dividend per share (Rs.)	3.50	3.50	2.50	2.75	3.00
Book Value per share (Rs.)	42.23	44.87	42.11	49.46	51.77
Share Price (Rs.)					
High	0	63.75	82.5	260.00	210.00
Low	0	40.00	43.75	60.00	63.75
Closing	0	53.75	61.00	210.00	67.50

Exhibit III

ESSAR GUJARAT LIMITED

Balance Sheet

(Rupees in crore)

	<i>May 89</i> <i>12 mths</i>	<i>May 90</i> <i>12 mths</i>	<i>May 91</i> <i>12 mths</i>	<i>May 92</i> <i>12 mths</i>	<i>Mar 93</i> <i>10 mths</i>
Liabilities:					
Net Worth	93.01	101.50	306.35	358.93	844.31
Equity Capital	20.95	22.00	70.16	70.58	161.01
Reserves & Surplus	72.06	79.50	236.19	288.35	683.30
Total Borrowings	242.85	539.65	463.59	754.99	1114.80
Bank Borrowings	35.73	59.43	94.03	81.14	149.10
Short-Term Bank Borrowings	11.59	17.74	80.36	81.14	133.38
Institutional Borrowings	187.23	231.13	259.97	300.05	660.77
Debentures	19.89	244.22	97.61	371.73	263.55
Secured Loans	0	0	0	764.74	1063.47
Current Liabilities and Provisions	30.09	151.84	179.44	281.89	176.36
Current Liabilities	24.62	143.94	162.33	264.16	144.25
Sundry Creditors	18.45	41.57	57.04	91.56	96.40
Provisions	5.47	7.90	17.11	17.73	32.11

Contd . . .

Exhibit II Contd . . .

	<i>May 89</i> <i>12 mths</i>	<i>May 90</i> <i>12 mths</i>	<i>May 91</i> <i>12 mths</i>	<i>May 92</i> <i>12 mths</i>	<i>Mar 93</i> <i>10 mths</i>
Assets:					
Fixed Assets					
Gross Fixed Assets	304.64	529.85	663.09	1072.34	1485.48
Land & Building	3.58	22.88	37.00	38.15	34.59
Plant & Machinery	97.43	428.87	482.46	391.49	545.14
Capital Work-in-Progress	201.99	74.14	137.45	635.15	893.13
Net Fixed Assets	276.18	491.04	585.28	992.67	1473.80
Current Assets					
Inventory	10.30	66.87	69.28	131.10	145.50
Raw Materials	5.00	48.27	38.19	115.16	131.10
Finished Goods	5.30	18.60	31.09	15.94	14.40
Receivables	73.34	134.24	211.26	237.05	317.72
Sundry Debtors	24.10	32.90	79.24	122.22	100.27
Other Receivables	49.24	101.34	132.02	114.83	217.45
Investments	0	20.20	28.43	11.92	84.74
Investments in Group Cos.	0	0	0	0.31	70.02
Cash and Bank Balances	4.51	78.81	51.99	16.68	98.45
Intangible Assets	1.62	1.83	3.14	6.39	15.26
Total Assets/Liabilities	365.95	792.99	949.38	1395.81	2135.47

Exhibit IV

ESSAR GUJARAT LIMITED

Profit and Loss Account

(Rupees in crore)

	<i>May 89</i> <i>12 mths</i>	<i>May 90</i> <i>12 mths</i>	<i>May 91</i> <i>12 mths</i>	<i>May 92</i> <i>12 mths</i>	<i>Mar 93</i> <i>10 mths</i>
Income:					
Sales	85.87	66.72	280.37	571.56	408.80
Other Income	2.62	4.29	8.24	3.63	13.46
Non-recurring Income	0.98	0.87	1.69	28.13	62.80
Change in Stocks	-38.55	2.86	12.49	-14.10	-1.26
Expenditure:					
Raw Materials and Stores	3.30	8.58	100.14	198.59	166.66
Energy	1.17	1.49	34.14	53.92	47.63
Other Manufacturing Expenses	11.65	19.74	13.65	77.85	12.36
Indirect Taxes	0.01	0.20	0.05	10.30	27.38
Wages & Salaries	3.27	3.93	5.02	11.48	3.58
Advertising	0.04	0.06	0	0	9.84
Marketing	0	0	1.98	3.41	5.68
Distribution	0.77	0	12.85	4.43	3.45
Repairs & Maintenance	0.65	1.46	4.87	5.48	2.80
Other Expenses	4.35	9.79	20.14	36.90	16.21
Non-recurring Expenses	0	0	1.12	2.11	0.05
Less: Expenses Capitalized	0	0	0	0	0
PBIDT	25.71	29.49	108.83	184.75	188.16
Interest	5.81	6.59	40.61	63.61	44.56
PBDT	19.90	22.90	68.22	121.14	143.60
Depreciation	8.68	8.89	37.56	49.87	40.85
Profit before Tax	11.22	14.01	30.66	71.27	102.75
Tax	0.95	1.50	0	0	0
Profit after Tax	10.27	12.51	30.66	71.27	102.75
Dividend	5.41	7.67	18.05	19.86	34.53

Exhibit V**ESSAR GUJARAT LIMITED**
Capital History

<i>Issue Date</i>	<i>Issue Type</i>	<i>Security Type</i>	<i>Face Value (Rs.)</i>	<i>Premium (Rs.)</i>	<i>Increased PUC (Rs. crore)</i>
Oct 76	Public	Equity	10.00	0.00	0.15
Sep 81	Rights	Equity	10.00	0.00	0.53
Aug 85	Rights	Equity	10.00	0.00	1.00
Dec 87	Rights	Equity	10.00	0.00	1.99
Dec 87	Bonus	Equity	10.00	0.00	5.98
Feb 88	Public	Equity	10.00	0.00	14.83
Feb 88	Public	Equity	10.00	0.00	16.16
Mar 89	Deb. Conv.	Equity	10.00	0.00	21.77
Sep 89	Public	FCD	180.00	0.00	21.77
Sep 89	Rights	FCD	200.00	0.00	21.77
Jun 90	Deb. Conv.	Equity	10.00	30.00	72.22
Jun 91	Loan Conv.	Equity	10.00	30.00	106.64
Jun 92	Deb. Conv.	Equity	10.00	30.00	130.29
Oct 92	Rights	FCD	300.00	0.00	130.29
Feb 93	Deb. Conv.	Equity	10.00	40.00	162.90

Exhibit VI**ESSAR GUJARAT LIMITED**
Cost of Expansion and Steel Project*(Rs. in million)*

Land, site formation and infrastructure	567
Buildings	3,696
Plant and machinery	19,411
Other fixed assets	833
Technical knowhow, engineering fees training and similar costs	2,433
Preliminary, pre-operating and capitalized financing costs	6,124
Provision for contingencies and escalation	567
Working capital	619
Investment in Essar Power	1,000
<i>Total</i>	<u>35,250</u>

Exhibit VII

ESSAR GUJARAT LIMITED Financing of Expansion and Steel Project

The following table gives a breakdown of the proposed funding.

(Rs. in million)

Equity	
Equity shares (1)	3,910
Convertible rupee debentures (2)	9,780
Convertible rupee debentures (3)	1,000
Equity warrants (4)	1,200
Equity warrants (5)	980
<i>Total equity</i>	16,870
Debt	
Non-convertible rupee debentures (6)	1,000
Non-convertible rupee debentures (7)	3,420
Non-convertible rupee debentures (8)	3,000
Foreign currency loans and export credits (9)	4,442
Total debt	11,862
Bonds now being issued (10)	1,975
Balance outstanding (11)	4,543
<i>Total</i>	35,250

Of the total project cost of Rs. 35,250 million (US\$ 1,120.8 million), the Company has raised, or has legally binding commitments in respect of Rs. 21,644 million (US\$ 688.2 million). The Company requires the consent of the lead lending institution under various loan agreements for any issue of debentures or equity capital or any raising of loans, except the raising of loans from banks in the ordinary course of business.

Notes:

1. Originally issued by way of rights in 1989 as convertible debentures. Now fully converted.
2. Mandatorily convertible debentures issued January 1993. The debentures will be paid up in instalments.
3. Mandatorily convertible debentures expected to be issued by way of private placement to non-resident Indians in the last quarter of 1993.
4. 25,096,580 warrants were issued in 1989. It is assumed they will be exercised.
5. Warrants proposed to be issued with the debentures described in Note 8 below. It is assumed they will be issued and exercised. If warrants are not issued and/or exercised, equivalent amounts will be provided from reserves.

Contd . . .

6. Issued by way of a public offer in 1989.
7. Issued to Indian financial institutions in April 1993.
8. Proposed issue of debentures presently being discussed with Unit Trust of India.
9. Firm commitments have been received for Rs. 3,445 million. A preliminary non-binding commitment from the Export-Import Bank of the United States in respect of the balance of Rs. 997 million has been received.
10. Assumes no issue of additional Bonds pursuant to the Managers' option.
11. The Company proposes to raise this sum by way of debt or equity issues in the domestic or international market, depending on market conditions. Pending raising this amount, the Company is negotiating bridge financing with Indian financial institutions.

Of the total project cost of Rs. 35,250 million (US \$1,120.8 million), the company has raised, or has legally binding commitments in respect of Rs. 21,644 million (US \$ 688.2 million). The company requires the consent of the lead lending institution under various loan agreements for any issue of debentures or equity capital or any raising of loans, except the raising of loans from banks in the ordinary course of business.

Exhibit VIII

ESSAR GUJARAT LIMITED

Daily Closing Prices

(Rupees in crore)

<i>Date</i>	<i>Closing Price</i>	<i>Date</i>	<i>Closing Price</i>	<i>Date</i>	<i>Closing Price</i>
04/01/93	80.00	24/02/93	72.50	21/04/93	50.00
05/01/93	80.00	25/02/93	73.75	22/04/93	47.50
06/01/93	75.00	26/02/93	76.25	23/04/93	46.00
07/01/93	72.50	27/02/93	70.00	26/04/93	46.25
08/01/93	72.50	01/03/93	67.50	27/04/93	45.00
14/01/93	71.25	02/03/93	67.50	28/04/93	48.75
15/01/93	73.75	03/03/93	68.75	29/04/93	50.00
18/01/93	76.25	04/03/93	67.50	30/04/93	50.00
19/01/93	76.25	05/03/93	66.25	03/05/93	50.00
20/01/93	75.00	09/03/93	60.00	04/05/93	50.00
21/01/93	75.00	10/03/93	57.50	05/05/93	50.00
22/01/93	75.00	11/03/93	56.25	07/05/93	51.25
25/01/93	75.00	12/03/93	57.50	10/05/93	52.50
27/01/93	75.00	15/03/93	58.75	11/05/93	53.75
28/01/93	73.75	16/03/93	60.00	12/05/93	55.00
29/01/93	75.00	17/03/93	60.00	13/05/93	53.75
01/02/93	73.75	18/03/93	60.00	14/05/93	56.25
02/02/93	73.75	19/03/93	60.00	17/05/93	56.25
03/02/93	73.75	22/03/93	60.00	18/05/93	55.00
04/02/93	70.00	23/03/93	60.00	21/05/93	56.25
05/02/93	68.75	26/03/93	58.75	24/05/93	57.50
08/02/93	68.75	30/03/93	57.50	25/05/93	56.25
09/02/93	68.75	31/03/93	57.50	26/05/93	56.25
10/02/93	72.50	02/04/93	57.50	27/05/93	53.75
11/02/93	73.75	07/04/93	57.50	28/05/93	52.50
12/02/93	72.50	08/04/93	57.50	31/05/93	52.50
15/02/93	70.00	12/04/93	56.25	02/06/93	55.00
16/02/93	67.50	13/04/93	56.25	03/06/93	56.25
17/02/93	67.50	15/04/93	55.00	04/06/93	57.50
18/02/93	66.25	16/04/93	55.00	07/06/93	56.25
22/02/93	68.75	19/04/93	55.00	08/06/93	57.50
23/02/93	70.00	20/04/93	52.50	09/06/93	57.50

Contd . . .

Exhibit VIII Contd . . .

<i>Date</i>	<i>Closing Price</i>	<i>Date</i>	<i>Closing Price</i>	<i>Date</i>	<i>Closing Price</i>
10/06/93	57.50	28/06/93	50.00	15/07/93	55.00
11/06/93	57.50	29/06/93	50.00	16/07/93	55.00
14/06/93	55.00	30/06/93	52.50	19/07/93	55.00
15/06/93	53.75	02/07/93	60.00	20/07/93	56.25
16/06/93	53.75	05/07/93	61.25	21/07/93	56.25
17/06/93	52.50	06/07/93	60.00	22/07/93	57.50
18/06/93	52.50	07/07/93	60.00	26/07/93	58.75
21/06/93	51.25	08/07/93	55.00	27/07/93	60.00
22/06/93	52.50	09/07/93	58.75	28/07/93	58.75
23/06/93	52.50	12/07/93	57.50	29/07/93	61.25
24/06/93	52.50	13/07/93	56.25	30/07/93	66.25
25/06/93	52.50	14/07/93	56.25		

Exhibit IX

ESSAR GUJARAT LIMITED

US Dollar Interest Rates

	<i>LIBOR (6 months)</i>	<i>3 Year Govt. Bonds</i>	<i>10 Year Govt. Bonds</i>
1987	7.30%	7.67%	8.38%
1988	8.13%	8.24%	8.85%
1989	9.27%	8.56%	8.50%
1990	8.35%	8.25%	8.55%
1991	6.08%	6.81%	7.86%
1992	3.90%	5.31%	7.01%
1993		5.31–8.56%	7.01–8.85%
Qtr.I	3.38%	Max 4.64%	Max 6.08%
Qtr.II	3.34%	4.41%	5.99%
April	3.19%	Min 4.30%	5.97%
May	3.34%	4.40%	6.04%
June	3.50%	4.53%	5.96%
July	3.50%	4.43%	Max 5.81%
		4.30–4.64%	5.81–6.08%

Exhibit X

ESSAR GUJARAT LIMITED Asian Euroconvertibles 1993

<i>Issuer</i>	<i>Launch Date</i>	<i>Conv. premium at issue (%)</i>	<i>Amount (million)</i>	<i>Arranger</i>	<i>Coupon Maturity (%)</i>	<i>Yield to put maturity (%)</i>	<i>Yield to Issue price (%)</i>	<i>Currency</i>	<i>Initial conversion price</i>
CHINA									
China Textiles									
HONG KONG									
Dairy Farm International Holdings	3.23	12.9	208.96	Jardine Fleming	6.5 Perpetual		100	US\$	11.4 (HK\$)
Jardine Strategic Holdings	3.23	22	360	Jardine Fleming	7.5 Perpetual			US\$	24.00
Wharf Holdings	6.23	22	402.5	Morgan Stanley Int	5 7.15.00	4.94	100	US\$	24.89
Dao Heng	7.28	36	36	Morgan Grenfell	5 Perpetual			US\$	10% disc to IPO
Guangdong Investment	9.23	23	102	CS First Boston	4.5 10.07.98	4.5		US\$	3.84
Amoy Properties	9.29	20	300	Robert Fleming	5.5 Perpetual			US\$	10.1
Guangzhou Investment	10.01	24.6	90	Morgan Stanley Int	4.5 10.08.98	4.5		US\$	2.48
Sino Land	10.05	16	200	Robert Fleming	5 10.21.00	5		US\$	6.86
Johnson Electric	10.18	20	150	Morgan Stanley Int	4.5 11.05.00	4.5		US\$	22.92
Henderson Land/China	10.20		460	Morgan Stanley Int	4.5 10.27.96			US\$	
HKR International	10.20	21.5	100	Morgan Stanley Int	4.75 10.25.00	4.75		US\$	6.5
Regal Hotels	10.29	17.5	125	Jardine Fleming	5.25 12.13.08	5.25		US\$	2.04
Stelux Holdings	11.03	5	125	Nomura	1.75 3.31.01	1.75		SFR	4.78
Applied International	11.05	18	75	Jardine Fleming	5.25 11.30.00	5.25		US\$	5.546
China International Travel	11.08	22	131	Merrill Lynch	4.25 11.18.98	4.25		US\$	3.66
New World Development	11.15	22.05	300	Morgan Stanley Int	4.375 12.11.00	4.375		US\$	33.15
Shougang Concord	11.16	29	183	CEF	4.5 12.15.98	4.5		US\$	5.7
INDIA	*	*	*	*	*	*			
Essar									

Contd . . .

<i>Issuer</i>	<i>Launch Date</i>	<i>Conv. premium at issue (%)</i>	<i>Amount (million)</i>	<i>Arranger</i>	<i>Coupon (%)</i>	<i>Maturity</i>	<i>Yield to put maturity (%)</i>	<i>Yield to maturity (%)</i>	<i>Issue price</i>	<i>Currency</i>	<i>Initial conversion price</i>
KOREA											
Daewoo Corp	2.12	5	75	SBC	3.25	12.31.97	6.23	3.25	SFR		11,781 (Won)
Dong Ah Construction Industrial Co	2.26	5	75	SBC	3.25	12.31.97	6.12	3.25	SFR		19,635
Daewoo Electronic Co	5.06	8	70	Baring	2.25	12.31.08	6.13	2.25	US\$		14,329
Ssangyong Oil Refining Co	7.08	10	150	PCM	3.75	12.31.08	6.38	3.75	US\$		19,100
Yukong	9.14	5	70	SBC	1	12.31.98		1	SFR		25,038
Kolon International	10.19	7	20	Dong Suh	1	12.31.08	4.58	1	US\$		16,050
Daewoo Corp	10.26	14.81	50	BZW	0.25	12.31.08	4.59	0.25	US\$		15,500
TAIWAN											
Sincere Navigation Corp	*	*	*	*	*	*	*	*			
Pacific Construction	9.07	10	60	SBC	*	*	*	*			
THAILAND											
The Petrochemical Ind (Cayman is)	4.02	7	70	CS First Boston	3.5	4.16.98	6.20	3.5	SFR		88 (Bt)
Land and Houses Public Co	4.22	14.7	60	Jardine Fleming	5	4.29.03		4.93	100 US\$		307.31
Finance One Public Co	6.04	12	75	Salomon Brothers	5.75	6.17.03		5.67	100 US\$		156.8
The Petrochemical Ind (Cayman is)	7.16	12	48	Jardine Fleming	3.5	8.05.03	6.75	3.5	US\$		103.81
Hemeraj Land	9.01	9	60	Robert Fleming	3.5	9.09.03	3.5	3.5	100 US\$		186
MDX Public	9.03	13	80	Nomura	4.75	9.17.03		4.7	US\$		155
Dhana Siam	9.08	7.6	45	CS First Boston	4	10.06.03		4	US\$		290.98
Bangkok Land (Cayman is)	9.30	10.48	130	Daiwa	4.5	10.13.03	6.39	4.5	US\$		118
The Central Chemical	10.06	10.9	60	Jardine Fleming	3.75	10.25.03	6.47	3.75	US\$		61.65
CMIC Finance	10.20	12	50	Nomura	3.5	11.08.03	5.97	3.5	US\$		214
Asia Credit	11.02	12	100	Salomon Brothers	3.75	11.17.03		3.75	US\$		216
Kiatnakin Finance	11.11	11.24	60	BZW	4	11.30.03		4	US\$		485

Source: Jefferies Pacific.

Exhibit XI

ESSAR GUJARAT LIMITED

Closing Levels of BSE Indices

	<i>BSE Sensitive Index Closing level</i>	<i>BSE National Index Closing level</i>
1985	527.36	236.19
1986	524.45	249.25
1987	442.17	227.81
1988	666.26	340.49
1989	778.64	419.13
1990	1,048.29	528.57
1991	1,908.85	893.27
1992 (1st Quarter)	4,285.00	1,967.71
(2nd Quarter)	3,080.54	1,336.75
(3rd Quarter)	3,294.42	1,469.18
(4th Quarter)	2,615.37	1,184.60
1993 (1st Quarter)	2,280.52	1,021.4
(2nd Quarter)	2,227.54	1,039.13

TATA IRON AND STEEL COMPANY (TISCO)

After earning a record net profit of Rs. 201 crore in the year 1991–92, Tata Iron and Steel Company (TISCO) experienced a decline of 41 per cent in its net profit, reporting Rs. 119 crore of net profit during the year 1992–93. Many feared that the flagship company of Tata that had prospered because of subsidies and high tariff walls had slipped into the red after government announced its new economic policy. Many speculated that the liberalization and new economic policies of the government aimed at increasing the efficiency of the domestic companies intensified the competition in India's steel industry and TISCO was unable to face the onslaught of the changed market condition. However, the performance of the company improved considerably during the last three years. The company reported a record net profit of Rs. 521 crore during the year 1996. The company also undertook a massive capital expenditure (CAPEX) programme as part of a modernization programme to update and improve their technology. The company has now completed four of the five phases of this programme. The total CAPEX budget for modernization, undertaken since 1990, was Rs. 7,407 crore. The company has tapped both the domestic and international market using several innovative instruments to raise necessary financial resources to fund their new investment projects. The company came up with a recent public issue of 'Trust Bonds' aggregating Rs. 500 crore to finance its CAPEX programme.

The company is currently facing a huge shortfall of Rs. 2,000 crore to finance the expenditure for modernization and expansion programmes during the next two years. The company also expects that after completing the expansion project, it will have 20 per cent market share in the domestic steel market. At the same time, the scenario in steel industry is showing signs of intensifying domestic and international competition.

BACKGROUND OF THE COMPANY

TISCO was set up in 1907 by the Tata Group, when India had no significant industrial base. The establishment of TISCO by Tatas gave a fillip to the modern steel industry in India. Though incorporated in the year 1907, commercial production at TISCO started only in 1911. At that point of time, the total capacity at the plant was only 125 thousand tonnes per annum. Tata Sons Limited and Ewart Investments Limited together held 8.71 per cent of total equity capital of the company at the time of incorporation. The promoter group, Tata Sons Limited

had a total investment in equity of Rs. 31.08 crore and Ewart Investments Limited an amount of Rs. 0.99 crore.

The main activity of business at TISCO is to produce finished steel which includes saleable steel. The product range at TISCO includes rails, fish-plates bars, high/heavy structurals, charge chrome, plates, galvanized billets special steels, bearings, welded/seamless tubes, etc. TISCO's plants are located at various places in the country. Its main plant is located at Jamshedpur in Bihar. The other plants are located at Adityapur and Jojobera in Bihar and Sonadih in Madhya Pradesh. The company's plant at Adityapur produces welded steel tubes, charge chrome, alloy steel ball bearings, and seamless tubes. At Jamshedpur, they produce saleable steel and at Jojobera and Raipur the products produced are ordinary portland cement and portland blast furnace slag cement. The raw material required by the company for the production of various products is sourced from mines, collieries and quarries owned by it in the states of Bihar, Orissa, Madhya Pradesh and Karnataka.

The first pig iron was produced in 1919 at Jamshedpur. The company also produced ferro manganese for the first time in India in 1915. Later a continuous castings plant was commissioned at Adityapur which enabled the company to produce billets from special steels. In 1973, the company's wholly owned subsidiary, West Bokaro was amalgamated with the company. Later on in October 1983, TISCO took over the bearings unit of Metal Box India at Kharagpur and in October 1985 it merged the Indian Tube Company with it.

TISCO accounts for roughly about 15 per cent of the total domestic steel production in the country. Apart from manufacturing steel TISCO has also entered cement production. The present turnover of each major industry segment in which the company operates is as follows:

<i>Product Segment</i>	<i>Rs. in crore</i>	<i>Percentage (%)</i>
Steel and Allied Products	5,084	86.46
Cement	253	4.30
Bearing	102	1.73
Ferro Alloys	441	7.50
<i>Total</i>	5,880	100.00

TISCO's average usage of raw material is about 7 million tonne which include iron ore, cooking coal, limestone, dolomite, magnasite, ferrochrome, refractories, etc. A total of seven collieries and 14 mines and quarries are owned by TISCO to cater to its production needs. The total power requirements is to the tune of 280 MW, out of which 160 MW is sourced through captive capacity and the balance is sourced from Bihar State Electricity Board and Damodar Valley Corporation.

COMPETITION

Immediately after the economic liberalization policies of the government, the industry attracted many new companies. One of the factors responsible for intensifying competition

was the state-of-the-art technology of these new companies. The latest technology of new entrants helped the companies to manufacture better quality products. With the withdrawal of freight equalization scheme, the location of the plant became an important strategic factor. TISCO's experience in locational disadvantage is that it is cheaper to send steel from London to Maharashtra by ship than by rail from Jamshedpur. Many of the new companies located their plants near to their market. It was around this time that the company started showing signs of weakening performance. TISCO experienced the advent of fierce competition from within and outside the country. Public sector companies like Steel Authority of India (SAIL) started consolidating its position in the market. Various other companies in the private sector such as Lloyd's Steel, Essar Gujarat, and Jinal's Ispat became fierce competitors of TISCO.

The management of TISCO started thinking of the future of the company and its dwindling profits. The profits of the first quarter of 1993–94 were put at a mere Rs. 5 crore which was a worrying thing for the company. Almost every industry analyst started thinking about the future of TISCO and its large shareholding fraternity. They had virtually written off the company as the first major casualty of the economic liberalization policies in the country. This was the time when the management at TISCO started thinking in a different perspective. There was a change in the board and J J Irani took over as the Managing Director of the company.

MODERNIZATION PROGRAMME

It was in the late eighties that JRD Tata started a modernization programme at TISCO. The broad strategy of the modernization programme was its implementation in a phased manner. The modernization programmes were intended to increase production capacity and the introduction of modern technologies to improve operating parameters and reduce energy consumption. The company adopted energy efficient continuous casting technology and increased the proportion of higher value added flat products. The company envisaged a capital expenditure programme for achieving the above modernization programme.

The amount spent by the company under the CAPEX programme during the last 5 years is as follows:

<i>Financial Year</i>	<i>Rs. in crore</i>
1991–92	1,330
1992–93	1,445
1993–94	946
1994–95	540
1995–96	519

The main objectives of the CAPEX programme have been:

1. To improve the product mix by increasing the proportion of value-added products.

2. To increase the capacity of saleable steel from 2.7 million tonnes per annum (MTPA) to 3.2.
3. To introduce facilities required for the sustenance of production, replacements, increasing efficiency, etc.

The product-mix of TISCO has been going through a rapid change over the period (Exhibit I). The company's main strategy in this area has been moving away from low margin, high volume products such as semi-finished steel to high margin, low volume products such as flat products which include sheets, coil plates, etc.

The company has been able to produce the lowest cost hot metal. The hot strip mill has been manufactured at the Growth Shop of TISCO located at Adityapur, with technological know-how and supervision from Scholemann-Siemag of Germany. The Growth Shop of TISCO was established in 1969 to cater to internal customers for their requirements of plant and equipment. The company has plans to double the capacity of the hot strip mill.

Apart from the above, in 1993 the company diversified into the manufacture of cement. The company also has the plans to set up the biggest ever steel plant in the country at Gopalpur in Orissa for which an MOU has already been signed with the Government of Orissa and this project is being taken up with the technical consultation help from Nippon Steel Corporation, Japan.

The company's expansion programme at Jamshedpur is in its IV Phase and it is being done with the collaboration of Mannesmann-Demag of Germany. This expansion plan is to increase the production capacity from 2.7 MTPA to 3.2 MTPA by the year 1999. The company has also has plans to set up a Desulphurizing compound project at Jamshedpur, with the collaboration from Skw Metal Chemic, Germany. Commercial production at this plant is supposed to have started in October 1996. All these programmes at TISCO are slated to be completed by the year 2000.

FINANCIAL RESOURCES

As on March 31, 1996, the company has subscribed capital of Rs. 367.23 crore and reserves and surplus of Rs. 3,742.14 crore. Against this, the total borrowings of the company are Rs. 3,842.14 (Exhibit II and III). The company has been increasing its capital in phased manner since 1986. Some of the instruments used by the company to raise capital from the market are described below:

SECURED PREMIUM NOTES (SPNS) WITH DETACHABLE WARRANTS

The company made a public issue of SPNs with detachable warrants to raise Rs. 346.50 crore in 1992. Each SPN was worth Rs. 300 and had a detachable warrant which entitled the holder to subscribe to one share of TISCO at Rs. 80 per share (including premium of Rs. 70 per share)

within one and one and half years from the date of allotment. The detachable warrants helped the company raise additional Rs. 92.40 crore after the stipulated period.

SPN is a type of debt instrument, without a coupon rate. The terms of repaying the principal amount was in four equal annual instalments of Rs. 75 each from 4th year to the end of 7th year together with an equivalent additional amount of Rs. 75 with each instalment, which represented the interest or premium on redemption. The SPN holder had also an option to sell back the SPN at par at the end of the third year.

EURO CONVERTIBLE BONDS

In order to meet the foreign exchange requirement of the company's modernization and expansion programme, the company raised US\$ 100 million by issuing 2.25 per cent Foreign Currency Convertible Bonds during 1993–94. The bondholders have the option of converting the bonds into global depository receipts (GDRs) representing shares at a price of Rs. 291 per GDR (one GDR representing one share of the company) during the period up to March 2, 1999.

NAKED WARRANTS

Over the period the equity stake of the Tata group in TISCO had diluted to 9 per cent. During the year 1994, the company allotted 30 million naked warrants to the Tata Companies against payment of option money of Rs. 36.30 crore. During the year 1996, the Tata Companies converted these warrants into equity shares at a price of Rs. 242 per share. This resulted in an increase of Rs. 30 crore in share capital and of Rs. 696 crore in share premium. The Tata group has intentions of increasing its stake in TISCO further. Tata group chairman, Ratan Tata said in an interview, "We would not protect our holding in TISCO by stopping an expansion of capital. I do not think we will hurt any company in that way. If we wish to increase our holding, it would be by injection of further funds into an expanded capital." (*Business India*, June 3–16, 1996)

TRUST BONDS

The public issue of secured, redeemable non-convertible bonds aggregating Rs.500 crore comprised of two parts: placement portion and public portion. Under the placement portion, the issue was offered through the syndicate by way of the 'block building process'. The public portion is an offer to the public and is governed by the allotment procedures of stock exchanges. The issue was assigned a credit rating of 'AAA' by the CRISIL. There were three different types of bonds included in the offer, that is, regular income bonds, twin benefit bonds and discount bonds. These bonds also came with the option of exercising the right to early redemption by both the company and the bondholder.

INTERNAL GENERATION OF FUNDS

Internal generation of funds in TISCO has been one important source of funds to finance its growth and capital expenditure requirements. The total funds from internal sources (measured by retained profits plus depreciation) has been more than Rs. 200 crore during each of the last five years. The internal sources contributed about Rs. 700 crore in 1996. This contribution has been possible because of improving productivity of capital employed, better profit margins, and increasing retention of profit of the company. During the last three years, the company's productivity of capital employed and profit margin have shown an increasing trend (Exhibit IV). The retention ratio of the company has also increased during the last five years. The retention of profits which was about 55 per cent in 1990, increased to about 75 per cent in 1996 (Exhibit IV). The company has been paying dividends since inception. The dividend rate of the company has increased from 30 per cent in 1989–90 to 45 per cent in 1995–96.

COMPANY'S CAPITAL STRUCTURE

The total debt capital of TISCO increased significantly during the early 1990s. The debt-equity ratio (measured by total debt to net worth) was highest, that is, 1.54 in 1993. After this period, the debt-equity ratio has shown a declining trend, and has come down to 1.05 in 1996 (Exhibit IV). The company management feels that the existing debt-equity ratio is most favourable and the company will not go for high gearing.

SHARE PRICE PERFORMANCE

The total market capitalization of TISCO stood at about Rs. 6,000 crore in November 1996, thus making it one of the ten largest companies in the country. The company's track record in share market is closely related to the Sensex movement. The monthly returns of TISCO are plotted against the Sensex monthly returns from January 1990 to November 1996 (Exhibit V).

FUTURE REQUIREMENT OF FUNDS

The company's future requirement of funds is expected to be about Rs. 2,000 crore. These funds are necessary in order to finance the expansion requirements of the company. These investments are expected to help the company increase its market share to 20 per cent in domestic steel business.

What are the options available before the company? Will the company be able to sustain the higher growth in sales? Will the company be able to raise sufficient funds at acceptable terms?

DISCUSSION QUESTIONS

1. What are the options available before the company?
2. Will the company be able to sustain the higher growth in sales?
3. Will the company be able to raise sufficient funds at acceptable terms?

NOTE

This case is based on secondary sources of information published in *Business India* (June 3–16, 1996), *Business World* (April 19–May 2, 1995), *Business Today* (July 7–21, 1994), Annual Report (1996), Trust Bond Prospectus (August 1996), Right Issue and SPN Prospects (June 1992). *Business World*, April 19–May 2, 1995.

Exhibit I

TATA IRON & STEEL COMPANY LIMITED

Trends in Sales

(Rupees in crore)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Saleable steel	1,509	1,757	1,949	2,303	2,886	3,673
Welded steel tubes					180	255
Cold rolled strips	23	24	24	25	15	11
Seamless tubes	75	80	79	63	80	94
Carbon & alloy steel bearing	3	2	3	5	3	9
Metallurgical machinery	5	8	5	1	10	45
Ammonium sulphate	2	1	2	2	3	2
Alloy steel ball bearing rings 17	27	24	27	40	48	
Bearings	33	44	50	70	76	102
Steel & scrap (semi-finished)	150	261	512	489	521	482
By products	16	15	20	19	16	22
Others	82	182	70	61	73	82
Agrico products	19	20	23	22	31	36
Ferro manganese	22	48	12	1	0	2
Charge chrome		60	120	158	173	206
Ordinary portland cement				11	39	70
Portland blast furnace slag ceme				0	48	155
Sponge iron/Hot briquetted iron				54	95	57
Sale of raw materials				128	147	274
Coffee, peper, shrimps, etc.				59	25	0
Continuous weld tubes	136	153	156	166		
Other raw materials	54		89			

Exhibit II**TATA IRON & STEEL COMPANY LIMITED****Balance Sheet***(Rupees in crore)*

	1991-92	1992-93	1993-94	1994-95	1995-96
Gross Fixed Assets	4,026	5,463	6,440	6,963	7,408
Net Fixed Assets	2,878	4,107	4,929	5,213	5,394
Investments	249	170	262	221	411
Inventory	798	973	835	865	1,077
Debtors	599	788	1,104	1,313	1,695
Cash	92	177	163	162	507
Intangible Assets	0	6	36	31	168
<i>Total assets</i>	4,616	6,222	7,324	7,806	9,251
Equity Capital	230	278	335	337	367
Reserves and Surplus	1,315	1,708	2,190	2,351	3,375
Net Worth	1,545	1,986	2,525	2,688	3,742
Bank Borrowings	464	763	500	543	950
Long-term Borrowings	989	1,369	1,492	1,425	1,386
Debentures	419	670	1,172	1,202	1,211
Fixed Deposits	63	119	111	112	103
Other Borrowings	129	144	159	300	262
Total Borrowings	2,064	3,064	3,434	3,583	3,912
Accounts Payables	774	974	1,152	1,257	1,204
Other Provisions	148	126	109	165	123
Proposed Dividends	84	72	105	114	270
<i>Total liabilities</i>	4,616	6,222	7,324	7,806	9,251

Exhibit III

TATA IRON & STEEL COMPANY LIMITED

Profit and Loss Account for the
year ending on March 31

(Rupees in crore)

	1991-92	1992-93	1993-94	1994-95	1995-96
Sales	3,036	3,637	4,038	4,915	6,256
Indirect Taxes	189	273	311	472	620
Net Sales	2,847	3,364	3,727	4,443	5,636
Other Income	151	166	117	123	169
Non-recurring Income	-8	18	18	-12	-145
<i>Total revenue</i>	2,990	3,548	3,862	4,554	5,660
Raw Material	972	1,272	1,428	1,543	1,861
Energy	149	215	275	359	422
Other Manufacturing Expenses	129	91	97	225	255
Wages and Salaries	477	552	591	676	855
Marketing and Distribution	261	306	330	445	545
Other Expenses	383	448	445	448	524
Depreciation	165	215	178	262	298
<i>Total expenses</i>	2,536	3,098	3,343	3,959	4,760
PBIT	454	450	519	595	900
Interest	189	330	338	331	379
PBT	265	120	181	264	521
Tax	64	1	0	0	1
PAT	201	119	181	264	521

Exhibit IV

TATA IRON & STEEL COMPANY LIMITED Financial Analysis

	<i>1991-92</i>	<i>1992-93</i>	<i>1993-94</i>	<i>1994-95</i>	<i>1995-96</i>
CNT/NS	60.63%	55.80%	54.30%	57.21%	59.49%
OP/CNT	18.04%	33.76%	32.31%	27.80%	27.57%
OP/NS	10.94%	18.84%	17.54%	15.90%	16.40%
PBIT/CNT	26.29%	23.96%	25.64%	23.42%	26.85%
PBIT/NS	15.94%	13.37%	13.92%	13.40%	15.97%
NS/CE	0.79	0.67	0.63	0.71	0.74
PBIT/CE	12.57%	8.91%	8.71%	9.49%	11.76%
CE/NW	2.34	2.54	2.36	2.33	2.05
PBT/PBIT	58.29%	26.70%	34.86%	44.40%	57.90%
PAT/PBT	75.81%	99.17%	100.00%	99.91%	99.90%
PAT/NW	12.98%	6.00%	7.16%	9.82%	13.91%
DIV/PAT	40.16%	54.42%	53.39%	44.78%	30.15%

NS: Net Sales;

CNT: Proxy for Contribution defined as NS - (RM + Energy);

OP: Operating Profit (PBIT + Other Income and other non-recurring income);

CE: Capital Employed defined as Net Worth + Total Borrowings;

NW: Net Worth defined as Paid-up Capital + Reserves and Surplus;

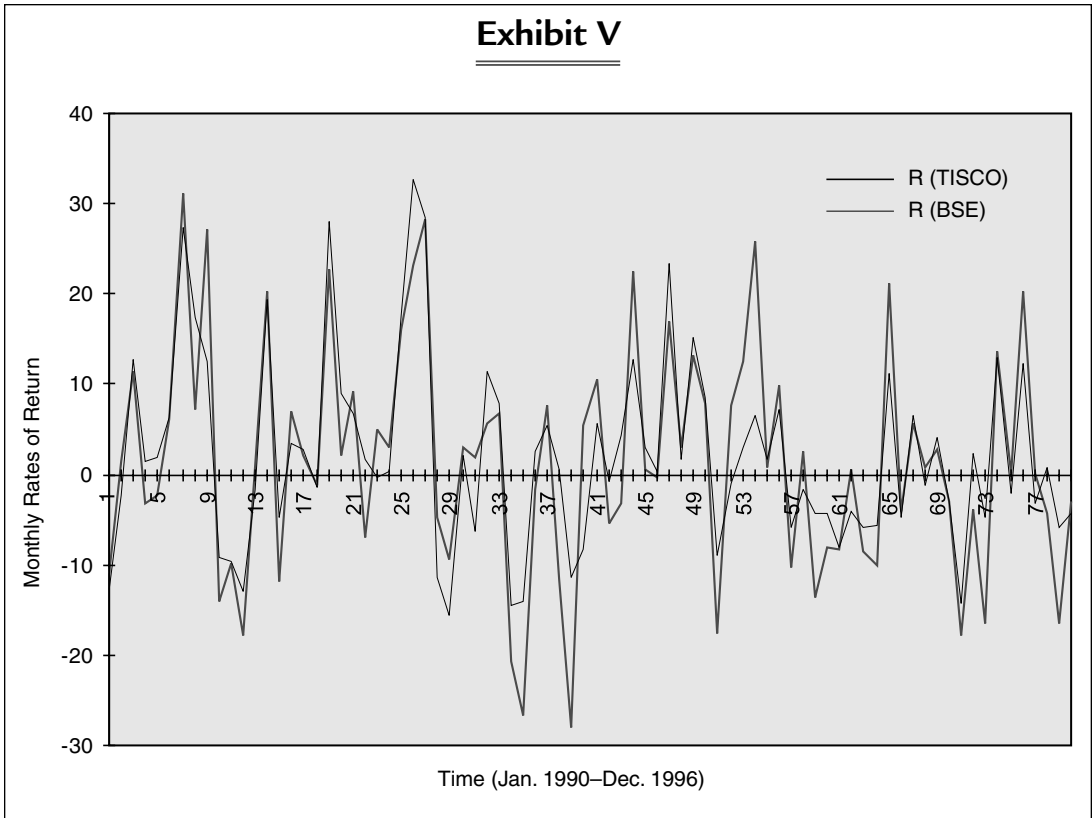
PBIT: Profit Before Interest and Tax;

PBT: Profit Before Tax;

PAT: Profit After Tax;

DIV: Total Dividends;

Exhibit V



TECHPROCESS SOLUTIONS LIMITED

“What should be our next step?” was the question bothering Bikramjit Sen, the promoter of TechProcess Solutions Limited (TPSL), a payment-processing company. It has been seven years since the inception of TechProcess. Last week, he attended the quarterly board meeting and it was suggested that TPSL should examine the future strategic directions as a number of reputed companies were keen to establish their foothold in Indian market. This may have significant implications for the competitive scenario in this business. TPSL had grown from just five locations on the inception year to 67 locations currently. Given the growth rate, the country was experiencing over last few years and its direct link to the growth of financial services, it was time to look for opportunities to strengthen the competitive position of the business. So far, growth in financial services had directly contributed to TPSL’s business volumes, the future critically depended on understanding the way these industries were likely to shape-up and arranging finances to meet the future challenge. Bikramjit also realised that Battery Ventures their private equity partner, which has provided funds would be looking for exit in next three to five years time. This would inevitably involve valuing the firm. One possible option would be an IPO for which TPSL need to attain further growth in its top-line revenues and expand its product offerings. Even before the IPO process, Bikramjit needed to develop the strategic framework and an action plan for next two to three years.

In the seven years since inception, TPSL had acquired close to 200 Blue Chip institutional clients, across industry verticals, such as banking, NBFC, asset management, insurance, telecom and utilities. A critical success factor common to all these industries is the need to process payments quickly, efficiently and painlessly. A government-sanctioned framework for processing small payments electronically had existed in the country since the mid-90s, but had not quite taken off to the extent expected, primarily due to service issues. TPSL had consciously invested in technology and geographical presence across the country; but flawless execution and consistently high service levels were also equally responsible for its success.

During the last three years, electronic transaction volumes had grown at 31 per cent per annum. The number of physical cheque transactions was still growing in absolute terms, though growth had slowed down to 6 per cent. Electronic transactions now comprise roughly one-fourth of the total transaction base (see Exhibit I). Electronic Clearance System (ECS) Debit transactions in particular had grown more than 100 per cent year-on-year in the same period. In this category of transactions, TPSL enjoyed a 70 per cent market share.

BACKGROUND

Born and brought up in Kolkata, Bikramjit had a modest beginning to his career. He graduated from REC Nagpur (now National Institute of Technology, Nagpur), one of the well-known regional engineering colleges in India. After graduation, he joined Bharat Forge, then an upcoming company in Pune. He left Bharat Forge to join ICICI's project financing department in 1993. Payment and settlement systems was an area of interest for Bikramjit even in those days and this interest became more focused when he started working on securitization of electricity receivables for a utility company. The challenges he faced in structuring an efficient and reliable collection process for a long duration collection schedule for the securitized assets accelerated his learning curve. It was here that the seeds of the future venture were sown. In 1999, ICICI was planning to set up a series of incubated initiatives under the newly formed e-commerce group and was looking for 'in-house entrepreneurs' to drive these initiatives. This was the opportunity that Bikramjit was waiting for and he gave up his flourishing career in project finance and embarked on setting up an electronic payments venture.

OPPORTUNITY

In 1999–2000, Bikramjit moved on to ICICI Ventures. His first venture here was an online bill payments portal called Billjunction (www.billjunction.com). This enabled the retail customer, through tie-ups with banks and utility companies, to pay bills online through bank debit.

Over 2–3 years, Billjunction became reasonably successful because of its strong design and unique value proposition. However, Bikramjit felt that there were natural constraints in the business model at the time, because of which this model would witness only incremental growth, as opposed to exponential growth. First and foremost, billers were for the most part monopolistic utilities, and had already sunk substantial costs in collection infrastructure. Therefore, it was difficult to show them the benefits of an outsourced collection process. At the same time, customers did not really have choice of an alternative utility provider. Hence, the billers may not have sufficient incentives to make the bill payment process convenient for the customer.

At the process level, too, there were constraints. The Billjunction model presupposed the presentation of itemized billing data on the website. The idea was that customers would verify their bill online and verify payments. However, this was not always possible because of lacunae in billing systems and/or reluctance to share data on the part of the utility companies.

Notwithstanding the above, the Billjunction initiative resulted in the development of a strong payment processing backbone. Bikramjit realized that the core strength of his company was this generic payments processing capability and that bill payment was just one application thereof. The challenge, therefore, was to find other applications with more substantial potential.

It was obvious that the financial services industry (loans, mutual funds, insurance) was amongst the heaviest users of payment infrastructure. Bikramjit also realized that as volumes grew; processing payables and receivables would be a substantial challenge for the industry. This was due to almost exclusive reliance on post dated cheques (PDCs), and the inefficiencies associated with them.

Physical transfer of cheque was the main cause behind these inefficiencies. For example, for a three-year loan 36 post dated cheques were collected by bank and processed at the rate of one cheque per month. Till then the cheques were kept in safe deposits called post dated cheque (PDC) factory. The management of PDC factory created huge overheads for the bank and keeping track of the payments and their processing was complex operations.

Bikramjit started working on potential opportunity in this field. He realized that with expected GDP growth in the economy at 8-9 per cent, loan system will grow tremendously (see Exhibit II). It was realised that the inefficient payment system, which depends on manual clearances, would become major hindrance and create unbearable load on the financial system. With current cost of Rs. 15–25 to process one PDC, the cost was going to play an important role in this segment over coming years.

He realized that there were lot of issues and challenges in this area, which if tackled will transform itself into an opportunity. He started investigating possibility of new system to replace the existing one. A separate team was formed to investigate the current system and possible avenue for improvement.

MICR: A Gift

Around the same time, the RBI had issued notification to start electronic payment system in major cities, leveraging the technology used to clear MICR cheques. Magnetic Ink Character Recognition (MICR) is a character recognition system that uses special ink and characters. When a document that contains this ink needs to be read, it passes through a machine, which magnetizes the ink and then translates the magnetic information into characters.

The information needed by clearing houses and banks is printed in a magnetic ink near the bottom of the document. After printing, the documents are then processed mechanically and electronically through a reader–sorter machine. This machine magnetically reads pertinent information about the check including the amount of the cheque, account number, institution upon which the cheque was drawn and other miscellaneous transaction codes. This information is used by the reader sorter machine enabling an electronic sort of the cheque for routing purposes (see Exhibit III for detailed information on MICR).

Electronic Clearance System was originally envisaged as a service to be operated by banks directly. However, Bikramjit realized that there was a case for a third-party service provider in this area, who would approach payments processing as a core competency, rather than just another task. Natural economies of scale prevalent in this business meant that smaller banks would not have the volumes to justify the investment in infrastructure and physical presence required. Also, as a neutral entity it was relatively easier for TPSL to aggregate the business, as compared to a bank.

Building-up Core Competency

To understand the market opportunity, Bikramjit tried to understand why this opportunity was not exploited before. He found out that most of the banks were reluctant to develop debit-side processing, as it would entail significant capital costs in what was seen as a non-core activity.

Since cheque processing involves multiple banks, Bikramjit thought that only a neutral agency would be able to remove the biases between the banks and succeed in this field. Apart from being a neutral agent, he listed down the following critical for a company to be successful in this venture:

- Good understanding of financial system
- Company should be backed by good shareholders to bring in the trust and confidence as it was going to deal with other payments
- Company should have less regulatory framework to deal with to be able to bring in efficiencies to the system
- Ability to sustain the operation over long period by creating high switching cost

Bikramjit predicted that these parameters matched up very well against current status of his company. He contemplated that to be successful he may need to add many other value-added services to create switching cost and leverage the first mover advantage. He also realized that a strong pedigree and shareholder support will allow him to overcome much of the regulatory and trust issues. For long-term sustainability, he knew he had to build good service and creditability right from the beginning.

Customer Challenges

To be the first one in the industry, Bikramjit had to do lot of ground work to establish the trust and develop adequate customer base. From his experience in developing a successful electronic bill payment portal called “Bill Junction”, an online electronic bill presentment and payment system developed by Bikramjit in 2001, he anticipated the following challenges:

- Initial trust build up and establishing creditability
- Debit side banks have no incentive to develop an efficient system. Convincing banks to adapt customer oriented approach in debit side will be a daunting task.
- Actual customers in India at that time were not very techno savvy. Conservative Indian customers did not trust their money on electronic system
- Company had no balance sheet or track record to show. Promotion had to be based on intangibles initially.
- Many customers were reluctant to change their software to include the services Bikramjit was planning to offer.

Most importantly, in order to be truly efficient, the process flow envisaged money to flow into TPSSLs pool account before it was relayed to destination accounts. Initially it was tough to convince customers on this. Pedigree and quality of shareholding helped in crossing this hurdle; however, it still entailed substantial effort to win over the first set of customers.

Scale and Market Potential

Scale was an important factor as the initial fixed investment was substantially high. But Bikramjit was not worried about the scale, as he knew that the market size was huge and given the projected GDP growth it was bound to get better over the years.

Consumer loans were still a very small part of overall GDP as compared to other countries (see Exhibits II, IV and V). Robust financial system plus the well-established institute were all set to fuel the growth in consumer loan in Indian market. Indian banks were also characterized by higher level of innovation and technology absorption. There was also lot of integration and development of field, such as insurance, banking, mutual funds and securities was going on in India.

Growth in middle class segment with high disposable income created huge market for banks. This increased stakes and competition made banks become more customer focused. All these factors plus low level on consumer loan as measured against GDP removed any fear about future growth of this market segment.

Establishment

Finally, TechProcess Solutions Limited, a comprehensive payments processing company was established on September 8, 2000. In the beginning, TPSL operated on a vendor developed software platform. But Bikramjit realized very quickly that the use of existing software will not create any entry barrier for other players and also was not particularly well-suited for their operational needs. So he made a conscious decision to move towards proprietary system by 2002 thereby creating a long-term strategic advantage.

Timing of the start up worked out well for Bikramjit. The dot com burst enabled him to hire people from reputed companies with domain experience to work on system design and architecture.

While developing a proprietary system, Bikramjit made sure that modifications required at customer end were kept at a minimum to reduce their resistance to change. Bikramjit was well aware that banks were generally very reluctant to change their software. Most of the times the processes involved were very cumbersome. For example, multinational banks had a global system controlled by their principal offices. Any change request had to be routed through main office and it took anywhere between 3–4 years for them to make changes effective. Also use of global system ruled out any India specific changes.

Finances

The financial requirements of TPSL were a function of the organic growth strategy that Bikramjit had laid out for the company, which involved making heavy investments in developing proprietary software, extensive marketing of the product and service concept, and expanding into product and service areas adjoining electronic transactions. The source of financing available could be either private equity or debt capital through banks and other lenders based on the cash flow and balance sheet of the company. Given that TPSL lacked a strong balance sheet in its inception years, most of the initial funding came from ICICI ventures.

Once the proof-of-concept had been completed, and scalability of the model demonstrated, TPSL was actively scouting for further growth capital (as well as knowledge capital). After solicitations with few banks and private equity funds, they came across Battery Ventures (BV).

Launched in 1983, Battery Ventures was founded on a set of principles that remain the pillars of our investment philosophy: a concentration on technology and related sectors; a research-centric methodology for identifying and understanding large, emerging market opportunities; a proactive approach to finding driven entrepreneurs and compelling businesses; and daily involvement with every portfolio company.

This approach has helped Battery to build lasting, market-leading companies while delivering leading returns for its investors. BV has worked with individuals who have set out to push technology boundaries at companies such as: Akamai Technologies, Allegiance Telecom, FORE Systems, HNC Software, Infoseek, LIFFE, MetroPCS, Neoteris, Nextel, Pixelworks, Qtera, SigmaTel, Vastera and Witness Systems. BV's strategy has been to focus across an array of technologies and related sectors.

BV focuses on sectors where their expertise and connections can make an impact, including: Technology (Telecom & Communication services, Clean Tech & Advanced Materials; Software; Semiconductors & Components), Media (Internet & Digital Media, TV, Print, Mobile, etc), Financial Services Tech Enabled businesses (Services, BPO, KPO, etc).

At all stages of a company's life cycle, Battery is well-versed in working with management teams on traditional venture investments, ranging from seed to later stage. BV team is equally adept at sophisticated deal structures, such as leveraged buyouts, PIPEs, spin outs, roll-ups and take-privates, and can also arrange debt while willing to do secondary transactions.

Battery Ventures has been typically the lead institutional investor in its portfolio companies and has a stage agnostic DNA with investment sizes ranging from \$500K–\$1M on the low end in seed stage startups all the way up to \$80 million on the high end in a single situation.

BV has historically been very active in the financial services space in the US and as it mapped out the white spaces (opportunities for growth) in India it realized that payments infrastructure would be a very strategic asset to back in India. It realized that the criticality of this infrastructure ensured to the financial services sector in the country would ensure the accrual of a disproportionate amount of equity value towards the dominant platform.

Around 2006, Battery began researching the space in India and came across TPSL and Billdesk as the two main third party independent providers in addition to captive groups within banks such as HDFC. They then reached out at the senior levels of management at ICICI Bank (through some relationships that BV had), which resulted in an introduction to TPSL and Bikramjit. From that point onwards Battery team had several phone conversations with Bikramjit with extensive two way information exchange to understand how an investment/partnership could benefit the two organizations.

Once sufficient interest was generated, BV team visited Mumbai to meet Bikramjit. They came away pretty impressed from that interactions and further focused their energies on due diligence. As the diligence checks continued to come out positive, BV decided to make a second trip and this time convinced the Founder and CEO of CheckFree (a \$4B market cap company in the US in a similar business as TPSL) who was a friend of the BV partnership to join them. After a very positive meeting in Mumbai and further diligence BV decided to enter into the term sheet negotiation stage.

DUE DILIGENCE

BV team started its due diligence by interacting with senior management team at TPSL apart from Bikramjit. They talked to sales team to understand the sales process and pipeline as well as the product team to get a view on the upcoming products under development. BV also focused on performing accounting due diligence with the help of third party accounting firms to get an independent and complete view into the financials of the company.

BV also got in touch with clients/customers of TPSL across banking, insurance, and mutual funds space to understand their experience and satisfaction levels with TPSL. This process also enhanced BV's understanding of TPSL offerings and its relative strengths against its competitors.

Technology experts from US office were involved in reviewing the technology platform, scalability, reliability, disaster recovery capabilities, product road map, etc. Check on policy regarding clearing house infrastructure was carried out with the head of payments at the Reserve Bank of India.

Risk and Reward Analysis

Battery Ventures team identified the following risk involved with TPSL from its review:

- Most of the current processes of TPSL were manual and semi -automated. With increasing transaction volume most of these processes had to be automated to prevent errors. High attrition rate in Indian job market also worked against current semi-automated system.
- High dependence on ECS-based transaction processing. How would this evolve as clearing house infrastructure was upgraded and approached the ACH system in the US was not clear.
- Interest rate environment and its effect on the volume of transactions. High dependence on consumer finance products (loans, mutual funds SIP schemes, insurance policies) was a concern as their volumes are adversely impacted by a hardening interest rate environment.

At the same time, BV team highlighted the following rewards from being associated with TPSL:

- Dominant platform in India with over 70 per cent market share on electronic transaction processing
- A market that lends itself to a natural monopoly/duopoly. As number of transactions increases, the processing cost per transaction continues to come down. As long as this rate is higher than the pricing compression, the margin structure will continue to improve.
- Payment processing system is critical to the smooth operation of the financial services sector in India and therefore, the dominant platform could become very valuable.
- Continued growth of electronic transactions in India was imperative given the explosive growth in financial services/products all of which requires an efficient payment processing system.

All of the above could result in outsized returns on the financial investment over the long term.

The Deal

After its evaluation of TPSL, BV team decided to invest in the company. Discussions with TPSL were mainly around reaching a mutually agreeable valuation that took into account the current status, projected growth, comparable multiples, financial needs of the company, minimum byte size and ownership requirement of BV, etc. Once the term sheet was agreed upon there were a number of other issues that needed to be addressed regarding investor rights, preferred returns, anti-dilution protection, information rights, board representation, etc.

Battery Ventures along with the company decided to also bring in Greylock Partners, another VC firm in the US that has a long standing relationship with BV, as a stakeholder in the company. Greylock also brings similar value add as BV to the table.

BV and Greylock took an overall 19% stake in the company at a pre-money valuation of \$ 90 million. Also part of the deal was secondary with about \$ 9 million raised in the company and the balance was a stake sale by one of existing investor ICICI Ventures.

As part of the deal BV brought its expertise in financial service space to TPSL. BV has well-established relationships and network with leading financial services companies in the US including Checkfree, First Data Corporation, TSYS, FiServ, Fidelity National Information Services, Metavante, Visa, eCredit, Wells Fargo, Bank of America, etc. BV's 25 years of experience in building over 270 companies was going to act as an accelerator in establishing TPSL as a dominant player in its field. BV identified the following roles for itself in this partnership as a sounding board as the company thinks through future strategic initiatives and acquisitions:

- Monitor progress on a monthly basis through KPIs and MIS systems
- Assist in the hiring process of senior management team members
- Open doors and make introductions/connections within the BV network

Battery Ventures expected TPSL to grow dramatically in the next 3–4 years on the back of the overall growth in the Indian economy and undertake a public offering once it has reached the critical mass of top line/bottom line.

TPSL OFFERINGS

The offerings are categorized into three main units (see Exhibit V). The first and the most important one, contributing to 71 per cent of the revenue is 'Receivable and Payable Processing'. This category is further divided into Debits, Credits and Payment Gateway services. Under debit services, the company offers electronic payment collection system not just to banks but also to various other organizations, such as insurance and utility companies, schools and institutional lenders. On the credit side, it offers services, such as dividend payment, vendor payment and salary crediting services to organizations.

The second unit called 'Transaction Processing' is mainly concentrated on document processing for bigger organizations. This includes services, such as digitization, cheque

processing and customized logistical support for the companies. Details of this can be found in Exhibits VI, VII, VIII and IX.

The third unit 'Software Solutions' is focused on outsourcing software product development services to clients in the BFSI ecosystem in India and abroad.

Payment processing system was kept simple and easy to understand. All customers had to do was issue an authorization to TPSL using a form. Then these details were fed into the proprietary software. This software electronically processed the payments as and when they were due using the same technology backbone as is used for processing MICR cheques. All the receivables were transferred to Escrow account and distributed from there to respective banks. TPSL's geographical reach, trained staff and technology investments made this process very efficient. This process allowed the total processing cost to reduce substantially.

In the initial stages, there was skepticism whether electronic means of payment would be adopted by the Indian customer. Also, within the financial services community itself, there were varying levels of technology adoption. Coupled with the fact that it would not be easy to change the banks' systems where they existed, this implied that significant work had to be done in customizing TPSL's systems as and when business tie-ups were put into place.

There was also a very natural resistance to change and to new processes at the operational level, which took substantial training, incentivization and persuasion to overcome.

Finally, not having a very strong balance sheet proved to be a major hindrance in the initial years.

ROADBLOCKS

What Bikramjit did not anticipate were the resistance from bank employees towards this system. They saw it as their substitute and there was tremendous internal pressure on management not to adapt the system. Unproven track record also added to these worries. Bikramjit realized that only proven track record can get him started.

So, he asked the banks to assign him the region with worst branches in terms of operating efficiency. He got one bank to allocate Pune and Ahmedabad branches, which were difficult branches for them for installation of his product. He was able to show improvements in operational efficiencies in a short period of time in these branches and was able to change management mindset, while showcasing companies technical and infrastructure capabilities thereby winning their confidence.

He also located easy target customers, such as car and bike dealers. By talking to them he realized that they lose 15 per cent of the customers due to not being able to close the deal in a same sitting as most of the times customers had to go back due to non-availability of cheque leaflets, an essential commodity for processing loan, with them.

He offered his system to auto dealers during loan mela in Mahim, Mumbai around 2003. TPSL product was an instant hit with the dealers. Despite these pockets of successes TPSL lost money in initial three years. But things changed after 2006 Mumbai floods. Many banks lost cheques stored in PDC factory during these floods. TPSL was one of the few entities

honouring payments in this period. TPSL processed all the cheques through their Chennai branch during this time. This acted as a triggering point for the banks and they realized that PDC was a risky affair and opted for TechProcess Solution products.

SUCCESS AT LAST

TPSL has increased its operations to 67 locations currently from a meager start of 5 locations in 2000 and 9 locations in 2001. Over the years TPSL has established itself as an end to end solutions provider to various financial institutions.

Though there are a few competitors for TPSL now, it has managed to establish itself as the market leader in all the segments it operates in. Leading NBFCs, which among them control over 60 per cent of the consumer loans market in India, are its clients. Almost all the leading mutual fund companies in India are on TPSL's platform. Even the largest private insurers, operate on its system. Even in its original business of bill payment TPSL continues to be in a leadership position. Most of its customers are top market players in their respective category (see Exhibit XII).

The main reason for this success was TPSL's execution excellence. It has set up a performance metrics on three major parameters and achieved excellence in all three of them. Its turnaround time is between 2–4 weeks. It has a client satisfaction rate of 95 per cent and error free transaction processing rate is at 99.5 per cent.

B2B vs. B2C IN PAYMENTS INDUSTRY

TPSL relies on B2B system to generate sales. One of the lessons of the Billjunction days had been that it is an extremely costly and time-consuming proposition to build a B2C brand in the financial services industry. Bikramjit realized that TPSL would be better off focusing on execution excellence and selling to institutions, who would in turn offer the solution to their customers under their own brands. Hence, even in the bill payment business (which TPSL continues to operate), it is better to offer a white-labelled solution to a bank, which can then be offered through the bank's portal as a value-added service to its customers.

If one looks closely at how similar services have evolved in developed markets one finds a very similar progression. For example, in the US, most of bill payments companies started out as B2C companies (CheckFree, Yodlee, etc.) and very quickly repurposed themselves to enabling these services for the banks in a B2B model. There is a natural level of trust that a customer has in its banking institution and the power of that brand should not be underestimated. It is prohibitively expensive to build direct to consumer services in the payments industry. One of the few examples of a successful B2C service is Paypal which took over \$100M to be built. And it is a well known fact that key to Paypal's adoption was the proliferation of the eBay ecosystem without which it might not have been able to scale in spite of the capital resources that it had access to.

KEY CHALLENGES

Now, major challenge in front of TPSL is how to expand further. TPSL has had good success in tying up with private banks that account for the majority of electronic transaction volumes. Success with public sector banks has so far been limited. There are 28 public sector banks in India and all of them are at different level of technical competency. This calls for personalized services, such as training, customized software development at both the ends.

Another key challenge is how to insulate the business from cyclical patterns in the economy. The financial services business, though very promising in the long run, is prone to upturns and downturns and it may be difficult to build predictable revenue streams on this basis (see Exhibits X, XI).

There is also fear of uncontrolled credit growth in recent times. India's impressive growth momentum is already showing some signs of leading to excesses, the most prominent of which is the lending frenzy and its impact on local property prices. Despite the genuine medium and long-term appeal of India's economy, RBI fears that unbridled bank lending could jeopardize economic prospects.

Recently, consumer lending has continued to slow and corporate lending to rise, which is also in line with the RBI's policy framework. Personal loan growth has fallen to 23.9 per cent YoY on May 25, 2007 down from 57 per cent YoY in 2004, while industry loan growth has risen from 8 per cent YoY to 26.4 per cent YoY over the same period. The most evident decline in lending growth has been in mortgage and general real estate loans, which is also what the RBI has wanted to see. Housing loan growth has slowed to 21.6 per cent down from 54 per cent. Likewise, real estate loan growth has declined from 102 per cent to 69.7 per cent.

It is also very important to diversify the business by building additional revenue streams, as ECS (and payments processing in general) is subject to heavy regulatory risk. The question is: what would be the logical avenues for diversification?

A key contributor to the above had been the growth clocked by the financial services industry in the corresponding period. Mutual funds had found increasing favour due to buoyant markets. A growing number of households were looking for investment vehicles that beat inflation in the long-term and assist in wealth creation. Similarly, a boom in private sector employment had given rise to a demand for sophisticated investment and insurance products to compensate for the safety nets traditionally associated with government jobs. Rising incomes and a consumerist culture had contributed to the popularity of retail loans, for housing, automobiles and personal needs.

There were worrying aspects, though. The interest rate environment had led to a slowing down of growth in the housing, auto and personal loans segments that drove TPSL's transaction volumes (see Exhibit XI). With inflationary pressures still intact, it was unlikely that year-on-year growth would reach the heady heights of 2005 any time soon. In addition, the proportion of non-performing assets in a typical portfolio had gone up in 2007. This was enough to cause some of TPSL's clients to curtail lending volumes. There were significant questions pertaining to the existence and growth of consumer lending in India. Worse, because of the lag effect

between loan disbursements and electronic repayment transactions, the effect of this would possibly be felt in the years to come.

Similarly, the equity markets had enjoyed an extended growth phase during the last several years. Bikramjit was fully aware that India could not remain immune to the global downturn. Surely this would have implications for the Indian mutual fund industry, and hence for TPSL?

Companies, such as Payment Business services, located in Denmark, had ties with 117 banks. This not only gave them creditability in the market but also scale, which was critical in this business. Given this threat, TPSL had to establish itself as major market player before foreign players entered Indian market.

An established US company in this field, Payment Data Systems Inc., had sold a group of selected patents and patent applications to PCT Software Data LLC, generating \$750,000 for the company. The patents and patent applications sold relate to bill payments made with debit and stored value cards. So there was a threat from potential licensing agreements from already established player in the market.

Not to mention, Fiserv and Yodlee had already established footprints in India in the form of software development and service center. With relaxed regulatory norms, it would not be difficult for these established players to enter Indian market in coming years.

COMPETITION

Globally, there were many players in electronic bill processing arena. But locally there were only two major competitors to TSPL—Billdesk and Easy bill. Most of the global players, such as Yodlee and Frisev are in business since 1980s. Electronic payment processing took off in early 2000s mainly due to increase in internet penetration and broadband availability. Increased attraction of this field in early 2000 resulted in many ventures in this field. Currently, the market is matured in western countries and consolidation is taking place to increase the margin and get scale and scope of the operations.

YODLEE

Yodlee, headquartered in Redwood City, California, is a company that provides account aggregation and other online financial services. Yodlee allows users to see their credit card, bank, investment, email, travel reward accounts, etc. on one screen. Rather than market their services directly to consumers, they partner with other institutions so that Yodlee-based services can be offered to their customers. Ameriprise Financial Inc., Bank of America, HSBC, Fidelity and Wachovia are among the financial institutions, which use Yodlee services. Yodlee has offices in the United States, United Kingdom and India.

Just like other players in the industry, Yodlee in going through consolidation and joint venture formation process to increase its reach and ability to cross sell its products. Recently it went into joint venture with Western Union (money transfer agent) to provide expedited server for their online payments (see Exhibit XIII).

Yodlee has substantial manpower in software development. It keeps coming with new product to improve its existing solutions and/or serve new market. The main USP of Yodlee product is cost saving in bill processing activity for its client. This strategy works well with Yodlee's B2B business model. Yodlee BillPay PayItAll™ is a next generation online bill pay offering that will enable financial institutions to dramatically lower bill pay solution, processing and related expenses, generate new revenue and significantly improve the customer experience (see Exhibit XIV).

Yodlee is also venturing into intra-bank transactions. Recently launched Yodlee Funds Transfer already moved more than \$1 billion and has initiated over 500,000 transfers within nine months. It is also venturing into account opening and funding solutions. Yodlee's real estate tool, which helps its client assess real-time market value of their home, allowing for a more holistic view of their total net worth was well received by the market.

Yodlee's venture into mobile banking through SMS has given a substance boost to its revenue. Its standards-based mobile infrastructure produces the fastest, most effective and concise presentation of personal account data for each consumer, regardless of application, data source, or mobile device. After securely logging-in, consumers can check account balances, view transactions and receive fraud monitoring alerts.

Recently, Yodlee went into agreement with Metavante to bolster Bill Pay with reciprocal agreement. Constant innovation and market opportunity identification have been salient features of Yodlee (see Exhibit XII).

FISERV, INC.

Fiserv, a Fortune 500 company, provides information management systems and services to the financial and insurance industries. Leading services include transaction processing, outsourcing, business process outsourcing (BPO), software and systems solutions. The company serves more than 18,000 clients worldwide. Fiserv was ranked the second largest provider of information technology services to the financial services industry worldwide in 2007 FinTech 100 surveys. Headquartered in Brookfield, Wisconsin, Fiserv reported more than \$4.4 billion in total revenue for 2006 (see Exhibits XVI and XVII).

Since beginning in 1984, Fiserv has grown through its insistence on finding exactly the right resources to meet clients' strategic and day-to-day technology needs—developing industry-specific solutions, establishing key business partnerships and acquiring entrepreneurial companies at the cutting edge.

The company began when two large regional providers of financial services data processing for small banks and thrifts, Sunshine State Systems of Tampa and First Data Processing of Milwaukee, joined to form the first large national financial services company. Fiserv was the first to launch the national data processing concept and has since turned it into an international corporation. In 1986, Fiserv went public as a \$70 million data processor, adding credit union services with its 1988 acquisition of Minnesota On-Line, Inc. Within four years, Fiserv was serving some of the nation's largest financial institutions.

As financial service organizations' needs grew, so did Fiserv's array of solutions—and its pattern of strong acquisitions. The team sought out profitable, well-run companies whose managers were willing to carry on their good work with a high degree of autonomy and the support of Fiserv resources.

In 1990, Fiserv expanded its electronic funds capabilities through the acquisition of California-based GTE EFT Services Money Network and GTE ATM Networks. Fiserv entered the card fulfillment market in 1992 through Indianapolis-based Data Holdings, Inc. In 1997, the company added securities transaction processing services with BHC Financial, Inc. of Pennsylvania (see, Exhibit XV).

Fiserv has blazed trails into new markets, entering the insurance industry with the 1998 acquisition of Iowa's Network Data Processing Corp. In 2001, the company acquired Texas-based Benefit Planners, thereby entering the health benefits market.

With each step forward, the Fiserv team has focused on generating the solutions that matter to clients. Today, as a Fortune 500 multi-billion dollar global corporation, Fiserv offers clients an unmatched array of information management solutions built on a foundation of service-oriented architecture and supported by the highest quality client service.

The Fiserv growth strategy continues to centre on delivering solutions to help clients meet their changing needs, expand their markets, and overcome technological challenges. In short, Fiserv's history and future is about connecting clients with success and helping them to achieve best-in-class status. Now serving more than 18,000 clients worldwide, Fiserv is the leading provider of core processing solutions for U.S. banks, credit unions and thrifts. Fiserv was ranked the largest provider of information technology services to the financial services industry worldwide in the 2004, 2005 and 2006 Fin Tech 100 surveys.

Fiserv entered India through Fiserv India Pvt. Ltd. This subsidiary is used for software development and service. Currently its centres are located in NCR Delhi and Pune.

BILLDESK

Billdesk was floated by Indiaideas.com Ltd. in 2000 by 3 ex-Anderson professionals. It was formed with the main intent of leverages the potential of electronic medium to better organise and manage payments. Unlike TPSL, Billdesk started with B2B model and concentrated on creating internet based products, targeted at banks and other financial product providers.

Billdesk's business model works on a direct relationship with banks and billers. Most payments happen through debit or credit cards, where the customer enters a bank's website and uses Billdesk's platform to pay utilities, which are charged a service fee of 2.25 per cent for credit card payments, or Rs. 5 per direct debit through the bank's website

Billdesk's contemporary and only competitor, TPSL, uses the electronic clearing service, where the customer specifies the amount to be debited in his account for every bill generated. TPS uses BillJunction, its website brand, to get a bank's customer to register and provide account information.

Billdesk came into existence with the backing of Bank of Baroda and National Venture Fund. BOB also partners with Billdesk as a Sponsor Bank in providing operational support

for the ‘payments’ leg of the electronic payment services. National Venture Fund is a venture fund promoted by SIDBI and the Ministry of IT, Government of India and administered and managed by SIDBI Venture Capital Limited. Unlike TPSL, Billdesk partnered by Flextronics Systems for development and maintenance of its technology platforms.

Billdesk has seen an impressive growth over the years mainly due to its B2B model. By 2003, it already had 11 major banks in its fold including State Bank of India, Bank of Baroda, ABN Amro, Union Bank of India and had a presence in two cities (see Exhibit XVIII).

Billdesk believes that, in a few years, there could be 1,650 million bills generated online annually in the top 25 cities in India. Most of this business is expected in the insurance, electricity, telecom and mobile telephony sectors. The current usage of online bill payments is limited to the metro, and Tier-I and II cities, which account for 86 per cent of the business.

Online bill payments via credit cards is the area where the highest growth is expected. In India, VISA alone has 58.4 million credit cards, adding up to \$9.3 billion in retail sales volume as of 2007.

More than scalability Bikramjit was worried about competition in this market area. Given that market was very lucrative and had good growth potential it attracted many potential competitors.

Bikramjit knew he did not have solid grounds to create an entry barrier for others. So the barriers to entry had to come from higher switching costs, creditability of the company and quality of services. To create this, Bikramjit concentrated on the following parameters right from the beginning:

- Automated, error free processing to build creditability
- Faster service level, using high-end MIS systems
- Use of proprietary software to connect with clients

EXIT OPTIONS

Consistent with Battery’s and other investors’ expectations, it is important to chart out a strategic roadmap that would culminate in a suitable exit opportunity 3–4 years down the line. What would be the best form of exit—IPO, strategic sale, other? The answer would also determine the tasks that needed to be planned and executed in the 2–3 years timeframe.

Going public was a critical move for TPSL as it will project image of stability and dependability for TPSL. This is particularly important in industries where product do not represent one-time purchase, but requires ongoing service or upgrades.

Within a span of two weeks, two major public issues—Emaar MGF Land and Wockhardt Hospitals—have been withdrawn on account of weak response from investors. The recent volatility in the stock markets may put initial public offerings (IPOs) by PE-backed companies on hold in the short term, but this is not expected to impact net gains from overall exits. The impact of the stock market correction on Battery Venture’s exit timing needs to be assessed (see Exhibits XIX and XX).

Apart from timing concerns, there were the following pitfalls associated with IOP for a smaller size company like TPSL:

- Cost of rising money from the market was almost 10 per cent of the total money raised for smaller firms.
- The degree of disclosure requirements and scrutiny will take away the attention of managers from business development
- Bad timing and withdrawal of offering, even due to factors beyond the company's control will taint the image of the company.

With its proprietary software, TPSL will find it difficult to sell it to foreign player who are already established with their own system. They will find it hard to change the acquired clients platform to their own. Financial institutions will be averse to acquire TPSL as it might create a discomfort to the other client of TPSL as such.

FUTURE

Another conundrum for Bikramjit was the fact that TPSL was an overwhelming market leader in electronic payments processing in India. Needless to say, there was very little headroom to grow the business as it was currently defined, without excessively relying on the continued growth of client industries (see Exhibit XXI).

Also, the electronic payments domain was very sensitive to regulation. Any changes in the regulatory environment could severely impact TPSL's fortunes, or at least cause it to make substantial changes to its business and operating model.

Therefore, it was very clear that the company should diversify, but into what activities? One aspect TPSL could count on was strong brand equity built up with its core customer base, that of an efficient and reliable provider of payment processing services. In addition, Bikramjit and his team enjoyed cordial relationships with the Who's Who of the Indian BFSI sector. But would a strong brand as a payments processor translate into a preferred brand as, say, a provider of BPO services? After all, India was home to the global pioneers in the BPO business. How would TPSL compare to these market leaders in a client's mind? So far, TPSL had ventured into outsourced management of business processes with some success, but its areas of intervention (e.g., digitization of documents, cheque processing, etc.) had been closely allied to its core payments processing strength. The transaction processing business, as it was called, had grown from practically nothing to account for 5 per cent of TPSL's revenues in the last three years.

Similarly, due to its technology-enabled business proposition TPSL had always possessed in-house software development strengths. As an experiment, during the last few years, Bikramjit had tried to position TPSL as a generic provider of software development services to banks and financial institutions. This had met with some success, and software services now accounted for close to 6 per cent of TPSL's top line.

Here too, competition was tough as in the BPO space. As opportunities for overseas labour arbitrage were drying up, IT and ITES majors were beginning to focus increasingly on the

domestic market. They certainly had the scale and expertise built over the years, not to mention the financial muscle to compete on margins. Would TPSL stand a chance?

Bikramjit was not at all sure whether the diversifications outlined above were sustainable as a course of action, or could be justified as such to the TPSL board. The scorching pace of growth logged in the core business was beginning to slow down. Electronic payments processing had been a unique proposition in India, which is something that had made TPSL attractive to Battery Ventures and other investors in the light of their global experience. By departing too far from its original strengths, was TPSL committing a mistake?

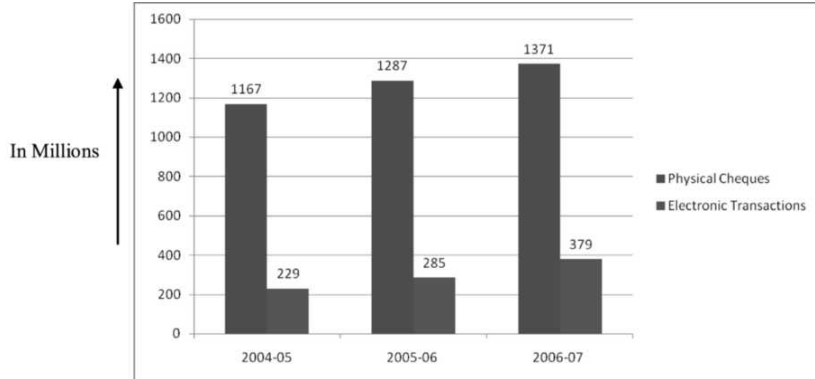
One another area that Bikramjit has also been thinking about is whether to expand internationally thereby diversifying the revenue and customer base at TPSL. He certainly has the support of Battery Ventures and their deep domain and network as he thinks about creating products and services focused on customers in US and elsewhere. But the question remains: What would be the areas that he can expand into? What services and products would make most sense? Who would be his strategic partners and anchor customers?

DISCUSSION QUESTIONS

1. How did Bikramjit Sen identify the business opportunity?
2. Why was reliability critical in this field?
3. What was the value proposition of TechProcess?
4. Why banks themselves are not venturing into this field? What kind of advantage a third party had over banks?
5. What were the performance drivers behind making this system?
6. What are the key strategic moves made by Bikramjit Sen? Was there any adjustment to strategy made by Bikramjit Sen?
7. If you run a private equity firm, will you buy this company?
8. What are Bikramjit's worries? What should the company do at this stage? What should be future strategies?
9. What are the exit options? It's already into second year of its investment, when does it plan to exit?

Exhibit I

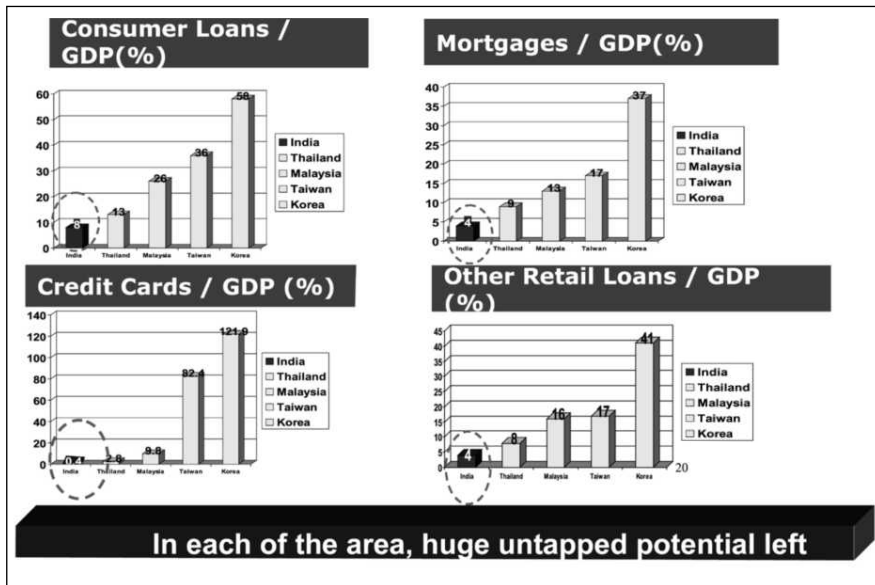
ELECTRONIC TRANSACTIONS VS PHYSICAL CHEQUES (INDIA)



Source: TechProcess Solution Ltd. Presentation

Exhibit II

MARKET POTENTIAL FOR CONSUMER LOAN



Bank of Baroda

Source: Bank of Baroda Presentation for US-India Business Summit 2006

Exhibit III

HISTORY OF MICR

In the 1950s, the demand for data processing created a need for a mechanized method of check processing. United States banks, bankers, machine manufacturers, and check processors formed committees to create a solution. The ultimate result of these committees was the adoption of the MICR in 1958 by the American Bankers Association (ABA).

Liberalization of economy in 1991 increased the number of players in the financial arena. This along with proliferation of electronic payment landscape increased the number of transactions and created crises in countries payment system. Reserve Bank of India (Central Bank of India) recognized the importance of efficient payment system. The national payment system enables the circulation money in the economy. The secure payment system provides the conduit essential for effecting payments and transmission of monetary policy.

Electronic commerce and finance are growing rapidly. New payments mechanisms designed to aid electronic commerce have become routine in other countries. India adopted MICR in the year 2001 when it came out with its 'Payment Systems–Vision Document'. It detailed, in the Document, the strategies and implementation plan for the payment system arena for 2001–03. In this plan, RBI extended MICR-based clearing to cover 40 major commercial centres facilitating thereby faster clearing of cheques at more centres.

Cheque clearing represented an important milestone in the development of an efficient payment and settlement system. The introduction of MICR technologies has helped to foster such a system all over the world. As a part of such an evolving framework, MICR technology was for the first time introduced in India in the late eighties at the four major metropolitan cities of Mumbai, Chennai, Delhi and Kolkata. These centres were set up and are managed by the Reserve Bank of India. The success of these MICR based local clearing processing centres prompted RBI to start the similar system in many other cities.

MICR technology brought considerable efficiency and throughput to the cheque clearing process. However, the volumes in cheque clearing continued to reflect an upward trend, creating considerable pressure on the existing work flow processes. A closer analysis revealed that 'at par' items, such as dividend and interest warrants issued by various corporate were contributing significantly to the volumes in clearing. The existing system of paying interest/dividend to the beneficiaries through paper instruments is also fraud prone with frequent reports of postal interception and encashment, often resulting in the real beneficiaries not getting their dues at all, or at other times getting delayed payments.

RBI then decided that a system needed to be put in place that would (i) decrease the volumes of paper instruments in MICR clearing and (ii) improve customer service by ensuring prompt and secure interest/dividend payments to the beneficiaries. Such a system needed to be cost-effective and serve as an alternate method of effecting bulk, low value, recurring payment transactions, thereby obviating the need to issue and handle paper

instruments. Electronic Clearing Service (ECS) Credit scheme provided the answer to these problems. Electronic Clearing Service-Debit, is a scheme, which facilitates payment of charges to utility services, such as electricity, telephone companies, payment of insurance premium and loan installments by customers. The scheme was introduced Chennai and Mumbai for collection of telephone bills by Madras Telephones and MTNL, Mumbai, respectively in 1996. In 1997, Calcutta Telephones also joined the ECS Debit scheme.

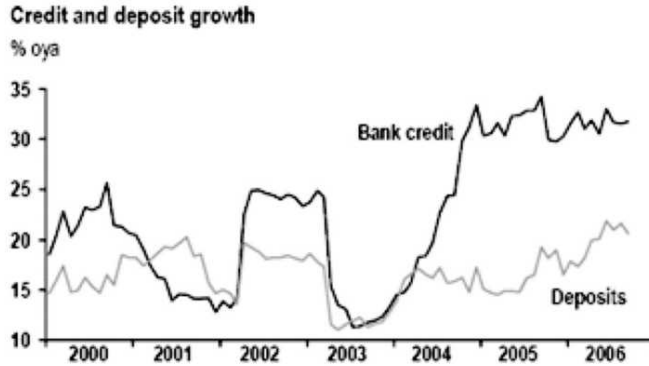
ECS Debit envisages a large number of debits resulting in a single credit simultaneously. ECS Debit works on the principle of pre-authorised debit system under which the account holders' account is debited on the appointed date and the amounts are passed on to the utility companies. The scheme thus facilitates:

- Faster collection of bills by companies
- Better cash flow management and
- Eliminates the need to go to collection centres/designated banks by the customers.

Source: RBI website and WhatisMICR website

Exhibit IV

RAPID CREDIT GROWTH IN INDIAN MARKET



Source: Economic Research Note by JPMorgan Chase Bank, Singapore

Exhibit V

TPSL PRODUCT OFFERING

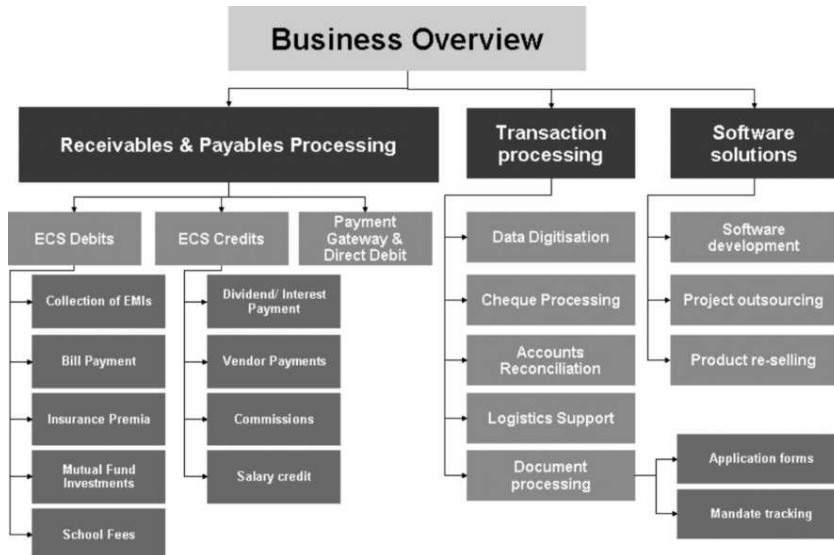
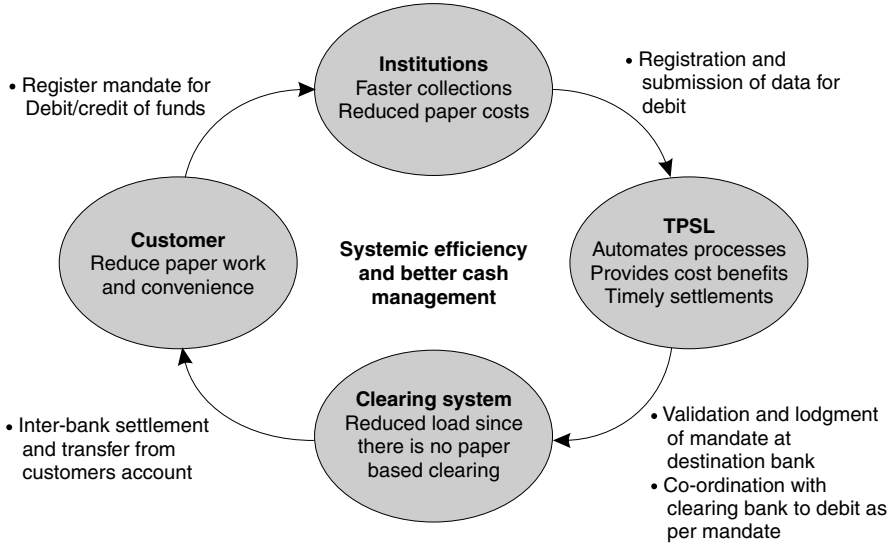


Exhibit VI

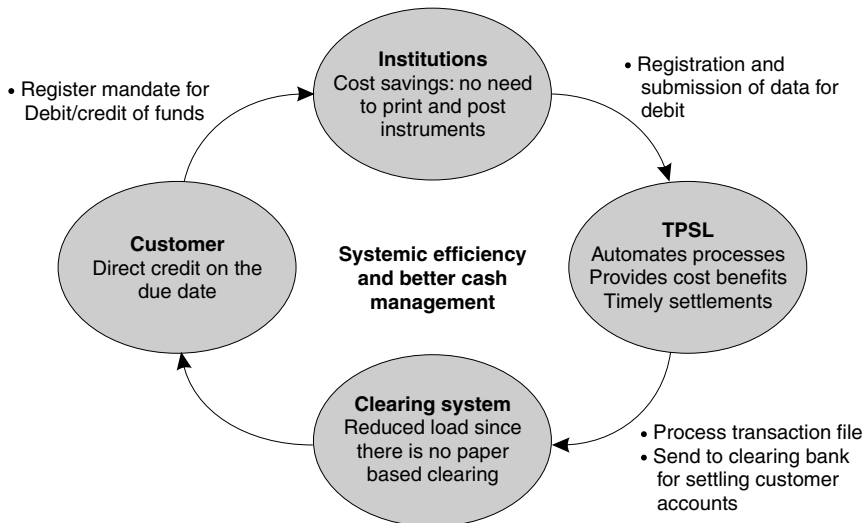
PROCESS FLOW ECS DEBIT



Source: TechProcess Solution Ltd. Presentation

Exhibit VII

PROCESS FLOW ECS CREDIT



Source: TechProcess Solution Ltd. Presentation

Exhibit VIII

TRANSACTION PROCESSING OVERVIEW

Data Digitisation	<ul style="list-style-type: none"> • Data entry of application forms • Conversion of data to image
Cheque Processing	<ul style="list-style-type: none"> • Processing of cheques to received
Accounts Reconciliation	<ul style="list-style-type: none"> • Reconciliation of cheques to documents • Amounts garnered in schemes/products
Logistics Support	<ul style="list-style-type: none"> • Design and Print Solution • Mail stuffing and dispatch services • MIS reporting on deliveries and returns
Document Processing	<ul style="list-style-type: none"> • Data entry and scrutiny of the document • Document archiving • Data storage and retrieval

Exhibit IX

RETAIL PROFILE OF THE BANKS

<i>Item</i>	<i>Item Outstanding as at March</i>			<i>Percentage Variation</i>	
	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2005–06</i>	<i>2006–07</i>
Housing Loans	1,34,228	1,79,060	2,24,481	33.4	25.4
Consumer Durables	3,810	4,469	7,296	17.3	63.3
Credit Card Receivables	8,407	12,434	18,317	47.9	47.3
Auto Loans	35,048	61,369	82,562	75.1	34.5
Other Personal Loans	85,083	1,18,351	1,55,204	39.1	31.1
Total Retail Loans	2,66,631	3,75,683	4,87,860	40.9	29.9

Source: Report on Trend and Progress of Banking in India 2006–07, Reserve Bank of India

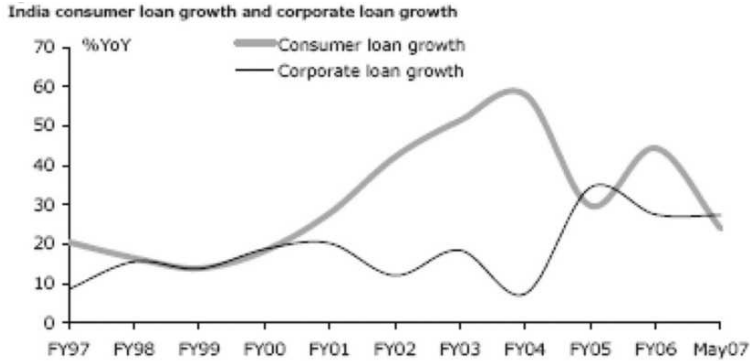
Exhibit X**INTEREST RATE VOLATILITY 2000**

<i>Rank</i>	<i>Country</i>	<i>Volatility</i>
1	Turkey	32.93
2	Chile	1.74
3	India	1.72
4	Mexico	1.36
5	U.K.	0.91
6	Indonesia	0.88
7	Poland	0.81
8	Philippines	0.77
9	Hungary	0.56
10	Czech Republic	0.44
11	Thailand	0.41
12	Switzerland	0.36
13	Brazil	0.34
14	Singapore	0.24
15	South Africa	0.19
16	Israel	0.16
17	Canada	0.16
18	Australia	0.16
19	New Zealand	0.15
20	Sweden	0.11
21	Germany	0.11
22	Korea	0.08
23	Malaysia	0.06
24	Japan	0.05

Source: Baig (2001): Standard deviation of differences in short-term interest rates. For India, the interest rate is the call money rate.

Exhibit XI

CYCLIC NATURE OF CONSUMER LOAN



Source: RBI, CLSA Asia-Pacific Markets

Exhibit XII

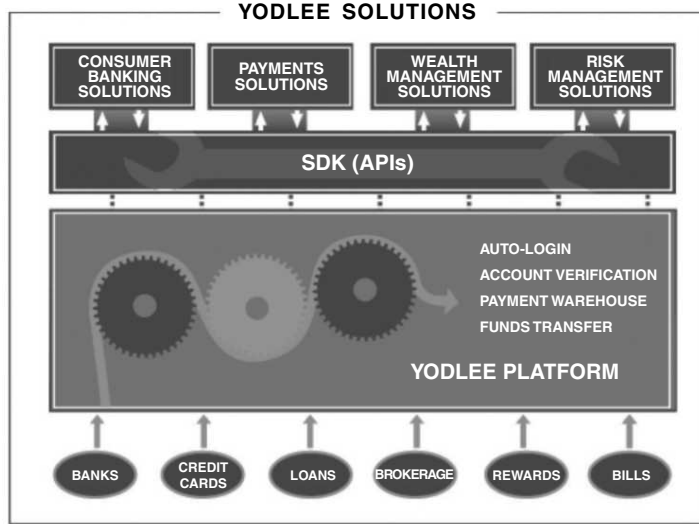
TPSL CUSTOMER PROFILE



Source: TechProcess Solution Ltd. Presentation

Exhibit XIII

YODLEE PRODUCT VERTICALS



Source: Yodlee website

Exhibit XIV

YODLEE CUSTOMER BASE



Source: Yodlee website

Exhibit XV

FISERV PRODUCT RANGE

Bank Systems – In-house and outsourced core processing for banks and thrifts, including cash and treasury management solutions, risk management, imaging solutions, customer contact solutions and data warehousing.

Bank Servicing & ePayments – Outsourced (service bureau) core processing systems, EFT processing, credit processing services, electronic bill payment services and value-added solutions for banks and thrifts.

Lending Solutions – Outsourced and licensed software and services for the lending industry, including mortgage loan servicing, automated property valuation, loan and lease portfolio management for the auto finance market, loan settlement support and contact centre services.

Item Processing – Complete solution for the item and image processing needs of financial institutions, providing resources and technology for processing and automating paper-based payment transactions.

Credit Union & Industry Products – Core account processing and value-added solutions for credit unions, plastic card production and services, high-volume laser printing and mailing, electronic document distribution and archival.

Insurance Solutions – Comprehensive insurance processing services and products, emphasizing business process outsourcing for the life, annuity and property and casualty sectors.

Health Solutions – Outsourced services for self-funded and other medical, dental, vision and disability plans, including health plan administration, care and disease management, and pharmacy benefit management. Sale of this division to UnitedHealth Group (pending close) was announced on February 11, 2007. [2]

Investment Support Services – Outsourced services for individual and business retirement plans, trustee, custodial and recordkeeping, back-office investment support and tax reporting. Sale of this division to TD Ameritrade Online Holdings, Inc. on May 24, 2007 and closed on February 4, 2008. [3]

Fiserv Global Services – Global delivery capabilities provided to Fiserv Business Units and clients in a range of technology and processing disciplines.

Exhibit XVI**FISERV INCOME STATEMENT**

Consolidated Statements of Income

<i>(In thousands except per share data)</i>			
<i>YEARS ENDED DECEMBER 31.</i>	<i>2006</i>	<i>2005</i>	<i>2004</i>
REVENUES:			
Processing and Services	\$3,026,460	\$2,991,552	\$2,739,732
Product	1,517,691	1,167,926	990,014
TOTAL REVENUES	4,544,151	4,059,478	3,729,746
EXPENSES:			
Cost of processing and services	1,959,255	1,855,247	1,822,733
Cost of product	1,251,261	942,706	795,965
Selling general and administrative	589,354	516,127	451,488
TOTAL EXPENSES	3,799,870	3,314,082	3,070,186
OPERATING INCOME	744,281	745,395	659,560
Interest Expense	(50,955)	(27,828)	(24,902)
Interest Income	6,999	13,561	6,708
Realized gain from sale of investments	-	86,822	
INCOME FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	710,285	817,951	641,366
Income tax provision	267,060	306,594	246,468
INCOME FROM CONTINUING OPERATIONS	443,225	511,357	394,898
INCOME (LOSS) FROM DISCONTINUED OPERATIONS, NET OF INCOME TAXES	6,689	5,081	(17,256)
NET INCOME	\$449,914	\$516,438	\$377,642
NET INCOME (LOSS) PER SHARE – BASIC:			
Continuing operations	\$ 2.53	\$ 2.71	\$ 2.03
Discontinued operations	0.04	0.03	(0.09)
TOTAL	\$ 2.57	\$ 2.74	\$ 1.94
NET INCOME (LOSS) PER SHARE – DILUTED:			
Continuing operations	\$ 2.50	\$ 2.68	\$ 2.00
Discontinued operations	0.04	0.03	(0.09)
TOTAL	\$ 2.53	\$ 2.70	\$ 1.91
SHARES USED IN COMPUTING NET INCOME (LOSS) PER SHARE:			
Basic	174,989	189,807	194,981
Diluted	177,529	190,967	197,287

Source: Fiserv Website (Note: Indian GDP is 1/12 that of US)

Exhibit XVII

FISERV BALANCE SHEET

Consolidated Balance Sheets

<i>(Dollars In thousands) DECEMBER 31,</i>	<i>2006</i>	<i>2005</i>
ASSETS		
Cash and cash equivalents	\$ 185,328	\$ 184,471
Trade accounts receivable, less allowance for doubtful accounts	601,226	516,902
Prepaid expenses and other assets	176,236	142,382
Investments	2,019,197	2,126,538
Property and equivalents, net	248,040	226,013
Intangible assets, net	614,818	593,808
Goodwill	2,363,078	2,249,502
TOTAL ASSETS	\$ 6,207,923	\$ 6,039,516
LIABILITIES AND SHAREHOLDERS EQUITY		
Trade accounts payable	\$ 229,025	\$ 194,409
Accrued expenses	374,978	389,251
Accrued income taxes	9,365	4,266
Deferred revenues	263,236	240,105
Customer funds held and retirement account deposits	1,986,315	1,985,368
Deferred income taxes	172,126	165,992
Long-term debt	747,256	595,385
TOTAL LIABILITIES	3,782,301	3,573,776
SHAREHOLDERS' EQUITY		
Preferred stock, no par value: 25,000,000 shares authorized: none issued	-	-
Common stock, \$0.01 par value: 450,000,000 shares authorized: 197,791,218 and 197,507,892 shares issued	1,978	1,975
Additional paid-in capital	700,103	693,715
Accumulated other comprehensive income (loss)	(131)	1,321
Accumulated earnings	2,886,891	2,436,977
Treasury stock, at cost, 26,699,943 and 15,753,675 shares	(1,163,219)	(668,248)
TOTAL SHAREHOLDERS' EQUITY	2,425,622	2,466,740
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 6,207,923	\$ 6,039,516

Source: Fiserv Website (Note: Indian GDP is 1/12 that of US)

Exhibit XVIII

BILLDESK CUSTOMER PROFILE

<p>Electricity Andhra Pradesh Central Power Distribution Company Limited Bangalore Electricity Supply Company Limited BSES Rajdhani Power Limited BSES Yamuna Power Limited Calcutta Electric Supply Corporation Limited Madhya Pradesh State Electricity Board Madhya Pradesh Poorv Kshetra Vidyut Vitran Company Limited MSEDCL Ltd. North Delhi Power Limited Reliance Energy Limited (Formerly BSES Limited) Torrent Power SEC Limited Torrent Power AEC Limited</p>	<p>Insurance Birla Sun Life Insurance Co. Ltd. ICICI Prudential Life Insurance Child Life Insurance Corporation of India Kotak Mahindra Old Mutual Life Insurance Limited SBI Life Insurance Co. Ltd. Aviva Life Insurance Company Limited Max New York Life Insurance Company Limited Reliance Life Insurance Company Limited HDFC Standard Life Insurance Company Limited</p>
<p>Mobile Airtel Mobile Services BPL Mobile Idea Cellular Limited Vodafone Essar Limited (Formerly known as Hutch) Reliance Infocomm RPG Cellular Services Limited Spice Telecom Escotel Mobile Communications Ltd. Tata Teleservices Limited (Tata Indicom)</p>	<p>Charity Cancer Patients Aid Association Child Rights and You CHILDLINE India Foundation PETA India Planning Rural-Urban Integrated Development through Education National Association for the Blind SAVE The Children India Women's Institute for Social Education HelpAge India</p>
<p>Telephone Airtel Broadband & Telephone Services Mahanagar Telephone Nigam Limited Tata Teleservices Limited (Tata Indicom) Bharat Sanchar Nigam Ltd.</p>	<p>Water Chennai Metropolitan Water Supply and Sewerage Board Hyderabad Metropolitan Water Supply and Sewerage Board</p>
<p>Taxes Corporation of Chennai Municipal Corporation of Greater</p>	<p>Gas Mahanagar Gas Limited Natraj Gas</p>
<p>Magazines India Today Wisden Asia Cricket</p>	<p>Donations Shree Siddhivinayak Ganapati Temple Reader's Digest</p>
<p>Credit Cards BOBCARDS Limited ISP In2cable</p>	<p>Partners Bank of Baroda SIDBI Venture Capital Limited Flextronics Software Systems</p>

Source: Billdesk Website

Exhibit XIX

PE IN INDIA

Risk Capital Foundation seems to be the first VC–PE firm to start operations in India in 1975. During 1976–95, domestic financial institutions, such as Industrial Finance Corporation of India (IFCI), Industrial Development Bank of India (IDBI) and Industrial Credit and Investment Corporation of India (ICICI Bank) were some of the few private organizations that provided any Venture Capital (VC) or Private Equity (PE) capital, and the actual investment made by them was also negligible. During the period 1996–2000, several international and domestic VC and PE firms raised capital internationally and started investing tiny amounts in India. For example, the total investment in India made by these firms was only US \$20 million in 1996 and US \$80 million in 1997.

Even though VC–PE investment was only \$20 million in 1996 and \$80 million in 1997, the pace of growth was very healthy largely due to the worldwide dot-com boom. Unfortunately, because this growth was driven by of the dot-com bubble, it came crashing down soon after NASDAQ lost 60 per cent of its value in 2000—for example, the total number of deals declined from 280 in 2000 to 110 in 2001 – and this investment reached its low point both in the number of deals and total value in 2003.

From 2003 onwards, India's economy started growing at 8–9% annually in real terms and at 13–15% in nominal terms (including inflation), and since some sectors (e.g., the services sector and the high-end manufacturing sector) started growing at 10–14% a year in real terms and 15–20% in nominal terms, VC–PE firms started investing again in 2004. For example, they invested US \$1.65 billion in 2004, surpassing the investment of \$1.16 billion in 2000 by 42 per cent.

Source: Compiled from various articles on IndiaPE website

Exhibit XX

IPO MARKET FOR PE FIRMS

In the past four years, there have been around 700 deals. Assuming a few secondary rounds, there still would have been 400–500 deals. Since a typical holding period is three years or more, funds would still be invested in most of these deals.

While many of the recent IPOs have PE investors in them, the exit cycle has not really begun in a big way in the Indian market yet. While one may hear of 30 new deals in a month, there are not more than one or two exits. In another year or so, there may be exits at the rate of 100–200 per year; in other words, 10 or more exits per month. That is when things will get interesting. It could also point towards how many deals are actually working.

Financial or stock market information is not the only way to figure out whether deals are going well. A classic sign is frequent change in business model. PE investors, such as ICICI Ventures, IL&FS, Chrys Capital or Sidbi Ventures have all made good money in their early funds. Many of them have shown over 30–40% annualized returns. It will be far trickier from here on, though a 9 per cent growth would surely help.

No 2007 deal has come close to Warburg Pincus Llc.'s \$840 million sale of its residual 5.6 per cent stake in Bharti Televentures Ltd. (Now Bharti Airtel Ltd.) to Vodafone Group Plc. and Citigroup Venture Capital International's \$593 million sale of its 41 per cent stake in iFlex Solutions Ltd. to Oracle Corp., both in 2005. Private equity investors have pushed through exit transactions in India worth \$1 billion in 2007. This would, however, still be well below the peak in 2005 when the total value of exits concluded by private equity investors stood at \$3.3 billion. It is unlikely that 2008 will break that record. These numbers do not include exits by early-stage venture capital investors.

All the disclosed exits this year have been either through strategic stake sales, known as trade sales in private equity jargon, or secondary market transactions. The growing size of deals and multiple exit routes used indicate that India is fast gaining credibility for returning value to investors and augurs well for future fund-raising for this market.

Three of the eight disclosed exit deals this year are over \$100 million against just one in 2006. ICICI Venture Funds Management Co. alone has pulled off three significant exits—from ACE Refractories Ltd., Subhiksha Trading Services Ltd. and Deccan Aviation Ltd. and currently leads the pack in terms of total value of exits this year, at \$161 million.

The 2005 record included Warburg Pincus Llc.'s \$840 million sale of its residual 5.6 per cent stake in Bharti Televentures Ltd. to Vodafone Group Plc. and Citigroup Venture Capital International's (CVCI) \$593 million haul from the sale of its 41 per cent stake in iFlex Solutions Ltd. to Oracle Corp.

Markets may have crashed, justifying some recent high-profile exits by leading private equity players from Indian companies, but their pullouts may have cost them a few billions, at least notionally.

Some number crunching can show that global PE majors, such as Warburg Pincus, Baring, ChrysCap and Citigroup Venture Capital have made big profits from their Indian investments, they would have pocketed a few billions more had they held on to their shares for a little bit more. And this is exclusive of the dividend money, which would have accrued to them while they were holding the stock.

Given the spectacular bull run over the last couple of years in the Indian stock markets, the value of the listed firms rocketed sky high. While some PE funds timed the market right by exiting at a price with a fair degree of profits in Actis-Punjab Tractors, IDFC Private Equity-Hotel Leela Venture, many others made huge losses from their early exits, notionally speaking.

Take Warburg Pincus' investments in Bharti Airtel. This has been the most valuable exit by any PE firm in the country till date. The PE firm had invested Rs. 1,300 crore in 1999 in the telecommunication company. Subsequently, through various partial exits, it made a phenomenal Rs. 8,496 crore, or \$1.9 billion, at the time of the final exit, taking home more than six times its original investment.

Now look at what it lost. As of February 11, 2008, the value of shares that Warburg Pincus held before it started selling them in 2004 works out to Rs. 29,094 crore, or around \$7.2 billion.

To be fair, Warburg Pincus held the shares for about seven years in Bharti. On an average, PE firms typically stay put in a firm anywhere about 5–10 years. The PE funds need to sell out even if they see the value of their investment going up because the funds have a life period, which stretches for about 10 years in general at the end of which the original investors are returned their money. This separates PE firms from other companies or strategic investors, who usually acquire for perpetuity.

Warburg made an even swifter exit from another significant investment in India, cement giant Gujarat Ambuja (now renamed as Ambuja Cements). The PE firm had invested nearly Rs. 270 crore in 2001 in the company and pocketed close to Rs. 827 crore through two separate transactions in 2005-end. The value of the shares that Warburg Pincus held initially would have fetched it more than Rs. 1,144 crore at today's price.

Warburg is not the only one to have lost out to bigger gains. Other early entrants to the PE/VC scene in India, such as Actis, ChrysCapital and Citigroup also could have potentially made a bigger killing out of their investments. In fact, these firms made quick exits from some firms.

Actis, for instance, lost a great deal by selling a tad too soon in UTI Bank (now Axis Bank). The PE firm, which had invested around Rs. 158 crore in 2001, pulled out within three years, pocketing nearly Rs. 437 crore. However, this was one multi-bagger it lost out big time. The value of the bank shot up considerably after Actis sold out in 2004, and the current value of its investments stands at Rs. 4,314 crore, or \$1.1 billion. Actis's other major exit was timed right. The PE firm had sold its stake in Punjab Tractor to Mahindras last year at a price, which the scrip never got to see again.

Exhibit XXI

TechProcess Projected Income Statements, (Rs in Lakh)

	<i>Year Ended March 31,</i>				
	<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2006</i>	<i>2005</i>
	<i>Estimate</i>	<i>Estimate</i>			
Consolidated Statements of Operations:					
Revenues:					
Third parties	13,963	11,355	9,698	8,816	7,475
Related parties(a)	1,186	2,257	2,366	1,529	0
Total processing and servicing	15,149	13,612	12,064	10,344	7,475
License fees	684	690	715	862	481
Maintenance fees	808	735	694	609	536
Other	687	724	541	564	372
Total revenues	17,328	15,761	14,014	12,381	8,863
Expenses:					
Cost of processing, servicing	6,995	6,799	7,489	7,301	5,215
Research and development	1,894	1,506	1,576	1,589	1,018
State and marketing	1,483	1,633	1,658	2,580	1,279
General and administrative	1,307	1,115	1,248	1,442	1,169
Depreciation and amortization	5,074	6,475	12,445	12,214	1,224
In-process R&D	9	0	0	531	197
Impairment of intangible assets	0	292	4,431	0	0
Reorganization charge	0	40	468	0	0
Total expenses	16,762	17,862	29,314	25,657	10,103
Income (loss) from operations	565	(2,101)	(15,301)	(13,277)	(1,241)
Equity in net loss of joint venture	(17)	0	0	0	0
Interest	0	0	0	0	0
Income	163	209	242	440	220
Expense	(376)	(371)	(365)	(376)	(229)
Loss on Investments	0	(92)	0	(459)	0
Income (loss) before income taxes	335	(2,354)	(15,423)	(13,671)	(1,250)
Income tax expense (benefit)	34	(946)	(2,825)	(3,296)	(327)
Net income (loss)	301	(1,491)	(12,599)	(10,375)	(923)

Source: Estimation based on Checkfree Income statement (Year 2000-04)

AHMEDABAD MUNICIPAL CORPORATION (AMC)

AMC has a history of 180 years—almost two centuries! In the year 1817, a governing committee was formed to administer the city of Ahmedabad. In 1858, this committee was given statutory recognition. In 1873, this body became a city municipality and by 1926, it was made a burrough municipality. The municipality was upgraded into the Ahmedabad Municipal Corporation on July 1, 1950.

The city has seen a tremendous growth over the recent decades and the municipal corporation has been fairly successful in keeping pace with the demands made by such growth. For example, in the past decade, the length of surface roads has increased from 940 km to 1,058 km; the number of street lights and the conservancy staff have doubled. Exhibit I indicates the major parameters of growth.

The head of the municipal corporation's administration is the Municipal Commissioner. The municipal corporation is organized functionally into eight departments—tax, accounts, estate, town planning, engineering, health, project, and octroi—each headed by a Deputy Municipal Commissioner. The administration of the city is being restructured and five zonal offices—north, east, centre, west, and south—each headed by a deputy municipal commissioner are being created. The emerging structure of administration is a matrix structure. The operational responsibility will vest in zonal offices while the policy issues will fall in the domain of the functional heads at the head- quarters.

CHANGING ENVIRONMENT

Growing urbanization is putting pressure on the existing infrastructure of the towns and cities. It has been noticed that choice of locations for corporate investment is governed, among other things, by the facilities offered by the cities. Since the metros have many problems—high real estate cost, high cost of living, high levels of pollution, inadequate transportation facilities—smaller cities such as Ahmedabad are becoming more important as investment locations. This imposes a huge responsibility on the municipal corporation to continuously upgrade the quantity and quality of town services.

Many municipal corporations are reeling under sustained deficit on revenue account. This often results in poor services. The state governments are not in a position to fund municipalities

in larger measures. Many state governments are not keen to get involved in the day-to-day administration of these municipalities and municipal corporations. These developments have opened a new set of opportunities for progressive municipal corporations. They have come to realise that financial self-sustainability is the key to survival, independence and progress. AMC realised the need to tackle the problem in a planned manner. Restructuring is an attempt in this direction. It decided to computerise its accounting function using the commercial system of book keeping (unlike the cash based accounting system in government). Experts have been engaged to re-engineer the business process.

AMC'S FINANCIAL POSITION

The municipal corporation has different sources of cash flows. These are octroi, taxes, profits from investments, grants received and made, operational expenditures, and debt servicing. Exhibit II shows the sources and uses of funds of AMC for the year 1995 and 1996. The items that make revenue income are octroi (53%), tax (26%), and profits made on investments (21%).

The revenue expenditure includes establishment charges, energy charges, repairs and maintenance, and others. Capital expenditures involve project implementation costs. These projects deal with solid waste management, drainage, water supply, slum improvement, roads, bridges and flyovers.

It may be noted that revenue account is far in excess of capital account. The single largest head of funds pertain to octroi. Therefore, octroi management holds the key to successful fund management. Octroi collection can be enhanced in two ways: first, collecting from the existing clients more efficiently; second, enhancing the collection pool. The first approach called for the streamlining of the collection process. The second called for increasing the attractiveness of Ahmedabad for trading activity through better infrastructure.

The efforts to improve collection efficiency included:

- Building unloading stations for trucks, so that complete inspection of goods can be made. This reduces dependence on false declaration and random checks.
- Additional check points to cover all incoming routes
- Close liaison with local police to expeditiously handle cases of evasion
- Construction of watch towers
- Increasing the strength of vigilance and inspection staff; creation of flying squads and mobile inspectors
- Reduction of taxes in arrears through follow up and collection

These steps enabled the municipality to wipe out the entire revenue deficit in two years. In fact, the result was a surplus of Rs. 10 crore. The accounts of AMC are presently maintained on cash basis. The past two years (1995 & 1996) have been exceptionally good years as far as revenue collection is concerned. Substantial part of the cash collected pertains to the arrears of the past years.

For the future, AMC has made estimates for project expenditure (Exhibit III). It is evident that the project expenditure will reach a peak in 1999, and will gradually decline thereafter. It is possible to compute the cash balances of the municipal corporation under some assumptions. Two sets of assumptions (best case and worst case) are given below.

	<i>Best case</i>	<i>Worst scenario</i>
Cost over-run	0%	50%
Long-term revenue growth rate	12%	11%
Long-term expenditure growth rate	14%	15%
Growth in octroi (1997)	27%	20%
Growth in tax (1997)	50%	25%
Growth in expenditure (1997)	30%	45%
Other revenue (Rs. crore) (1997)	101.96	50.00

One group of analysts opined that the assumptions given in Exhibit IV are more realistic.

FINANCING PLAN

The World Bank has estimated that developing nations require \$ 10 billion for funding urban infrastructure projects but the municipal authorities may be able to raise only \$ 1 billion on their own. Thus, the gap of \$ 9 billion has to be tapped from various other sources.

The projects (for providing infrastructure facilities such as drinking water) envisaged by AMC require Rs. 742 crore during the years 1997–2002 (Exhibit III). It appears that Rs. 450 crore will be available from government loans (Exhibit V). This leaves a gap of Rs. 292 crore. The internal accruals may be inadequate to meet this demand for funds.

There are two approaches to meet the fund gap. The first is to seek new sources of funds. The second alternative is to alter the investment side—reduce investment or change the investment schedule to match the fund availability horizon. AMC chose to opt for the first approach. It decided to tap the capital market on its own for meeting part of the fund requirement. The United States Agency for International Development is expected to provide a loan of \$ 25 million with a repayment period of 30 years. AMC is also networking with Housing and Urban Development Corporation for raising funds for urban infrastructure.

AMC had no scope to tap the equity market as it would create fundamental change in ownership, needing major changes in statutes through public debate. Hence, recourse to debt market was the only choice. Municipal bonds are new to India but have been popular in the West. These bonds are structured in a special manner because of the unusual time horizons, cash flow patterns, and risk characteristics. The basic structure is determined by: general vs specific obligation, revenue vs infrastructure financing and private placement vs public issue.

The first item decides the cash flows that will be used to service the bond. In a general obligation bond, the servicing is done from any and all cash flows of the corporation. In a specific obligation bond, the servicing is done from a specific and identified cash flow stream.

Infrastructure projects have revenue streams that are small in each year but spread over a period of years. This calls for skilful matching of bond duration and the asset duration. Thus, infrastructure bonds are somewhat different from other bond issues.

Public issue offers greater liquidity. But, in the absence of active secondary market for debt, this advantage is difficult to realize. Thus, private placement with large institutions is a feasible alternative.

RATING OF AMC AND ITS BOND ISSUE

Unlike business corporations, public bodies such as municipal corporations may issue bonds without approval from the Security and Exchange Board of India (SEBI). However, rating of public debt issues has become a standard practice in India. In April, 1996 AMC sought rating by CRISIL. CRISIL has an alliance with Standard & Poor which helps it access the S & P methodology of municipal-bond rating.

Rating of a debt instrument follows some standard principles and a municipal bond is no exception. The basic idea is to estimate the loan servicing capability of the borrower. This assessment is broken down into many components. This enables the rating agency to understand the importance of different factors in servicing capacity and the sensitivity of the servicing capacity with respect to each such factor. The factors are rank ordered in terms of: contribution of the factor to cash flows and the uncertainty/volatility of the factor.

There are some items which do not directly influence the cash flows but are seen as collateral that protect the downside of the principal. Stronger collateral values result in higher rating.

Standard & Poor rates the municipal bonds based on number of factors. These are:

1. Composition of existing debt (amount, maturity, security, revenue source for debt service)
2. Total assessed value of the assets for the past four years (nature of the asset, assessment procedure)
3. Tax collection statements for the past four years (basis, sources, tax rate, amount collected)
4. Recent estimates about demographic profile
5. Two most recent annual reports and annual budget
6. List of 10 largest tax payers (with valuation of their properties)
7. Description of economic profile of the municipal area
8. School enrolment in the past 10 years
9. Borrowing plans for the next five years
10. Capital improvement plans for the next five years.

This information is arranged into four heads: debt factors; administrative factors; economic factors; and current financial account analysis. Appendix I describes the first three classification in more detail.

AMC chose to issue a general obligation bond. Two things make the issue safe. First, there is the State backing to a municipality. Second, Rs. 100 crore issue is just 30 per cent of the annual revenue receipt. CRISIL, after analysis, accorded A+ rating to the issue in the fall of 1996.

BOND ISSUE

AMC approached the government of Gujarat for permission to mobilize funds through a bond issue. The approval was given in May 1997. The government of Gujarat has sought from the Ministry of Finance (Government of India) tax exemption status for these bonds. The State government has pointed out that in the Western countries municipal bonds are tax-free. This enhances its attractiveness to the investors. The expectation is that such tax exemption will bring more public participation. In the USA, municipal bonds worth \$ 1,000 million are in the market and all enjoy tax concessions. The Ministry of Urban Development (Government of India) and the Planning Commission have supported the Gujarat government's suggestion. The bond issue of Rs. 100 crore is expected to hit the market in later part of 1997. The issue will be managed by the Infrastructure Leasing and Finance Services Company. The structure of the proposed bond issue is described below:

Proposed bond issue details	
Tenure:	7 years
Issue size:	Rs. 100 crore
Interest payment:	17% p.a. on Rs. 100 crore
Issue date:	1.1.1998
Redemption:	31.12.2004
Payment of Principal to bond trustee:	7 equal instalments starting from 31.12.1998

PUBLIC POLICY ISSUE

Public issue of bonds by AMC raises many questions. The ability of the corporation to service the bond will appear weak if some critical assumptions are altered. CRISIL awarded A+ to AMC's bond issue. Perhaps CRISIL has largely relied on the status of the municipal corporation as a public body. It means that the government has provided an implicit guarantee to the bond-holders. This amounts to an indirect financing by the government and option held by the bondholders. The important issues are: To what extent the government is 'financing' AMC indirectly? What is the value of the option held by the bondholders? How can we justify and evaluate the value shift from government to the corporation?

DISCUSSION QUESTIONS

1. What are key challenges in designing and making a public issue of bonds by organizations such as AMC?
2. Why credit rating important in bond issues? What are the key assumptions made in credit rating process and what is the criticality of these assumptions? Do you think the ability of the AMC to service the bond will appear weak if some critical assumptions are altered?
3. CRISIL awarded A+ to AMC's bond issue. What are factors CRISIL has largely relied on? Are there any implicit guarantees to the bond-holder?
4. To what extent do you think the government is "financing" AMC indirectly?
5. What is the value of the option held by the bond-holders? How can we justify and evaluate the value shift from government to the corporation?

Exhibit I**Highlights of Ahmedabad**

	1981	1991
No. of Election Wards	36	43
No. of Corporators	105	129
Area (City Limits) sq. km.	98.15	190.84
Population	2,059,725	2,876,710
Literacy	71.20%	73.01%
Students	216,903	258,966
Primary Schools	496	570

Source: Statistical Outline of Ahmedabad City

Exhibit II

Details of Actual Cash Flows during 1995 & 1996
Year ending on 31st March

(Rupees in lakh)

	1995	1996
Revenue Account		
Revenue Receipts		
1. Direct service charges		
1.1. Octroi	15,314.01	20,298.19
1.2. Tax	7,313.73	8,002.52
1.3. Sub-total	22,627.74	28,300.71
2. Others (including grants)	5,918.68	7,121.05
3. Total (1 + 2)	28,546.42	35,421.76
Revenue Expenditure		
4.1. Establishment	9,561.03	11,373.90
4.2. Energy charges	2,544.16	2,869.99
4.3. Repairs & maintenance	2,467.32	3,417.19
4.4. Gen. contingency	209.38	258.79
4.5. Spl. contingency	528.16	417.84
4.6. Spl. expenditure	318.74	542.18
4.7. Other expenditure	53.20	23.38
4.8. Grants given	5,845.90	7,056.03
4.9. Sub-total	21,527.89	25,959.30

Contd . . .

Exhibit II Contd . . .

	1995	1996
Revenue Surplus	7,018.53	9,462.46
Interest Paid		
5.1. HUDCO loan	90.35	68.91
5.2. Other loans	2,008.92	1,690.39
5.3. Other financial charges	19.29	7.61
5.4. Sub-total	2,118.56	1,867.21
Net Revenue Surplus	4,899.97	7,595.25
Capital Account		
Inflow		
5.1. Capital receipt	3,830.29	3,100.55
Outflow		
6.1. Projects	2,748.28	6,579.43
6.2. HUDCO loan repayment	145.56	145.56
6.3. Other loan repayment	976.28	1,512.83
6.4. Sub-total	3,870.12	8,237.82
Capital Surplus	-39.83	-5,137.27
Net Surplus	4,860.14	2,457.98
Cash Position		
7.1. Opening balance	247.96	5,108.11
7.2. Add net surplus	4,860.14	2,457.98
7.3. Closing balance	5,108.10	7,566.09

Exhibit III

Estimated Expenditure for the Proposed Urban Infrastructure Project

Year	(Rupees in lakh)										
	Bridges and flyovers	Road	Slum network	Water Project	Drainage Project	Water Project Narmada	Solid Waste Management	National River Conservation	Pay and Use	Total	per cent
1997	320	2,651	0	1,204	48	5,000	0	0	0	9,223	12.4
1998	1,350	2,479	2,000	2,499	901	5,000	600	1,000	500	16,328	22.0
1999	1,250	1,000	2,000	9,063	2,357	0	600	1,000	500	17,770	23.9
2000	1,484	1,000	2,000	8,954	1,245	0	0	1,000	500	16,183	21.8
2001	1,300	1,000	2,000	4,000	0	0	0	0	0	8,300	11.2
2002	1,000	397	2,000	3,000	0	0	0	0	0	6,397	8.3
Total	6,704	8,527	10,000	28,720	4,552	10,000	1,200	3,000	1,500	74,201	100

Exhibit IV

Assumptions Made by a Group of Analysts

(Figures in per cent)

Cost over-run	0
Long-term Rev. Growth rate	10
Long-term Exp. Growth rate	14
Growth in Octroi in 1997	27
Growth in tax in 1997	50
Growth in other rev in 1997	43

Exhibit V

Loans Expected to be Given by the Government During the years 1997-2002

(Rupees in lakh)

1997	2,956
1998	7,930
1999	12,439
2000	11,328
2001	5,810
2002	4,478
<i>Total</i>	<u>44,941</u>

Exhibit VI

Expenditure for Existing Projects* Years 1995–2011 Year ending 31st March

(Rupees in lakh)

<i>Year</i>	<i>Amount</i>
1995 (actual)	2,478.28
1996 (actual)	6,579.43
1997	1,000.00
1998	1,120.00
1999	1,254.40
2000	1,404.93
2001	1,573.52
2002	1,762.34
2003	1,973.82
2004	2,210.68
2005	2,475.96
2006	2,773.08
2007	3,105.85
2008	3,478.55
2009	3,895.98
2010	4,363.49
2011	4,887.11

* excluding the proposed infrastructure projects

Exhibit VII

Existing HUDCO loan details

Loan outstanding as at 1.4.1994:	Rs. 7.38 crore
Interest rate:	13.5%
Repayment schedule:	Rs. 145.56 lakh in each of the year (1995–1998)
	Rs. 97.96 lakh in year 1999
	Rs. 57.65 lakh in year 2000

Exhibit VIII

Interest Payments and Principal Repayment Schedule of Debts* 1995–2011

(Rupees in lakh)

<i>Year</i>	<i>Repayment</i>	<i>Interest</i>
1995 (actual)	976.28	2,008.91
1996 (actual)	1,512.83	1,790.69
1997	3,640.00	3,982.64
1998	4,046.90	4,675.08
1999	4,772.11	6,568.59
2000	4,351.41	8,298.08
2001	4,352.48	9,087.90
2002	1,805.87	9,643.26
2003	3,006.22	9,248.43
2004	3,796.49	8,713.64
2005	4,271.05	7,980.45
2006	4,789.13	7,305.14
2007	4,769.10	6,495.39
2008	5,283.33	5,081.97
2009	5,496.15	4,233.52
2010	5,401.15	3,895.52
2011	4,767.12	2,564.12
<i>Total</i>	<u>67,037.62</u>	<u>1,01,573.30</u>

* except HUDCO loan and the proposed bond issue

Exhibit IX

Interest Charges (actual) for the Years Ending March 31, 1995 & 1996

(Rupees in lakh)

HUDCO loan	90.35	68.91
Other loans	2,008.91	1,690.39
Government loans	0	100.30
Other financing charges	19.29	7.61
<i>Total</i>	<u>2,118.55</u>	<u>1,867.21</u>

Exhibit X

Capital Receipts Expected: 1995–2011

(Rupees in lakh)

<i>Year</i>	<i>Amount</i>
1995	3,830.29 (actual)
1996	3,100.55 (actual)
1997	250.00
1998	280.00
1999	313.60
2000	351.23
2001	393.38
2002	440.59
2003	493.46
2004	552.67
2005	619.00
2006	693.27
2007	776.46
2008	869.64
2009	974.00
2010	1,090.87
2011	1,221.78
<i>Total</i>	<u>16,250.79</u>

STANDARD & POOR FACTORS FOR DEBT RATING OF MUNICIPALITY

Debt Factors

The first matter that S & P looks at under debt factors is the nature of security behind the bond in question. The investment advisory body also checks the bond's indenture and resolution. A key question is whether there are any legal limits to the amount of debt the issuer may incur and how closer is the issuer to it.

Another issue is the comparison of issuer's current and proposed debt on three different parameters

- Per capita debt
- Per capita debt in relation to per capita income
- Debt in relation to the total market valuation of taxable property.

There are no fixed norms on what is considered acceptable but its evaluation depends on community characteristics. For instance, communities with high per capita income would have a higher limit of a acceptable per capita debt.

The trend in the issuer's debt, as a percentage of its per capita income and the market valuation of its property, is also considered. The rate of debt retirement is an important matter. Debt with shorter maturity is considered easier to sell by the underwriters. The point is that debt retirement should be evenly spread out with no huge amounts due in any one year.

The investment advisory organization also looks at the issuer's debt service costs in relation to its gross revenues. Once again, a lot depends on the community features. For example, if it is a city, then higher debt service ratios will be acceptable. Debt history is examined to assess whether the issuer has ever defaulted on interest or principal payments before.

Finally, S & P asks what amount will the issuer need to borrow over the next five years.

Thus, the key questions are:

- How does the amount that is required to be borrowed compare with the amount outstanding?
- How does the amount currently outstanding compare with the amount that will be retired?

If the first figure in either case is high, then there is a cause for concern.

Administrative Factors

The important factor is what form of government is involved. S & P first asks whether the government has wide ranging responsibility and authority. Governments which have the authority to levy taxes are certainly considered more creditworthy.

Contd . . .

Next, the investment advisory body considers the form of management, essentially the degree of professionalism in the management. Further, it also inquires about the issuer's capital improvement programme and other long range plans. It studies them for evidence of careful thought or ad hocism. Another administrative factor is any limitations on tax rates. The issuer may be legally barred from levying taxes beyond a certain rate, or it may be forbidden to set aside more than a certain portion of its taxes to pay off principal and interest on debt. Depending on how stringent such limitations are, they can be drawbacks to the issuer's ability to obtain a high rating.

The issuer's tax collection experience is also important. At times municipalities base their revenue projections on 100 per cent collection rates whereas actually the collection could be far lower.

Finally, the investment advisory organisation looks at the issuer's revenue structure and the elasticity of that structure. In case the issuer is heavily dependent on one form of tax, say income tax, then recession can wreck havoc with both its revenues and its budget. S & P likes to see a reasonable balance in the kind of taxes levied by a municipality.

Economic Factors

The state of an issuer's economy has a direct impact on its ability to service the debt. First, and foremost, S & P looks for economic stability either in the form of diverse tax base or widespread employment opportunities. Stability of employment is measured in relation to nearby/comparable areas or rate of unemployment.

Population data, especially its rate of increase or decrease, is also studied. A rapid increase is indicative of approaching problems in the form of heightened demand for more hospitals, schools and municipal services.

In assessing an issuer's economy S & P also looks into the per capita estimated market values of all taxable properties, the per capita estimated market values of homes, and the per capita volume of wholesale and retail sales.

Finally, the investment advisory organization makes an analysis of the issuer's current account, in particular, its fiscal performance in relation to its budget and its balance sheet. Obviously, the major question is whether the main operating account ended with a surplus or deficit in the most recent year of its operations.

S & P also looks at the issuer's current assets. It is particularly interested in quick assets, i.e., cash and securities that can be quickly marketed. Another point that the investment advisory body keeps in mind is the amount of state financial support the issuer is currently receiving and whether the state is likely to continue its level of support.

Yet another matter that the S & P investigates is whether the issuer's accounts are independently audited. Independent audit is seen as an assurance of the quality of an audit.

Finally, S & P tries to ascertain whether the issuer engages in any kind of financial gimmickry. Many municipalities have been found to be indulging in financially imprudent practices like borrowings from its capital fund to meet its operating budget and counting on revenues that might never materialize.

INDIAN BUILDERS' COMPANY LIMITED

In June 2011 meeting of the board of directors, the Indian Builders' Company Limited (IBCL) was considering its future dividend policy in view of expected increase in earnings levels for the next three to five years. The company was successful in winning a bid which fetched it a contract of Rs. 210 crore from the Shivali State Development Authority for the design and construction of a bridge on a turbulent river and a flyover in a high traffic zone in the State. In the opinion of Mr. Suresh Duggal, the managing director of IBCL, this contract will be sufficient to guarantee full operations and a substantial increase in the company's earnings for at least the next three years. In the light of this, he thought that there was a need to reconsider the company's dividend policy.

HISTORY OF IBCL

In 1965, a partnership firm with the name of Solid Constructors was promoted for undertaking engineering and construction activities. As the operations of the firm expanded in the fifties, it was converted into a private limited company, known as the Indian Builders' Company Private Limited, in 1970. The company showed further significant growth in its revenues on account of the spurt in the construction activities in the country in the sixties. The company needed more capital to support its growth. Therefore, it was converted into a public limited company on December 26, 1991. It made a public issue of equity shares of Rs. 2 crore in February 1992. The issue was well received by the public and financial institutions which had underwritten the issue. The company also issued preference capital of Rs. 43 lakh to the financial institutions. A further issue of equity share capital of Rs. 2.5 crore was made in 1998.

The company's scope of operations has considerably increased today since its inception as a partnership firm in 1965. Now its activities include construction of tunnels, bridges, irrigation projects such as dams, airport runways, water and sewerage turnkey projects, deep drilling and other large-scale construction and engineering works. It faces tough competition with financially strong Indian and multinational construction companies.

During the year 2011, IBCL made an all-time high sales of Rs. 200 crore and profit before interest and tax (PBIT) of Rs. 19 crore. However, the company had a fluctuating fortune during the last decade of its operations on account of increasing competition and uncertainties

of construction activities. The company was in the red in terms of its profit after tax (PAT) twice—once in 2001 and again in the year 2009 (Exhibit I). In both the years, the company's sales dropped from their previous levels in spite of the cyclical behaviour of its earnings. It always paid dividend to its shareholders (Exhibit II). The company has also adopted an aggressive financing policy; the use of debt has been showing an increasing trend over the years (Exhibit III).

DIVIDEND POLICY

Mr. Duggal explained to the board members that IBCL has never skipped dividend, and historically, it has been distributing half of its earnings as cash dividends to its equity shareholders (Exhibit II). He felt that a widely-held public limited company such as IBCL must always pay some dividend. He justified the company's existing policy of paying 50 per cent of its earnings as dividends.

IBCL's half-yearly results for the year 2011–12 have shown considerable increase in sales and profit after tax. In view of the Rs. 210 crore government contract, the company is expecting the following results for next three years:

<i>(Rupees in crore)</i>			
<i>March Ending</i>	<i>Sales</i>	<i>PBIT</i>	<i>PAT</i>
2012	240.60	32.45	9.80
2013	264.00	36.44	11.20
2014	277.50	37.27	12.60

Mr. Duggal argued that in view of the expected earnings per share of Rs. 9 in the year 2012, the company should increase the dividend per share to Rs. 4.50. He also believed that keeping with the company's historic pay-out policy of 50 per cent, IBCL may have to consider paying higher dividend of Rs. 5 and Rs. 6 respectively in the subsequent two years, viz. 2013 and 2014. He further stated that shareholders also look for a growth in their holdings. Therefore the company might also consider a bonus issue in 2013. He reminded the members that the last bonus issue was made in 2008.

Mr. Kasturi Lal, a nominee-director representing financial and investment institutions, strongly disagreed with Mr. Duggal's views. He was against the company's constant dividend pay-out policy because it has made the behaviour of dividend per share cyclical (Exhibit II). He explained that a construction company like IBCL is bound to have fluctuating sales and earnings, and therefore, paying a constant percentage of earnings as dividends may result into varying dividend per share. In his opinion the company's share prices have been highly volatile because of its highly erratic dividends per share. He believed that fluctuating dividend per share has made the company's shares quite speculative. This speculation has harmed the interests of genuine investors. He was particularly concerned about the institutional investors who have twin investment objectives in a developing economy like ours. They want to earn a reasonable return

from their investments and they would also like that the share prices of the companies in which they have invested their money do not show extreme fluctuations. In fact, financial institutions in India are required to play the role of bringing stability in the stock markets. He further stated that investment institutions such as the Unit Trust of India may not invest in the shares of those companies whose prices show wide variability. He was very much perturbed by the erratic price movements in the IBCL's shares during the past decade.

Mr. Umesh Saxena, the finance director, taking the lead from Mr. Lal, suggested that IBCL should follow a policy of paying a constant dividend per share. He felt that the certainty which this dividend policy would introduce would minimise the wide fluctuations in the share prices. He further stated that some studies have indicated that because of the shareholders' preference for certain dividends, a stable dividend policy helps a company to increase its price-earnings ratio. He clarified that a stable dividend did not imply constant dividend per share forever; a company should increase the dividend per share after some time as the management becomes certain about the increase in the level of earnings. He argued that given the cyclical behaviour of IBCL's earnings, even a dividend per share of Rs. 3.50 as paid in the last year was quite high. He however recommended that IBCL may continue with the current dividend per share and may consider increasing it after three or four years only if the company's earnings show a stabilized trend.

Mr. Manek Verma, director of corporate planning, intervened in the discussion by saying that the views expressed so far did not make any sense to him. In his opinion, implications of IBCL's existing dividend policy and the one suggested by Mr. Lal and Mr. Saxena were almost the same; one implied fluctuating dividend per share while the other meant fluctuating pay-out. He asked: What should be the objective of a company? Should it not be the maximization of growth and profitability through judicious investment decisions? He stated that the management of IBCL should be more concerned about financing all profitable investments, first out of internal funds and in case they are not sufficient, by raising external funds. He argued that IBCL generally has shown an increasing trend in its activities in the last decade and this growth has been mostly financed by borrowings. He further stated that the future anticipated growth would require considerable funds and IBCL should finance it through internal sources. He further explained that retention of earnings is a convenient method of financing besides saving the company from incurring floatation costs, which are generally estimated at around 10 to 15 per cent of the amount raised. In his opinion, the growth-oriented investment policy will generate a high amount of earnings which would favourably influence share prices. He therefore recommended that IBCL should pay dividend only when it did not have profitable investments to finance from internal funds.

Mr. Lal sharply reacted to Mr. Verma's recommendations. He reiterated his arguments by emphasizing that an uncertain dividend policy is bound to make IBCL's shares volatile and therefore speculative. He once again referred to the consequences of IBCL's uncertain dividend policy which resulted in very low and widely fluctuating share prices. Because of such low prices, the dividend yield on IBCL's shares has been exceedingly high. To emphasize his point, he cited the following data for some of the companies in the construction industry (names disguised):

<i>Company</i>	<i>EPS</i>	<i>DPS</i>	<i>Market Price</i>		<i>Dividend</i>
			<i>High</i>	<i>Low</i>	<i>Percentage</i>
Company A					
2009	8.5	2.4	175.0	92.5	1.8
2010	29.5	2.7	175.0	67.5	2.3
Company B					
2009	19.5	2.5	47.0	19.5	7.5
2010	4.4	1.5	55.0	29.0	3.6
Company C					
2009	16.5	3.5	660.0	300.0	0.7
2010	16.2	3.8	405.0	147.5	1.4
Company D					
2009	(3.1)	-	41.0	21.0	-
2010	(5.5)	-	21.0	8.5	-
Company E					
2009	4.3	1.6	54.0	28.0	3.9
2010	1.1	1.6	35.5	17.0	6.1

Mr. Lal brought to the notice of the board members that the dividend yield for all industrial shares as well as for the construction industry has been ranging between three and four per cent while for IBCL it has been around 15 per cent. This high yield for IBCL has been the result of fluctuating low share prices. He emphasized that low prices for the IBCL's shares has deprived its long-term investors from making long-term capital gains and thus earning a reasonable after-tax return. He strongly recommended that IBCL should follow a stable dividend policy and increase dividend per share or issue bonus shares only if warranted by permanent increase in earnings. He agreed with Mr. Saxena that dividend per share for the year 2011 should be fixed at Rs. 3.50 and this may be maintained for three to five years.

Mr. Duggal, after listening to the conflicting recommendations, was unable to make up his mind on the company's future dividend policy. He thought that a significant deviation from the existing dividend policy may convey adverse signals to shareholders and could result in low prices for the company's shares. He also felt that in view of the encouraging half yearly results for the year 2011–12, shareholders would be expecting a higher dividend per share than the last year. He also recalled the following from a write-up a leading business magazine which has reported financial performance of a sample of 400 companies: "From the sample of 400 companies, about one-third skipped dividends in the previous year. But the number of companies that declared a dividend between 10 per cent and 20 per cent increased by 20 to 210. Therefore, in a year when profits declined, dividend was either maintained or hiked by many companies. This is a clear

indication that with the increased reliance on capital markets, companies need to keep their investors happy even in bad years.”

DISCUSSION QUESTIONS

1. Why should IBCL, which is a growing company, pay dividend? What will they gain from paying cash dividends? What are the key advantages and disadvantages of paying cash dividend?
2. What are the most important issues confronting the IBCL?
3. From company’s perspective, what are the different ways in which company can formulate its dividend policy? Which policy is appropriate and why? Is the current dividend policy appropriate?
4. Should dividend policy aim at a higher payout ratio?
5. From an investor’s perspective, is IBCL’s dividend policy and dividend payout appropriate?
6. Analyze Mr. Duggals proposed dividend policy. Would you agree with it?
7. What would you recommend regarding investment in IBPL shares—buy, sell or hold?

Exhibit I**INDIAN BUILDERS' COMPANY LIMITED****Summary of Earnings Data***(Rupees in lakh)*

<i>Year</i>	<i>Net Sales</i>	<i>PBIT</i>	<i>PAT</i>	<i>PDIV</i>	<i>EDIV</i>
2001	5837	410	284	4	131
2002	5024	28	(59)	4	22
2003	5571	201	47	4	28
2004	6091	208	81	4	44
2005	10532	834	412	4	196
2006	18172	1144	320	4	153
2007	17890	1864	667	4	305
2008	18046	2019	896	4	436
2009	16067	1602	524	4	273
2010	12273	460	(145)	4	55
2011	20044	1930	768	4	382

Note:

1. In 2008 a bonus issue in the proportion of 1:1 was made.
2. PDIV and EDIV respectively mean preference dividend and equity dividend.

Exhibit II**INDIAN BUILDERS' COMPANY LIMITED****Earnings and Share Price Data**

<i>Year</i>	<i>EPS (Rs.)</i>	<i>DPS (Rs.)</i>	<i>Payout (per cent)</i>	<i>Average Market Price (Rs.)</i>	<i>P/E Ratio</i>	<i>Dividend Yield (per cent)</i>
2001	6.5	3.0	46	29.1	4.5	10.3
2002	(1.4)	0.5	-	9.2	-	5.4
2003	1.0	0.5	50	8.3	8.3	6.0
2004	1.8	1.0	56	19.1	10.6	5.2
2005	9.4	4.5	48	46.8	5.0	9.6
2006	7.3	3.5	48	21.4	2.9	16.4
2007	15.3	7.0	46	48.3	3.2	14.5
2008	8.3	4.0	48	37.2	4.5	10.8
2009	4.8	2.5	52	30.3	6.3	8.3
2010	(1.3)	0.5	-	12.7	-	3.9
2011	7.1	3.5	49	24.5	3.5	14.3

Note:

The company made a bonus issue in proportion of 1:1 in 2008. Per share data from the year 2008 onwards are based on increased capital.

Exhibit III

INDIAN BUILDERS' COMPANY LIMITED

Balance Sheet as on March 31

(Rupees in lakh)

	2008	2009	2010	2011
<i>Assets</i>				
Cash and bank	543	636	269	800
Sundry debtors	1261	1323	1602	2304
Inventory	12197	11994	14885	17340
Other current assets	401	441	540	219
Current assets	14402	14394	17296	20663
Gross block	8833	9793	11223	13223
Less: acc. depreciation	3934	4453	5221	6405
Net block	4899	5340	6002	6818
Other fixed assets	180	185	125	190
Net fixed assets	5079	5525	6127	7008
<i>Total assets</i>	19481	19919	23423	27671
<i>Liabilities</i>				
Sundry creditors	4942	4453	6325	6421
Advances from customers	1878	1757	2270	3156
Bank borrowings	5634	5270	6810	9474
Tax provision	524	324	186	47
Other current liabilities	142	166	3	12
Current liabilities	13120	11970	15594	19110
Long-term debt	1685	3025	3109	3459
Preference capital	43	43	43	43
Equity capital	1090	1090	1090	1090
Reserves and surplus	3543	3791	3587	3969
Net worth	4676	4924	4720	5102
<i>Total funds</i>	19481	19919	23423	27671

THE ASSOCIATED CEMENT COMPANIES LIMITED

In the last week of September 2010, the Associated Cement Companies Limited (ACC) sent a notice to the Bombay Stock Exchange stating that the board of directors of the company would meet on October 22, 2010 for finalizing the accounts for the year ended July 31, 2010, for recommending dividend for the year, and for considering an issue of bonus shares. The notice was required as per the listing agreement entered into between the company and the Bombay Stock Exchange. The purpose behind this requirement is to ensure the disclosure of the vital information affecting a company to the investors and the general public through the stock exchange so that the information is available to all and is not misused for insider trading.

Bonus calculations which had commenced early in September 2010 for various configurations had been completed and, in accordance with the guidelines, a bonus issue in the ratio of 4:5 seemed perfectly feasible. The executive committee of the board of directors which included the institutions' nominees met on 17th October and decided that the company will issue bonus shares in such proportion as may be decided by the full board at its meeting scheduled for the 22nd October. But the unexpected and unforeseen happened when the institutions decided to veto the proposal. The reasoning behind the veto is not known. Various surmises have been made.

ACC was incorporated in 1962 at Bombay. The main business of the company consists of the manufacture of cement, refractories, cement plants and other machinery including structural and mild fabrication. The company also offers consultancy services in respect of design and drawings for the construction of cement plants. It has recently diversified into fertilizers. It is the largest cement manufacturer in the country accounting for about 31 per cent of the installed capacity, 33 per cent of production and 32 per cent of sales. It has 17 production units located in various States.

The company has about 64,000 shareholders who are widely distributed (Exhibit I). The financial institutions form a major group with investment amounting to nearly 38 per cent. Among the top companies in the private sector in the year 2008–09, ACC ranked third in terms of total assets and seventh in terms of sales. The financial performance of the company during the last five years can be examined from Exhibit II.

The equity shares of ACC was considered as widow's scrip. But it has now become the most sought-after scrip by the speculators of the stock market. The fluctuations in its market price

(Exhibit III) from December 2009 to the end of October 2010 reveal that the prices increased from Rs. 303.5 on May 5, 2010 to Rs. 460 on October 13, 2010, but declined to Rs. 366 on October 30, 2010 when the proposal of making the bonus issue was dropped.

Addressing the annual general meeting on December 16, 2009, the Chairman of the company ruled out the possibility of issuing bonus shares in the near future. He stated that the company would make a bonus issue of share “as early as possible and when it is in the interest of the shareholders”. The directors could have proposed a modest issue of, say, one for five share, considering the reserve position. But such an issue would have pre-empted the company from recommending another bonus issue for next three years. The last bonus issue was made by the company in June 2006 in the ratio of 1 : 6.

The guidelines for the issue of bonus shares, among other things, require a company to indicate the management’s intention regarding the rate of dividend declared in the year immediately after the bonus issue. The rate of dividend paid in the years 2008–09 and 2009–10 was 20 per cent. Assuming a bonus issue ratio of 1 : 1, for declaring dividend of 20 per cent on Rs. 66 crore (Rs. 33 crore + Rs. 33 crore), the distributable profit required would be Rs. 13.2 crore. Thus, from a strictly computational point of view, ACC could have issued the maximum permissible bonus of 1 : 1. It earned an after-tax profit of Rs. 21.2 crore in the year 2009–10 as against Rs. 32.2 crore in the year 2008–09. The management expected better prospects for the year 2010–11 due to improved capacity utilization and the possibility of getting full benefit of Rs. 40 per tonne increase allowed to the levy cement in July 2010 to be reflected in 2010–11 results.

The performance of ACC during the year ended July 2010 showed an increase in production and sales but a drop in profits. The production of cement increased from 64.6 lakh tonnes to 71.5 lakh tonnes along with an improvement in capacity utilization from 85 per cent in the year 2008–09 to 89 per cent in the year 2009–10. Sales rose to 70.7 lakh tonnes valued at Rs. 608 crore, from 64.5 lakh tonnes valued at Rs. 502 crore. But the profit at gross level declined from Rs. 66 crore to Rs. 53 crore after providing a higher amount of Rs. 30 crore towards interest charges as against Rs. 16 crore in the earlier years. The pre-tax profit declined to Rs. 21.2 crore in the year 2009–10 from Rs. 43 crore in the previous year (Exhibit II). According to the management, the setback in earnings was due to a sharp rise in the cost of production. The company was obliged to absorb the cost increases aggregating Rs. 56 crore comprising the price of and freight on coal, power and wages. The upward revision in the levy price of cement by Rs. 40 came into effect only from July 18, 2010. The deterioration in the financial performance of the company might have influenced the financial institutions decision not to allow the company to issue bonus shares for the time being.

The bonus proposals are generally welcomed by the investors as their equity holding increases and also they gain through better market appreciation resulting from the improved image of the company. However, there are possibilities of reduction in the rates of dividend in the future unless the bonus issues are accompanied by the proportionate increase in the earning capacity. The uncertain prospects for increased profits thus generate speculation. The official guidelines for the issue of bonus shares require a declaration of the management’s intention

regarding the rate of dividend after the bonus issue. But it is not an adequate provision to prevent speculation. Further payment of dividend is not guaranteed by such declaration. Speculation is likely to persist in the case of a company like ACC when the fortunes of the cement industry have been fluctuating so widely in the past few years.

Attention may be drawn to the findings of a research study made by L.C. Gupta on bonus shares. (*Bonus Shares: Macmillan Company of India Ltd; New Delhi; 1973*). He found that higher bonus ratios were common more often among companies paying high dividend rates and lower ratios among those paying low dividend rates. Further, the nominal rate of dividend was not maintained in the majority of cases after bonus issue when the bonus ratio was 1 : 2 or above. On the other hand, the rate of dividend was maintained or even raised in the majority of cases when the bonus ratio was 1 : 4 or less. He has concluded that the probability of the nominal dividend rate being maintained after the bonus issue is inversely related to the bonus ratio. Thus, the nominal dividend rate being maintained after the bonus issue, depended not only on the bonus ratio but also on the level of pre-bonus rate of dividend. The higher this rate, the lesser is the probability of the rate being maintained. Hence, one may conclude that bonus issue by itself does not materially reward the investors. They will be rewarded only if the future dividend rates are attractive enough.

The speculative rises in the prices following bonus issue announcement are rarely based on realistic appraisal of the fundamental factors governing profit and dividend. Largely they are governed by rumours and speculative psychology. The increases in the share price at the end of one year from the date of announcement of bonus were less universal than the increase in the period immediately following such announcements. The share markets place undue significance on bonus issue and their ratio. The immediate price were haphazard and not sufficiently discriminating.

The dropping of bonus share proposal at the board meeting of ACC on October 22, 2010 at the instance of the financial institutions has created a situation seeking answer to the following question:

1. If the loan agreement with the financial institutions does contain the stipulation that permission of the financial institutions is required, why has the ACC management failed to get the clearance in time? At what stage should the ACC management have sought this approval? Is it to be an informal one? Should it be before the date of meeting of the board of directors at which the bonus issue is to be considered or should it be after the date of board meeting? There are perhaps no precedents available on these issues. If the ACC management had formally approached the financial institutions before the date of board meeting so that the financial institutions' approval or disapproval was available, it would mean taking for granted that the board of directors would agree to a bonus consideration. The processing of the bonus issue proposal at the various stages would have encouraged speculative buying and selling.
2. The nominee-directors are appointed in assisted companies by the financial institutions for the purpose of ensuring that the boards should play an effective role in the management of companies. But the nominee-directors are not expected to interfere in

the day-to-day affairs of assisted companies but only to keep themselves fully acquainted with their affairs. The IDBI has a nominee-director on the Board of ACC. Has the IDBI nominee on the ACC Board failed to keep himself fully acquainted with the affairs of the company?

3. The ACC management omitted to mention in the notice to the Bombay Stock Exchange that “under the loan agreement, the company is not entitled to issue any bonus shares unless the financial institutions agree”. Is this omission due to the fact that the above stipulation is a standard clause, among several others, in the agreement between every borrowing company and financial institutions, and therefore, is not normally mentioned in the notice to the stock exchange? Or alternatively even if such a mention was made, would the operators have desisted from their speculative activities?
4. It is learnt that discussions with the financial institutions were held by the representatives of ACC prior to the board meeting on September 26, 2010. But there was no inkling that the bonus issue would be opposed by the financial institutions. Perhaps the financial institutions did not have enough time to apply their minds. Unfortunately the delay in making known to the company their views almost at the zero hour made matters worse. Was it only an administrative lapse on their part?
5. While the financial institutions in terms of their loan agreement have every right to enforce the terms either to give consent or to reject a bonus share issue, an objective analysis of the corporate performance indicates that a bonus share issue was justified. Should the financial institutions ignore the financial result and expectations of the investing public so as to over-rule the recommendations of the company’s board?
6. Another interesting dimension of the problem is related with the leakage of information about the opposition of the financial institutions to the bonus issue. It encouraged insider trading by people possessing the information on October 20, i.e., 48 hours before the Board meeting of ACC. There are remedies in USA to punish the persons indulging in ‘insider trading’. What should be the position in our context?
7. Kerb trading (trading outside the trading ring after the official hours) is an evil in the Indian stock exchanges. The kerb trading in ACC was highly active as it is reported that 1.5 lakh ACC shares were transacted at that time. Should the Bombay Stock Exchange close its eyes to curb such a large-scale kerb and allow the speculators to continue their game with impunity?
8. It is reported that UTI had been increasing the ACC scrips investment portfolio in the recent months. It increased its investment in ACC since the notification of ACC bonus issue to the stock exchange. It seems that there is a total lack of communication among the financial institutions. UTI did not have any information about the financial institutions’ unwillingness to allow ACC to make the bonus issue. Is it that UTI does not care about earning a good yield on its investment?
9. There has been a sizeable increase in the borrowings of the company in the recent years. Borrowing increased from Rs. 22 crore at the end of the year 2003–04 to Rs. 160 crore

at the end of the year 2008–09 and over Rs.224 crore at the end of the year 2009–10. Consequently, the interest burden increased to Rs. 30 crore during the year 2009–10. Have the financial institutions ruled out a bonus issue for the time being in view of the company's pending loan and interest commitments?

10. Going ahead with the bonus issue proposal despite the financial institutions' objection would have meant a breach of the terms of the loan agreement and a face-to-face confrontation with the financial institutions. Has the takeover threat contained in the loan agreement for any breach of the terms by the company prevented the company to issue bonus shares?
11. Mr. N A Palkhivala, Chairman of the Company, spoke to *Business India* (December 3–16, 2010): "I personally do not attribute any *mala fides* to the institutions in this whole business. I would reiterate that I still think they acted wrongly, but I will say they acted independently. However, as far as we are concerned, the chapter is not closed. We will continue with our efforts and hope they will agree to our proposal at the appropriate time."

Mr. Vadud Khan, Vice-Chairman and Managing Director, when approached to comment on this episode, stated: "The institutions did say that our profitability was lower than last year. But the factors that created such a situation ought to be clarified. After all, even with this lower net profit, our dividend cover is 3.2 times. In fact, if we had given 4:5 bonus, for instance, even then our liability on dividend (presuming that we maintained our dividend at 20 per cent) would have totalled only Rs. 11.55 crore on the expanded capital. ACC is very comfortably poised to service an equity of that volume". He went on to clarify the reasons for the phenomenal hike in manufacturing and other expenses due to continuous increase in administrative prices in coal and power. In addition, wages increased at a rate slightly above that of production. "We are naturally concerned about this and continuous efforts are being made to keep such escalatory items under check."

He further mentioned that capacity utilization in ACC during the year 2009–10 was 89 per cent in spite of all the infrastructural constraints against the industry average of only 79 per cent during the same period. The performance of the company in the year 2010–11 was quite promising. Further, the levy price increase announced on July 18, 2010 will bring better results. "We are confident of scaling the 82 lakh tonnes target for the year 2010–11. Further plans are more promising. ACC has chalked out plans that will see its capacity to over 11 million tonnes for the next five years at a total cost of Rs. 400 crore.

"The whole episode has tarnished not only the ACC Board's image but also the image of the IDBI and other Institutions and the stock exchange. Certainly there is more at stake than the fortunes of a handful of speculators."

DISCUSSION QUESTIONS

1. Examine the feasibility and desirability of bonus share issue by ACC.
2. What would be your recommendations?

3. Determine the appropriate ratio for the bonus issue keeping in mind the growth objective of the company and the interests of its shareholders and lending institutions.
4. What do you imply from the ACC's 1984 episode of dropping the bonus share issue for corporate management, investors, financial institutions, stock exchanges and the government?
5. Comment on the adequacy and effectiveness of the guidelines issued by the Controller of Capital Issues for bonus shares.

Exhibit I**THE ASSOCIATED CEMENT COMPANIES LIMITED**

Distribution of Shareholding as on July 31, 2010

	<i>No. of shareholders</i>	<i>No. of shares held (in lakh)</i>
A. 1 to 10 shares	32,293	1.59
11 to 25 shares	15,103	2.58
26 to 50 shares	7,803	2.90
51 to 100 shares	5,080	3.65
101 shares and above	3,934	22.51
<i>Total</i>	64,213	33.23
B. (i) Individuals	<u>63,933</u>	<u>19.46</u>
(ii) Corporate shareholders	244	1.21
(iii) Government, Government companies and statutory corporations	36	12.55
<i>Total</i>	<u>64,213</u>	<u>33.23</u>
Percentage of shares held by Government Companies and Statutory Corporations		37.77

Exhibit II**THE ASSOCIATED CEMENT COMPANIES LIMITED**

Performance at a Glance as on July 31

	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2006</i>
Profit, net worth and debt					
Pre-tax profit	21.20	43.00	32.22	2.81	1.21
Share capital	33.23	33.23	33.23	33.23	33.23
Free reserves	85.33	78.86	45.35	19.00	19.53
Long-term debt	170.11	108.95	90.13	58.95	20.44
Per share data and yield					
Earning Per Shares (EPS)	64	121	95	6	2
E/P Ratio %	18	27	31	3	2
Dividend %	20	20	16	10	10
Yield %	6	4	5	5	9
Book Value Per Share	376	335	235	155	157
Market Price					
High Rs.	454	459	377	209	169
Low Rs.	293	324	158	98	112

Exhibit III**THE ASSOCIATED CEMENT COMPANIES LIMITED**
Statement Showing Closing Prices of Ordinary Shares

	<i>Rs.</i>
03.12.2009	396.00
07.01.2010	372.50
04.02.2010	344.00
03.03.2010	353.00
14.04.2010	317.00
05.05.2010	303.50
02.06.2010	311.50
07.07.2010	351.00
04.08.2010	358.00
01.09.2010	372.00
08.09.2010	390.00
15.09.2010	400.00
22.09.2010	424.00
29.09.2010	444.00
06.10.2010	459.00
13.10.2010	460.00
19.10.2010	433.00
26.10.2010	368.00
29.10.2010	376.00
30.10.2010	366.00

HUL: BUYBACK OF SHARES

July 29, 2007 was an unusual day for HUL. The first board meeting after being christened as Hindustan Unilever Ltd was not a normal one that concluded with announcing the quarter results. Additional to the regular business, the board approved a share buyback up to an aggregate amount of Rs. 630 crore at a maximum price of Rs. 230 per share that represented 25 per cent of existing paid-up equity share capital and free reserves of the company as of December 31, 2006. The maximum buyback price was at a premium of 17 per cent over the closing price of the company's shares on July 27. The average closing price of HUL share on BSE for the last six months was Rs. 196.

Buybacks are often intended to give signals to market and hence everyone was curious to know what made HUL to take this route. The management released few statements to the press explaining the decision.

"A buyback of this kind, which will run for a year and will be the first in the history of HUL, is to effectively use surplus cash."

—Director (Finance), D. Sundaram

"We have absolutely no intention to stop the growth process and have a strong balance sheet to fund organic as well as inorganic growth."

—Chairman, Harish Manwani

BACKGROUND

Hindustan Unilever Ltd. that was earlier known as Hindustan Lever Limited (HLL) is a 51 per cent owned subsidiary of the Anglo–Dutch FMCG giant Unilever. The company started its operation in India with Sunlight soap in 1888. Sunlight was followed soon after by Lifebuoy in 1895 and other famous brands, such as Pears, Lux and Vim. The company's corporate existence came into being with the establishment of Hindustan Vanaspati Manufacturing Company. This was followed by Lever Brothers India Limited in 1933 and United Traders Limited in 1935. These three companies merged to form Hindustan Lever Limited in November 1956. The company was renamed as Hindustan Unilever Limited in June 2007.

In February 2007, HLL adopted Unilever's logo and changed its name to Hindustan Unilever Limited (HUL). Thus, it maintained its Indian identity with the name and global heritage with the changed logo as well. According to HLL, retaining the name "Hindustan" as the first word in its name reflects the company's continued commitment to local economy, consumers, partners and employees.

Over the change of name, Mr. Doug Baillie, CEO, Hindustan Lever Ltd., said:

"The identity symbolizes the benefits we bring to our consumers and the communities we work in. Our mission is full of promise for the future, opening up exciting opportunities where we have competitive advantage for developing our business and our new identity will help us confidently position ourselves in every aspect of our business."

CURRENT BUSINESS SEGMENT, PRODUCT PROFILE

Product Portfolio

The product portfolio of HUL includes household and personal care products, such as soaps, detergents, shampoos, skin care products, colour cosmetics, deodorants and fragrances. It is also the market leader in tea, processed coffee, branded wheat flour, tomato products, ice cream, jams and squashes. Its distribution network includes 400 distributors and 16 million outlets. With its project Shakti, the company has managed to reach 100,000 villages in 15 states with the help of 30,000 women entrepreneurs. Recently, the company has extended its offering in water purifier with Pureit, a home-in water purifier. The details of the product category and brands are provided in Table 1.

Table 1 Product Category and Brands of HUL

<i>Category</i>	<i>Major Brands</i>	<i>Market Share (%)</i>
Fabric Wash	Wheel, Surf, Rin	56
Personal Wash	Lifeboy, Lux, Breeze	54
Dish Wash	Vim	55
Skin Care	Ponds, Fair and Lovely	55
Shampoo	Clinic Plus, Sunsilk	47
Talcum Powder	Ponds	60
Packaged Tea	Lipton, Brook Bond Taza, Brook Bond Taj Mahal	24
Instant Coffee	Bru	41
Toothpaste	Close up, Pepsodent	30
Ketchups	Kisan	26
Jams	Kisan	69

HUL diversified in the water purification business in year 2006 and since then, it has not looked back. Water purification business was launched with the launch of Pureit, an in-home drinking water purification system.

Promoter Holding Parent Company Outlook

The aggregate shareholding of Unilever PLC and its associates (hereinafter referred to as the Promoters) as on the date of the notice is 1135 million equity shares each of Re. 1 constituting 51.42 per cent of the equity share capital of the company. Pursuant to the buyback of equity shares as proposed, and depending on the response to the buyback offer, the percentage holding of the promoters would increase approximately to 52.07 per cent. Such an increase in the percentage holding of promoters is consequential and indirect in nature and falls within the limits prescribed under the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 1997 (offer and buyback price, 2007, p. 1). Shareholding pattern is given in Table 2.

Table 2 Shareholding Pattern before Buyback

Promoters	51.4%
FII	12.3%
Mutual Funds	3.9%
Insurance companies	12.7%
Others	19.7%

Parent company outlook

Unilever, PLC, a Netherlands-based firm and the parent company of HUL had a good year in 2007. The company recorded 3.6 per cent growth to \$ 3.96 billion in its top-line compared to 3.1 per cent in 2005. This was much in line with the expectations set by the Unilever Chief Executive, Patrick Cescau. The company's operating margin also went up to 13.6 per cent, 0.4 per cent higher than last year, though it hoped to do better (Unilever revenue growth, 2007, p. 2).

Growth in other markets

Unilever had a top line growth of 1 per cent in Europe, 3.7 per cent in America and 6 per cent in Latin America. In Latin America region, however, the company lost out in Mexico because of the shift in trade structure, low priced competition and some operational issues.

It was Asia and Africa that gave the highest growth of 8 per cent. In fact, Developing and Emerging (D&E) markets grew at 8 per cent rate with D&E contributing to 41 per cent of sales of Unilever (Unilever regional performance, 2007, p. 3).

Table 3 summarizes the growth in each of the categories of business.

Table 3 Growth of Businesses

<i>Category</i>	<i>Growth Rate</i>
Personal Care	6%
Home Care	2.3%
Savoury, Dressings and Spread	2.6%
Ice Cream and Beverages	3.7%

(Unilever country growth, 2007, p. 3)

LATEST FINANCIAL RESULTS

Operating margin

The other goal of Unilever was increase in operating margin. However, the operating margin increased just by 0.4%–13.6% compared to 2005.

Update on 2007 Q2 results of HUL

HUL had an impressive run in the second quarter of 2007. A brief description about HUL performance in this quarter is given in Exhibit VIII.

The second quarter overall sales grew by 12.9 per cent. Each segment achieved a double-digit growth; however, it was the processed foods that gave the maximum sales growth of 38 per cent and mainly because of HUL's merger with modern foods. A company like HUL would target processed food as an avenue of growth and would try to establish its leadership in that segment as well.

All the products under Home and Personal Care (HPC) showed a good growth except for the skin segment. HUL also improved its top line by lowering Advertisement and Sales Promotion (ASP) expenses by 2.7 per cent.

DIVIDEND POLICY STOCK OPTIONS BONUS ISSUES

Stock Splits

Hindustan Unilever had once gone for stock split. It was in 1999, when Hindustan Lever (HLL) had performed exceptionally well with 32 per cent rise in profits from Rs. 807 crore in 1998 to Rs. 1070 crore in 1999. The company later announced 10: 1 stock split, i.e., splitting shares of face value of Rs. 10 into 10 shares of Re. 1 face value. The company also declared Rs. 17 per share of final dividend, together with interim dividend of Rs. 12, amounting to Rs. 29 per share, thus, returning 290 per cent to the shareholders.

The purpose of stock split was to allow small retail investors to participate in the equity capital of the company as liquidity of shares improved (HLL stock split, 2000, Tribune India).

But now HUL decided to go for buyback of shares. Details about buyback are provided in the next section.

Buyback Offer

HUL was sitting on huge pile of cash of Rs. 2200 crore approximately. HUL decided to give some portion of this money to its shareholders through share buy-back. This was on the account of company's accumulated cash more than what is needed for business operations. The buyback price was decided to be Rs. 230. This price was arrived by taking into account the trends in the market price of the equity shares of the company during the last six months prior to the date of Board Meeting. The closing market price of the equity shares on July 27, 2007 being the last trading date before the date of the Board Meeting was Rs. 196.45 on the Bombay Stock Exchange Limited. The maximum buyback price of Rs. 230 was at a premium of 17 per cent over the aforesaid market price. The proposed value of this buyback was Rs. 630 crore that is 25 per cent of the existing paid-up equity share capital and free reserves of the company as of December 31, 2006 (Offer and Buyback price, 2007, p. 1).

The terms and conditions of the offer are provided in Appendix 1.

However, was buyback the right decision? HUL had options, such as distributing cash through dividends or use the excess cash to invest in their new business acquiring some promising brands in the market. Still, HUL went with this offer. HUL's decision to buyback the share was not new.

Previous Buyback Issues

The buyback in India started after government approved Buyback Securities Regulation in 1998. Refer to Exhibits IX and X for the list of companies in India that have gone for buyback. The success of buyback programme is inversely proportional to the number of shares buyback. The greater is the number of shares bought back, it implies investors have lost the confidence in the company and think they are better off selling the stock.

The positive response can be attributed to premium price option and second is fear that promoters can misuse the process to prop up market price of share for personal benefit. This resulted into higher acceptance of buyback offers by users. Exhibit X clearly shows that these buybacks failed to create any significant value and resulted into market capitalization erosion in most of the cases.

Reasons for Buyback

The strategic motives behind the buyback as described by HUL are as follows (Necessity for Buyback, 2007, pg. 1):

1. Reduce outstanding number of shares and consequently increase the EPS.
2. Effectively utilize surplus cash; and
3. Make the Balance Sheet leaner and more efficient to improve key ratios

What was the HUL exact motive? There could other factors, such as shareholding pattern of promoters, rationalizing the capital structure, using share buyback than paying dividends, undervaluation as compared to its peers, equity dilution, consolidation of brands or its failed mergers or acquisitions or simply prevent hostile takeovers.

Peer Valuation of The Stock

Currently, the company seems to be undervalued in the market. Exhibit VII gives comparison of the peer group multiples. The market is valuing the company below its peers. It is not clear if this is really a undervaluation or since the company has failed to beat the peer group consistently in recent past, the market has lost the faith in the company that justify the current lower multiples.

What is Buyback Procedure?

HUL decided to go for buyback by way of open market offer through Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) using nationwide electronic trading facility. According to Sections 77A, 77AA and 77B of the Companies Act, 1956, there is a certain procedure for buyback of shares.

- (a) “Where a company proposes to buy back its shares, it shall, after passing of the special/ Board resolution make a public announcement at least one English National Daily, one Hindi National daily and Regional Language Daily at the place where the registered office of the company is situated.
- (b) The public announcement shall specify a date, which shall be “specified date” for the purpose of determining the names of shareholders to whom the letter of offer has to be sent.
- (c) A public notice shall be given containing disclosures as specified in Schedule I of the SEBI regulations.
- (d) A draft letter of offer shall be filed with SEBI through a merchant Banker. The letter of offer shall then be dispatched to the members of the company.
- (e) A copy of the Board resolution authorizing the buyback shall be filed with the SEBI and stock exchanges.
- (f) The date of opening of the offer shall not be earlier than seven days or later than 30 days after the specified date
- (g) The buyback offer shall remain open for a period of not less than 15 days and not more than 30 days.
- (h) A company opting for buy back through the public offer or tender offer shall open an escrow account.”

Source: ‘Buyback Procedure’, <http://www.legalserviceindia.com/articles/shares.htm>, retrieved on December 29, 2007

DISCUSSION QUESTIONS

1. Do you think buybacks create value by raising earnings per share?
2. What is information signaling a buyback sends about the company's prospects to the market? Was it a right strategy for HUL to go for buyback of shares at this stage?
3. Do you think investors expect companies to spent money pursuing value-creating opportunities?
4. The research suggests that managers routinely underestimate how many shares they need to buy to send a credible signal to the markets. Do you think HUL has underestimated the buyback?
5. What is the process HUL has followed to buyback the shares. Compare and contrast the advantages and disadvantages of the three most common ways that companies make the actual purchases - open-market purchases, fixed-price tender offers, and auction-based tender offers.
6. It is suggested that when a company's performance is lagging, a share buyback can look attractive. Do you think this is the case with HUL?

Exhibit I.A

BALANCE SHEET FOR HUL (1987-1996)

<i>In Lakhs</i>	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Balance sheet										
Fixed assets	12,450	14,404	16,335	17,919	19,353	22,275	25,434	32,890	39,556	72,171
Investments	107	343	791	852	760	1,224	5,095	19,145	12,283	32,877
Net Differed Taxes										
Net Current Assets	17,875	17,603	18,545	22,674	25,408	29,858	19,560	34,202	45,767	37,867
Net Assets	30,432	32,350	35,671	41,445	45,521	53,357	50,089	86,237	97,606	142,915
Share Capital	9,332	9,332	9,332	9,332	13,999	13,999	13,999	14,699	14,584	19,917
Reserves and Surplus	9,014	11,275	13,520	16,206	15,047	19,331	24,569	56,882	67,001	79,236
Share Premium										17,757
Suspense Account										
Loan Funds	12,086	11,743	12,819	15,907	16,475	20,027	11,521	14,654	16,021	26,005
Capital Employed	30,432	32,350	35,671	41,445	45,521	53,357	50,089	86,235	97,606	142,915

Rs in lakh

Exhibit I.B

BALANCE SHEET FOR HUL (1997-2006)

<i>In Lakhs</i>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Balance sheet										<i>Rs in lakh</i>
Fixed assets	79,409	105,377	108,717	120,347	132,006	132,234	136,947	151,756	148,353	151,101
Investments	53,157	69,751	100,611	176,974	163,593	236,474	257,493	222,956	201,420	241,393
Net Differed Taxes				(37,338)	24,648	26,992	26,744	22,600	22,014	22,455
Net Current Assets	12,242	22,606	18,725	(7,504)	(7,504)	(23,983)	(36,881)	(40,930)	(135,531)	(135,340)
Net Assets	144,808	197,734	228,053	259,983	312,743	317,717	384,303	356,382	236,256	279,609
Share Capital	19,917	21,957	22,006	22,006	22,012	22,012	22,012	22,012	22,012	22,068
Reserves and Surplus	106,233	149,346	188,320	226,816	282,357	348,375	191,860	187,259	208,550	250,281
Share Premium										
Suspense Account										
Loan Funds	18,658	26,431	17,727	11,161	8,374	5,830	170,430	141,711	5,694	726
Capital Employed	144,808	197,734	228,053	259,983	312,743	376,217	384,302	350,982	236,256	279,609

Exhibit II.A

PROFIT AND LOSS STATEMENT FOR HUL (1987-1996)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Sales	81,500	86,469	103,137	123,402	150,761	175,703	206,317	282,648	336,695	660,011
Other Income	268	267	297	598	616	1,200	2,976	5,621	6,670	11,808
Interest	-9,753	-10,147	-10,712	-12,905	-15,833	-19,817	-25,000	-33,225	-39,237	-66,225
PBT										
PAT	7,830	7,938	8,961	11,074	13,770	16,598	22,277	30,271	37,222	60,525
Growth in PAT	4650	4878	5381	5874	8020	9848	12727	18996	23922	41270
EPS (Rs)	3.32	3.48	0.384	0.42	0.573	0.703	0.909	1.302	1.64	2.08
DPS (Rs)	0.167	0.213	0.233	0.28	0.385	0.42	0.56	0.8	1	1.25

Rs in lakh

Exhibit II.B

PROFIT AND LOSS STATEMENT FOR HUL (1997-2006)

	<i>Rs in lakh</i>									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Sales	781,971	1,021,524	1,091,769	1,139,214	1,178,130	1,095,161	1,109,602	1,088,838	1,197,553	1,303,506
Other	18,387	24,474	31,898	34,507	38,179	38,454	45,983	31,883	30,479	35,451
Income										
Interest	-88,414	-2,939	-2,239	-1,315	-774	-918	-6,676	-12,998	-1,919	-1073
PBT			138,794	166,509	194,337	219,712	224,495	150,532	160,447	186,168
PAT	85,025	83,744	106,994	131,009	154,095	173,132	180,434	119,928	135,451	153,967
Growth in PAT	58025	0.44324	0.277632	0.224452	0.176217	0.123541	0.042176	-0.335336	0.129436	
EPS (Rs.)	2.81	3.67	4.86	5.95	7.46	8.04	8.05	5.44	6.4	8.41
DPS (Rs.)	1.7	2.2	2.9	3.5	5	5.16	5.5	5	5	6

Exhibit IV

SUMMARY OF PERFORMANCE

Periodic Returns	<i>1987-91</i>	<i>1992-96</i>	<i>1997-2001</i>	<i>2002-2006</i>
Increase in Sales	13.1%	30.3%	8.5%	3.5%
Increase in Net Profit	12.0%	29.5%	12.6%	-2.3%
Increase in Market Cap	15.2%	25.8%	12.3%	3.6%

Exhibit V.A

PEER STOCK PRICE PERFORMANCE (MARKET CAP INR MILLION)

	<i>Dabur</i>	<i>Nestle India</i>	<i>P&G</i>	<i>HUL</i>	<i>ITC</i>
2-Jun-00	21,125	37,217	15,592	557,134	171,054
1-Jun-01	20,621	50,479	12,216	423,945	188,871
3-Jun-02	14,837	48,714	9,848	417,127	153,495
2-Jun-03	13,087	51,510	9,417	348,780	173,605
1-Jun-04	21,182	54,215	12,994	301,454	223,307
1-Jun-05	37,120	67,978	20,257	328,756	395,007
1-Dec-05	49,700	90,997	26,795	407,890	509,491
1-Jun-06	71,978	101,082	26,999	493,351	600,930
1-Dec-06	84,468	107,431	29,435	530,587	706,072
1-Jun-07	84,347	109,914	25,462	444,131	607,411
2-Jul-07	88,204	112,088	24,414	417,226	579,382
1-Aug-07	86,649	115,554	25,368	445,147	628,667
3-Sep-07	87,081	124,791	24,373	461,724	654,062

Source: Bloomberg

Exhibit V.B**PEER STOCK RETURNS
(RE.1 INVESTED IN JUNE 2000)**

	<i>Dabur</i>	<i>Nestle India</i>	<i>P&G</i>	<i>HUL</i>	<i>ITC</i>
2-Jun-00	1	1	1	1	1
1-Jun-01	0.98	1.36	0.78	0.76	1.10
3-Jun-02	0.70	1.31	0.63	0.75	0.90
2-Jun-03	0.62	1.38	0.60	0.63	1.01
1-Jun-04	1.00	1.46	0.83	0.54	1.31
1-Jun-05	1.76	1.83	1.30	0.59	2.31
1-Dec-05	2.35	2.45	1.72	0.73	2.98
1-Jun-06	3.41	2.72	1.73	0.89	3.51
1-Dec-06	4.00	2.89	1.89	0.95	4.13
1-Jun-07	3.99	2.95	1.63	0.80	3.55
2-Jul-07	4.18	3.01	1.57	0.75	3.39
1-Aug-07	4.10	3.10	1.63	0.80	3.68
3-Sep-07	4.12	3.35	1.56	0.83	3.82

Source: Bloomberg

Exhibit VI**BETA AND MARKET RISK FOR THE STOCK**

	<i>Beta RAW</i>	<i>Beta adj</i>
COLGATE-PALMOLIVE (INDIA)	0.646	0.765
GILLETTE INDIA LTD	0.206	0.471
PROCTER & GAMBLE HYGIENE	0.314	0.543
DABUR INDIA LIMITED	0.739	0.826
HINDUSTAN UNILEVER LIMITED	0.833	0.888
NESTLE INDIA	0.534	0.689

Source: Bloomberg

Exhibit VII

PEER VALUATION

<i>Name</i>	<i>Price Earnings Ratio (P/E)</i>	<i>Total Return 1 Year Net</i>	<i>EV/THIS Year Est EBITDA</i>	<i>PEGY Ratio</i>	<i>EV/This Year Est Sales</i>	<i>Price/EBITDA</i>
COLGATE-PALMOLIVE (INDIA)	36.87	34.14	16.36	1.71	3.63	28.96
GILLETTE INDIA LTD	30.42	499.57	NA	NA	NA	26.43
PROCTER & GAMBLE HYGIENE	28.37	-49.02	NA	2.089	NA	17.42
DABUR INDIA LIMITED	34.61	17.61	19.544	1.623	3.83	27.55
HINDUSTAN UNILEVER LIMITED	25.2	5.61	24.13	1.147	3.519	25.4
NESTLE INDIA	41.92	NA	17.36	NA	4.81	24.16

Source: Bloomberg

Exhibit VIII**CATEGORY WISE SALES GROWTH**

	<i>Growth % JQ'07</i>
Soaps & Detergents	14.6
Personal Products	5.2
Beverages	20.9
Processed Foods	38.2
Ice Cream	23.9
FMCG	13.4

Excludes Other Segmental Income

* Processed Foods includes impact of Modern merger

HPC TOPLINE

Personal Wash	↑
Laundry	↑
Shampoo	↑
Skin	↔
Toothpaste	↑
HPC Growth	11.1%

Source: http://www.hll.com/mediacentre/JQ07_Presentation_Analyst_Meet.pdf

Exhibit IX

RESPONSE TO BUYBACK OFFER

<i>S. No</i>	<i>Issuer Name</i>	<i>%</i>	<i>Price</i>	<i>No. of share offered</i>	<i>No of share bought</i>	<i>Acceptance %</i>	<i>Total Consideration paid</i>
1	AARTI INDUSTRIES	5.16	42	600000	11954	1.99	502068
2	BAJAJ AUTO	22.48	400	18000000	18207304	101.15	7282921600
3	BHAGYANAGAR METALS-I	24.90	27	2400000	2114166	88.09	57082482
4	BHAGYANAGAR METALS-II	9.97	80	750000	750000	100.00	60000000
5	CARBORUNDUM UNIVERSAL	22.87	115	2767800	2767800	100.00	318297000
6	COROMANDEL FERTILISERS	20.00	65	4864000	4864000	100.00	316160000
7	FINOLEX CABLES	10.00	275	3610620	1768339	48.98	486293225
8	FORTUNE FINANCIAL-I	5.16	10	1373226	1139800	83.00	11398000
9	FORTUNE FINANCIAL-II	25.00	10	1088276	470100	43.20	4701000
10	GANDHI SPECIAL TUBES	22.22	17	2100000	2099929	100.00	35698793
11	GOLDIAM INTNL	20.00	33	1322000	1900	0.14	61750
12	GREAT EASTERN SHIPPING	15.70	42	42940972	42940921	100.00	1803518682
13	INDIA NIPPON	7.68	230	395600	395600	100.00	90988000
14	INDIAN RAYON	25.00	85	16870760	7606419	45.09	646545615
15	JAY SHREE TEA	10.00	120	1230000	1230000	100.00	147600000
16	JOHN FOWLER	25.00	63	906515	466981	51.51	29186313
17	MADURA COATS	25.00	30	18044000	13326541	73.86	399796230
18	MOTOR INDUSTRIES-I	5.30	4200	200000	200000	100.00	840000000
19	MOTOR INDUSTRIES-II	5.55	3800	200000	200000	100.00	760000000
20	RAAJRATNA METAL-I	25.00	40	1187500	1186800	99.94	47472000
21	RAAJRATNA METAL-II	25.00	60	890800	657100	73.77	39426000
22	RAAJRATNA METAL-III	25.00	80	726525	726500	100.00	58120000
23	RAYMOND	25.00	160	13710083	13710083	100.00	2193613280
24	SELAN EXPLORATION	25.00	20	712750	712750	100.00	14255000
25	WINSOME YARN	25.00	10	5600000	411605	7.35	4116050

Source: <http://129.3.20.41/eps/fin/papers/0507/0507001.pdf>

Exhibit X

MARKET CAPITALIZATION EROSION

S. No	Issuer Name	%	Set offered to be bought	Mkt Cap erosion from AD to CD		Mkt Cap erosion 3 month post CD	
				Value	%	Value	%
1	AARTI INDUSTRIES	5.16	600000	5.07	0.12	11.09	0.27
2	BAJAJ AUTO	22.5	18000000	(355.69)	(0.10)	(1271.90)	(0.35)
3	BHAGYANAGAR METALS-I	24.9	2400000	(2.15)	(0.10)	5.37	0.26
4	BHAGYANAGAR METALS-II	9.97	750000	(0.98)	(0.02)	(1.76)	(0.04)
5	CARBORUNDUM UNIVERSAL	22.9	2767800	(5.43)	(0.05)	(24.33)	(0.24)
6	COROMANDEL FERTILISERS	20	4864000	(16.78)	(0.13)	6.57	0.05
7	FINOLEX CABLES	10	3610620	(64.21)	(0.07)	(77.95)	(0.08)
8	FORTUNE FINANCIAL-I	5.16	1373226	(2.09)	(0.51)	(1.48)	(0.36)
9	FORTUNE FINANCIAL-II	25	1088276	0.11	0.04	3.61	1.37
10	GANDHI SPECIAL TUBES	22.2	2100000	(4.61)	(0.30)	(4.90)	(0.32)
11	GOLDIAM INTNL	20	1322000	32.83	1.31	36.34	1.45
12	GREAT EASTERN SHIPPING	15.7	42940972	(305.92)	(0.36)	(224.16)	(0.27)
13	INDIA NIPPON	7.68	395600	(1.93)	(0.02)	(34.49)	(0.36)
14	INDIAN RAYON	25	16870760	11.13	0.02	234.16	0.47
15	JAY SHREE TEA	10	1230000	(12.98)	(0.12)	(49.51)	(0.44)
16	JOHN FOWLER	25	906515	(3.10)	(0.17)	(7.27)	(0.41)
17	MADURA COATS	25	18044000	(6.13)	(0.04)	0.79	0.00
18	MOTOR INDUSTRIES-I	5.3	200000	(42.00)	(0.03)	(219.91)	(0.16)
19	MOTOR INDUSTRIES-II	5.55	200000	34.61	0.03	(293.18)	(0.24)
20	RAAJRATNA METAL-I	25	1187500	99.87	0.21	103.63	0.22
21	RAAJRATNA METAL-II	25	890800	204.25	0.38	386.72	0.71
22	RAAJRATNA METAL-III	25	726525	(72.12)	(0.12)	9.82	0.02
23	RAYMOND	25	13710083	(391.96)	(0.38)	(527.92)	(0.51)
24	SELAN EXPLORATION	25	712750	1.04	0.04	1.65	0.07
25	WINSOME YARN	25	5600000	2.86	0.18	(3.14)	(0.20)
Total Market Capitalisation Erosion				(896.31)		(1942.15)	

Source: <http://129.3.20.41/eps/fin/papers/0507/0507001.pdf>

APPENDIX 1

The terms and conditions of the offer are provided below.

1. As per the provisions of the Sections 77A, 77AA, 77B of the Companies Act, the funds deployed for buyback capital may not exceed 25 per cent of the total paid-up capital and reserves (Rs. 2556 crore) that amounts to Rs. 630 crore. Further, under the Act, the number of equity shares that can be bought back should not exceed 25 per cent of the paid-up equity capital of the company that is approximately equal to Rs. 55,16,94,024.
2. As per Sections 77A, 77AA and 77B of the Companies Act, 1956 (.the Act.) and the provisions contained in buyback regulations, the present buyback has to be authorized from
 - Resolution passed by the Board of Directors of the company (hereinafter referred to as the Board) (authorized at meeting held on July 29, 2007)
 - Special Resolution passed by shareholders of the company through postal ballot, as per Section 192A of Companies Act (results declared on September 14, 2007 with 99.77% voting for approval)
3. The company will implement the buyback by way of open market purchases through the BSE and the NSE using their nationwide electronic trading facilities. The company shall not buyback its equity shares from any person through negotiated deals, whether on or off the stock exchange(s) or through spot transactions or through any private arrangements in the implementation of the buyback.
4. The maximum amount required by the company for the said buyback aggregating Rs. 630 crore will be met out of the free reserves and/or the share premium account of the company.
5. The aggregate shareholding of Unilever PLC and its associates (hereinafter referred to as the Promoters) as on the date of the Notice is 113,48,49,460 equity shares each of Re. 1 constituting 51.42 per cent of the equity share capital of the company. Pursuant to the buyback of equity shares as proposed, and depending on the response to the buyback offer, the percentage holding of the Promoters would increase approximately 52.07 per cent. Such an increase in the percentage holding of promoters is consequential and indirect in nature and falls within the limits prescribed under the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 1997.
6. No shares were either purchased or sold by the promoters during the period of last six months preceding the date of the Board Meeting at which the buyback is approved.
7. The promoters and persons in control of the company shall not participate in the buyback.
8. As required under the Act, the ratio of the debt owed by the company would not be more than twice the share capital and free reserves after the buyback.

9. As per the provisions of the Act, the Special Resolution passed by the shareholders approving the buyback will be valid for a maximum period of twelve months from the date of passing of the said Special Resolution. The time frame and the price subject to maximum price for buyback will be determined by the Board/Buyback Committee within this validity period. As per the company announcement on September 28, 2007, the buyback offer would commence on October 3, 2007 and close on September 13, 2008 or whenever the company acquires 25 per cent of the total shares.
 10. As per the provisions of the Act, the company will not be allowed to issue fresh equity shares within a period of six months after the completion of the buyback except by way of bonus issue or in the discharge of subsisting obligations such as conversion of Warrants, Stock Option Schemes, Sweat Equity or conversion of Preference Shares or Debentures into Equity Shares.
 - 11 The company confirms that there are no defaults subsisting in the repayment of deposits, redemption of debentures or preference shares or repayment of term loans to any financial institutions or banks.
- (Offer and Buyback price, 2007, p.1)

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GREAT EASTERN SHIPPING CO. LTD

DIVIDEND POLICY

In August 1994 Mr. K M Sheth, Chairman and Managing Director of Great Eastern Shipping Co. (GESCO), was trying to decide on the dividend he should recommend for the consideration of the Board for the year 1993–94. This had been a good year for the company with income increasing by 18 per cent and profit after tax by 25 per cent. In his last statement to the shareholders of the company, published in the annual report for 1992–93, he had argued for reduced dividends. He had stated, 'We do not intend to maintain dividends as a percentage of the face value of your shares, nor do we intend to maintain the dividend at a fixed rupee value. Subject to your approval, it is our intention to retain as much profit as we possible can, ideally we should like to retain all our earnings, we certainly believe that to be in shareholder's interest, but we also have to recognize that dividend policies can only be modified gradually.' The complete text of the statement is reproduced in Exhibit I.

The shipping industry is broadly classified into the dry bulk, liquid, and containerized cargo sectors. Both dry bulk cargo and liquid cargo markets are highly volatile and cyclical. Exhibit II gives the movements in the Baltic Freight Index, which is a measure of dry bulk cargo spot rates. Intra year as well as inter year variations are quite large. This is also true of the tanker market. The containerized cargo sector is also referred to as the liner business and subject to conference agreements.

Till recently all aspects of the Indian shipping industry such as purchase and sale of vessels, financing and chartering were heavily regulated. However, with the recent liberalization of the economy, most of the regulations have been removed and shipping companies have almost complete freedom in their commercial and operating transactions.

GESCO is one of the largest private sector shipping companies in India in terms of the aggregate dryweight (dwt) of vessels. It was incorporated in 1948 and listed on the Bombay Stock Exchange in 1954. The company now operates its shipping activities through its Bulk Carrier, Tanker and Offshore Divisions. It operates 19 dry bulk carriers, 11 tankers and nine offshore supply vessels. The Great Eastern Shipping Co. London Ltd. (GESCO London), a wholly owned subsidiary of GESCO based in London, operates five bulk carriers. GAL

Offshore Services Ltd. (GAL), a subsidiary of GESCO London, operates two offshore drilling rigs and a construction barge. GESCO owns 33.9 per cent of Prime Securities Limited which undertakes investment banking activities. The company commenced real estate development as a separate business in 1989 and the trading division was formed in November, 1993.

BULK CARRIER DIVISION

The bulk carrier division (BCD) has 19 ships of an aggregate 698,587 dwt with an average age of 16 years. Thirteen of these ships are owned by GESCO, four are operated under GESCO's bare-boat charter arrangement with GESCO London and two have been sold and bare-boat chartered back on lease. Three out of the four ships bare-boat chartered from GESCO London have a demise at the end of the fifth year of their charter and will, therefore, revert to GESCO in 1998. The fourth ship is under bare-boat arrangement until the end of 1994.

In the financial year 1992–93, about 53 per cent of the division's revenue from operations was from Government of India controlled cargo fixed through TRANSCHART. With the recent liberalization measures and de-canalization of cargo, TRANSCHART business is expected to reduce. For the period from 1st April to 31st December, 1993 approximately 34 per cent of the business was through TRANSCHART.

The BCD's vessels are employed in a mix of voyage and time charter. The duration of time charters may vary from 15 days to two years or more. Time charters provide a steady revenue stream, while the voyage charters seek to exploit the opportunities presented by upturns in the markets. The relative percentages of the division's earnings from voyage and time charters are given below:

	1991–92	1992–93	1993*
Voyage Charter	83%	80%	50%
Time Charter	17%	20%	50%

* April–December

Of the total time charter earnings, international trading accounted for 15 per cent in 1991–92; 65 per cent in 1992–93 and about 55 per cent in the first nine months of 1993–94. Domestic earnings make up for the balance. In the international market, GESCO competes with a large number of international shipping companies. In the domestic sector, the largest owner is the state owned Shipping Corporation of India which owns more than 65 dry cargo vessels.

The company plans to expand by acquiring 35,000–65,000 dwt vessels. Replacement is also likely to be in this category although the company expects to continue to operate smaller vessels (27–30,000 dwt) to meet the remaining TRANSCHART trades as well as to service smaller sized coastal movements. Given the limitations of various Indian ports, need for smaller sized ships will continue.

TANKER DIVISION

The Tanker Division's fleet consists of 11 vessels, aggregating 523,243 dwt and an average age of 12.6 years, all owned by the company. All the vessels are currently employed on behalf of Indian oil companies, principally operating between the Arabian Gulf and India. Tankers on time charter are fixed on an yearly basis on market based rates converted into Indian Rupees. Fluctuations in the US Dollar/Rupee exchange rates exceeding Rs. 0.50 per US Dollar are compensated in Rupees by an increase/decrease in charter rates. For tankers on voyage charter, freight payment is received in Indian Rupees converted from US Dollar at the prevailing market rate.

The company's market share of Indian product tankers time-chartered to the Indian oil industry is about 37 per cent of the total market, i.e., approximately 206,000 dwt from a total market of approximately 553,000 dwt. The main competitors in this market are SCI with about 172,000 dwt, Essar Shipping with about 70,000 dwt, Varun Shipping with about 60,000 dwt and Century Shipping with 45,000 dwt (based on a report by the Director General of Shipping).

The company plans to expand its fleet by acquiring additional fuel economic vessels with double hulls. In November, 1993 the company signed contracts for the construction of two double hulled product/crude tankers each of approximately 44,500 dwt. These vessels are due to be delivered in November, 1995 and March, 1996, respectively.

OFFSHORE DIVISION

This division owns and operates nine anchor handling tug supply vessels with an average age of 11 years. The vessels are used for the positioning of drilling rigs and to tow them from one location to another. They are used as transport and supply vessels, taking men and material to offshore platforms and rigs from various supply bases. All but two vessels are on long-term time charter with the Oil and Natural Gas Commission (ONGC).

The company believes that the opening of the Indian offshore oil business to multinationals and the Indian private sector may increase demand for the Division's services. The division wishes to develop its international business by increasing the size of or re-focusing the fleet.

CAPITAL EXPENDITURE

The capital cost of ships accounted for more than 95 per cent of capital expenditure in each year. Details of the capital costs are given below:

(Figures in Rupees crore)

	<i>Bulk Carrier</i>	<i>Tankers</i>	<i>Offshore</i>	<i>Total</i>
1990-91	25.98	0	19.99	45.97
1991-92	0	0	0	0.00
1992-93	71.28	56.13	0	127.41
1993*	46.44	142.04	11.80	200.28

* April-December

FINANCIAL INFORMATION

The financial statements of the company are shown in Exhibit III. Exhibit IV shows the breakdown of operating income and revenues by division and Exhibit V gives a summary of the capital history. Exhibits VI, VII and VIII give the financial statements of its major competitors in the private sector in India.

SHAREHOLDING

As of end 1993, approximately 53 per cent of the share capital is held by the general public (including foreign financial investors and Indian corporate bodies) with financial institutions and banks accounting for a further 27 per cent. The International Finance Corporation, Washington has a 10 per cent holding. The Sheth family holding accounts for 9 per cent. Details of the composition of the company's shareholders is in Exhibit IX.

In February 1994 the company made an offering of 6,273,500 Global Depositary Receipts (GDR) at an issue price of US\$ 15.94 per GDR. Each GDR was issued in respect of five ordinary shares of the company. The shares underlying the GDR will, upon completion of the offering, represent 15.054 per cent of the issued ordinary share capital of the company. Shares underlying the GDR will be entitled to the portion of the annual dividend for the year ending March 31, 1994 corresponding to the portion of the year for which they have been outstanding.

TAXATION

According to the Income Tax Act (as of 1994), dividends are taxed along with ordinary Income subject to a deduction of Rs. 10,000 from dividends under Section 80L. The income tax rates for various slabs are:

<i>Income slab</i>	<i>Tax rate</i>
Below Rs. 35,000	no tax
Rs. 35,000 – Rs. 60,000	20%
Rs. 60,000 – Rs. 1,20,000	30%
Above Rs. 1,20,000	40%

In the case of capital gains, short-term gains resulting from holding the shares for less than 12 months are taxed along with ordinary income. Long-term capital gains are calculated after indexation and are subject to a flat rate of 20 per cent.

Under Section 115AC of the Indian Income Tax Act, payments received by non-residents with respect to dividends on the shares and the GDRs will be subject to Indian tax at the rate of 10 per cent. Capital gains on all transactions of trading of GDRs and shares outside India, among non-resident investors, will be free from any liability to income tax in India. The capital gains arising on the transfer of shares in India by a non-resident investor will be liable to income

tax at the long-term rate of 10 per cent if the shares have been held for more than 12 months. If they are held for less than 12 months, the capital gains will be treated as short-term capital and subject to tax at rates varying from 20 per cent for individuals to 65 per cent for foreign companies.

SPECIAL TAX PROVISIONS

According to the provisions of Section 33AC of the Income Tax Act, 1961—a shipping company may create a specific reserve account up to a maximum aggregate amount equal to twice the amount of its paid-up share capital (excluding share premium account and capitalized reserves) and treat this as a deduction against its total income. Shipping companies also benefit from the deduction permitted by Section 80.IA of the same Act of an amount equal to 30 per cent of the profits and gains derived from ships purchased and brought into use during the period from April 1, 1991 to March 31, 1995 for a period of 10 assessment years.

DIVIDENDS

The table shows the details of the dividends paid by GESCO in the last five years.

<i>Year</i>	<i>Cash Dividends (Rs.)</i>	<i>No. of shares</i>	<i>Amount paid (Rs. crore)</i>
1989	1.20	68,065,371	6.68
1990	2.00	68,065,371	13.61
1991	2.40	71,315,371	17.12
1992	3.05	85,578,445	26.10
1993	3.25	171,244,246	31.02

The number of shares entitled to dividends in the financial year ended March 31, 1989 includes 24,814,966 shares which were not fully paid up for that year. In the financial year ended March 31, 1993 a total of 85,665,801 shares were not entitled to dividends of the full financial year.

DISCUSSION QUESTIONS

1. How has GESCO performed in the past? What is its financial structure and how has it changed over the years? Examine the current dividend policy of the GESCO. How does this compare with the dividend policies of Varun Shipping Company and Chowgule Steamship?
2. Despite the reasonable growth in earnings after tax, why the company is proposing to reduce the dividends of the current year? What constraints will the management face in drastically changing the dividend policy of the company? What are some of the unintended consequences of this change?

3. Discuss the Chairman's statement. Discuss the competitive environment of this company and how does this influence the dividend policy of the company. What options the Chairman has listed to raise the funds?
4. Analyze the Chairman's view on disadvantages of paying dividends. Do you agree with them? Do you agree that the distribution of dividends is an ineffective way of maximizing the shareholders wealth?
5. Which option the company has proposed for future dividend policy? What are implications? Compare and contrast this case with Indian Builders Company Limited case?
6. Why do you think the Chairman has not spoken about the tax advantage of retaining maximum and its impact on shareholder value in the Chairman's Statement? After the discussion find the actual dividend policy of the GESCO and how other companies responded to this situation.

Exhibit I

THE GREAT EASTERN SHIPPING CO. LTD

Chairman's Statement

It is, I know, customary for a Chairman's speech to review topics that reflect their views on the state of their industry, the state of the nation and indeed even on the state of the world. I do not intend to follow that tradition. I wish to concentrate on a specific issue germane to the future growth of your company. The matter I wish to address is the question of how best to balance the dividend payments on your Company's increasing capital with the need to raise resources for expansion and renewal of your Company's fleet.

Shipping, as we all know, is a very capital intensive business in which freight rates and values of ships can move quickly. In the wake of this, I believe, a shipping company should always be cash rich and should limit its overall borrowings to match its equity. Secondly, the industry is dominated by private ship-owners who, due to the nature of their ownership structure, look at ship investments with a medium to long-term approach. (They are not influenced by short considerations). Being independent they neither need to concern themselves about dividend payment nor do they need to ensure immediate returns on equity. They can, and do, retain all their earnings in the company for future growth. Having briefly discussed the nature of the industry let us look at the different sources of funds for the expansion and renewal of the Company's fleet.

There are four sources of funds for investment. First, there is retained earnings; second there is the raising of fresh capital from existing shareholders through a rights issue; third the raising of the capital from investors outside the existing shareholders; and fourth there is borrowings from banks and institutions.

Of all these four methods of raising resources, the first and fourth, i.e. retained earnings and borrowings are the least disturbing. The other two methods involve issuing fresh capital which means permanent change in the structure of the company.

The issuance of shares of the existing shareholders has the advantage of eliminating the risk of mispricing since the market price of the share adjusts to the new rights so issued. Here, your company would like to continue its hitherto policy of pricing its rights at the cheapest possible value, i.e., at par. In pursuing this policy, your company's equity capital would increase quite substantially. This in my opinion should not matter if you remove the misconception that dividends are recognized in percentage terms. Managements all over the world distribute dividends in relation to the Company's profit. Moreover, dividend paid out is always a certain amount per share held by the shareholder and, therefore, so long as the company's earnings grow, the total dividend received by a shareholder will increase. All companies follow this rule as a broad dividend policy. However, the dividend distribution per share varies from company to company because some managements prefer to issue rights at premium whereas some managements, like yours, prefer to issue rights at par. As I have said earlier, the pricing of the share issued as rights is not important because of the price adjustment of the share after issuance of rights. What does vary, due to the difference in the pricing of the rights, is the dividend payment per

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Exhibit I Contd . . .

share. When a company increases its capital through rights issue at par, it is obviously difficult to maintain the same dividend per share so issued although the total amount of dividend that the shareholder will receive would be higher in quantum. Although, as I have explained before, shareholders should be quite indifferent to any reduction in the dividend per share that they receive so long as the total amount of dividend received in their hands is increasing since that is a clear sign of their company earnings increasing.

There are two principal disadvantages, however, in the payments of dividends. Firstly, in the case of Indian companies, the dividend receipt is taxed in the hands of the shareholder. Thus, for example, if we pay a dividend of Rs. 100, you, the shareholder, may receive only Rs. 70, if there is a 30 per cent average tax on dividend. Now supposing we give you Rs. 100 as dividend and simultaneously ask you to subscribe to Rs. 100 in a rights issue, we will all lose because

- (a) on the dividend you will pay Rs. 30 in tax and;
- (b) on the rights issue your company will have to bear substantial expenses which amount to at least five per cent of the issue.

So the every Rs. 100 the company pays in dividend, the shareholder receives Rs. 95. So between the company and its shareholders, there is a total loss of resources from transferring money from and to the company. The total loss is not insubstantial.

The payment of dividends has another rather subtle deleterious effect on the shareholder. This is a consequence of the modern method that values shares on price/earning multiples. Let me try to explain. I am told that most institutions tend to appraise shares at many times the earnings of a company. Thus, if the earnings per share is Rs. 10 and the multiple they apply to the company is 15x then the fair value of the share is considered to be Rs. 150. Now take a company that pays out Rs. 3 per share as dividend. If the company does not pay this money out but invests in business, earning a return of, let us say, 30 per cent, then its permanent income should rise by Rs. 0.90 per share than what it would have been paying out of a dividend. The result is that if shares are valued at 15 times multiple of earnings then for every Rs. 0.90 per share increase in earnings of the share value will go up by Rs. 13.5. Thus, for a sacrifice of Rs. 3 in dividends the worth of shares should go up by Rs. 13.5.

Many of you will find this argument too theoretical and are therefore somewhat unpersuasive. I sympathize with those of you who are unconvinced. However, I must tell you that the example I have given is quite realistic. It is a fact that the return on your equity in shipping has, over time, been well in excess of 30 per cent. Further the shares of your company have been valued at anywhere between twelve and fifteen times earnings. Although the past is no guide to the future, it would be unreasonable to deny the fact that the growth of your company would be faster if we took less out of it in dividends.

In partial pursuit of these policies, we have repeatedly tried to tell you that we intend to restrict our dividends. We recognize that there must be some formula for a dividend policy and we have chosen to restrict it to a percentage of net profits after tax. Unfortunately this message has not got home. Let me therefore repeat what we have already said. We do not intend to maintain

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Exhibit I Contd . . .

dividends as a percentage of the face value of your share, nor do we intend to maintain the dividend at a fixed rupee value. Subject to your approval it is our intention to retain as much profit as we possibly can, ideally we should like to retain all our earnings, we certainly believe that to be in shareholders' interest, but we also have to recognize that dividend policies can only be modified gradually. I do hope you will take note of these policy statements, because otherwise you will be disappointed by misconceived notions.

Let me now summarize the main thrust of my argument. I have attempted to show that payment of dividends is an inefficient way of increasing the shareholders' wealth. That had we been a new company the most sensible policy may well have been to pay no dividends and accumulate our profits. This is a policy followed by some of the most successful companies in the world. We have been inhibited in doing so by tradition and conventional wisdom. Perhaps we have no escape from following a system which you are familiar with; but I have to put these issues before you so that you can consider for yourselves whether we should adopt a different course.

Bombay
5th November, 1993

Sd/
(K M Sheth)
Chairman

Exhibit II

GREAT EASTERN SHIPPING CO. LTD

Baltic Freight Index

Baltic Freight Index: January 1985 - April 1994

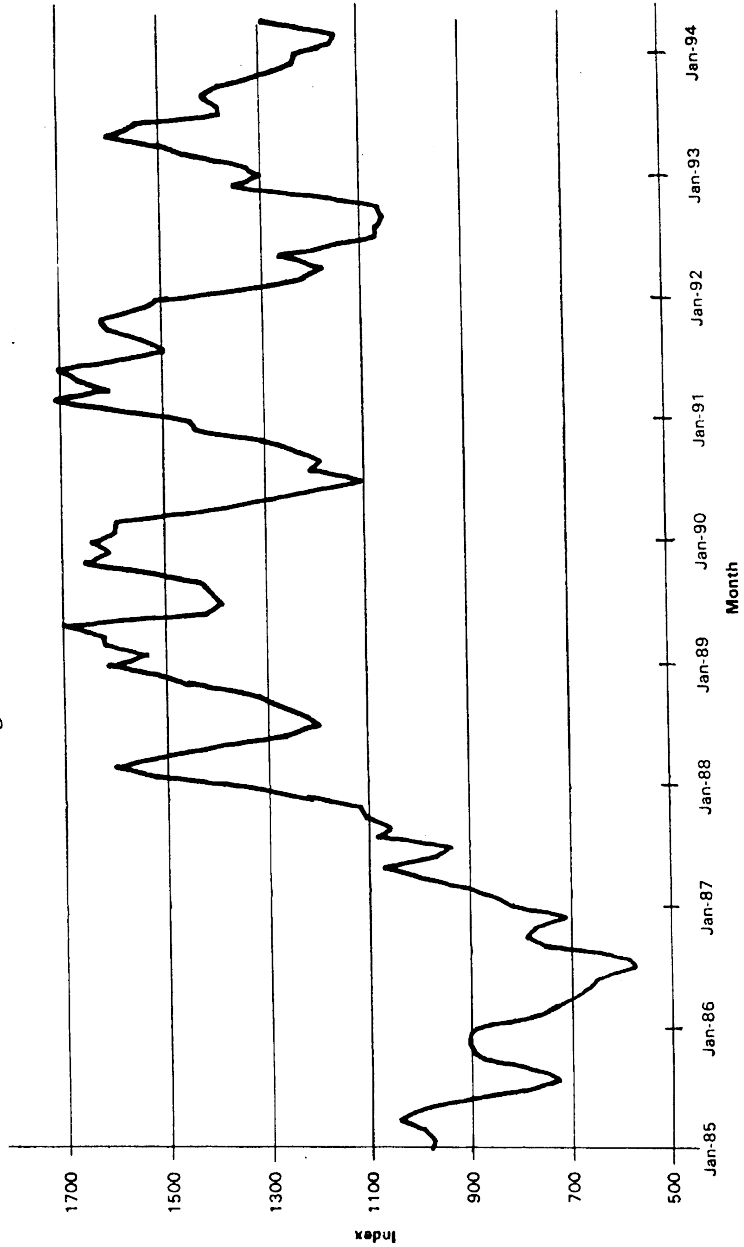


Exhibit III**GREAT EASTERN SHIPPING CO. LTD.****Balance Sheet***(Rupees in crore)*

	1990-91	1991-92	1992-93	1993-94
<i>Sources of Funds</i>				
Shareholder's Funds:				
Capital	71.21	85.55	174.90	208.38
Reserves and Surplus	108.68	161.40	241.21	624.97
	179.89	246.95	416.11	833.35
Loan Funds:				
Secured Loans	127.48	90.24	160.20	323.55
Unsecured Loans			0.29	6.01
Deferred Payment	34.69	21.06	13.43	
	162.17	111.3	173.92	329.56
<i>Total</i>	342.06	358.25	590.04	1,162.92
<i>Application of Funds</i>				
Fixed Assets:				
Gross Block	552.55	536.01	694.73	965.46
Less: Depreciation	225.81	251.18	286.45	351.91
Net Block	326.74	284.82	408.28	613.55
Capital WIP		1.64	0.61	43.73
		286.47	408.89	657.28
Investments	12.43	4.04	5.20	317.39
Current Assets				
Inventories	6.76	7.90	29.12	33.27
Sundry Debtors	21.59	22.78	38.87	100.78
Cash and Bank Balances	7.30	31.59	77.08	44.62
Other Current Assets	4.68	1.76	5.01	12.63
Loans and Advances	28.44	83.42	129.89	145.16
Incomplete Voyages	8.09	8.43	3.72	2.71
	76.86	155.88	283.68	339.16

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Exhibit III Contd . . .

	1990-91	1991-92	1992-93	1993-94
<i>Less: Current Liabilities</i>				
Current Liabilities	42.13	45.02	62.71	110.32
Provisions	24.76	31.35	37.52	47.21
Incomplete Voyages	7.07	11.77	9.19	7.04
	73.97	88.15	109.42	164.57
Net Current Assets	2.89	67.73	174.26	174.60
Misc. Expenditure			1.69	13.65
<i>Total</i>	342.06	358.25	590.04	1,162.92
Income Statement				
	1990-91	1991-92	1992-93	1993-94
<i>Income</i>				
Operating Earnings				
Freight	188.95	202.07	167.55	134.72
Charter Hire	86.75	129.68	159.25	262.39
Miscellaneous Receipts	5.55	9.52	16.39	12.28
	281.24	341.27	343.18	409.40
Other Income	7.82	13.78	59.43	38.31
Ship sale profit		13.33	38.57	22.29
Sale-Real Estate & Trading	0.00	0.00	9.65	60.44
	289.06	368.39	450.82	530.44

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Exhibit III Contd . . .

	1990-91	1991-92	1992-93	1993-94
<i>Expenditure</i>				
Operating Expenses				
Direct				
Full Oil and Water	36.23	31.02	31.43	19.56
Port, Light, Canal Dues	32.26	36.76	31.11	26.93
Stevedoring, etc.	5.94	6.90	4.55	4.37
Hire of Chartered Steamers	13.49	9.11	11.59	12.70
Brokerage and Commission	3.06	3.40	3.76	7.18
Agency Fees	2.01	2.28	2.17	1.69
Cargo and Other claims	0.64	0.18	0.09	0.09
I-tax at Foreign Ports	0.20	0.44	0.52	0.33
	93.83	90.11	85.21	72.85
Others				
Floating Staff	24.43	24.21	29.69	25.95
Provision fund	0.49	0.49	0.58	0.56
Stores	11.92	12.68	14.02	11.79
Repairs and Maintenance	31.98	50.77	68.77	57.53
P & I Club Fees	10.77	16.82	18.57	19.96
Vessel Management Fees	11.30	12.76	17.02	32.80
Sundry Steamer Expenses	1.44	1.86	2.24	2.35
	92.33	119.59	150.89	150.94
Administration Expenses	9.57	10.39	16.60	23.04
Interest and Guarantee Charges	16.18	12.84	19.29	23.36
Depreciation				
On Fleet	38.98	40.63	59.76	81.48
On Other Assets	1.04	1.10	1.65	0.00
Cost of Sales-Real Estate			0.40	15.93
Cost of Sales-Trading			7.84	26.05
	251.93	274.65	341.65	393.65
Profit Before Tax	37.14	93.74	109.17	136.78
Less: Provision for Tax			0.20	
Profit After Tax	37.14	93.74	108.97	136.78

Exhibit IV**GREAT EASTERN SHIPPING CO. LTD**

Turnover by Division

(Rupees in crore)

<i>Division</i>	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>
Bulk Carrier	187.86	227.33	201.83
Tanker	80.00	90.58	112.59
Offshore	133.87	23.36	28.28
Real Estate	0.12	0.79	1.80
Trading			7.85
<i>Total</i>	401.85	342.06	352.35

Operating Income by Division

<i>Division</i>	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>
Bulk Carrier	44.22	61.79	25.22
Tanker	35.81	42.62	47.33
Offshore	6.01	14.86	16.73
Real Estate	0.08	0.37	1.30
Trading			(0.21)
<i>Total</i>	86.12	119.64	90.37

Exhibit V**GREAT EASTERN SHIPPING CO. LTD****Capital History**

<i>Issue Date</i>	<i>Issue Type</i>	<i>Security Type</i>	<i>Face Value (Rs.)</i>	<i>Premium (Rs.)</i>	<i>Increased PUC (Rs. crore)</i>
July 84	Rights	Bonds	100.00	0.00	0.00
Sep 85	Deb. Conv.	Equity	10.00	0.00	31.94
Jul 86	Deb. Conv.	Equity	10.00	0.00	37.55
Jan 87	Public	Equity	10.00	0.00	39.56
Jan 87	Rights	Equity	10.00	0.00	51.73
Sep 87	Deb. Conv.	Equity	10.00	0.00	40.25
Mar 88	Loan Conv.	Equity	10.00	0.00	67.79
Dec 90	Loan Conv.	Equity	10.00	0.00	71.21
May 91	Bonus	Equity	10.00	0.00	85.57
Nov 92	Rights	Equity	10.00	0.00	177.00
Jan 94	Euro Issue	Equity	10.00	90.00	208.37
Mar 94	Rights	Equity	10.00	0.00	279.23

Exhibit VI

Chowgule Steamships: Summary Information

(Rupees in crore)

	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>
Sales	53.82	72.59	72.50	74.10
Net Profit	1.68	16.51	12.03	25.99
Equity Dividends	1.22	2.46	2.46	3.23
Cash Flow	13.44	27.77	22.68	36.15
Net Worth	15.09	29.28	38.85	62.37
Borrowings	136.61	139.41	111.24	90.36
<i>Total Assets</i>	165.48	184.79	166.78	167.42
<i>Stock Prices Indicators</i>				
EPS (Rs.)	1.37	13.41	9.77	20.12
DPS (Rs.)	1.00	2.00	2.00	2.50
Price/Earning Ratio	14.97	9.69	9.72	3.60
Book Value (Rs.)	12.30	23.78	31.56	48.28
Share Price (Rs.)				
High	36.50	157.50	250.00	117.50
Low	11.25	18.00	66.25	68.75
Closing	20.50	130.00	95.00	72.50

Exhibit VII**Essar Shipping Limited: Summary Information***(Rupees in crore)*

	<i>1990–91</i> <i>15 months</i>	<i>1991–92</i> <i>6 months</i>	<i>1992–93</i> <i>12 months</i>
Sales	219.86	134.70	313.29
Net Profit	32.78	32.51	44.40
Equity Dividends	11.60	6.02	13.85
Net Worth	146.09	168.37	197.46
Borrowings	318.27	289.90	726.84
<i>Total Assets</i>	<u>523.11</u>	<u>537.19</u>	<u>1,025.68</u>
<i>Stock Prices Indicators</i>			
EPS (Rs.)	7.06	6.45	8.81
DPS (Rs.)	2.50	1.25	2.75
Price/Earning Ratio	7.43	11.43	7.52
Book Value (Rs.)	31.47	33.43	39.19
Share Price (Rs.)			
High	64.00	77.50	160.00
Low	18.50	46.50	56.25
Closing	52.50	73.75	66.25

Exhibit VIII**Varun Shipping Limited: Summary Information***(Rupees in crore)*

	1990–91	1991–92	1992–93	1993–94
Sales	33.25	45.50	63.45	98.96
Net Profit	6.36	8.14	17.86	16.20
Equity Dividends	2.40	2.95	8.06	9.97
Cash Flow	8.12	11.51	20.99	23.98
Net Worth	17.78	36.77	81.97	89.13
Borrowings	57.60	64.81	152.58	191.85
<i>Total Assets</i>	85.49	113.50	255.77	300.58
<i>Stock Prices Indicators</i>				
EPS (Rs.)	7.17	3.72	5.11	4.64
DPS (Rs.)	2.70	2.80	2.80	2.80
Price/Earning Ratio	4.18	14.80	6.85	7.01
Book Value (Rs.)	20.04	16.79	23.47	25.51
Share Price (Rs.)				
High	37.50	57.50	110.00	42.50
Low	20.00	22.00	31.25	22.50
Closing	30.00	55.00	35.00	32.50

Exhibit IX**GREAT EASTERN SHIPPING CO. LTD****Shareholders**

The following table sets out the composition of the Company's shareholders as shown on the Company's share register as at December 29, 1993.

<i>Shareholder</i>	<i>Shares (Fully paid-up)</i>	<i>Per cent of capital</i>
<i>Foreign</i>		
IFC, Washington	17,754,740	10.03
Non-resident	433,262	0.24
FFIs	3,662,498	2.06
<i>Total Foreign</i>	21,850,500	12.34
<i>Indian Institutions</i>		
LIC of India	6,405,578	3.61
UTI	18,011,193	10.17
GIC	13,304,471	7.51
Banks	5,543,628	3.13
Govt. Companies	4,393,809	2.48
Mutual funds	800,935	0.45
<i>Total</i>	48,459,614	27.37
<i>Indian Corporates</i>		
Domestic Companies	14,678,072	8.29
Banks	1,624,695	0.91
<i>Total</i>	16,302,767	9.21
Directors & Relatives	12,206,460	6.89
Assoc. Companies	4,893,540	2.76
Other Indian Investors	73,287,339	41.40
<i>Total</i>	177,000,220	100.00

The shares underlying the GDRs will, upon completion of the Offering, represent 15.054 per cent of the issued ordinary share capital of the Company.

VISHAL ENGINEERING ENTERPRISES

Vishal Engineering Enterprises is a medium-sized engineering company. It had total assets of Rs. 270 crore and sales of Rs. 256 crore in 2010. The company has been growing at an annual rate of 23 per cent during the last five years, and the management expects to maintain this trend for the next few of years. The growing operations of the company led the management to consider the possibility of acquiring a medium size, specially designed computer along with software for its CAD/CAM functions. The management of the company, therefore, invited representatives from some leading solution providers to help them in designing a useful and cost-effective system. After an evaluation of the various available alternatives, the company made up its mind on the TECH 2010 supplied by a leading company, which would best meet its current and expected future needs.

The finance department evaluated the profitability of buying the TECH 2010 using its normal capital budgeting procedures. The company has a policy of using 12 per cent after-tax cut-off rate for modernization, up-gradation or automation projects. For higher risk projects, a higher cut-off rate is used. It was found that computer has a positive expected NPV.

The chief finance manager has recently been reading a lot about leasing and hire purchase business in India. The subsidiaries of a number of banks, private firms as well as manufacturers have been offering lease and hire purchase finance. He thought that there should be some merit in these options. He therefore decided to talk to the management of the company if they could sell the TECH 2010 on lease or hire purchase basis. He found that the manufacturer was ready to consider supplying the solution on lease or hire purchase.

The purchase price of the TECH 2010 is Rs. 75 lakh. It has an expected life of eight years. The company expects to receive a pre-tax benefit of Rs. 18 lakh per year from the use of computer. The company's tax consultant had indicated that if the computer is purchased, the company can depreciate the solution on written down value basis at 25 per cent per annum. On the other hand, if the company decides to take the product on lease, it will have to forego tax benefit on depreciation. The company will be required to pay lease rentals of Rs. 14 lakh at the beginning of each year for eight years. If Vishal Engineering Enterprises buys the system, it will be serviced and maintained by the computer company for no extra cost, but in the case of lease, Vishal Engineering Enterprises will have to incur a maintenance cost of about Rs. 1.75 lakh per annum.

The chief financial manager is not sure whether there would be any salvage value. However, he thought that if the technology does not change drastically, it may be sold for Rs. 6 lakh. He knew that if the product was taken on lease, he will have to forego the salvage value. He believed that the company's after-tax cost of borrowing, estimated to be 9.5 per cent, is the appropriate rate to use to evaluate the cash flows of leasing. The company's marginal tax rate is 35 per cent.

As regards the hire purchase option, the supplier quoted a hire purchase instalment of Rs. 18.375 lakh per annum payable in the beginning of the year. He had calculated the annual instalment as follows:

	<i>(Rupees in lakh)</i>
Cost of computer	75.00
Interest: $75 \times 8 \times 12\%$	72.00
	<u>147.00</u>
Annual instalment: Rs. 147/8	<u>18.375</u>

The finance manager was surprised to find a higher quotation for the hire purchase instalment than the lease rental. But he did realize that under hire purchase, his company will be entitled to claim depreciation. Therefore, he thought it appropriate to systematically analyze the economics of both options.

DISCUSSION QUESTIONS

1. Determine cash flows on incremental basis under the lease alternative.
2. Why does the chief financial manager believe that the company's after-tax cost of borrowing of 7.5 per cent is the appropriate discount rate for evaluating the lease alternative? Should he use this rate to discount the salvage value also? Can weighted average cost of capital be used for discounting cash flows of leasing?
3. Should chief financial manager go for leasing of computer? Use both net advantage of lease (NAL) and loan equivalent methods to justify your decision.

SANAL LEASING AND FINANCE COMPANY¹

Mr. Avinash Verma, Director Finance of Sanal Leasing and Finance Company (SLFC), looked at the tender notice of the Department of Telecommunications (DOT) inviting private participation in financing telecom projects in view of the new telecom policy of the government of India. The first page of the tender notice read as follows:

Sealed offers are invited on behalf of the President of India for financing of telecom projects through leasing or deferred payment term arrangement with selected vendors. These projects would relate to setting up/expansion of telephone exchanges in the entire country, transmission routes, other telecom projects, procurement of telecom equipment comprising of but not restricted to telephone switching equipment, transmission equipments and cables. Minimum amount to be offered should be at least Rs. 10 crore. Registered Indian companies/institutions with annual turnover (annual disbursements in case of finance companies) exceeding Rs. 100 crores are eligible.

Avinash started thinking about the next course of action. He knew that if this goes through, it would have significant implications on the business of SLFC. He also started thinking about the broad structuring of the presentation he would have to make to the Board for obtaining their approval before submitting SLFC's bid to DOT.

SANAL LEASING AND FINANCE COMPANY

SLFC was established in 1990 as a subsidiary of a leading private sector bank in India. The business of SLFC increased rapidly as the company experienced a boom in the financial services industry. The company expanded its operations in a number of states and had branch offices in almost all metropolitan areas. The company at the time of its inception had decided to focus on the leasing business, however, it expanded its operations in the area of issue management, equity support, trusteeship of the Sanal Mutual Fund, loan syndication and placement of commercial papers (CPs) in the market, and other corporate advisory services. The company continued to be in the forefront of leasing business. Sanctions in the leasing business during the year 1993 amounted to Rs. 275 crore while disbursements were to the tune of about Rs. 300 crore. Cumulative disbursements in leasing till date has totalled Rs. 580 crore. The company has high expectations about the future growth in this area.

There are already proposals under discussion for two lease agreements from abroad. The company expects significant demand for funds from the infrastructure projects in the near future. The telecom sector is high on the company's agenda to expand its business.

TELECOM SECTOR IN INDIA

The telecom sector in India has seen significant development in the last few years. The Government of India has now permitted, because of a resource crunch, private participation in the telecommunications sector in the areas of technical and financial assistance from Indian and foreign companies. The new telecom policy has highlighted the use of private initiative to complement DOT's effort to raise additional resources through increased internal generation and adopting innovative means like leasing, deferred payments, build-operate-transfer and build-transfer-operate. Foreign equity participation up to 49 per cent is also permitted in the case of joint ventures.

The telecom sector expects a growth of about 20 million lines in service by the end of year 2000 a compound growth of about 22 per cent. This growth will require a significant amount of funding and it is expected that this sector needs about Rs. 15,000 crore for basic investments.

NOTICE OF TENDER FOR TELECOM PROJECTS

This notice of tender for telecom projects had come as a result of the change in government's telecom policy. Moreover, raising funds through lease financing and deferred payments would be the first step to expand the telecom facilities through private participation in the country. The main points of the tender notice read as follows:

1. The financing arrangement for telecom projects shall be based on:
 - (a) Lease Financing, or
 - (b) Deferred Payment Scheme

The bid may contain offer based on either clause (a) or (b) or a combination of both provided that the Offered Amount for each option is not less than Rs. 10 crore. The quotation for the financing arrangements has to be submitted in Rupees per thousand per quarter 'in arrears', that is, after the expiry of the quarter to which it relates (see Appendices I and II for Bid Form and Bid Schedule respectively).

2. The offer for financing telecom projects shall be for the one or more of the following terms/periods only:
 - 3 years
 - 5 years
 - 7 years
3. The *modus operandi* of the financing arrangement shall be that the DOT shall separately specify an equipment or project. The project for which the DOT will require funding, may include all types of assets, that is, land, building, civil works and equipment. The 'Financing Agency' would be required to provide finance for this.

To provide adequate security cover to the financing agency, the DOT shall sign a 'Memorandum of Understanding (MOU) with the financing agency, to be followed by a tripartite agreement between DOT, Financing Agency and the vendor of Telecom equipment/project. The tripartite agreement shall cover all the mutually agreed terms and conditions. Where the financing offer is by a vendor, a bipartite agreement with Department of Telecommunications will be required.

4. While it is preferable if the bidder does not link his offer of finance, to particular projects, locations, that is, a bidder is permitted to indicate the telecom items/projects, which the bidder does not wish to finance. A degree of flexibility in choice of projects equipment will be considered for the best evaluated offer(s) in each category.
5. Rates for procurement of telecom equipment/cost of telecom project shall be finished by Department of Telecommunications. However, the tripartite agreement with the financing agency shall contain adequate safeguards so that the Department of Telecommunications is able to invoke warranties and also levy liquidated damages for delay in supply of equipment/completion of projects.
6. Mode of payment to the supplier of telecom equipment shall be as per the conditions determined by DOT. The financing agency may be required to release the payment to a supplier of telecom equipment, as per the directions of DOT.
7. Repayment to the financing agency shall be made by the supplier or Department of Telecommunications on behalf of the supplier as per mutually acceptable suitable arrangements.
8. Schedule for repayment shall be over a period of three years or five years or seven years only. The DOT shall undertake to make the payment of agreed amounts by due dates of payment.
9. Treatment at the end of the lease period may be as below:

DOT would have the right of first refusal with regard to leased assets at the stage of completion of the lease period.

Alternatively, DOT may adopt other options like extending the lease, with advance payment of all future lease rentals at the end of the primary period of lease and further disposal of the asset to be solely determined and controlled by Department of Telecommunications.
10. The financing agency shall furnish performance security to DOT for an amount of five per cent of the total quantum of finance agreed to be made available or an amount of Rs. 50 lakh, whichever is lower, within 15 days of the signing of the Memorandum of Understanding. The performance security shall be in the form of a Bank Guarantee and shall be discharged by DOT on completion of the financing agency's obligations under the contract, that is, on making the agreed finance available as per contracted terms and conditions.
11. For delays in making available the agreed quantum of finance or part thereof, the DOT shall be entitled to recover Liquidated Damages equal to 0.1 per cent of the quantum of

finance delayed, for each week of delay/part thereof, subject to a maximum of five per cent of the quantum of finance delayed or not made available at all. This will be without prejudice to any other remedies.

12. DOT reserves the right to prepay all or some of the balance instalments or lease rentals, suitably discounted to the proposed date of payment, without any penalty to be applied to DOT or the vendor for such pre-payment. Due notice of at least one month will be given prior to such pre-payment.

Avinash skipped details regarding force-majeure and arbitration, deciding to look at them later. His main concern at this point of time was the amount SLFC should bid for lease financing. He was also not sure whether SLFC should bid for three years or five years or seven years or some combinations of these. For the former, he required some information about the total funds requirement of DOT and for the latter he needed to work out details. Sometime back he had asked his marketing manager to collect information on telecommunication projects and the amounts of the funds the government may look forward to raise through these arrangements. His marketing manager had given him an estimate of Rs. 1,500 to Rs.2,000 crore of lease finance. The business potential was quite significant.

Avinash made some quick calculations on the projected availability of funds with SLFC if DOT would call for the money in the future, based on the assumption of six to nine months response time of DOT. He projected that the company would have funds worth about Rs. 50 crore for this purpose by that time. However, given the market opportunity and the huge amount of money required by the DOT, he did not want to lose the opportunity to expand his business. He decided to go for higher bids of leasing finance. The additional amounts of funds would have to be borrowed. Given the market condition and his debt equity ratio he estimated that he would be in a position to borrow about Rs. 150 crore from his parent bank, enabling him to bid for Rs. 200 crore. This kind of practice was quite popular among financial service companies in other countries to finance their customers. He had recently read in an economic daily where a bank, because of restrictive monetary policy, was short of funds and could not lease finance 100 per cent of the requirements of one of their clients, a well-known leading international computer manufacturing company. The bank then decided to borrow from one of the financial institutions to finance the rest of the requirements. In this case, the bank serves as the owner-lessor, but the bank borrows most of the funds needed to purchase the equipment from the financial institution.

There was also the possibility of a tie-up with a foreign financial institution to raise the necessary funds and to participate in the financing of telecom projects. Avinash was concerned about the interest and exchange rate fluctuation risks. DOT had clarified that bids were to be submitted in Indian rupees only; however, DOT was willing to consider interest rate variations based on verifiable international rate. Given the business opportunity, Avinash also wanted to consider the option of exploring a joint bid. There was no information whether DOT would consider a joint bid from a syndicate of financing agencies and/or vendors of specific supplies and if so, then on what additional terms and conditions. He was told that DOT was not envisaging joint bids at this stage. DOT had indicated the possibility of receiving offers in which finance

was linked to specific equipment/projects and, therefore, had not ruled out such bids. He was told that SLFC could quote independently without disclosing the name of the financing agency or manufacturer with whom back to back tie-up may have been arranged by then. He also saw an opportunity to finance the manufacturers directly without getting involved with DOT. Their direct participation would be outside the DOT bidding since the manufacturer with whom they would have a financial tie-up could not be a party to joint bidding.

In going for joint bids, Avinash thought of two possibilities. One was syndication with the exiting financing companies and another was a tie-up with suppliers of telecommunication products. He was not sure whether SLFC could quote in this tender for lease conditional against supply of jelly filled telephone cables, which one of the group companies was manufacturing. Could the company have a tie-up with another company manufacturing optic fibre cables and accordingly? In both cases he speculated that SLFC's offer would be a conditional one, as an agreement would be against the supply of material by SLFC or other companies. He did not see any problem in another company furnishing the bank guarantee also. DOT clarified that offers in which the finance was linked to specific equipment/projects would not be ruled out and the rates for procurement of telecom equipment/telecom project would be on the basis of rates to be decided in the current tenders under finalization/evaluation with DOT and also current rates available with DOT would be taken into account while finalizing leasing payment terms with financing agency. In any case DOT would be the ultimate lessee-cum-user of equipment. Exact modalities would depend on terms and conditions mutually agreed upon.

In case SLFC tied-up with other companies there would be the problem of guaranteeing the delivery of equipments and/or its performance. He was not sure whether DOT would recognize this. However, he was sure that this part could be taken care of in the tripartite agreement and the responsibility of the supplier would be included in the terms and conditions.

Alternatively, for financing arrangements the SLFC should have the option to hypothecate leased assets/lease rental receivable to its banker/lender or for securitization of receivables without any objection from DOT. DOT had clarified that it considered the arrangement between the lessor and their banker on internal arrangement and therefore, did not involve DOT. Avinash envisaged that in any case the primary responsibility for payment of lease rentals to SLFC would rest with DOT and would be made in accordance with the term of the agreement.

DOT had introduced the concept of a performance security bond that was required for a period of one year if DOT was committed to availing of finance by March 31, 1995. This provision was to take care of any contingency that might arise in the implementation of the agreement. Performance security covered all possible events of non-performance (e.g., delay in non-release of funds in accordance with terms of MOU/tripartite agreement or any other non-compliance to the agreed terms) by the financing agency. For this the bid security committed the bank to pay DOT a sum of Rs. 10 lakh if the successful bidder either:

- (a) failed or refused to execute the MOU, or
- (b) failed or refused to furnish the performance security (see Appendices III and IV for bid security form and performance security bond respectively).

The exact period of validity of the guarantee was not specified and was currently open ended. Avinash found that the bank would be unable to provide the guarantee unless the period was clearly specified. DOT clarified that the bid security was linked to the validity of the bid and 30 days thereafter. In the case of extension of bid validity, the bidder might refuse the request without forfeiting its bid security. In this way, linking of bid security to bid validity did not make bid security open ended. The performance guarantee was to remain in force till the terms and conditions of the contract were carried out by the financing agency. It was expected that disbursement of finance by the financing agency might be completed within one year. It was the opinion of SLFC's bankers, that their liability should be as of a 'surety' and not of a 'principal debtor'. DOT insisted that the liability of the banker shall be as 'principal debtor'. Avinash found that this was different from the provisions of the law of sureties.

In the case of tripartite agreements, Avinash thought that there could be major disagreement on linking performance with the lease rental payments. He hoped that the financing agency would not in any way be held responsible for the performance or otherwise of the goods or the completion of the project. The agency would just be extending financing assistance and its repayments should not in any way be linked to the performance of the equipment/project; the performance criteria relating to equipment/projects would be met by the supplier. If there was a delay in supply of equipment or completion of the project, the lessor would be paid 'commitment charges' or 'finance charges' for the advances released. He thought of preparing a plan to develop the rate at which these commitment charges would be paid. These rates were generally worked out for the period between release of funds by SLFC and the date of actual commissioning of the asset. Since DOT had envisaged that payment for equipment will be released on completion of supplies and advance payments would not be required, he did not see major problems on this front.

Would DOT sign a non-cancellable lease agreement with the financing agency? According to company policy, the finance arrangement was generally non-cancellable during the primary period, subject to other terms and conditions. Whether DOT would give any security for lease period to ensure timely payment on due dates and whether DOT would be able to provide bills of exchange drawn on DOT duly co-accepted by their bankers to ensure timely payment on due dates were not known to Avinash. The notification from DOT suggested that DOT would stand by the terms of agreement including repayment schedules. If required, post-dated cheques for a financial year could be given in advance and/or additional payment for delayed payments could be considered. The acceptance of bills of exchange was not envisaged. The tender document did not provide for payment of liquidated damages by DOT to lessors if there was a delay in payment of lease rentals. How did DOT propose to compensate the lessor for delayed payment on its part? DOT clarified that generally no delays were anticipated. Also this was not a problem because of the possibility of payments being made through post-dated cheques, if so required. The general practice in the leasing industry is to take upfront post-dated cheques to the leasing company for lease rentals payable during the lease period and DOT agreed to this practice. In the case of government agencies as lessees, there was a suggestion of creating an escrow account in which all the proceeds of the project would be deposited and payment of lease rental would get the first

priority. DOT had not planned to create any escrow account from where lease rentals could be paid to the financing agency. Since there was no certainty about the implementation schedules, SLFC also thought of submitting different lease quotations for assets installed between April 1 and September 30 and those installed between October 1 and March 31 of the financial year.

Avinash was wondering how to go about evaluating this type of arrangement. Valuation of the arrangement became necessary to determine the bids for lease rentals which SLFC would submit to DOT. He was also interested in finding out the period for which he should submit a bid, since there were three maturity periods for which other competitors in the market would certainly submit their bids. Avinash was sure that his bid under the proposed arrangement would be competitive because of the substantial tax advantage in this arrangement. This advantage was because of the fact that DOT being part of telecommunications ministry did not pay tax. On the other hand, SLFC's tax rate was 46 per cent. Since the ownership of equipment bought by DOT would be with SLFC, there would be substantial tax shield on depreciation that depended on the tax rate difference between the lessor and the lessee. The depreciation tax shield depends on the total amount of lease, i.e., Rs. 200 crore which will accrue to SLFC. The depreciation for tax purposes would be worked out using a written down value method. Avinash had to figure out the schedule of rates of depreciation specified for telecom projects. He was wondering whether the government of India would help the participating organization in getting 100 per cent depreciation on items procured by DOT. He was not sure what types of assets SLFC would be financing. The analysis of telecom projects revealed that it varied from procurement of land, to building and civil works. He estimated that the cost of financing such types of assets could work out to be higher as the depreciation rate would be lower on this category of assets. Regarding 100 per cent depreciation there was no surety of such commitment. He also assumed that all assets financed under a lease, irrespective of the type of project financed, would be separate and individually identifiable so as to permit the lessor's claim to depreciation.

Avinash also worked out that the lease agreement might also deal with insurance and other obligations, statutory and otherwise. The tender document did not clearly specify who would insure the equipment. His view was that as per the normal market practice, the cost of insurance should be borne by the lessee—in this case DOT. The insurance, however, would be in the joint name of the lessor and the financier funding the lessor. Insurance of leased assets, if required had to be done by lessor. A company's rate of lease rentals could be quoted. He decided to use the ongoing rate of insurance of Rs. 1.33 per Rs. 1,000 for working out the lease rentals. The stamp duty would be borne by DOT, if applicable. About other statutory levies like excise duty, sales tax and freight and insurance, etc. the financing offer could be made inclusive of all taxes except sales tax on lease rentals. Sales tax would have to be borne by DOT only once. Currently, sales tax on DOT's procurement was 4 per cent. The other charge would be lease management fee. In his previous leasing proposal, he had been quoting one per cent of total lease amount as one time lease management fee and had found these rates quite competitive.

Avinash tried to understand the conditionalities of the contract regarding lease rental payments. DOT had specified that repayment to the financing agency shall be made by the supplier or DOT on behalf of the supplier as per mutually acceptable suitable arrangements.

He had difficulty in understanding the role of supplier in lease payments. When finance was being availed by DOT, he understood that, as per normal arrangements, repayments in the form of lease rentals would have to be paid by DOT itself. DOT clarified the manner in which the supplier would be involved. An arrangement was possible in which the financing agency makes the finance available to the supplier of equipment/projects and DOT repaid the financing agency in accordance with the terms of the tripartite agreement. Under this arrangement, it was also possible that the supplier paid directly to the financing agency. DOT would enter into an MOU with the financing agency followed by a tripartite agreement between DOT, the financing agency, and the vendor. Further, 'the tripartite agreement shall cover all the mutually agreed terms and conditions'. He wanted to know whether DOT had drawn up a draft copy of the MOU and the tripartite agreement. Since the tripartite agreement would cover 'mutually agreed terms and conditions', he also wanted to know what would happen if a difference arose among the contracting parties on certain conditions/clauses of these documents, would the bid be rejected by DOT (and bid security forfeited) or would a different mode of documentation and routing of finance be considered. DOT assured the prospective bidders to consider appropriate mode of documentation and routing, if required, on mutually acceptable terms.

Since SLFC proposed to borrow Rs. 150 crore, the interest paid on these borrowing would also provide a tax shield to SLFC. Avinash worked out that if SLFC had to borrow the money, the rate of interest in the region of 14 to 15 per cent. So far as the repayment schedule was concerned, he was sure that Sanal Bank would agree to either of the arrangements, that is, linking it with the lease maturity period or go for the maturity period of ten years of loan. The interest payment was going to generate a tax shield to SLFC. Both tax advantages would not be available to DOT if it decided to finance their projects on its own.

Avinash was wondering how to value this arrangement. Another point that bothered him was the treatment of the value of the asset at the end of the lease period. DOT had indicated two different options. He also tried to understand the implications of the treatment at the end of the lease period. He thought that the treatment at the end of the lease period as indicated in the DOT tender would amount to an option to buy, which would make the transaction a hire purchase. Therefore, Avinash thought of suggesting the transfer price at the end of the lease period as zero. In case SLFC wanted to foreclose the lease agreement for some reason, would it have right and if so what would be the consequences? DOT clarified that this right should rest with both the lessor and DOT. The exact discount rate for foreclosure needed to be worked out prior to signing of the agreement. The tender documents also specified that DOT might extend the period at the end of the primary plan. Hence if the agreement was extended for a further period rather than terminating it, what would be that period? DOT made it clear that it did not propose to extend the period of lease. It was only an option. Extension of lease period, if required, could be mutually discussed and agreed. If DOT did not prefer to buy the leased asset indirectly at the end of the lease period, would the supplier of the equipment be willing to acquire the asset at a predetermined residual value? The terms and conditions governing such arrangements at the termination of lease period could be finalized at the stage of entering into the MOU/agreement.

Avinash was wondering how should he structure the presentation and what aspects should he cover in the board presentation for obtaining approval of this project.

DISCUSSION QUESTIONS

1. What are the options of financing arrangements offered for telecom projects?
2. What approach should Avinash follow in evaluating these options?
3. How should he structure this deal? What are total financial requirements if the deal goes through? What should he propose to the Board to finance this deal?
4. What are key risks in this project? How to minimize these risks?

NOTE

1. The case uses information provided in Tender Documents for Financing of Telecom Projects and subsequent Clarification on Tender issued by the Ministry of Telecommunications, Department of Telecommunications, Telecom Commission, April 1994.

APPENDIX I

Bid Form

Tender No. 95-7/94-VLF

Dated:

To,

The Department of Telecommunication
 Sanchar Bhavan
 New Delhi-110001

Dear Sirs,

Having examined the conditions of the contract, as per bid document the receipt of which is hereby duly acknowledged, we, undersigned, offer to supply finance for telecom, projects for a maximum amount of Rs. ----- (Rupees -----) as per the conditions of the tender No. 95-7/94-VLF dated 27th May, 1994.

We undertake, if our Bid is accepted, to make payments as per directions of Department of Telecommunications.

If our Bid is accepted, we will obtain the guarantees of a Scheduled Bank of a sum not exceeding five per cent of the agreed finance subject to a ceiling of Rs. 50 lakh for the due performance of the contract.

We agree to abide by this Bid for a period of 240 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

Until a formal Memorandum of Understanding is prepared and signed, this Bid together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this ----- Day of ----- 1994.

Signature of

In capacity of

Duly authorized to sign the bid or and on behalf of -----

Witness ----- (Signature)

Full Name and Address of Witness -----

APPENDIX II

Bid Schedule

Tender NO. 95-7/94-VLF ----- the ----- 1994

The tender must be submitted in the order given below:

DOT Tender Enquiry No. ----- due on -----

1. Name and address of the bidder
2. Terms of lease finance:
 - 2.1 Maximum amount of bid (Rs. in crore) Rs. crore.
 - 2.2 Lease Term: for 3 years/5 years/7 years (more than one option can be offered)
 - 2.3 Rate of Leases rentals (expressed as Rupees per Rs. 1,000/ of lease finance) payable in arrears:

At Quarterly

Lease Term

3 years

5 years

7 years

- 2.4 Lease Management Fee, if any (expressed as a percentage of lease finance).
- 2.5 (a) Transfer sale price, if any, expressed as a percentage of amount of lease finance (This may arise if Department of Tele-communications elects to exercise its right under clause 12.1 of Section III).
 - (b) Alternatively, advance lease rental to cover entire extended lease period (if any) in accordance with Clause 12.2 of Section III expressed as a percentage of amount of lease finance.
- 2.6 Other charges, if any.
- 2.7 Any other terms and conditions.
- 2.8 Variation in quarterly rentals in terms of Rupees/1,000 for every one per cent variation in the minimum lending rate of interest communicated by the Reserve Bank of India.

APPENDIX III

Bid Security Form

Whereas ----- (hereinafter called 'the Bidder') has submitted its offer dated ---
 --- for financing of telecom projects KNOWN ALL MEN by these Presents that WE ---
 --- OF ----- having our registered office at ----- (hereinafter called 'the bank')
 are bound unto Department of Telecommunications (hereinafter called "the Department of
 Telecommunications") in the sum of ----- (in figures and in words) or which payment
 will and truly to be made to the Department of Telecommunications, the Bank binds itself, its
 successors and assigns by these presents.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Department of Telecommunications during the period of bid validity;
 - (a) Fails or refuses to execute the Memorandum of Understanding, if required; or
 - (b) Fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders.

WE undertake to pay to the Department of Telecommunications up to the above amount upon receipt of its first written demand, without the Department of Telecommunications, having to substantiate its demand, provided that in its demand, the Department of Telecommunications, will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including Thirty (30) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

Signature of the Bank

Signature of the Witness

Name of Witness

Address of Witness

APPENDIX IV

Performance Security Bond Form

THIS DEED OF GUARANTEE IS MADE THIS ----- DAY OF -----
 – between the President of India acting through the Department of Telecommunications
 (which expression shall unless excluded by or repugnant to the context include his successors
 and assignees) of the one part and ----- hereinafter called the ‘Bank’ (which expression
 shall unless excluded by or repugnant to the context include its successors and assignees) of
 the other part.

WHERE THE DEPARTMENT OF TELECOMMUNICATIONS accepted the tender of
 M/s ----- (hereinafter called the Financing Agency) to finance the telecom.
 Projects of the Department of Telecommunications vide Memorandum of Understanding
 No. ----- Dt. ----- .

AND WHEREAS THE said Memorandum of Understanding provides that financing agency
 shall furnish Bank Guarantee to the extent of five per cent of the value of the finance, subject to
 a maximum of Rs. 50 lakh, as and by way of security for the due observance and performance
 of the terms and conditions of the contract.

AND WHEREAS at the request of the Financing Agency, the Bank has agreed to execute
 these presents.

NOW THE DEED WITNESSED AND IT IS HEREBY AGREED AND DECLARED BY AND
 between the parties here to as follows:

1. The bank hereby irrevocably and unconditionally guarantees to the Department of Telecommunications that the financing agency shall abide by all the terms and conditions of the aforesaid Memorandum of Understanding and to be stipulated in the Agreement to be entered between the Department of Telecommunications, Financing Agency and the Supplier of Telecom equipment and shall release the funds as per the specified schedule, and in the event of financing agency failing or neglecting to supply finance as per the terms of the Memorandum of Understanding and/or the Agreement of its failure to enter into the tripartite agreement, the Bank shall indemnify and keep the Government indemnified to the extent of Rs. ----- against any loss or damage that may be caused to or suffered by the Department of Telecommunications by reason of any breach by the financing agency of any of the aforesaid terms and conditions and the Bank further undertake to pay to the Department of Telecommunications, such sum not exceeding Rs. ----- on demand and without DEMUR in the event of the financial agency's failure to perform and discharge the aforesaid several duties and obligations on his part to be observed and performed under the said contract.
2. The decision of the Government as to whether the financing agency has failed to or neglected to perform or discharge his duties and obligations as aforesaid and as to the amount payable to the Government and as to the amount payable to the Government by the Bank herein shall be final and binding on the bank.

Contd . .

3. The liability of the bank under this Guarantee shall be as of Principal Debtor.
4. The Guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the aforesaid terms of the said contract and it shall continue to be enforceable three months after all the finances for the Department of Telecommunications under or by working of the said Memorandum of Understanding/ tripartite agreement have been fully supplied and its claim certified or discharged or till it is certified by the Department of Telecommunications that the terms and conditions of the said contract have been fully and properly carried out by the said financing agency.
5. The bank further agrees that the Guarantee herein contained shall remain in full force and effect for a period of one year from the date hereof and also that the extension of this Guarantee will be provided for by the Bank for such period beyond the said period of one year as the Department of Telecommunications may feel necessary in this behalf. Provided further that if any claim accrues or arises against the Bank before the expiry of the said one year or an extension thereof, the same shall be enforceable against the Bank notwithstanding the fact the same is enforced after the said period of one year or any extension thereof.
6. The Guarantee herein contained shall not be affected by any change in the constitution of the financing agency or the Bank and shall be a continuing one.
7. The Department of Telecommunications has fullest liberty without affecting the Guarantee to postpone for any time and from time to time any of the powers exercisable by it against the financing agency and either to enforce or forbear any of the terms and conditions of the said contract and the Bank shall not be released from its liability under this Guarantee by any exercise by the Department of Telecommunications of the liberty with reference to the matter referred aforesaid or by reasons of time being given to the financing agency or any other forbearance, act or the omission on the part of the Department of Telecommunications or any indulgence by the Department of Telecommunications to the financing agency or by any other matter or thing whatsoever which under the law relating to sureties shall but for this provision have the effect of so releasing of from its such liability.
8. The BANK undertakes not to revoke this Guarantee during its currency except with the previous consent of the Department of Telecommunications in writing.

IN WITNESS WHEREOF the parties have executed these presents the day and year therein above written.

Signed and Delivered by the Constituted Attorney for and on behalf of the Bank in the presence of

1. Signature
Name and Address

1. Signature
Name and Address

2. Signature
Name and Address

2. Signature
Name and Address

RPG CABLES

INTRODUCTION

“Imagine a CEO coming to meet you in late night explaining why you should convert your deposit into the equity shares and that of a company which no one thinks have any future. We actually did that for one continuous week. Few accepted it with last hope to get back their money and few thought it as one more financial jugglery to cheat them,” Mr. Gupta, MD of RPG Cables, forming his makeshift office in manufacturing division at Thane, Maharashtra, was narrating about the tough times he and his group faced convincing depositors to accept the restructuring plan. You do not find most of the CEOs working from the manufacturing division but that is how Mr. Gupta is different.

“I have seen people who kept the savings of their lifetime in our company expecting it to make fortune, protesting in my office after company getting bankrupt. They lost all hopes of getting their money back. We had left with no cash to pay their deposits and only option left was to convert their deposits into equity shares. After we did this successfully, the same lot of people had come with sweets to thank us for getting back their investment, which they never dreamt of”, added Gupta.

This was one of the few steps, which helped RPG Cables not only to come out of financial distress but also chalk out one interesting story of corporate turnaround.

COMPANY BACKGROUND

RPG Cables Limited came into being in 1996 with the merger of three companies: Upcom Cables (Rae Bareli), RPG Telecom (Mysore) and Asian Cables & Industries Limited (Thane). RPG Cables is a part of the well-known RPG Group of Companies.

The company manufactures four types of cables—power and control cables, jelly-filled telephone cables (JFTC), optical fibre cables and housewiring cables. RPG Cables underwent trying times between 2003 and 2006 when its jelly-filled and optical fibre cables businesses faced overcapacity and intense price competition in the market in a very short period of time.

The company's income statement and balance sheet over the last few years are shown in Exhibits I and II.

BUSINESS SPECTRUM

The range of offerings from RPG Cables consisted of the following products:

Power and Electrical Cables

RPG Cables is a major supplier of power cables in the range 1–132 kV voltage grades. It pioneered the manufacture of XLPE cables in India. It produces PVC cables; PILC (paper insulated lead sheathed) cables, which conform to Indian standards, international standards, such as BS, VDE and GOST, and to customer specifications. RPG Cables is one of the three companies in India to produce extra high-tension cables (EHTC).

Telecom Cables

RPG Cables' wide range of telecommunication products includes JFTC and optic fibre cables for telecommunication and high-speed data transfer. Its products are well accepted by all leading telecom service providers (BSNL, MTNL) and contractors.

House Wiring

RPG Cables manufactures standard wires, fire retardant and zero halogen wires. It was one of the pioneers to introduce the concept of flame retardant power cables, which involved the sheathing material to be made flame-retardant.

MANUFACTURING FACILITIES

RPG Cables has four manufacturing facilities, which are responsible for separate products. For example, the Thane unit exclusively manufactures high-tension power cables.

Thane

Set up in 1959, this is the flagship plant of RPG Cables. **High-tension power** cables are manufactured in this facility. As recognition of its initiatives, the unit received the Certificate of Merit in the RPG Quality Awards (2002). It has pioneered XLPE cables in India.

Mysore

Set up in 1982, this plant produces the entire range of **telecom cables**. It had an installed capacity of 45 lakh cable kilometres (CKM) for JFTC and 3.6 lakh CKM for optic fibre cables.

It was promoted with cooperation from Karnataka State Industrial Investment Development Corporation (KSIIDC).

Silvassa

Set up in 2000, this plant is the hub for producing the **low-tension power cables**. Owing to its location, it enjoys the cheapest power tariff and sales tax benefit.

THE BUSINESS SLUMP

Historically, Indian telecom cable market was dominated by JFTC and RPG Cables was one of the largest manufacturers. Consequently, the company enjoyed a steady flow of revenues over the years. However, with the advent of mobile telephony and optical fibre technology, the use of JFTC witnessed a dramatic collapse. The last seven years has seen a tremendous increase in the number of mobile subscribers while their wireline counterpart, i.e., the landline, has remained stagnant.

<i>Mode</i>	<i>2000</i>	<i>2007</i>
Mobile	5	250
Landline	35	39

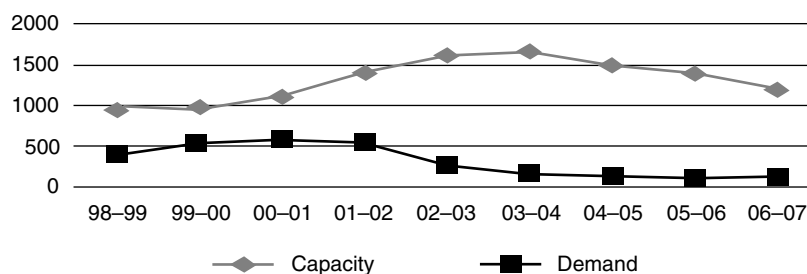
(All figures in million)

CHANGING INDUSTRY SCENARIO

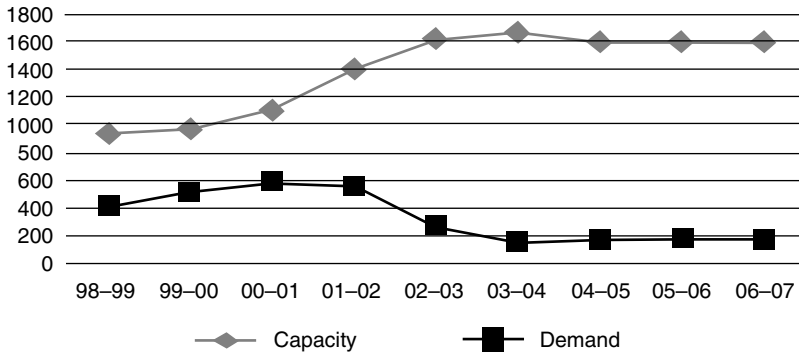
Shifting Trends in Telecom Industry

The management did not recognize the shifting trend towards mobile telephony and went on adding capacity (for manufacturing JFTC) to the Mysore plant. The following diagrams illustrate the development of the demand–supply gap for JFTC:

The demand capacity gap for jelly-filled telecom cables (in lakhs km)



The demand capacity gap for optical fibre cables (lakhs fibre/route km)



Acting on the same strategy, RPG cables boosted its optical fibre manufacturing facility and encountered the similar fate.

The Price Cut

The major cable producers enjoyed a margin to the tune of 40 per cent in the JFTC. However, the ensuing mobile penetration in India put a downward pressure and eventually the telecom cables prices fell by nearly 40 per cent between FY 02–FY 04 and all industry leaders, including RPG Cables, were badly hit. Profitability was eroded to nothing within a span of 3–4 years. Many players exited the telecom cables business. Since RPG Cables had a huge set-up, there were considerable barriers to exit the segment.

The lack of demand and the downward pressure on the prices can be noticed from the financial snapshot of RPG Cables for the period 2000–2005 (Exhibits III and IV).

MILKING THE COW

RPG Cables is a good example of how conglomerates milk the cash cow companies to feed the cash-strapped companies in early stage of their development. Since RPG Cables acted as the cash cow for the RPG Group before the financial crisis, certain funds were diverted to Blue Niles Holdings Limited. These were shown as long-term investments in the balance sheet. However, when RPG Cables faced this distress, no money was ploughed back from any of the group holdings.

FINANCIAL DISTRESS

The year 2004 saw the onset of financial distress for RPG Cables. The effects of this on various fronts are described below.

Customer

RPG Cables turnover reduced from Rs. 400 crore to under Rs. 100 crore within a span of four years and debts increased to more than Rs. 300 crore. This reflected in the behaviour of RPG's

customers. Even the long-term customers started cancelling their orders and were unwilling to enter into new agreements.

Lenders

Due to the continuous downturn in the revenues, the share price was driven down to Rs. 8 in 2004 (market cap down to Rs. 16 crore). Many investors had saved their earnings as fixed deposits with RPG Cables. Most of them were pension earners and this was their only investment.

The sudden depreciation of share price triggered distress among the fixed depositors and they started demanding withdrawal of their amounts. The promoters injected Rs. 75 crore over a period of one year but there was no resolution. More than 16,000 depositors were yet to be reimbursed. Consequently, many legal cases were filed against the company. There were incidences when the depositors demonstrated in the corporate office demanding their money. Several newspaper reports highlighted this precarious situation.

Management and Employees

Section 274 (1G) disqualifies the directors of the company, which defaults in repayment of fixed deposits. Consequently, all the Board members resigned. Apart from them, RPG Cables witnessed the exodus of three CEOs over a period of six months. Acting in the news of the company being in deep distress, bulk of the employees also left the company. Salary payments were delayed each month. This accentuated the attrition of the middle and low level employees. The management decided to sell off the equipment in order to pay wages to the disturbed employees.

Supplies

RPG Cables was in no condition to pay the suppliers for their past deliveries. As a result, the suppliers refused to provide any supplies once their dues were clear. Lack of supplies meant that even the committed orders could not be fulfilled.

The company started defaulting on the interest payments. Naturally, all banks sealed their accounts and there was no recourse of going for additional debt.

Since the power cable business was only marginally better off, it was unable to service the debt burden of telecom cable business. Consequently, the company registered with Board for Industrial and Financial Reconstruction (BIFR) in July 2004 declared it as 'financially sick'. The details of the liability at that time are shown in the following table:

<i>Type of Liability</i>	<i>Amount in Cr.</i>
Fixed Deposits	33
Sales Tax Liability	48
KSIIDC	14
Other Institutions	44
Bank Borrowings	163
Total	302

POSSIBLE OPTIONS

“That was tough really tough time for us”, Gupta recalled. “Everyone concluded that only option left was to shut down our business. To raise Rs. 302 crore was beyond our imagination. When we approached banks and financial institutions for help, looking at the business prospects no one was willing to finance. The depositors were getting more aggressive as the uncertainty started increasing. We approached few leading investment banks and one of them agreed to fund us, provided we would cut our debt to Rs. 170 crore. The immediate task in front was to cut down the debt to magic figure of Rs. 170 crore!!”, he said.

“We decided to break down this problem in pieces. The first priority was to repay the depositors but we had no money left with us. That’s when idea of converting deposits to equity shares strike us. We decided to convert the 30 crore deposits to the equivalent amount of equity share of Rs. 37 each. The stock was trading at Rs.10 that time and we had a daunting task to get approval from at least 4000 (25% of total depositors) of them”, he added.

DISCUSSION QUESTIONS

1. Do you believe that the company would be successful to convert 4000 depositors over the two weeks?
2. If you were a depositor in this company, would you have liked to convert your deposits to shares?
3. What are the ways by which you could bring down the overall debt level to Rs. 170 crore?
4. Will it be possible to continue running this company provided it does not have any working capital with it? If yes, how that can be made possible?
5. Imagine you are at Gupta’s place. What will be your next steps and priorities?
6. As an investor running distress fund for a leading investment bank, would you like to invest in this business? If yes, which route?

Exhibit I**PROFIT & LOSS ACCOUNT OF RPG CABLES**

	<i>Mar '07</i>	<i>Mar '06</i>	<i>Mar '05</i>
Income			
Net Sales	182.91	125.92	88.64
Other Income	28.04	1.62	7.51
Stock Adjustments	0.52	0.44	-4.92
Total Income	211.47	127.98	91.23
Expenditure			
Raw Materials	146.09	89.37	48.1
Power & Fuel Cost	3.28	3.35	2.28
Employee Cost	11.21	12.03	13.76
Other Manufacturing Expenses	2.75	14.03	18.04
Selling and Admin Expenses	17.23	9.16	15.34
Miscellaneous Expenses	6.83	4.48	7.01
Total Expenses	187.39	132.42	104.53
Operating Profit	-3.96	-6.06	-20.81
PBDIT	24.08	-4.44	-13.3
Interest	19.63	34.47	28.26
PBDT	4.45	-38.91	-41.56
Depreciation	3.96	3.86	4.29
Profit Before Tax	0.49	-42.77	-45.85
Extra-ordinary items	1.39	3.41	3.39
PBT (Post Extra-ord Items)	1.88	-39.36	-42.46
Tax	0.11	0.18	0
Reported Net Profit	1.77	-39.53	-42.45
Earning Per Share (Rs)	0.57	-18.61	-19.99

Exhibit II**BALANCE SHEET OF RPG CABLES (RS IN CRORES)**

	<i>Mar '07</i>	<i>Mar '06</i>	<i>Mar '05</i>
Sources of Funds			
Paid-up Share Capital	31.26	21.24	21.24
Reserve and Surplus	-44.74	-111.35	-71.65
Net Worth	-13.48	-90.11	-50.41
Secured Loans	100.93	202.2	179.52
Unsecured Loans	63.68	74.14	65.75
Total Debt	164.61	276.34	245.27
Total Liabilities	151.13	186.23	194.86
Application of Funds			
Gross Block	252.72	255.43	257.83
Less: Accum. Depreciation	209.19	209.13	207.04
Net Block	43.53	46.3	50.79
Capital Work in Progress	0	0.06	0
Investments	80	87.95	93.22
Inventories	6.86	6.45	5.61
Sundry Debtors	29.82	22.99	25.91
Cash and Bank Balance	2.32	1.58	0.76
Total Current Assets	39	31.02	32.28
Loans and Advances	75.71	61.14	60.1
Fixed Deposits	2.6	3.02	2.97
Total CA, Loans & Advances	117.31	95.18	95.35
Current Liabilities	88.18	41.36	40.26
Provisions	1.52	1.9	4.24
Total CL & Provisions	89.7	43.26	44.5
Net Current Assets	27.61	51.92	50.85
Total Assets	151.14	186.23	194.86
Contingent Liabilities	9.91	31.02	62.28
Shares in issue (lakhs)	312.62	212.38	212.38
Book Value (Rs)	-5.33	-43.28	-24.67

Exhibit III**CASH FLOW OF RPG CABLES (RS IN CRORES)**

	<i>37680</i>	<i>37315</i>	<i>36950</i>
Net Profit Before Tax	1.87	-40.98	-42.45
Net Cash From Operating Activities	46.62	2.93	-55.12
Net Cash (used in)/from Investing Activities	-8.03	-0.54	25.53
Net Cash (used in)/from Financing Activities	-38.27	-1.52	27.52
Net (decrease)/increase In Cash and Cash Equivalents	0.33	0.87	-2.06
Opening Cash & Cash Equivalents	4.6	3.73	5.79
Closing Cash & Cash Equivalents	4.92	4.6	3.73

PART
FIVE

*Mergers, Acquisitions, Valuation,
and International Finance*

TOMCO-HLL MERGER

The Economic Times of January 6, 1995 reported the following advertisement:

Notice is hereby given that pursuant to the order passed by the Hon'ble High Court at Bombay, The Tata Oil Mills Company (TOMCO) has been amalgamated with Hindustan Lever Limited (HLL) on December 28, 1994 with retrospective effect April 1, 1993 . . . The shareholders of TOMCO whose names would appear in its Register of Members as on a Record Date, to be fixed by the Board of Directors of HLL, would be eligible for 2 equity shares of Rs. 10 each credited as fully paid up in HLL, for every 15 ordinary shares of Rs. 10 each held by them in TOMCO.

HLL's chairman informed the shareholders on June 15, 1993 about the management's proposal to merge TOMCO into HLL. He stated:

In the light of recent changes in the economic environment, which are designed to prepare Indian businesses to face up to global competition, your management has been considering avenues for faster and more profitable growth. Business imperatives demand that the focus on core businesses in which we have competitive strength derived from our core competence. We have come to the conclusion that the 'core areas' of business for your company are:

- soaps and detergents
- personal care products
- chemicals including speciality chemicals
- agri-inputs including fertilisers and seeds
- exports

We believe that these businesses continue to offer considerable growth potential, even in the forecastable future and therefore, unless there are strong and compelling reasons, we will continue to focus all our energies on these businesses. We aim to achieve our objective through organic growth to our existing/new locations while, at the same time, actively pursuing growth opportunities through mergers/acquisitions which are strategically appropriate and financially attractive, and where we can add value better than others.

One such proposal which your management considers in the best long-term interest of the Company and, therefore, of the shareholders is being put up for your consideration at the ensuing Extraordinary General Meeting on June 30, 1993. While the notice, explanatory statement and

other relevant papers have been sent to you separately, I propose to explain the relevance of the proposal in some detail.

Subject to the requisite approvals and permission from the shareholders of the two companies and the Hon'ble High Court of Judicature at Bombay, it is proposed to merge The Tata Oil Mills Company Limited with your company with effect from April 1, 1993.

Earlier in March 1993, the Rs. 2,086 crore HLL proudly announced that it had just conquered its oldest rival—the Rs. 350 crore TOMCO. If HLL made this move with a view to dominate the market, it would have to use all its skills to turn TOMCO around as it recorded an operating loss, after sales dropped from Rs. 428 crore in 1991–92 to Rs. 312 crore in 1992–93.

BACKGROUND OF MERGING COMPANIES

Hindustan Lever Limited

HLL was incorporated as a private limited company on October 17, 1933 and was converted into a public limited company on October 27, 1956. It is a subsidiary of the Anglo-Dutch international giant Unilever. HLL is engaged in the manufacturing and marketing of soaps, detergents, toilet preparations, basic chemicals, fertilizers, and other agricultural inputs. HLL is also a recognized export trading house. HLL's presence in the Indian soaps and detergents market is truly dominant: some of its brands such as 'Lifebuoy', 'Sunlight', 'Lux', 'Rin' and 'Surf' are household names in India. These brands are also Unilever's international brands. It was generally opined that HLL's brands did leave gaps in the product line. In fact, Nirma exploited this weakness of HLL fully in the 80s.

Various manufacturing and export units (29 units) are located in the states of Maharashtra, Jammu & Kashmir, Madhya Pradesh, Karnataka, Punjab, Gujarat, Uttar Pradesh, Andhra Pradesh, Tamil Nadu, New Delhi and the Union Territory of Pondicherry. HLL has six subsidiaries in India (Indexport Ltd.; Levers Associated Trust Ltd.; Levindra Trust Ltd.; Stepan Chemicals Ltd.; Shekar Engineering Industries Ltd.; Hindustan Trust Ltd.)

In the recent years, many well-known Indian companies (Brooke Bond India Limited; Lipton India Ltd.; Pond's India Ltd.) were brought in as affiliates/associate companies of HLL. All these companies are subsidiaries of Unilever.

The share capital of HLL as on December 31, 1992 was Rs. 140 crore. The shareholding pattern as on April 22, 1993 was:

Foreign shareholding	51.16%
FIs	16.79%
Public	32.05%
<i>Total</i>	<u>100.00%</u>

The HLL equity shares are listed on stock exchanges at Ahmedabad, Mumbai, Kolkata, Kochi, Delhi and Madras. Financial data for HLL for the three years of 1990, 1991 and 1992 are given in Exhibits I–III.

Between 1984 and 1992, HLL's gross turnover grew at 16 per cent, the profit before tax grew at 18 per cent per annum, and the profit after tax showed an annual growth rate of about 21 per cent per annum. During 1956–1992, a period of 37 year, HLL earned profits and declared dividend in every year.

The Tata Oil Mills Company Limited

TOMCO was incorporated as a public limited company on December 10, 1917. It was engaged in the manufacture and marketing of soaps, detergents, glycerines, vanaspati, edible oils, toilet preparations, cattle and poultry feeds, oil cakes, deoiled meals, fish and fish products.

Manufacturing units of TOMCO were established in Maharashtra, West Bengal, Kerala, Bihar, Gujarat, Uttar Pradesh, and Tamil Nadu. International Fisheries Ltd. and Aftab Investments Company were the two subsidiaries of TOMCO. In addition, TOMCO had the following affiliates/associate companies:

- Industrial Perfumes Ltd.
- Tata Vashisti Detergents Ltd.
- Tata Ceramics Kerala Ltd.
- Kalyani Soap Industries Ltd.
- Tata Oil Company Ltd.

TOMCO's financial data are given in Exhibits IV–VI. TOMCO's shares were listed at Mumbai, Kochi and Chennai. In 1991–92, TOMCO's turnover was Rs. 425 crore, it employed about 5,700 people and sold 1,66,000 tonnes of soaps and detergents from its eight manufacturing locations.

During 1991–92, Tata Sons (a holding company for other Tata companies) decided to review their business strategy. It was decided to concentrate on few core areas of competence. TOMCO was seen as a company that did not suit the new strategy of Tatas. Though it has good brands, TOMCO was seen as poor in marketing and distribution. The raw material cost and wage bill were also excessive. The company continued to make losses and in 1992–93, the dividend was skipped. One analyst wrote: 'Tatas simply lost interest in TOMCO; they decided to quit TOMCO gracefully.'

THE UNILEVER INTERESTS

The merger of TOMCO with HLL seemed to match the various moves made by Unilever in India (and abroad) over the last few years. Unilever acquired Brooke Bond and Lipton. It is claimed by analysts that for all practical purposes, HLL oversees the combined entity named

BBLIL. Vijay Mallya's Kissan was also purchased by Unilever around the same time. This made Unilever the largest and dominant player in the Indian food and beverage sector. Several acquisition moves have been initiated in the ice cream sector as well. Unilever had also acquired the cash rich Pond's.

In the international scenario, Unilever had to constantly fight two other giants – Procter & Gamble (P&G) and Nestle. In the recent past, P&G had drubbed Unilever in a price war in the USA. P&G has also established a commanding position in Europe. Unilever's stock price had been tumbling and the profits were slipping. In India, a survey conducted in August 1993 showed that in the fast moving consumer goods (FMCG) sector, the most admired company was HLL, but P&G was placed not very far away at the third position.

P&G acquired Richardson Hindustan Limited in the late 80s, but took active interest in it in early 90s. Its name was changed to Procter & Gamble (India) Limited. It quickly entered into a strategic alliance with Godrej whereby the soaps manufactured by Godrej Soaps Limited would be marketed and distributed by P&G. Godrej had some very popular brands such as 'Cinthol', 'Marvel', and 'Crowning Glory'. International brands such as 'Evita' and 'Camay' were soon introduced in India by the two strategic partners. In the meanwhile, Nestle had also announced plans to consolidate its position in Indian food and beverage sector.

EMPLOYEES' RESISTANCE TO MERGER

The entire merger negotiation was shrouded in high secrecy. The announcement took the 27 TOMCO unions (with varied political affiliations ranging from CPI to the Janata Party) by surprise. They met in Delhi and decided to file a caveat in the Bombay High Court under Sections 391 and 392 of the Companies Act pleading that the terms and conditions of the employees be protected after the merger. Madan Phadnis, the TOMCO employees' lawyer, explains that under law, 'employees, unlike the shareholders, who are the legal creditors of the company, cannot challenge a merger.' However, the TOMCO Employees Federation had asked the management that it should be made a party to the merger negotiation.

There was good reason why TOMCO employees were worried. TOMCO employed about 5,500 people and marketed 1.6 lakh tonnes of soaps and detergents with a turnover of Rs. 400 crore. HLL employed 10,000 people and marketed 7 lakh tonnes of soaps and detergents with a turnover of Rs. 2,100 crore. TOMCO had made operating losses in the past two years. HLL's chairman, S M Dutta, had said that a Voluntary Retirement Scheme (VRS) was in the offing. HLL itself had been cutting staff in the recent past. At its Sewree plant, for example, the 4,000 strong force had been cut to 2,200 and attempt had been made to further reduce it to 1,700 through VRS in 1992.

In the meanwhile, HLL employees had also challenged the merger in the Supreme Court on the ground that merging the loss-making TOMCO with HLL would prove to be a liability to HLL. Chief Justice Mr. M N Venkatachalliah and Justice Mr. S Mohan directed that the merger already approved by the Bombay High Court shall not be given effect till July 21, 1994.

RATIONALE FOR MERGER

Though TOMCO was a company with a rich 75-year heritage, the performance in late 80s and early 90s was clearly slipping. The desire on the part of Tatas to quit and look for a good management to sell TOMCO proved handy for HLL. From HLL's point of view, TOMCO would bring in, as a part of the merger proposal, valuable brands ('Hamam,'501,'Moti,'Jai,'OK', which enjoyed enormous goodwill among Indian consumers. These are ethnic Indian brands, which fill gaps in and strongly supplement HLL's portfolio of international brands. The merger would also enable HLL to access manufacturing capacities for soaps and soap intermediates, particularly fatty acids and detergents, thus enabling HLL to save on capital expenditure and optimize on both transportation and distribution costs.

However, there were some problem areas such as: under-utilized TOMCO workforce, with relatively lower productivity; need for substantial investments to upgrade the plant and machinery to achieve quality standards on par with those of HLL's existing factories; and need to train TOMCO people, upgrade their skills, and integrate them into the HLL work culture.

The chairman of HLL further informed the shareholders as follows:

Your management is confident that it can deal with these issues successfully. Some reorganization and rationalization may be inevitable in the process of making the TOMCO operations viable and suitable; we believe this can be done through an open dialogue with the employees and their representatives in a spirit of mutual understanding, and most importantly, in a humane manner.

Be that as it may, your company is committed to adequately protecting the interest of the TOMCO employees. The merger scheme envisages that all TOMCO employees will become HLL employees, and their terms and conditions of service will be no less favourable than what is currently applicable to them in TOMCO.

TERMS OF THE MERGER

HLL's terms of the merger stated by its chairman are reported below:

One of the most crucial issues in a merger proposal is the swap ratio, which must safeguard the interests of both sets of shareholders. One set of shareholders should not gain at the expense of the other set of shareholders. Conscious of this responsibility, your management, in consultation with the TOMCO management, entrusted this share valuation exercise to Mr. Y H Malegam, senior partner of S B Billimoria and Company, Chartered Accountants, who in his professional capacity acted on behalf of both the companies. Mr. Malegam has recommended a swap ratio of two HLL shares for 15 shares of TOMCO based on a comprehensive valuation exercise. This has been shared with the public financial institutions—Unit Trust of India, General Insurance Corporation, and Life Insurance Corporation, who have approved the swap ratio after discussion among themselves. The public financial institutions together have about 17 per cent shareholding in HLL and 40 per cent in TOMCO.

The management of your company feels that the swap ratio is fair, reasonable, and equitable to both sets of the shareholders. We believe your company will, post-merger, emerge stronger and more

successful, so that both sets of shareholders will participate in the gain from the prosperity arising from the merger. This represents a unique 'win-win' situation for the shareholders of both companies.

Your company will, apart from issuing shares to TOMCO shareholders as a part of the merger proposal (which will necessitate the issue of 28,67,314 shares of HLL), accept responsibility for the outstanding debt of about Rs. 180 crore and other contingent liabilities of about Rs. 30 crore, besides redeeming preferential shares of Rs. 1.15 crore. Your company proposes to invest a sum of Rs. 50 crore in technology upgradation at the manufacturing facilities. Thus, the total cost of integrating the TOMCO business consequent to the merger is substantially higher than what may appear at first glance.

This cost is worthwhile, because we believe in our ability to manage the revival of the TOMCO business, and get it to make a healthy contribution to the operations of the merged company in a relatively short span of time. Therefore, at the cost of repetition, it is worth restating that both sets of shareholders will participate and gain in the enhanced prosperity emanating from the proposed merger.

As an established Tata company with 75 years of history, TOMCO holds several investments. Most of these are directly relevant to its own business, while some are of relevance to Tatas generally. It has been agreed that trade investments related to TOMCO's own business, namely, International Perfumes Limited, International Fisheries Limited, Tata Vashisthi Detergents Limited, and Kalyani Soaps Limited will get transferred to your company as a part of the merger proposal. However, investments held by TOMCO in areas of relevance to the Tata group will be moved out to other Tata companies in consideration of which TOMCO, the merged company will receive their full market value. These investments include Tata Ceramics Kerala Limited, Tata Exports Limited, the proposed joint venture of zirconium sponge and titanium and titanium dioxide, and Aftab Investments Limited (which in turn holds investments in several Tata companies). In the case of unlisted securities, the fair value will be determined by the experts in accordance with accepted accounting/valuation principles.

We believe these arrangements are both suitable and appropriate to both the companies. Your company will, post-merger, neither have the core competence to pursue such projects, nor does it wish to enter these areas of business. The Tatas, who were and continue to be committed to these projects, can take off these projects from their present investment stage in TOMCO. The release of these investments will generate cash which will be gainfully used to further the core business of TOMCO—the merged company. I would like to assure you that these investments will be transferred at full commercial value. There is no hidden subsidy whatsoever, as alleged in uninformed and motivated reports.

Similarly, it has been agreed to make certain arrangements in respect of specified properties of TOMCO. These can be divided in two parts:

The first part comprises tenancy rights in respect of

- premises occupied by TOMCO in Bombay House, Bombay
- premises occupied by the central accounts office of TOMCO in Army and Navy Building, Bombay
- one residential flat in Harbour Height, Colaba, Bombay

These properties are owned by the other Tata companies, which had allowed TOMCO the use and occupation thereof by virtue of TOMCO being a Tata company. Since TOMCO, post-merger with your company, will no more be a Tata company, it has been agreed to release these tenancies. Consequently, no rent or other charges will be due or payable in respect of these properties.

The second set of properties, which comprise certain residential flats (most of them in the exclusive Tata colony), and certain lands and buildings earmarked for specific projects (e.g.; Ceramics, Zirconium sponge, Titanium) owned by TOMCO, can be released to other Tata companies without impacting TOMCO operations. It has, therefore, been agreed that the merged company will make available these assets to other Tata companies should they so desire, at a fair market value which will be assessed by independent valuers. From this it will be clear that there will be no loss to your company or to the shareholders since all these transactions will be at the full market price.

The provision with regard to sale of trade investments and release of certain properties need not have formed part of the merger scheme since, under applicable legal provisions, the managements could have on their own, without formal approval or consent of the shareholders, released/transferred/sold the assets in question. However, it was the express wish of both companies to ensure total transparency that led us to include these in the scheme so that vested interest do not, at a later date, allege suppression of material facts.

This takes me to the last important issue, namely, preferential allotment of 29,84,347 shares to Unilever Plc. This is being done to restore Unilever's 51 per cent shareholding (which it currently has in Hindustan Lever) in the merged company.

Being a Unilever subsidiary has been a source of major strength for your company and has been responsible in several ways for its phenomenal growth and prosperity. This status has enabled your company to access from Unilever, free of cost, R&D, technology know-how, marketing support (both domestic and international, including brand names), management systems, training facilities, and other resources in the normal course of business. Your management, therefore, considers it important that Unilever Plc. retains its 51 per cent shareholding in the merged company.

Some of you may recall that Unilever Plc., which held 100 per cent equity in your company, voluntarily diluted its shareholding to 84.6 per cent in two stages, in 1956 and 1966. The shares were offered to the Indian public at a price worked out by reference to the Controller of Capital Issues (CCI) formula. Unilever Plc. further diluted its holdings in your company from 84.6 per cent to 51 per cent, partly by a public issue and partly by a divestment on rights basis in 1977 and 1978. Here again, the issue prices were based on CCI formula. These prices were substantially lower than the ruling market price of your company's shares.

If the same CCI formula (followed at the time of dilution) is now used to allot shares to Unilever Plc. to raise its equity to 51 per cent, Unilever would be entitled to receive the shares at a price of about Rs. 43 (face value is Rs. 10). However, your board is not proposing to do this.

The apex chambers of commerce at the national level and the public financial institutions (LIC, GIC, UTI, IDBI, and ICICI, among others) have, after discussions, evolved a revised formula for enabling the parent company to raise the shareholding in an Indian company through a preferential allotment. This formula envisages preferential allotment at a price earning multiple of 15, based

on the last published audited annual results of the company. This also ensures a measure of equity between the price at which a foreign shareholder is expected to dilute and the price at which it can increase its shareholding, if it wishes to do so.

We have followed this formula for recommending the preferential allotment. Your company's earnings per share for the accounting year ended on December 1992 was Rs. 7. At a multiple of 15, the price is Rs. 105. This is equal to face value of Rs. 10 and a premium of Rs. 95. The merchant banking division of ICICI has confirmed that the price of Rs. 105 per share for preferential allotment to Unilever Plc. to restore its shareholding in the merged company to 51 per cent (which exists pre-merger) is fair and reasonable.

Your board has, however, proposed two conditions for the preferential allotment to Unilever Plc. Firstly, the shares in question shall be non-transferable for a period of seven years from the date of allotment. Secondly, should Unilever decide to divest these shares within 12 years from the date of allotment, it shall do so in favour of other shareholders on a fair and equitable basis at a price worked out by reference to P/E of 15, based on the latest published audited results. Your board considers the proposed preferential allotment at the aforesaid price and conditions fair and reasonable.

After the merger, the stake of Unilever would reduce to 49 per cent. In order to raise it to 51 per cent, a preferential allotment in favour of Unilever was proposed. When HLL approached the Reserve Bank of India (RBI) for clearance, it did not grant approval for a long time. Instead, RBI issued new guidelines stating that pricing of every preferential allotment, including allotment to foreign shareholders, would be determined on the basis of the average price of the share during the preceding six months at the main listing centre. If these guidelines were to be obeyed, then Unilever would be forced to shell out Rs. 358 per share (Rs. 253 more per share than what the board proposed). The total would amount to Rs. 106.80 crore instead of Rs. 31.5 crore as the board's proposal. HLL challenged the RBI guidelines in the Bombay High Court in July 1994.

REVIEW OF MERGER DECISION BY HLL

Even before HLL approached the court, it unilaterally announced that it would be forced to comprehensively review the merger. HLL said that financial institutions did not oppose the proposal at any stage and it was strange that RBI opposed it towards the end. HLL pointed out that many other companies such as Castrol, Colgate, Peico, Coates, and Hoechst were permitted by RBI to issue preferential allotment to their foreign parents at heavy discount to market prices. It was also a fact that HLL's application was made several months before the new RBI guidelines on preferential allotments were issued.

The announcement that HLL may review the merger was received, by the analysts, with some scepticism. One analyst noted:

In my view, Hindustan Lever cannot demand that the parent be given shares at 1/7th the market price. True, when the application was made to the government the rules were different. But Hindustan Lever has been in the country long enough to know that several times the government has

amended the rules when the need arose. Hindustan Lever, as a corporate citizen, should obey the law. The people of this country will continue to regard it with the high respect it has always commanded.

OFFERS BY NIRMA AND GODREJ

In June 1993, Nirma's Karsanbhai Patel made an attempt to put a spoke in the wheel. He was planning to put in a counter bid of Rs. 75 per share, a price more attractive than the valuation of Rs. 52 implied in the exchange ratio of 2:15. Patel claimed that his move was altruistic to ensure that TOMCO shareholders got the right deal. Some observers pointed out that Patel's main consideration was perhaps his own market share. Patel later wrote to TOMCO Chairman, H N Sethna, expressing that he would be willing to pay 50 per cent higher than HLL for acquiring Tata Son's 20 per cent stake in TOMCO. HLL's spokesmen said that Nirma's bid was a delaying tactic that had come too late. Already the two boards as well as the Bombay High Court had cleared the merger. The financial institutions, which held 42 per cent stake in TOMCO, had also approved the merger.

Highly placed sources at TOMCO confirmed in June 1994 that Godrej Soaps had also made a bid to take-over TOMCO although no concrete terms had been discussed. Godrej Soaps had already made a move to merge with the Gujarat Godrej Innovative Chemicals.

TOMCO'S TURNAROUND BY HLL

HLL's personnel had moved into TOMCO as advisors well before the merger was legalized. The turnaround strategy bears the classic Lever stamp—tight fund management, strong pull factor for the brands backed by heavy advertisement and promotion, an emphasis on mass market products.

Even as the TOMCO-HLL merger was ratified by the shareholders of TOMCO, HLL formed a crisis management team to restore TOMCO back on the rails. At this stage, the emphasis was not on profits, but on creating new management systems at TOMCO. Three phases were identified for tackling TOMCO's problems.

The first phase began in mid-March, 1993 and continued till June, 1993; that is, about 100 days. The main focus was on costs.

- Production shifted from the Sewree plant to the new cost efficient Tata Vashisti plant at Chiplun near Delhi and its two factories in Kerala. Several low unit cost, low margin product lines, like '501' bar soap, 'OK' bath soap were given off to third party manufacturers.
- Reducing the company and stockist inventory from three months to 15 days. To push pipeline stocks, HLL asked TOMCO to cut down production by about 30 per cent from March, 1993 to June, 1993.
- The TOMCO oils and fats purchases were connected to the Lever's purchase pool. Raw material costs are said to here reduced by about 40 per cent. TOMCO is said to

have gained about Rs. 1,500 per tonne on the purchase of oils and fats through HLL sources.

The second phase started in July, 1993 and ended in September, 1993. During this period, TOMCO's brand portfolio was analyzed in order to identify those brands that could eventually generate profits.

- HLL asked TOMCO to concentrate on creating brand pull for select products. 'Hamam' and 'Moti' which served as strategic defenders for Lever's own popular segment brands and the premium priced 'Le Sancy' were given advertisement support. These brands were advertised on television for the first time in years.
- The TOMCO management began looking for niches, like hair oils and perfumes, to generate profits. The production of Dau de Cologne at Bombay has been stepped up. The Madras factory began making hair oils again after a gap of about years. The third party manufacturing system was strengthened by adding three more manufacturers to raise the strength to six. Production is said to be up to 4,000 tonnes from 1,500 tonnes from about a year ago. The Tata coconut hair oil brands have also been advertised on television for the first time in about a decade.

The third phase began in October, 1993. It was aimed at better factory and production management. This phase had to be dealt with very carefully because it was not feasible to deal with the 5,500 strong TOMCO workers legally until the merger was legally through.

- Every product was being evaluated from a production point of view and parameters were developed based on the unit cost of production and the quality of the product. The parameters were designed to match production facilities with
- TOMCO's product quality has to be on par with HLL's own quality norms and product costs, as close to those of HLL's as possible. Plans include changing factory layouts, modernizing operations and rationalizing manpower utilisation.
- TOMCO's production personnel have been reshuffled. About six manufacturing people from TOMCO are now said to be managing the show under the guidance from one Lever man at each factory. Most of these are not erstwhile factory managers.

Commenting on the HLL efforts to change TOMCO's management systems, one always noted:

All through the programme, there has been one implicit, unwritten message. By changing systems and management styles, HLL was out to change the way in which TOMCO had worked. From being a manager who was merely interested in selling all he made, the TOMCO executive had to become a livewire who would push the market with everything he had.

DISCUSSION QUESTIONS

1. Perform a SWOT analysis from HLL's viewpoint.

2. Based on your response to above, what would you think about TOMCO merger? Be specific in your analysis.
3. In this merger, list the assets that HLL acquires.
4. What are the liabilities that are assumed by HLL? Try to quantify as many of these as possible.
5. How much does HLL 'pay' for all the assets listed in Q3?
6. Did TOMCO shareholders receive a fair deal? The discussion should reflect upon the various approaches to valuing assets.
7. What are the sources of value gain envisaged by HLL?
8. Would you agree with the idea of proposing a preferential allotment to Unilever? Why? Why not?

Exhibit I

HLL's Balance Sheet 1990-1992
(as at 31 March)

(Rupees in crore)

	1992	1991	1990
Assets			
Fixed assets	222.75	193.53	179.19
Investments	12.24	7.60	8.52
Current assets	597.74	533.49	411.34
Loans and advances	96.83	76.06	75.47
<i>Total</i>	<u>929.56</u>	<u>810.68</u>	<u>674.52</u>
Liabilities			
Share capital	139.99	139.99	93.22
Reserves and surplus	193.31	151.11	162.06
Secured loans	93.32	77.31	80.00
Unsecured loans	106.96	87.44	79.07
Current liabilities	395.98	354.83	260.07
<i>Total</i>	<u>929.56</u>	<u>810.68</u>	<u>674.52</u>

Exhibit II

Profit and Loss Account of Hindustan Lever

(Rupees in crore)

	1992	1991	1990
Gross sales revenue	2,086.87	1,776.32	1,460.27
Other income	12.00	6.16	5.99
PBDIT	217.77	177.52	146.30
<i>Less: Interest</i>	32.19	20.63	18.31
<i>Less: Depreciation</i>	19.60	19.19	17.25
Profit before tax	165.98	137.70	110.74
<i>Less: Tax provision</i>	67.50	57.50	52.00
Profit after tax	98.48	80.20	58.74

Exhibit III

Equity Share Data for HLL

(Rs.)

	1992	1991	1990
Face value	10	10	10
Book value per share	23.8	20.75	27.36
Dividend (%)	42%	38.50%	42.2%
EPS	7.03	5.73	6.29

The market price as on June 17, 1993 was Rs. 375 per share.

Data for 1991 and 1992 are on enlarged capital base to bonus issue of 1 : 2.

Exhibit IVBalance Sheet of TOMCO
(as on 31 March)

(Rupees in crore)

	1993	1992	1991
Assets			
Fixed assets	31.38	32.57	34.70
Investments	23.39	13.43	16.01
Current assets	105.56	178.33	125.01
Loans and advances	84.96	72.14	40.54
Miscellaneous expenditure	1.40	1.46	0.62
<i>Total</i>	<u>246.69</u>	<u>297.93</u>	<u>216.88</u>
Liabilities			
Share capital	22.65	22.65	10.88
Reserves and surplus	43.88	43.35	26.16
Secured loans	85.14	103.22	116.11
Unsecured loans	18.34	29.92	1.24
Current liabilities	76.68	98.79	62.50
<i>Total</i>	<u>246.69</u>	<u>297.93</u>	<u>216.88</u>

Exhibit V**Profit and Loss Statement of TOMCO***(Rupees in crore)*

	1992-93	1991-92	1990-91
Gross sales revenue	312.24	428.4	382.8
Other income	59.50	17.73	5.71
Profit before dep. and int.	27.18	23.20	23.92
Less: Interest	22.63	18.44	14.20
Less: Depreciation	3.59	3.64	3.18
Profit before tax	0.96	1.12	6.54
Less: Provision for tax	0.31	-	0.90
Profit after tax	0.65	1.12	5.64

Exhibit VI**TOMCO's Equity Share Data**

	31.3.93	31.3.92	31.3.91
Face value Rs.	10	10	10
Book value Rs.	29.75	29.45	36.17
Dividend (%)	-	12.5	20
EPS Rs.	0.30	0.50	5.19

The market price as on June 17, 1993 was Rs. 52.50 per share.

Exhibit VII**Sales Mix of HLL and TOMCO in 1991-92***(Rupees in crore)*

	HLL	TOMCO
Soaps, detergents, and related items	1,219	270
Chemicals and agro	236	85
Personal products	302	67
<i>Total</i>	<u>1,757</u>	<u>322</u>

UNION CARBIDE (INDIA) LIMITED

Before the Bhopal gas tragedy of 1984, Union Carbide (India) Limited (UCIL) was known for its 'Eveready' brand dry cells. During 70's UCIL's 'Eveready' brand enjoyed over 90 per cent of market share. It was a household name with a reputation that matched those of Hindustan Lever's 'Dalda' and 'Lifebuoy'. In the stock market, UCIL was a true blue chip company. It was a company in which retired people used to park their funds as fixed deposits and never worry about it thereafter. In the reputed management institutes, during 70's UCIL was the 'first day' company along with Hindustan Lever and Metal Box. All this changed after the tragedy. The company suffered continuous erosion of investor confidence from 1984. (see Exhibits I–III for the company's income statement and balance sheet).

As a result of the gas tragedy, there was a public outcry and it was established that lack of adequate safeguards resulted in the accidents. The courts awarded compensation and it was then believed that the final compensation bill would run into billions of dollars. However, the lackadaisical approach of the government of India, the prospect of long-winding legal battle, and the swift moves by the parent company resulted in an amicable settlement in line with a Supreme Court judgment. The Supreme Court passed orders on February 15, 1989 which said,

- (a) UCIL is a party to the proceeding along with the parent company, Union Carbide Corporation (UCC);
- (b) UCC and UCIL will pay \$ 470 million before March 23, 1989, of this, UCC will pay \$ 425 million and UCIL \$ 45 million;
- (c) the payment will be made to the government of India; and
- (d) this is compensation for the victims and not a fine, penalty, or punitive damages

UCC decided to divest its stake in UCIL and mobilize part of the required amount. However, in a separate development the Jabalpur High Court stalled the sale of shares till criminal proceedings were finalized. The shares were frozen in 1991. This ban was lifted only in February, 1994. Thus, majority stake in UCIL was up for sale. UCC planned to mobilise about Rs. 150 crore through the sale of its 50.9 per cent holding in UCIL.

The sale proceeds would be kept in an escrow account. The State Bank of India (SBI) and Credit Capital Finance Corporation (CCFC) were appointed as escrow agents. The latter were

also appointed as the brokers for auctioning (an open auction was mandated by the Supreme Court) the shares held by UCC in UCIL. CCFC faced many problems in this matter. First was the protest made by the victims of the gas tragedy; second, there were hidden dangers of the reversal of court orders and government stand; finally, there was the task of evaluating the financial terms and considerations in the various bids. James Winterbotham of Credit Capital noted:

“Transparency was critical to the deal since UCIL was a politically sensitive company and the deal would be scrutinised by everybody.”

The auction route was taken mainly to ensure transparency in the matter of sale of the shares. Among other things, the final choice of the buyer would depend not only on the strength of the bid, but also on the ability of the bidder to arrange the necessary finance.

COMPANY BACKGROUND

UCIL was a subsidiary of the Union Carbide Corporation of USA (which held 50.9 per cent of stakes; 1,65,84,750 equity shares, fully paid up, par value Rs. 10). The parent company (popularly known as UCC) had a strong international presence. In India, UCIL was a leading company in dry cells, chemicals and plastics. The company, despite numerous problems related to Bhopal Gas Tragedy, has shown consistently good performance. While monsoons would hardly qualify to be an important factor for UCIL, surprisingly it is so. The sales of flashlights and dry cells is highest during the monsoon periods. This is on account of the poor drainage system and lack of street lighting in the villages.

Products

The product profile of UCIL may be seen in Exhibit IV. The capacity and production of various products are given in Exhibit V. Most of the UCIL products are manufactured in-house. Outside purchases form only a small part. The company has ten plants. The company's products include the following:

Dry Cell

The product is technically called zinc copper batteries. The company is the market leader in this product line with a 43.9 per cent market share. UCIL showed remarkable resilience by increasing sales by three per cent, when the overall industry volume had fallen by 100 mn units. Presently, the main competitors are Indo National Nippon (26 per cent market share) and Lakanpal Novino (24 per cent market share). In the mid 70s, there were number of manufacturers of dry cells. However, there was a shakeout due to technological obsolescence and shutting out of the USSR export market in 1985. The companies which faced problems were: Apte Amalgamation, Estrella Industries, J K Batteries, Jesons, Punjab Anand Batteries, and Toshiba Anand. A company on the verge of closure was Geep Industrial Syndicate.

UCIL has units in Kolkata, Chennai, Srinagar, Hyderabad, Lucknow, and Toratala. The Srinagar plant is closed due to prevailing conditions in Kashmir. The production facilities are

equipped to make pen light and larger sized batteries. The existing batteries of UCIL will face stiff competition from alkaline batteries of companies such as Duracell. The average cost of alkaline battery will be higher at about 4 times but the life will be higher by six times. Duracell plans to set up a Rs. 40 crore plant and produce 50 mn pieces of alkaline batteries in India.

The demand for batteries has been growing rather slowly. Within the battery market, pencil cells which constitute 25 per cent of the market size is a high growth segment with expected growth rates of 15 per cent per annum.

Flashlights

The market for flashlights is stagnant. The competition is more from the cheaper smuggled flashlight than any other manufacturer in India. The sales of flashlights by UCIL has been showing a growth rate of three per cent per annum.

Carbons

Arc carbons are used by cinema halls. The industry appears to be in late maturity and decline stage. However, UCIL has additional presence in the industrial electrodes business where sales prospects appear good.

Metals

The company also produces photo engraves used in the printing industry. However, due to shift in the printing technology, the product has limited market. Hard facing products used in the automobile industry are, however, in the growth stage with the automobile sector set to boom in India. The company's annual reports admit the keenness of the competition in this area.

Electrolytic Manganese Dioxide

This appears to be a new product of the company; the market, especially the export market, is said to be promising.

Systems and Software

A strategic alliance with a US partner has enabled effective penetration in the industrial software segment. A more formal alliance is on the cards.

COMPETITION AND MARKET

None of the competing companies could survive the marketing and technological onslaught of UCIL till the eighties. During seventies, UCIL's 'Eveready' enjoyed 90 per cent market share. Then the Japanese electronics giant 'National' entered the fray with two collaborations,

Lakhanpal National and Indo National. Their market shares have inched upwards from six per cent to 41.9 per cent (Lakhanpal 20.8 per cent and Indo National 21.1 per cent). UCIL is still the market leader with 43.9 per cent market share.

Lakhanpal National

This company achieved sales of Rs. 112.9 crore in 1993-94, and PAT of Rs. 7.15 crore. The current price of the company's share is Rs. 145. The company's P/E ratio is 17.9. It plans to integrate backward through manufacture of battery grade separator. This company has also improved the quality of the product sold under the 'Novino Gold' brand name.

Indo National

This company achieved sales of Rs. 190.7 crore in 1993-94 and PAT of Rs. 5.15 crore. The company's current share price is Rs. 1,400. The company's P/E ratio is 20.3. The company is planning backward integration. Indo National sells its product under brand name Nippo.

Riding on the boom of transistors, the industry grew at 12-15 per cent till 1980. The growth rate subsequently came down and was 5.5 per cent between 1980-85. Presently, it is growing at 1.5 per cent only. Indian per capita dry cell consumption lags far behind the advanced and other developing countries. The indicative data is given below:

Per Capita Consumption of Battery Cells per Year

Hong Kong	19.8	Japan	18.2
USA	19.8	Korea	8.7
Europe	9.0	Sri Lanka	5.0
Philippines	3.9	India	1.5

Demand over the Years

<i>Year</i>	<i>Million pcs</i>
1986-87	1,167.0
1987-88	1,681.3
1988-89	1,351.9
1989-90	1,274.2
1990-91	1,234.9
1991-92	1,262.0
1992-93	1,256.0
1996-97	2,000.0

The zinc acetate batteries (generally called dry cells) are produced in three sizes.

UM-1, R-20: 992 mn pcs in 1991-92.

UM-2, R-14: 73 mn pcs in 1991-92, growth rate 11% p.a.

UM-3, R-6: 193 mn pcs in 1991-92, growth rate 19% p.a.

The raw materials used are zinc, acetylene black, electrolytic manganese dioxide and carbon rods. Zinc alone accounts for 35 per cent of raw material cost and its prices are closely related to the international markets.

POTENTIAL BUYERS FOR UCIL

There were a large number of serious contenders for UCIL's share offering. Nusli Wadia of Bombay Dyeing collaborated with Ralston Purina. The latter were the holders of the patent rights of 'Eveready' brand in all countries except India, Bangladesh, and Nepal. It was believed that the two partners had entered into an agreement which prevented Ralston Purina from tying up with other companies in India in battery business. Subsequently, this was found to be untrue.

R P Goenka group put in its bid for UCIL. It is headed by the Calcutta-based Ram Prasad Goenka. Over the last twenty years, this group has expanded significantly through the acquisition route.

Williamson Magor group head by B M Khaitan also showed keen interest. The group had its presence in tea and engineering industry and also owned Standard Batteries, an automobile battery company.

In addition, there were other interested parties such as BPL (a major white goods manufacturer in India), and Henkel.

Khaitans: The Dark Horse

A serious bid was made by the Williamsom Magor group, controlled by the Khaitans of Kolkata. Even the day before the auction results were announced, most observers expected Nusli Wadia to clinch the bid. To the surprise of many analysts, Khaitans emerged as the dark horse.

The Kolkata-based Williamsom Magor group (consisting about 20 companies) has strong interests in tea, engineering, foils, packaging, and financial services (see Exhibits VI and VII). The group had assets of Rs. 1,250 crore and reserves of Rs. 900 crore. The company has 21 tea gardens in Assam, Dooars, and Darjeeling. During 1994-95, it registered an output of 24.6 million kgs. of tea.

The group has five companies ranked in the *Business Today* 500. One is McLeod Russel. The rest are,

- | | |
|----------------------|---------------------------------------|
| 1. George Williamson | [Market capitalization Rs. 326 crore] |
| 2. Williamson Magor | [Market capitalization Rs. 208 crore] |
| 3. Bishunath Tea | [Market capitalization Rs. 150 crore] |
| 4. India Foils | [Market capitalization Rs. 85 crore] |

The conglomerate had in the past used the route of acquisition for expansion. In the past fifteen years, the group had acquired six companies, namely, divisions of McNally Bharat, Standard Batteries, India Foils, McLeod Russel and Bishunath Tea. The group has excellent record of running these companies. All companies except for Standard Batteries produced excellent returns to the shareholders

The market capitalization of the group was Rs. 2,200 crore out of which the Khaitans' share was Rs. 1,320 crore. The group decided to bid from its largest tea company, McLeod Russel. (Exhibits VIII-X provide information about McLeod Russel).

The reason for making McLeod Russel the acquiring company were:

- It is the group's largest company.
- Khaitans had a large shareholding in the company. Since Khaitans wanted to generate cash from a rights-cum-public issue, there was the danger of excess dilution of shareholding and loss of control in the public issue if money was raised through some other group company.
- The company has the ability to generate large cash flows and the earnings have been generally quite stable over the years.
- A liquidation of shares from 70 per cent to 51 per cent would have not adversely affected the control of Khaitans. At that time the company's share price was Rs. 340. Equity analysts and investment bankers had mentioned that a issue price at Rs. 240 would evoke good response. The sale of 4 million shares would have thus generated Rs. 100 crore.

Khaitans are new to the technology. Although they do have an automotive battery unit, the technologies are not the same. UCC also is not able to provide any new technological improvements for the operations/product as they were no longer in the business of dry cells. Interestingly, the second competitor, Ralston Purina, would have scored a perfect ten on the technology front. However, they are new to the Indian market.

Khaitans expected the following synergy from the acquisition: leveraging of the 'Eveready' brand name with that of 'Standard' battery; utilizing the UCIL's distribution system effectively and enhancing UCIL's performance through infusing managerial resources.

The group has in its fold another battery manufacturing company, namely, Standard Batteries. This company has a Japanese collaborator, Furukawa. It was expected that this company would be able to get synergy out of UCIL acquisitions. Much synergy was not expected in operations, since manufacturing and distribution of dry cell differs from that of automotive batteries. It was expected that the brand name of 'Eveready' could be leveraged to the automotive batteries. Thus, the idea was to tap the consumer confidence in dry cells to push the automotive batteries to trucks, tractors, buses and two wheelers. The brand name 'Eveready' enjoys tremendous support in the rural areas.

UCIL offered a great opportunity to utilize the vast distribution network in selling fast moving consumer goods. Dry cells are found in remotest and the smallest of shops kiosks. The 'Eveready' network covers every small and large town in India, besides more than one lakh villages (out of the total 5.86 lakh). In all, Eveready has presence in four lakh retail outlets.

UCC, the parent appeared to have lost its interest in running UCIL because they had already sold away the Eveready Battery units and the brand name to Ralston Purina. Thus, to them, running UCIL meant an irritant and an unrelated diversified activity. The Khaitans appeared to be able to provide more active decision-making support as compared with UCC. In any case, UCIL would have been a small member of the large UCC group and therefore, UCC management could not have given too much of its time to UCIL. Khaitans could change it for the better. Already there was ample proof of that in the past months.

Exhibit XI provides the share price data for UCIL and McLeod Russel from September 1994 to April 1995. Barely a day earlier to the day of opening the bids, a leading analyst wrote:

Corporate circles feel that Rs. 150 crore for a little over 50 per cent equity stake in the dry battery giant is a reasonable buy while an unreasonably biased bidder may even make an offer of Rs. 200 crore or so.

It was disclosed on September 7, 1994 that the bid made by Khaitans was the highest at Rs. 290.23 crore for 16,584,750 shares of UCIL held by UCC (amounting to 50.9 per cent of the total). The second highest was rumoured to be that of Nusli Wadia at Rs. 265.36 crore.

Even though the bid amounts were different, it was not easy to decide the winner because of the other aspects of the bid such as schedule of payment and the ability to arrange the requisite finance. For example, the Khaitan bid mentioned the following payment schedule:

Up front cash payment	:	Rs. 50 per share
One month later	:	Rs. 65 per share
Spread over one year	:	Rs. 70 per share

On September 9, 1994, it was formally announced that the Khaitans had won in the auction. Subsequently, on November 22, 1994, an advertisement in the *Economic Times* was issued by CCFC and SBI Capital Markets announcing the “*sale of 50.9 per cent shareholding in UCIL to McLeod Russel (India) Ltd. for Rs. 2,902.3 million*”.

Public Offer by Khaitans

The regulations in force then called for bidder mounting a takeover attempt to additionally buy at least 20 per cent stake from the general shareholders through a tender offer. It was not clear at that time if McLeod Russel would have to make a public offer to other shareholders to purchase a minimum of 20 per cent additional stake from them in pursuance of sections 40(A) and 40(B) of the stock exchange listing agreement. Some legal experts opined that since the auction was made in pursuance of an order of the Supreme Court, section 40 did not apply to Khaitans. But this was not to be.

Subsequently, McLeod Russel made an open offer to the shareholders of UCIL (now, Eveready Industries India Ltd.), offering to buy EIIL shares at Rs. 175 (subject to a maximum of 20 per cent of EIIL's equity). This offer closed on April 6, 1995. By that date, the company received shares from about 8,500 shareholders. As of July 6, 1995, the company's application was pending before the Department of Company Affairs for clearance for over 60 days.

Financing the Acquisition

Of the total consideration of Rs. 290.23 crore payable for the acquisition of UCIL by McLeod Russel India Ltd. (MRIL), Rs. 250 crore was financed by a bridge loan (in the form of short-term debentures) arranged by a consortium of financial institutions (IDBI +, ICICI + and Bank of America). These debentures were planned to be redeemed through the proceeds of a subsequent public-cum-rights issue. The balance came from the internal accruals of MRIL.

The debentures used for financing the acquisition were to be redeemed through a right-cum-public issue opening on May 25, 1995 (Rs. 38 crore rights plus Rs. 270 crore from the public). ICICI, IDBI and American Express would be the lead managers to the issue.

The issue proceeds would be collected in four calls spread over three months. The prospectus to the public issue (at a premium of Rs. 180 aggregating Rs. 302 crore) put the cost of the project (acquisition of shares in UCIL) at Rs. 308 crore. The actual amount required by the company, however, was Rs. 350.65 crore. The break-up is as follows:

Redemption of NCDs	Rs. 310.00 crore
Premium on redemption	Rs. 22.88 crore
Issue expenses	Rs. 17.77 crore
<i>Total</i>	Rs. 350.65 crore

It appeared that there was a gap of Rs. 42.65 crore which was not explained adequately in the prospectus to the public issue. The balance could be generated from internal accruals and other sources not disclosed then. It was also probable that the acquisition cost be slightly lower than the stated number.

FUTURE OUTLOOK

To get rid of the stigma now attached to the name Union Carbide and to cash on the brand equity of 'Eveready', the name of the company has been now changed to Eveready Industries India Ltd (EIIL).

Though the bulk of the tea production of the Williamson Magor group was sold through the auction house and exported, the group had also launched its branded packet teas such as Premium Gold and Planter's Pride which contributed to its profitability. It was expected that the 400,000 retail outlets of EIIL could be effectively utilised to push packet tea.

The company planned to achieve sales of about 3,000 tonnes of retail tea in 1995-96. For achieving this, the company would have to compete with the likes of Brooke Bond Lipton. This called for massive brand promotion effort. Thus, the promotional expenditure would be quite high.

B M Khaitan, the Chairman of the group, said in May, 1995 that a number of multinational companies engaged in manufacture of consumer goods evinced keen interest in utilizing the distribution network for reaching their goods to the customers. Already a large German

company is selling its 'Henko' brand of detergents through the distribution channels of EIL. Hindustan Latex has also approached EIL for pushing its products.

Khaitans have already taken steps to re-energize EIL. Extensive growth plans of existing product mix as well as introduction of new products and technology are being planned. EIL has signed an MoU with Eveready Battery Company Inc. to form a joint venture to develop alkaline battery business in India under the globally known Energizer brand. This brand (already an international brand) would have to compete with the other international brand from the US, Duracell. This collaboration is an interesting one because the collaboration partner is Ralston Purina which was also in the race for UCIL with Nusli Wadia as a partner. In this joint venture, UCIL will have a minority stake at 49 per cent. The JV will make and market alkaline batteries for pager, cellular phones, high speed cameras, motorised shavers, etc. The market is expected to be around Rs. 100-200 crore by the year 2000.

EIL has entered into another collaboration with Hitachi of Japan to manufacture and distribute button cells for watches and cameras.

DISCUSSION QUESTIONS

1. What is being valued? Entire company, all equity, or part of the equity?
2. If someone is buying slightly over 50% of the equity stake, how should we calculate the value of control premium?
3. Compute the value of all equity in Union Carbide based upon:
 - (a) Price paid by Mcleod Russel
 - (b) Bid made by Nusli Wadia
 - (c) Analyst estimate the day prior to the auction
 - (d) NAV or book value
 - (e) PECV
 - (f) Market value
 - (g) Fair value
 - (h) A judgement as to the break-up value
4. Perform sensitivity analysis on valuation; they may not understand the power and utility of DCF techniques.

Exhibit I**Profit and Loss Statement
Union Carbide (India) Limited***(Rupees in lakh)*

	1992-93	1991-92	1990-91	1989-90
<i>Income</i>				
Sales	31,834	28,022	22,971	23,055
Others	294	361	268	363
<i>Total</i>	<u>32,128</u>	<u>28,383</u>	<u>23,239</u>	<u>23,418</u>
<i>Expenses</i>				
Operating	22,882	20,482	16,653	15,710
Excise	6,800	6,056	4,722	5,171
(+)/- stock	(166)	(375)	135	635
Depreciation	350	303	299	314
Interest	216	99	111	972
<i>Total</i>	<u>30,082</u>	<u>26,565</u>	<u>21,920</u>	<u>22,802</u>
PBT	2,046	1,818	1,319	616
Tax provision	1,100	230	0	0
PAT	<u>946</u>	<u>1,588</u>	<u>1,319</u>	<u>616</u>

Exhibit II**Profit and Loss Statement of Union Carbide (India) Limited
1983-88***(Rupees in lakh)*

	1983	1984	1985	1986	1987	1988
Income	21,216	22,447	24,436	21,745	20,096	25,789
RM Consumed	9,160	9,801	10,569	8,739	8,034	9,714
Op. exp.	2,718	2,833	3,372	3,250	3,472	4,381
Other op. exp.	3,950	3,905	3,820	3,845	3,151	3,908
Depreciation	476	501	560	393	219	237
Interest	575	473	309	230	185	328
Excise	2,859	3,403	4,309	4,195	4,310	6,225
PBT	1,478	1,531	1,497	1,093	725	996
Tax	545	710	640	400	250	300
PAT	933	821	857	693	475	696

Exhibit III

Balance Sheet of Union Carbide (India) Limited

	<i>1992-93</i>	<i>1991-92</i>	<i>1990-91</i>	<i>1989-90</i>
<i>Assets</i>				
Fixed Assets				
Goodwill at cost	30	30	30	30
Fixed assets	2,634	2,099	2,046	2,189
Capex	428	750	308	270
Total	<u>3,092</u>	<u>2,879</u>	<u>2,384</u>	<u>2,489</u>
Investments	483	333	331	318
Current Assets				
Spares	697	696	685	703
Stocks	3,627	3,477	3,120	3,169
Debtors	2,007	1,391	578	1,469
Cash	757	666	575	423
Loans & advances	3,927	3,566	3,278	1,976
Total	<u>11,015</u>	<u>9,796</u>	<u>8,236</u>	<u>7,740</u>
<i>Total Assets</i>	<u>14,590</u>	<u>13,008</u>	<u>10,951</u>	<u>10,547</u>
<i>Liabilities</i>				
Long-term Liabilities				
Shareholders' funds				
Capital	3,258	3,258	3,258	3,258
Reserves	5,046	4,752	3,817	2,987
Total	<u>8,304</u>	<u>8,010</u>	<u>7,075</u>	<u>6,245</u>
Loan Funds				
Secured loans	1,502	865	800	1,583
Unsecured loans	79	80	76	77
Total	<u>1,581</u>	<u>945</u>	<u>876</u>	<u>1,660</u>
Total long-term Liabilities	<u>9,885</u>	<u>8,955</u>	<u>7,951</u>	<u>7,905</u>
Current liabilities				
Creditors	4,054	3,401	2,511	2,391
Provisions	651	652	489	251
Total	<u>4,705</u>	<u>4,053</u>	<u>3,000</u>	<u>2,642</u>
<i>Total Liabilities</i>	<u>14,590</u>	<u>13,008</u>	<u>10,951</u>	<u>10,547</u>

Exhibit IV

Break-up of Sales over the Years for Union Carbide (India) Limited

Year: 1991-92

<i>Item</i>	<i>Unit</i>	<i>Qty</i>	<i>Price (Rs.)</i>	<i>Value (Rs. lakh)</i>
Batteries	MM #	540.88	4.06	21,959.70
Flashlight cases	MM #	8.38	41.05	3,440.00
Arc carbons	MM #	7.21	8.81	635.20
Ind. carbon electrodes	MM #	0.60	5.29	31.74
Carbon electrodes	MM #	24.74	0.18	44.53
Photo engraves	Ton	310.00	87,258	270.50
Castings	Ton	13.10	1,686,107	220.88
Electrolytic Mn O ₂	Ton	1,675.00	42,463	711.26
S/W & others				123.52
Outside purchase				579.89
Technical services				11.79
<i>Total</i>				28,029.93

Year: 1992-93

<i>Item</i>	<i>Unit</i>	<i>Qty</i>	<i>Price (Rs.)</i>	<i>Value (Rs. lakh)</i>
Batteries	MM #	557.22	4.51	25,130.62
Flashlight cases	MM #	8.63	44.19	3,813.60
Arc carbons	MM #	7.59	9.24	701.32
Ind. carbon electrodes	MM #	0.74	4.33	32.04
Carbon electrodes	MM #	12	0.29	34.8
Photo engraves	Ton	266.9	101,858	271.86
Castings	Ton	4.3	3,283,488	141.19
Electrolytic MnO ₂	Ton	2,206	45,275	998.77
S/W & others				253.9
Outside purchase				463.47
Technical services				13.24
<i>Total</i>				31,854.8

Exhibit V

Capacity and Production in Union Carbide (India) Limited 1992-93

<i>Item</i>	<i>Unit</i>	<i>Licensed</i>	<i>Installed</i>	<i>Production</i>
Batteries	MM #	1,082	923	541.2
Flashlight cases	MM #	15	7.5	8.8
Arc carbons	MM #	7.9	9	7.1
Ind. carbon electrodes	MM #	2.5	2.5	0.7
Carbon electrodes	MM #	364.5	450	367.4
Photo engraves	Ton	600	200	244
Castings	Ton	150	150	6
Electrolytic Mn O ₂	Ton	3,940	4,500	4,809

Exhibit VI

Williamson Magor Group Profile 1993-94

<i>Tea</i>	<i>Engineering</i>	<i>Packaging</i>	<i>Trading & Finance</i>
Williamson Magor & Co	Dewrance Macneill	India Foils	Macneill Intl. Ltd
Bishnauth Tea	Flender Macneill Gears	Light Metal India	Deutsche Badcock
George Williamson	Kilburn Chemicals		Macneill Financial Services
McLeod Russel	Kilburn Engineering		Macneill Leasing & Financial Services
Makum Tea Co.	Kilburn Reprographics		
Namdang Tea	Macneill Engineering		Macneill Housing Fin.
	McNally Bharat Engg.		
	McNally Bangalore		
	Standard Batteries		
	Worthinton Pumps		
Sales: 3613 MM Rs.	2,584 MM Rs.	2,941 MM Rs.	185 MM Rs.
Tea Kgs. 62 MM	Factories 16	Factories 4	

Exhibit VII

Profile of Important Companies in the Williamson Magor Group

<i>Name</i>	<i>Product</i>	<i>Total Income</i> <i>MM Rs.</i>	<i>PAT</i> <i>MM Rs.</i>	<i>Net worth</i> <i>MM Rs.</i>
India Foils	Aluminium foils & flexible packaging material	1653.4	46.2	379.2
Bishnauth Tea	Tea	610.6	36.9	421.3
Williamson Magor	Tea	598.9	33.4	381.5
Namdung Tea	Tea	235.8	22.3	215.5
Makum Tea	Tea	254.2	18.3	185.8
Kilburn Reprographics	Postal franking machines	226.2	4.1	27.6
Kilburn Engineering	Industrial machinery	337.2	19.5	171.3
Worthington Pump	Pumps, valves	221.4	4.3	54.5
Light Metal Industries	Aluminium rolled products	119.7	6.5	390.6
Standard Batteries	Lead acid storage batteries	738.9	(55.0)	(1.9)
George Williamson	Tea	1267.4	136.2	1972.8
Dewrance Macneill	Control valves & boiler mountings fittings	136.8	0.1	37.8
Macneill Engineering	Truck control panels, electrical starters	196.0	7.6	16.7

Exhibit VIII

Past Financial Performance of McLeod Russel India Limited as on 31st March

(Rupees in million)

<i>Particulars</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>
Total operational income	782.4	839	914.3
of which export sales	187.7	231	214.6
PBDIT	196.9	192.3	183.3
PBDIT to total income %	25.2	22.9	20.0
PBT	125	105.9	92.7
Other income	30.9	38.1	46
Extraordinary income	0.2	0	44.9
Extraordinary expenses	(14.9)	(17.9)	(29.4)
PAT	69.9	65.3	98.1
Net cash accruals	47.7	50.3	82.9
Equity capital	100.0	100	100.0
Reserves & Surplus	289.4	309.7	362.8
RONW (%)	16.7	15.9	21.2
ROCE (%)	33.7	29.7	23.7
Debt to equity ratio	0.5	0.5	0.7
EPS (Rs.)	6.5	6.5	9.8
Book Value (Rs.)	38.9	41.0	46.3
Dividend (%)	45	45	45

Exhibit IX

**Balance Sheet of McLeod Russel India Limited
as on 31st March**

(Rupees in million)

	1992	1993	1994
<i>Assets</i>			
Gross fixed assets	430	564	700
Depreciation	<u>152</u>	<u>266</u>	<u>374</u>
NFA	278	298	326
Capital WIP	7	10	12
Investments	<u>71</u>	<u>158</u>	<u>215</u>
Inventories	64	80	88
Receivables	11	28	9
Cash and bank	21	8	8
Loans and advances	<u>329</u>	<u>309</u>	<u>306</u>
Total current assets	<u>426</u>	<u>425</u>	<u>411</u>
<i>Total assets</i>	<u>782</u>	<u>891</u>	<u>965</u>
<i>Liabilities</i>			
Equity capital	100	100	100
Reserves	289	310	363
Net worth	389	410	463
Debentures	35	35	35
Term loans	23	42	79
Other loans	<u>21</u>	<u>33</u>	<u>44</u>
Sundry creditors	68	78	70
Provisions	134	175	115
Bank borrowings	11	22	1
Other current liabilities	<u>101</u>	<u>96</u>	<u>158</u>
Total current liabilities	<u>314</u>	<u>371</u>	<u>344</u>
<i>Total liabilities</i>	<u>782</u>	<u>891</u>	<u>965</u>

Exhibit X

Past Performance of McLeod Russel as on 31st March

<i>Ratio</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>
Profitability ratios (%)			
PBDIT to total income	25.2	22.9	20.1
PBT to total income	18	15	16.9
PAT to total income	8.3	7.8	10.7
EPS (Rs.)	6.5	6.5	9.8
Cash EPS (Rs.)	9.3	9.5	12.8
Liquidity ratios (Times):			
Current ratio	1.4	1.2	1.2
Quick ratio	1.2	1	0.9
Structural ratios (Times):			
Total debt to equity	0.5	0.5	0.7
Book value per share	38.9	41	46.3
Coverage ratios (Times):			
Fixed asset coverage	3.3	2.7	2.4
Interest coverage	6	4	3.4

Exhibit XI

Share Price Movements During 1.9.94–28.4.95

<i>Date</i>	<i>Share price of UCIL (Rs.)</i>	<i>Share price McLeod Russel (Rs.)</i>	<i>BSE Index</i>
01.09.94	130	312	4,542.8
02.09.94	126	312	4,526.2
05.09.94	129	312	4,510.8
07.09.94	137	312	4,530.3
08.09.94	136	275	4,551.0
12.09.94	138	275	4,630.5
13.09.94	126	315	4,599.4
14.09.94	138	315	4,599.2
15.09.94	140	320	4,604.2
16.09.94	137	305	4,617.6
22.09.94	134	275	4,451.8
03.10.94	136	275	4,339.5
24.10.94	153	300	4,328.4
01.11.94	165	315	4,269.9
09.11.94	170	320	4,205.7
15.11.94	166	395	4,305.5
22.11.94	166	320	4,082.3
23.11.94	167	295	4,022.7
24.11.94	165	300	4,075.4
29.11.94	158	315	4,149.9
07.12.94	156	320	3,978.4
14.12.94	143	308	3,861.5
21.12.94	143	300	3,912.6
04.01.95	140	360	3,886.3
11.01.95	140	335	3,600.8
18.01.95	144	335	3,654.4
25.01.95	138	325	3,450.7
03.02.95	148	305	3,638.1
10.02.95	145	295	3,522.1
17.02.95	137	280	3,383.9
24.02.95	139	318	3,454.9
02.03.95	137	335	3,508.3
09.03.95	140	310	3,473.1
15.03.95	175	300	3,399.2
24.03.95	150	257	3,280.1
30.03.95	146	260	3,261.0
07.04.95	170	275	3,472.1
21.04.95	154	255	3,362.8
28.04.95	146	235	3,133.3

APPENDIX I**CCI Formula for Pricing a Public Issue**

Till the office of Controller of Capital Issues (CCI) was dismantled in 1992, the price of any public issue of equity shares was decided by CCI. The CCI arrived at “Fair Value” on the basis of a consideration of the following values:

1. Net Asset Value (NAV)
2. Price of Earning Capitalization Value (PECV)
3. Market Value (MV)

The procedure followed to establish the fair value involves the steps mentioned below:

STEP 1: CALCULATION OF NAV

NAV is defined as:

$$\frac{\text{Net worth + Fresh capital issue}}{\text{Number of shares including the fresh issue}}$$

In arriving at the net worth figure to be used in the above ratio, the following points are kept in view:

1. Intangible assets are not considered.
2. Revaluation of fixed assets will ordinarily not be taken into account.
3. A reserve not created out of genuine profits or out of cash will not be considered.
4. Proper provision is made for gratuity and other terminal benefits to the employees.
5. Adequate provision is made for liabilities like arrears of preference dividends, unclaimed dividends, and bad debts.
6. The debit balance in profit and loss, and the arrears of depreciation are deducted.
7. Contingent liabilities which are likely to impair the net worth are properly considered.
8. Depreciation is calculated on a consistent basis.

Contd . . .

STEP 2: DETERMINATION OF “PRICE OF EARNING CAPITALIZATION VALUE” (PECV)

The PECV is set equal to :

$$\frac{\text{Average profit after tax} + \frac{\text{Fresh capital issue}}{\text{Existing net worth}} \times \text{Existing profit after tax}}{\text{Capitalisation rate} \times \text{Number of shares, including the fresh issue}}$$

In arriving at the average profit after tax in the above expression, the following considerations are taken into account:

1. Provision for taxation should be made at the current statutory rate under the Income Tax Act.
2. The profits shown in the audited accounts are adjusted so as to exclude non-recurring miscellaneous income of an abnormal nature and write-back of provisions.
3. Normally, the averaging of profits is done for the latest three years. However, in industries subject to cyclical ups and downs, it is advisable to consider the profits of the latest five years.
4. If the profit variation in the last three years is regarded as normal, a simple arithmetic average is calculated. If profit shows a tendency to increase, a weighted arithmetic average is calculated in which the weightages are:

latest year	3
middle year	2
first year	1

If profit shows a tendency to decline, then the profit of the last year alone is considered.

The capitalization rate in the above expression is chosen as follows:

- | | |
|------------------------------|-------|
| (i) Manufacturing companies | 15% |
| (ii) Trading companies | 20% |
| (iii) Intermediate companies | 17.5% |

Contd...

STEP 3: CALCULATION OF THE MARKET VALUE (MV)

The MV, which serves as a guiding factor for valuation where shares being valued are listed on the stock exchange/s, is calculated as the average of :

- (i) the high and low of the preceding two years, and
- (ii) the high and low of each month in the preceding 12 months (in this calculation, appropriate adjustments are made for bonus issues and dividend payments)

STEP 4: DETERMINATION OF THE FAIR VALUE (FV)

For determining the FV, the starting point is the average of the NAV and PECV based on 15 per cent capitalization rate. If this average is lesser than the MV by about 20 per cent only, it is regarded as the FV. If, however, the average of the NAV and PECV is lesser than the MV by a margin of over 20 per cent, the PECV may be reworked by lowering the capitalization rate (In no case, however, can it be lower than 12 per cent).

The FV is then determined as the average of the NAV and PECV (based on a lower capitalization rate). For reasons of prudence, a further deduction equal to one year's dividend per share may be made.

It may be noted that the procedure employed for determining the FV is not mechanistic and fully structured. It does involve some exercise of discretion and judgment based on an assessment of the facts and circumstances of each case.

APPENDIX II

A Legal View on Share Valuation

A valuation of shares is only an expression of opinion, and it may be made on the one or more bases but the final test of the value of a thing is what it will fetch if sold. The stock exchange dealings are a satisfactory indication of the value of the shares for the listed shares. The unlisted shares are valued in accordance with one or more of the following popular methods:

(A) YIELD ON EARNING CAPACITY OF SHARES METHOD

- (i) Under this method, a yield of money is ascertained. Next, it is compared to the payment of dividends in the past years.
- (ii) It is a wise course to ascertain source of dividend payment, while scrutinizing the balance sheet. In case of fall of the trading profits, this fact should be taken into account for the purpose of valuation of shares. Because, dividend rate has to be maintained for some years utilizing the dividend equalization fund even though the trading results of the years do not justify the payment of the dividend at the same rate.
- (iii) If the payment of dividend is large, the value of the shares will be pro-portionately valued; but, if the payment of dividend is smaller than the normal yield, the value of shares will be less.
- (iv) Alternatively, the average net profits of the company for the last few years is to be ascertained in order to find out the rate of dividend which could have been paid out of such average net profits and then to compare this rate with the normal yield.

(B) BREAK UP METHOD

Under this method, the company is evaluated by assigning its assets a market value; liabilities are then reduced, to determine the net value of the assets. This method is applied where a company has not earned profits or is loss-making.

The present view is drifting from the yield method, which was the accepted principle five years ago. The thrust is now on premium oriented factors, such as, entry barriers, market shares, brands, human resources, technology, even a controlling stake. This makes corporate valuation very complicated. Calculating a company's net worth is no longer a matter of decisive event. Enough shrewdness is necessary to work out and extract premium for several intangibles.

Whichever method of valuation is adopted, the object is to arrive at a fair price of the shares. The valuation must be just or equitable to all shareholders of the amalgamating and amalgamated companies. To achieve this purpose (out of the several valuation figures arrived at on the basis of the different methods), a fair figure may be achieved by the average of the valuation figures. The exchange ratio offered or proposed to the shareholders may now be compared with this average price.

Contd...

JUDICIAL VIEWS ON FAIR PRICE

Judicial views on fair price are:

- (i) The test of fairness is whether the offer is fair to the offeree as a whole, and not to the applicant individually.
- (ii) The applicant must allege unfairness. It is not sufficient merely to say that insufficient information was given, or to rely on contentions which are speculative.
- (iii) Mere fact that balance sheet valuation of shares is more than price offered does not make the offer unfair.
- (iv) Transaction need not be in public interest.
- (v) If the objector does not say that price is unfair, but objects on ground that more information should have been made available to him: petition is not maintainable.
- (vi) Considerable weight is given to the fact that a large body of shareholders have accepted the offer.
- (vii) The court will see whether the offer is obviously and unconvincingly unfair or fraudulent or improper and not merely one which is open to criticism or capable of improvement.
- (viii) Scheme must be obviously, patently unfair to dissenting shareholder before he can take advantage of this section.
- (ix) Onus of proof is on the dissidents to establish that the price was unfair. If consenting 90 per cent shareholders of the transferor company are substantial shareholders of offeree (transferee) company, and the offer or scheme is intended to expropriation of dissenting minority shareholders, such offer or scheme shall be a 'bare-faced attempt' to evade the fundamental rule forbidding the expropriation of a minority interest. In that case, the onus to prove that the offer is a fair one, devolves on the transferee company, and not the dissidents.

TATA TEA LIMITED

In September 1994, Tata Tea Limited (TTL) tendered to buy up to 55 per cent equity of Asian Coffee Limited (ACL), a company manufacturing instant coffee. TTL exchanged its one share (after bonus issue) to ACL's five shares. The immediate impact of the announcement of the tender offer was an increase in ACL's share price and a fall in TTL's share price. Was the tender offer favourable to ACL's shareholders and against the interest of TTL's shareholders?

HISTORY OF TATA TEA LIMITED

In 1963, a small joint venture between the Tatas and James Finlay was established and named Tata Finlay to deal in packaged tea in Bangalore, and instant tea at Munnar in Kerala. At that time James Finlay was a sterling company with sizeable plantation holdings in the north-east and south India. In 1976–77, James Finlay used Tata Finlay as a vehicle for converting their interests in rupee terms and reduced their stake to forty per cent. In 1983, James Finlay pulled out the company and renamed as Tata Tea Limited (TTL). Darbari Seth became the chairman of TTL that year and stepped down only in April 1995.

During Seth's long and illustrious tenure at the helm of TTL, the company grew from strength to strength, and now it has become the single largest corporate producer of tea in the world. It is now ready to take on the multinationals to establish its dominance in the polypack segment in India, where its brands like Kannan Devan and Tata Tea have become market leaders in the south and in the north respectively. The company has become a leading export house and has interests in other commodities like spices. Its spices processing unit at Kochi has been awarded ISO-9001.

A joint venture, Tata Tetly, was set up a few years ago and it is now exporting value-added tea products (tea bags and packaged tea) to west Asia and countries like Poland. The strategy of growing its own tea and packaging it in the estates itself, is now being followed in case of coffee.

TTL had acquired a majority shareholding in Consolidated Coffee Limited (CCL) at the beginning of nineties. The acquisition was one of the most open and transparent take-overs in the Indian corporate history. After this acquisition, TTL took advantage of the coffee trade's liberalization, to market its own brand, Coorg, first in polybags and then in coffee bags, *a la* the tea bag route. Thus, both in tea and in coffee, the company has vertically integrated.

TTL has consistently paid dividends since 1984, maintaining 80% for 1992–93 and 1993–94. The scrip was traded at over Rs. 1000 around October 1994, but has fallen to Rs. 380 by end of March 1995, in sympathy with the general fall in the market.

TTL entered the coffee business a few years ago when it acquired 51 per cent stake in CCL—the largest producer of coffee in southern India. This was done through a tender offer. It was the first tender offer in the Indian corporate history (Appendix I). It was a case of a tender offer partly for stock and rest for cash. TTL used the tender offer route again when it raised its stake in Rallis India from 23 per cent to around 49 per cent. Acquisition of controlling interest in Asian Coffee Limited (ACL) was also done through tender offer (for stock). Thus, TTL is no newcomer to the technique of tender offer.

TTL earned a net profit of Rs. 54 crore for 1992–93 and Rs. 59 crore for 1993–94. Its sales amounted to Rs. 412 crore in 1992–93 and Rs. 436 crore in 1993–94. The company's prospects for 1994–95 is not very encouraging because of the sharp setback in exports of black tea. The company's south Indian operations have been hit due to adverse climatic conditions.

The exports of tea by TTL have declined and that getting into coffee business was an attempt to keep exports rising. Prices of coffee in the international market have shot up by 40 per cent since mid-July 1994.

In the past few years, Unilever group has been trying to make deep inroad in tea industry. First, it acquired Brooke Bond India and the purchased Lipton India. It has now brought Brooke Bond India and Lipton India under one umbrella titled Brooke Bond Lipton India Limited (BBLIL). Nestle has also been making several moves to increase its presence in the food beverage market in India.

TTL'S TENDER OFFER FOR ACL

Asian Coffee Limited converts coffee beans into instant coffee. It is a 100 per cent EOU (export-oriented unit). The output is exported to USA, UK, Japan, Korea and Singapore. It has a plant in Hyderabad with an installed capacity of 2,000 tonnes of instant coffee.

ACL made public issue in 1989 and rights issue (one for one at par) in April 1991. Its sales for 1992–93 and 1993–94 were Rs. 19 crore and Rs. 26 crore, respectively. Exhibit II furnishes the share price data for the company. Exhibit III provides the basic information regarding ACL.

On September 20, 1994, TTL announced an open offer (called tendering for stock) to buy up to 55 per cent equity (64,21,687 fully paid-up equity shares) of ACL, a 100 per cent export-oriented unit, manufacturing instant coffee. The board of TTL took this decision. N A Soonawala, deputy chairman of the company said that the acquisition of majority holding was intended to enhance the company's presence in the coffee business. It was further stated: "As a part of the overall efforts by TTL to reorganise and extend its interest in the coffee industry, the decision to acquire the majority stake in ACL will achieve a much greater degree of synergy between the coffee operations of TTL and ACL in the long run."

The press release addressed to the shareholders of ACL said, *inter alia*,

- The offer will be made to the equity shareholders of ACL whose names appear on the register of members as on September 30, 1994 (record date).
- The offer will remain open from January 9, 1995 till February 20, 1995.
- If the aggregate acceptances under this offer is less than 55% of the voting capital of ACL, TTL will have an option to withdraw the offer, in event of which the share certificate submitted by the shareholders of ACL who had accepted the offer would be returned to them.
- If the aggregate of the acceptances to this offer by the shareholders of ACL exceeds 55% of the voting capital of ACL, then TTL, in accordance with the SEBI regulations (Substantial Acquisition of Shares and Takeovers) of 1994, will acquire, by the way of exchange of equity shares from the shareholders of ACL accepting this offer, their respective holdings up to 100 shares each in the first instance and the excess of over 100 shares on a *pro rata* basis.
- The acceptance of this offer by the shareholders of ACL must be absolute and unqualified. Any conditional or incomplete acceptance will be liable for rejection.

In a letter to Bombay Stock Exchange, TTL stated that it would offer one share of the company (face value of Rs. 10) for every five shares (face value of Rs. 10) of ACL. This offer made under Rule 5B of Listing Rules of Bombay Stock Exchange would become effective once TTL completes its bonus issue announced in June, 1994. (This bonus issue was one for two).

TTL had fixed November 15, 1994 as the record date to determine the shareholder eligibility to vote at its next extraordinary general meeting. In that next meeting, TTL management was to seek formal approval of TTL shareholders for investing in ACL and for issue of additional shares (fully paid-up) shares to the willing ACL shareholders.

Well before the matter became public, two promoter directors of ACL (R J Rajendra Prasad and R J Dilip Kumar) had vacated their seats of ACL Board in favour of Darbari Seth and his nominee. As a prelude to this, Seth (that is, TTL) had acquired 9.5% stake in ACL from the management during 1993 itself. The other main shareholders in ACL were the Commonwealth Development Corporation of UK, Brazilian Comercio Exportaco Ltd, and a group of Indian expatriates.

Market analysts believed that the exchange ratio of one share of TTL (after bonus issue) against five shares of ACL was in favour of the shareholder of the latter. Upon the announcement of this tender offer, the price of ACL share moved up from Rs. 75 to Rs. 76.25. The share price of TTL fell from Rs. 680 to Rs. 655 on that day itself.

DISCUSSION QUESTIONS

1. What are the advantages and disadvantages of tender offer? What are the pros and cons of if consideration is cash or shares?
2. What are the motives of a raider and how do they relate to asset side of balance sheet and liability side of balance sheet?

3. The target firm seeks to resist the raider in a hostile tender offer. What are standard defence mechanisms which could be used to frustrate the raider?
4. What are the key determinants of valuation in tender offer by share exchange? What are implications if it is based on fair market price?
5. Discuss key features of tender offer for Consolidated Coffee and Asian Coffee. What are the key differences between these two tender offers?
6. What are the implications of these offers to the relative price movement of TTL and ACL?
7. What is the role of regulators in corporate control process?

APPENDIX I

Tata Tea Limited Tenders for Consolidated Coffee Limited

On September 27, 1989, Tata Tea Limited made an open offer to purchase shares of Consolidated Coffee Limited. This offer was made through financial newspapers and bulletin boards of stock exchanges.

One share of TTL plus Rs. 100 in cash was offered for every two shares of CCL. On 21.9.89, the closing price of TTL share and CCL share were Rs. 180 and Rs. 68 respectively (listed at stock exchanges at Madras and Bangalore). This meant that the shareholders of CCL who took up this offer would receive more than double the market price! This offer was restricted only to the resident Indian shareholders. All the resident Indian shareholders held eighty per cent of shares of CCL among themselves.

Even if the prices increased or decreased subsequent to the offer, the terms of offer would remain unchanged. By the evening of September 27, CCL share price on the MSE shot up from Rs. 88 to Rs. 140. The MSE had to suspend any further trading in that scrip.

It was a new concept in the Indian corporate scene. Many felt it was a very decent and transparent way of effecting the takeover. M N Prabhakar, a former president of Bangalore SE, however, noted: "A large number of CCL shareholders are well off and they may not want to sell the CCL shares. They would also have to pay very heavy capital gains tax." A stockbroker in Madras was sceptical: "Obviously Tata Tea is doing this to foil somebody else's bid, or a deal has already been done overseas and this is just an eyewash."

Tata Tea was at that time the largest tea plantation company in India. It was cash rich. Tata Tea had surplus resources that it could not deploy in its existing business any longer. CCL was Asia's largest plantation company. It controlled 12,807 acres of land under coffee at Pollibetta in Coorg district of Karnataka. This land is worth about Rs. 100 crore in the market. CCL's share capital was Rs. 7.51 crore and reserves Rs. 10.2 crore. It showed sales of Rs. 18 crore during the nine months of 1988. It had made investments in Vikrant Tyres, SPIC, and Coffee Lands (which was also a coffee plantation company in Chikmanglur, Karnataka). It was rumoured that Volkart Brothers of Switzerland might have sold their holdings in CCL (amounting to 20%) to either Vijay Mallya or Ajitab Bachchan.

CCL's shares were held by (approximately):

	<i>Per cent</i>
Financial Institutions (LIC, UTI and GIC)	30.3
Chettiars of Tamil Nadu	10.0
Doddamani family of Karnataka	3.5
Volkart Brothers of Switzerland	20.0
Indian public	28.2
Tata Tea Limited	7.0

Contd . . .

Darbari Seth remarked in a lighter vein, “God does not make land anymore.” He agreed that huge tracts of CCL land were an important attraction. Further, it would be easier for TTL to market new value-added coffee products than it would be for a new entrant like CCL. N K Prasad, executive director, Standard Chartered Bank observed that tea and coffee prices move in a seesaw fashion and bringing them together results in earning stability.

Darbari Seth said to the financial press that the idea of tender offer was conceived only in late August 1989, and that no discussions had taken place with any party including the government, FIs, or even TTL shareholders. This implied that the details of the scheme were worked out just one month’s time.

Some analysts pointed out that dividend yield on this new investment in CCL would be lower than what one can get from investing in units. Increased equity would dilute EPS, at least in the short run (CCL’s EPS was Rs. 4).

As a result of this open offer, TTL acquired 52.4 per cent of CCL’s equity share capital whereupon CCL became a subsidiary of TTL from November 20, 1990.

APPENDIX II**BSE's Objections Against Tata Tea's Tender offer
for Asian Coffee Limited**

BSE has held that the bid by TTL for ACL is violative of the listing agreement. The listing agreement says that any offer for acquisition of shares has to have an explicitly stated price. BSE stated: "ACL is valued implicitly by TTL at Rs. 100 crore based on TTL's current market price of Rs. 640 (October 4, 1994). The market capitalisation of ACL was Rs. 87 crore based on a pre-bid BSE quote of Rs. 75 per share. However, this is in violation of Clause 8 of Section 40B of the listing agreement."

As per the amendment of this clause by the Department of Economic Affairs on August 7, 1991, in open offer for takeover,

1. the price has to be stated
2. the consideration has to be in cash.

In the event of share exchange, the price is not explicit as the share prices change from day to day and a fixed exchange ratio meant uncertainty in exchange consideration. Tata Tea Limited was proposing payment for shares of Asian Coffee Limited not in cash but in shares of Tata Tea Limited.

Exhibit I

Average Index Numbers of Wholesale Prices

<i>Year</i>	<i>Coffee</i>	<i>Tea</i>
1982	141.0	264.5
1983	159.1	407.1
1984	211.8	494.0
1985	220.6	434.6
1986	223.0	411.6
1987	249.4	429.1
1988	252.3	417.9
1989 (a)	287.5	508.0
1989 (b)	188.7	293.5
1990	268.2	307.9
1991	310.7	277.7
1992	271.2	279.7
1993 (c)	332.4	349.9

Note:

- (a) 1970-71 = 100
- (b) 1981-82 = 100
- (c) Eleven month average

Exhibit II

BSE Share Price Data

(Rupees per share)

<i>Date</i>	<i>Tata Tea</i>	<i>Asian Coffee</i>
1.8.94	700, 725, 690, 700	58, 60
2.8.94	710, 720, 690, 700	61.25, 57.50, 60
3.8.94	700, 710, 690, 700	59, 61, 57.5
4.8.94	700, 690, 710	58.75, 57.50
5.8.94	700, 687, 50, 710, 700	58, 60, 58.75
8.8.94	700, 680, 690	58.75, 60, 55
9.8.94	700, 690, 710, 700	57.50, 60, 56.25
10.8.94	700, 720	56.25, 58.75
11.8.94	720, 740, 710, 730	56.25, 57
12.8.94	740, 730, 750	56.25, 58.75, 57.50
	740, XD Add Rs. 8 for div.	
16.8.94	735, 740, 720	58, 60, 58.75
17.8.94	715, 720, 700	58, 60
18.8.94	720, 700, 720	58.75, 62.50, 57.50, 60
19.8.94	720, 700	61.25, 58, 62.50, 60
24.8.94	720, 690, 700	62.5, 65
25.8.94	680, 700	62.5, 66.25, 65
29.8.94	700, 690, 710	70, 67.50, 72.50, 70
31.8.94	705, 690, 720	70, 75
1.9.94	700, 710, 690	70, 78.75, 77.50
2.9.94	680, 700, 685	73.75, 76.25, 75
5.9.94	695, 700, 660, 670	75, 81.25, 80
6.9.94	680, 660, 690, 670	80, 76.25
7.9.94	675, 680, 690, 680	80, 83.75
8.9.94	660, 690, 680	81.25, 85, 82.50
12.9.94	690, 700, 685, 690	83.75, 90
13.9.94	700, 680	86.25, 85, 90, 87.50
14.9.94	690, 700, 680	85, 80
15.9.94	690, 700, 680	80, 77.5, 82.50, 80
16.9.94	680, 700, 690	80
19.9.94	690, 670, 680	75
20.9.94	660, 675, 640, 655	70, 75, 76.25
21.9.94	640, 670, 650	83.75, 87.50, 77.50, 80
22.9.94	670, 640, 650	82.5, 87.5
24.9.94	650	86.25, 87.5
27.9.94	710, 690	85, 82.5

Contd...

Exhibit II Contd...

<i>Date</i>	<i>Tata Tea</i>	<i>Asian Coffee</i>
28.9.94	685, 670, 695, 690	80, 85, 82.50
29.9.94	680, 660, 670	81.25, 81.50
30.9.94	670, 660, 685, 670	72.5, 77.50
3.10.94	640, 655, 640	72.5, 70, 75
4.10.94	630, 680, 660	75, 77.5, 73.75, 76.25
5.10.94	670, 680, 660	75, 73.75, 77.50
6.10.94	650, 630, 660, 650	73.75, 76.25
7.10.94	450, 430, 440, XB	73.75, 80, 76.25

Exhibit III**Performance Indicators for TTL & ACL***Period: March 1994*

<i>Indicator</i>	<i>TTL</i>	<i>ACL</i>
Sales (Rs. crore)	436.0	26.00
Gross profit (Rs. crore)	95.0	5.00
EPS (Rs.)	18.7	3.30
Cash EPS (Rs.)	21.5	4.10
Dividend (%)	80.0	—
Market price (8.9.94) (Rs.)	680.0	82.50
P/E	36.4	25.10
Equity (Rs. crore)	31.6	11.70
W Book value (Rs.)	82.0	12.90

Exhibit IV**Board of Directors of Consolidated Coffee Limited**

<i>S.No.</i>	<i>31.3.1990</i>	<i>31.3.1991</i>	<i>31.3.1994</i>
1.	M M Appaiya (Chairman)	M M Appaiya (Chairman)	D S Seth (Chairman)
2.	K B Somana	K B Somana	K B Somana
3.	Y H Malegam	Y H Malegam	Y H Malegam
4.	Andreas Reinhardt	Andreas Reinhardt	Andreas Reinhardt
5.	M R Pai (Alternate Director)	M R Pai (Alternate Director)	M R Pai (Alternate Director)
6.	T S Subramaniam (Nominee Director)	T S Subramaniam (Nominee Director)	R Gonindarajan (Nominee Director)
7.	J K Sarkar (Nominee Director)	D S Seth	M M Appaiya
8.	D M Dasappa	D M Dasappa	D M Dasappa
9.	M A M Ramaswamy	M A M Ramaswamy	M A M Ramaswamy
10.	C S Samuel	C S Samuel	C S Samuel
11.	P B Bhandari (Managing Director)	P B Bhandari (Managing Director)	M A Bopanna (Managing Director)
12.	S Narayanaswamy	R K Krishnakumar	R K Krishnakumar (Vice-Chairman)

Exhibit V**TATA TEA LIMITED**
Income from Different Products*(Rs. in lakh)*

	<i>1988–89</i>	<i>1989–90</i>	<i>1990–91</i>	<i>1991–92</i>
Tea	17310	20043	22687	24593
Packet and instant tea	3703	5013	5664	8645
Spices	599*	193	177	490
Coffee	225	110	82	112
Cardamom	48	76	53	41
Pepper	—	181	357	77
Other income	1256	1433	1689	3025

* includes pepper.

HINDUSTAN UNILEVER LIMITED¹– ECONOMIC VALUE ADDED (EVA)

Hindustan Unilever Limited (HUL) was set up in 1933. It is an important subsidiary of Unilever. Unilever has about 500 subsidiary and associate companies in more than 100 countries. HUL's business areas include home and personal care, foods and beverages, and industrial, agricultural and other products. It is one of the largest producers of soaps and detergents in India. In 1983, the company reorganized its business and transferred some of its units to Lipton India Limited. In 1993, Tata Oil Mills Company was amalgamated with HUL, making the merged company the most dominant player in the domestic soap and detergent industry. The Brooke Bond Lipton India Ltd. merged with HUL in 1996. Many more mergers and acquisitions have taken place in the recent years.

HUL places equal focus on serving both the employees and the shareholders, and it is committed to add value to them. The company markets a large number of brands with the help of several thousands of stockists in over a million outlets. It has more than 50 factories and 70 locations and employs 36,000 persons. HUL has been regularly introducing new products and rationalizing its product portfolio. It is a highly profitable company and it follows a liberal policy of dividend payment. The market value of its share has shown significant appreciation over years. The company has significantly expanded its operations through internal development and acquisitions. The company needs estimate of the cost of capital for evaluating its acquisitions, investment decisions and the performance of its businesses and for determining the value added to shareholders.

The HUL management uses the concept of economic value added (EVA) in its decision-making and performance evaluation since it believes that shareholder value creation (SVC) is directly linked to EVA. How does HUL measure EVA and use it for performance evaluation? How is it superior to other measures of performance evaluation? Does it really lead to SVC?

CORPORATE PURPOSE

The company has stated its corporate purpose in the following words:

Our purpose is to meet the everyday needs of people everywhere—to anticipate the aspirations of our consumers and customers and to respond creatively and competitively with products and services which raise the quality of life.

Our deep roots in local cultures and markets are our unparalleled inheritance and the foundation of our future growth. We will bring our wealth of knowledge and international expertise to the service of our consumers.

Our long-term success requires a total commitment to exceptional standards of performance and productivity, to working together effectively and to a willingness to embrace new ideas and learn continuously.

We believe that to succeed requires the highest standards of corporate behaviour towards our employees, consumers and societies and world in which we live.

This is our road to sustainable, profitable growth for our business and long-term value creation for our shareholders and employees.

Our approach to Corporate Social Responsibility (CSR) is rooted in the belief that “to succeed requires the highest standards of corporate behaviour towards our employees, consumers and the societies and word in which we live”.

Our CSR philosophy is embedded in our commitment to all stakeholders—our consumers, our employees, the environment and the society that we operate in. It is this commitment we believe, that will deliver sustainable profitable growth.

The HUL management claims:

“In Hindustan Lever, the goal of sustainable long-term value creation for our shareholders is well understood by all the business groups. Measures to evaluate business performance and to set targets take into account this concept of value creation.”

In operational terms, the company focuses on the measurement and maximization of EVA for shareholder value creation.

EVA APPROACH AT HUL

HUL has grown very fast and its profitability has also increased over years. It pays dividend liberally. The company’s share has enjoyed high price in the stock market. The company’s market capitalization has shown an impressive growth. The company is very conservatively financed as it employs low amount of debt in relation to its equity funds.

HUL’s philosophy is to add value to shareholders. It considers that the concept of EVA is more relevant in creating shareholder value rather than the conventional measures such as earnings capitalization, market capitalization and present value of estimated future cash flows.² It uses EVA concept in evaluating projects, business performance and setting targets. It has defined EVA as the difference between net operating profit after tax (NOPAT) and cost of capital employed (COCE). NOPAT is profit after depreciation and taxes but before interest cost and COCE is the weighted average cost of the company’s debt and equity.

HUL'S COST OF CAPITAL³

The company considers cost of its debt as the effective rate of interest applicable to an 'AAA' rated company. It thinks that considering the trends over years, this rate was 5.92 per cent in 2008 and 9.45 per cent in 2007. According to the company, the cost of equity is the return expected by the investors to compensate them for the variability in returns caused by fluctuating earnings and share price. The risk-free rate is taken as the yield on long-term government bonds that the company regards as about 7.62 per cent in 2008. HUL takes the market-risk premium to be equal to 11 per cent for calculating the cost of equity. The cost of equity is calculated using the capital asset price model (CAPM). HUL has estimated its beta (a measure of the sensitivity of HUL's returns on share vis-à-vis the stock market returns) as 0.623.

The company's computations of NOPAT, COCE and EVA during the period from 1993 to 2008 are given in Table 1. HUL's EVA has been increasing over years.

SHAREHOLDER VALUE, INVESTMENT AND RETURN

Table 2 provides information about HUL's shareholders' EPS and DPS as well as the market performance of its shares. The market value of the shareholders investment has increased over the years. The increasing trend could be witnessed in EPS and DPS.

DISCUSSION QUESTIONS

1. Why does HUL calculate EVA?
2. How does HUL calculate cost of capital?
3. Comment on HUL's methodology of calculating EVA. What modifications would you suggest?
4. Comment on HUL's performance using earnings per share, dividend per share and share price data. How is this performance compared with the EVA performance?

Exhibit 1 HUL's EVA Performance, 1993–2008

Year	Avg Debt	Avg Equity	Average Capital Employed		Cost of Debt		Cost of Equity		WACC	COCE		PAT	After Tax Int.		NOPAT		COCE		EVA
	Rs. cr	Rs. cr	Rs. cr (1)+(2)	%	Debt %	Equity %	%	%	%	Rs. cr (3) × (6)	Rs. cr	Rs. cr	Rs. cr	Rs. cr	Rs. cr (8) + (9)	Rs. cr	Rs. cr	Rs. cr	Rs. cr (10) – (11)
	1	2	3	4	5	6	7	8	9	10	11	12							
1993	135	359	494	6.8	19.7	16.2	80	127	13	140	-80	60							
1994	97	462	559	7.4	19.7	17.6	98	190	15	205	-98	107							
1995	110	588	698	7.6	19.7	17.8	124	239	11	250	-124	126							
1996	156	815	971	7.9	19.7	17.8	173	413	32	445	-173	272							
1997	160	1,127	1,287	8.8	19.7	18.3	236	580	21	601	-236	365							
1998	165	1,487	1,652	9.1	19.7	18.6	308	837	19	856	-308	548							
1999	162	1,908	2,070	8.6	19.7	18.8	390	1,070	14	1,084	-390	694							
2000	93	2,296	2,389	8.5	19.7	19.3	460	1,310	8	1,318	-460	858							
2001	50	2,766	2,816	7.7	16.7	16.5	466	1,541	5	1,546	-466	1,080							
2002	45	3,351	3,396	6.5	14.4	14.3	486	1,716	6	1,722	-486	1,236							
2003	881	2,899	3,780	4.9	13.0	11.1	418	1,804	43	1,847	-418	1,429							
2004	1,588	2,116	3,704	5.2	14.8	10.7	395	1,199	82	1,281	-395	886							
2005	360	2,200	2,560	3.4	15.5	13.8	353	1,355	12	1,367	-353	1,014							
2006	163	2,515	2,678	5.9	16.4	15.7	422	1,540	7	1,547	-422	1,125							
2007	382	2,402	2,784	6.2	17.6	16.0	446	1,743	17	1,760	-446	1,314							
2008*	342	1,928	2,270	3.9	14.5	12.9	365	2,444	17	2,461	-365	2,096							

*Data for fifteen months

Source: HLL's Reports and Accounts, 2002 and 2008

Exhibit 2 Share Price Data

<i>Year</i>	<i>EPS (Rs.)</i>	<i>DPS (Rs.)</i>	<i>Share price (Rs.)</i>	<i>MCap (Rs. crore)</i>
1993	0.91	0.56	57.50	8049
1994	1.30	0.80	59.00	8604
1995	1.64	1.00	62.40	9100
1996	2.08	1.25	80.70	16073
1997	2.81	1.70	138.35	27555
1998	3.67	2.20	166.35	36525
1999	4.86	2.90	225.00	49513
2000	5.95	3.50	206.35	45409
2001	7.46	5.00	223.65	49231
2002	8.04	5.16	181.75	40008
2003	8.05	5.50	204.70	45059
2004	5.44	5.00	143.50	31587
2005	6.40	5.00	197.25	43419
2006	8.41	6.00	216.55	47788
2007	8.73	9.00	213.90	46575
2008	11.46	7.50	237.50	51770

NOTES

1. This is an abridged version of the case prepared by Professor I.M. Pandey on the basis of the information given in Hindustan Unilever Limited's annual reports and other publicly available sources.
2. EVA™ is trademark of Stern Stewart Company.
3. HUL's Annual Report, 2002 and 2008.

CAL PHARMA LIMITED

CAL Pharma Limited is one of the first medium sized pharmaceutical company that was the set up in Ahmedabad during the early 60's. The company experienced significant growth in its sales during the seventies and eighties. However, during the late eighties, the company started experiencing severe competition in the domestic market. At that point of time, the company began to explore the option of developing international market for its products. The company was successful in getting a good start in increasing its export sales. The company from the beginning focused its efforts on Asia, particularly concentrating in Philippines, Vietnam, Thailand, Bangladesh and Sri Lanka. By the middle of nineties the company's sales in these countries stabilised. The company developed a good network of distributing agents in these countries. As the sales grew, the company created its own sales arrangements. However, the company started experiencing problems in managing these forms of arrangements and found them a major constraint in increasing its sales further. Particularly, in Thailand which accounted for about 60 per cent of total exports and 30 per cent of total sales of company in 2011 started running into problems. The company found that once sales reach a particular level it becomes difficult to co-ordinate activities, and other constraints such as supply and transportation costs increase. Further, the risk of government levying higher import duties increases considerably. In view of these problems, the company started considering an option of setting up its own manufacturing plant in Thailand. This was a major decision for the company since it involved substantial amount of resources. The company wanted to make sure that the project would be profitable and provide adequate returns.

In the past, most financial issues related to export were handled by the finance department and the involvement of other functional departments had been minimum. But this time the situation was different. The project size was big and it required co-ordination from all departments to ensure that the company successfully implemented the project. Given these circumstances, the Board appointed a task force of four vice-presidents from marketing, finance, production and personnel to examine the profitability and issues related to the implementation of the project. The task force was also entrusted with the job of identifying the amount of resources required to implement the decision and the broad strategies to raise these resources.

The Director of Finance convened the first meeting of the task force to discuss the approach that they should use in developing a well co-ordinated plan. Along with the reminder for the

meeting, he also circulated the following estimates of sales and other financial information related to the proposed project and requested each functional head to identify risk factors that they consider important.

Sales

The survey carried out by the company indicated that the sales during the first year could be targeted at 500 million Baht. The sales in recent past did not exhibit much growth because of constraints experienced by the company. However, the company was optimistic that once the manufacturing facilities were set up within the country, the sales would grow at a rate of about 10 per cent per annum, which included the impact of inflation.

Investment Requirements

The company would need investments of about 275 million of Baht in fixed assets and about 50 million Baht in core component of working capital. In addition to this, other working capital requirements were estimated to be about 15 per cent of the sales. The requirements for the working capital could be expected to grow more or less in proportion with sales. It was expected that local trade credit and other accruals would finance about 40 per cent of the working capital requirements. The company expects to operate the manufacturing plant for next six years after which it is estimated that it would have a residue value of about 200 million Baht.

Sourcing of Raw Materials

The basic ingredients of the pharmaceuticals would be sold by CAL Pharma directly to the proposed venture. It is estimated that about 88 per cent of sales of the proposed venture would go in meeting the raw material costs. CAL Pharma would earn a profit margin of 20 per cent on these exports to proposed venture.

Other Expenses

It is expected that the proposed venture would have a fixed cash outflow of about 50 million Baht per annum and a variable outflow of about seven per cent of sales each year.

Tax Implications

CAL Pharma pays a tax of about 30 per cent on its corporate income. It is expected that the proposed venture would have tax rate of 20 per cent in Thailand. For tax purpose, the proposed company would be permitted to charge depreciation at the rate of 25 per cent per annum using the written down value method. About 90 per cent of investment in fixed assets would qualify for the depreciation charge.

Required Rate of Return

CAL Pharma uses 18 per cent as the discount rate to work out the profitability of the domestic projects. The finance department has suggested that the company in Thailand would like to earn a return of 20 per cent. CAL Pharma expects to receive about 80 per cent of earnings as dividend from the proposed venture. The dividend income would not have any tax implications for CAL Pharma.

Macro-Economic Indicators

- Inflation rate India: 9 per cent per annum
- Inflation rate Thailand: 6 per cent per annum
- Current exchange rate: INR 1.50 for one Baht

CAL Pharma has a well-described capital budgeting manual which recommends broad suggestions and approach each departmental head is expected to follow in evaluating the new investment project. Most of the VPs have participated in capital expenditure decisions of the company in the past and have been strictly following capital budgeting manual procedures. However, given the complexity of the proposed project, VP Finance anticipated that his colleagues would seek a number of clarifications on the proposed investment and other projections.

The meeting started with the discussion on the financial information circulated by the VP Finance. Members of the task force were interested in the methodology that they should use in projecting the cash flows of the proposed project. There were a number of questions on making these estimates. VP Marketing pointed out that sometime back they had carried out a study on demand projections of the products that they were planning to manufacture in Thailand. The marketing team had found it difficult to convert the demand projections in Indian rupees as it required the exchange rate forecasts for the next several years.

VP Finance pointed out that they could use the general estimates of inflation rates in India and Thailand to make some preliminary estimates and use them in calculations. VP Production, however, was not sure why the inflation rate information was required to make these projections. VP Finance explained that inflation rates significantly influence the competitive position of the country in international markets and, therefore, is an important determinant of foreign exchange rate. He explained that in order to determine the cash flows of Baht in Indian rupees, future spot rates of foreign exchange would be required at the end of each period. He further suggested that spot rates of two countries could be determined by the nominal interest rates. He further added that the nominal rates of interest should normally depend on the expected inflation rate. He did not want to complicate the discussion by referring to any theoretical model describing the relationship between the real and nominal rates of interest, and inflation rate. He, however, added that these relationships were based on number of assumptions. To explain the relationship between rate of interest and inflation rate, he used the examples of

Japan and India. The spot exchange rate of Japanese Yen (JPY) is Rs. 0.60 for 1 JPY. Assuming expected inflation rates in India and Japan are six per cent and two per cent respectively and if one-year treasury bill rate (yield to maturity) in India is about 11 per cent, one could possibly compute one year treasury bill rates in Japan and also one-year forward exchange rate between Japan and India based on this information. Since the expected rate of inflation in India was higher than Japan, the Indian rupee could be expected to depreciate against the Japanese Yen, he explained.

As per the existing capital budgeting manual, each departmental head is expected to earn 18 per cent after tax rate of return. This rate was fixed two years back when the company had formulated the capital budgeting policy and had made recommendations for using this rate in calculating the net present value of all proposed projects. The questions arose about what was the correct discount rate in evaluating the current project. Should the company be using 18 per cent or 20 per cent as indicated in the note of VP Finance? VP Production suggested that the choice of discount rate should depend on whether they wanted to evaluate the proposal as stand alone project from the perspective of host country or to evaluate the project from the viewpoint of their company. So there were two options in evaluating the project. It made logical sense to evaluate the project from the parent company's perspective and in that case the only relevant cash flow would be the dividends received in rupees. VP Marketing pointed out that dividends income was not the only cash flows accruing to the parent company. What if some of the cash flows generated by the project were used to expand the distribution network within the same host country or used to set up distribution or manufacturing facilities in other countries at some later date. VP Personnel asked—'if we adopted this approach how were we going to evaluate the operating profitability of the project?' He emphatically mentioned that the purpose of any capital investment evaluation decision was first to evaluate operating profitability of the project. He also pointed out that cash receipts by the company would depend critically on the dividend policy of the proposed project which in turn may be subject to number of factors including the government policy of the host country. Therefore, using the dividend income alone to evaluate the project was not appropriate. VP Finance intervened at this stage and suggested that they may use both the methods: first evaluating the project from host country's perspective and later from CAL's perspective.

VP Marketing suggested that without complicating the matter it should be possible to use the single discount rate for discounting one single cash flow. VP Finance explained that the basic objective of using the discount rate was to account for the risk and time value of money. In both the situations, that is, using stand alone project approach and evaluation of project from CAL's perspective, the risk characteristics were likely to be different and therefore, different discount rates would be used.

On considering the risk factor, VP Finance pointed out that there were several possible approaches. One option was to adjust the cash flows of the project directly for the risk factor. Alternatively, one could adjust the discount rate. He pointed out that according to one survey, large multinational companies generally used the 'adjusted cash flows' approach. It seemed that adjusting cash flows was more logical than adjusting the discount rate for all possible

uncertainties of the future. For example, the different components of the cash flows could be suitably adjusted for various risks.

VP Production at this stage asked about risks in foreign exchange fluctuations. Would that be appropriately covered by the way the cash flows had been projected and computed? He pointed out that the changes in the foreign exchange rate would have possible effects on operating cash flows. Elaborating his point, he observed that if about 88 per cent of the raw material was going to be sourced from India, the impact of changes in foreign exchange rates on the projected cash flows could be quite significant. Elaborating his point further he described that if the discount rate was adjusted upward, based on the assumption of higher depreciation in Indian rupees, a favourable impact of the depreciation in currency from projects point of view would be ignored at the same time. VP Personnel looked puzzled and felt that they were in a catch 22 situation. Converting Rupees in Baht first, and then Baht in Rupees. Didn't it seem that foreign exchange risk in the given situation was really a double-edged sword?

VP Finance realizing that the meeting was not reaching any conclusion, suggested that he would prepare an elaborate note summarizing various points and come up with a broad approach for evaluating new investments proposals in Thailand.

DISCUSSION QUESTIONS

1. What are the key issues and challenges in international financing?
2. Many members have expressed the concerns of the risk? What are the key risks?
3. How should VP Finance reconcile various views expressed in the meeting?

PART
SIX

Comprehensive Cases

MACHINERY MANUFACTURERS LIMITED

In mid 1982, Mr. Rakesh Mehta, the Financial Manager of Machinery Manufacturers Ltd. (MML), was considering the company's future operations and related investment and financial plans. MML's anticipated growth and massive diversification and expansion together would require substantial external funds.

THE BACKGROUND OF COMPANY

MML was incorporated in the late thirties by a very well-known business house in India. The company is one of the pioneer heavy engineering units of the country, manufacturing a wide range of products. MML manufactures textile machinery, boilers, super heaters, economizers, chimneys, pressure vessels, bridges and structurals, equipment for chemicals, paper and cement, oven, and steel and iron factories, coal and other solid material handling and conveying plants, railway rolling stock, castings for railway equipment, sugar machinery, etc. On the structural side, the company has been engaged in the supply of equipment for high pressure boilers for the well-known D.V.C. thermal power projects. The company has plans of diversifying into shipping and cement businesses. MML has also acquired some of the units of Balram Cotton Mills Ltd. with retrospective effect from April 1, 1981. The company has also received letter of intent for manufacturing cement mill machinery and diesel fork lift truck. It expects production to start as soon as the foreign collaboration agreements are finalized. MML has entered into technical collaboration agreement with a reputed firm of Japan for manufacturing its latest simplex machine and draw frame. The commercial production is expected to commence sometime early in the year 1983.

MML started with a paid-up capital of Rs. 20 lakh. At the end of the year 1981, the company's paid-up capital was Rs. 152 lakh and reserves were Rs. 1,402.90 lakh. The company's sales have been steadily increasing in spite of a number of difficulties, such as recessionary conditions, increasing input costs, power cuts, unremunerative prices of certain products, etc. In the last decade, MML's sales have increased from Rs. 20.98 crore in the year 1972 to Rs. 70.30 crore in the year 1981 (this includes Rs. 17.64 crore sales of the newly acquired cotton division) and net profits from Rs. 7.87 lakh to Rs. 1.74 crore. In fact, due to a number of reasons, the production, sales and profits of the company have been showing cyclical behaviour, although

the company has shown a definite tendency of growing in a substantial way. Exhibit I gives the data on production, sales and net profit for the period 1969 to 1981. It will be noticed that the company's sales showed a decline in the years 1973, 1977 and 1978. The decline is attributed to the recessionary conditions in engineering industry, production disruption due to power cuts, delays in receipt of certain manufacturing components, enforced hold-back of finished goods on account of non-availability of axle boxes for wagons, non-availability of shipping space to despatch certain products, etc.

Although MML's sales had been generally increasing, its profits had not been showing sufficient improvements till 1978. The company feels that unremunerative prices of wagons imposed by the Railway Board, high input costs and interest charges and reduction in the prices of other products on account of recession have been responsible for not a very impressive profitability of the company. It would, however, be noticed that the company's performance has been very impressive during the period 1979 to 1981. Sales have increased from Rs. 29.62 crore to Rs. 70.30 and net profits from Rs. 0.58 crore to Rs. 1.74 crore (see Exhibit I).

The product-wise divisions of the company are: textile machinery, wagon, boilers and pressure vessels, structural and miscellaneous engineering goods. Recently, the company has acquired units of Baram Cotton Mills and thus added a new textile division. MML's sales from this division were Rs. 17.64 crore in 1981.

With its increasing activities, the company's assets and funds have been increasing. The assets have increased from Rs. 20.78 crore in the year 1972 to Rs. 43.59, crore in the year 1981, about 85 per cent represented by the current assets. The company has hardly used long-term loans for financing its expanding assets in the past. The company has been following a conservative policy of earnings distribution. It retains more than 70 per cent of its profit (Exhibit II).

DIVERSIFICATION PLANS

Encouraged by its impressive performance in the years 1979 and 1980, the company decided to go in for a broad-based diversification programme in the fields of cement and shipping. In the area of shipping, the company appears to make a modest beginning by acquiring a second-hand vessel of 27,313 D.W.T. (GRT 16,736, built in 1977). From macro considerations, the diversification is in tune with the Government of India's decision to augment Indian tonnage by 2.5 million GRT during the Sixth Five-year Plan and encourage the non-shipping companies with a good capital base. The company's primary intention behind diversification, however, seems to reap the benefit of tax-saving.

The price of the shipping project has been estimated at US \$ 11.92 million, equivalent to Rs. 1,072.80 lakh. The company proposes to finance it by its own resources to the extent of Rs. 214.56 lakh and by taking a foreign currency loan of Rs. 858.24 lakh. The loan will be repaid in 16 half-yearly instalments starting from 1982. In preparing the earnings and cash flow estimates for the projects, the company has taken into consideration the results of the operations of a vessel owned by a shipping company, which has been given the responsibility of

managing the shipping division of MML, of similar size: Year of built: 1974; GRT: 14667.27; earnings in 1979 Rs. 195.38 lakh and in 1980 Rs. 296.44 lakh. In projecting the cash flows, the company has made the following assumptions:

- (i) Freight earnings have been escalated by 2 per cent per annum, and standing charges by 2.5 per cent per annum.
- (ii) Earnings have been reduced by 5 per cent for the fourth and eighth year because of the possibility of cyclical fluctuations.
- (iii) Depreciation would be provided on the straight-line basis.
- (iv) Annual freight earnings have been calculated taking into account that the vessel will carry 26,000 tonnes of cargo on five voyages, charter hire rate has been calculated at the rate of US \$ 8,000 per year.

The shipping industry is presently locked in a recession and the business cycle rotates in an erratic fashion. The standing charges, therefore, can go as high as 5 per cent per annum. The cargo-carrying capacity can be as low as 19,840 tonnes. It is also the experience of many shipping companies that vessel remains on voyage charter for 275 days and let on time charter for 60 days in a year. The ruling interest rate on foreign currency loans is 15 per cent per annum. The exchange rate for US \$ 1.00 could be assumed Rs. 9.00. The assumptions for profitability estimates are given in Exhibit III.

The company has also decided to diversify into cement. MML plans to set up a cement plant with a capacity of 5 lakh tonnes per annum in a notified backward area at an estimated cost of Rs. 30.80 crore. The scheme of financing is as follows: own resources Rs. 6.16 crore; Government subsidy Rs. 0.12 crore; term loans from financial institutions Rs. 17.32 crore and from a commercial bank Rs. 7.20 crore. The company's contribution of Rs. 6.16 crore from internal accruals will spread over the period 1981–83. The project implementation period ranges over 30 months commencing from June 1981. However, most of the cement projects presently being set up are expected to take around 30 to 36 months for completion. A delay of even one month in commissioning the plant can mean less cash generation to the company since the tax benefits assumed would not be available.

The company does not envisage any problem regarding the raw material availability and power supply. MML will also be able to sell its output easily as there is chronic shortage of cement in the country. The profitability and cash estimates of the project are given in Exhibit IV.

The present average capacity utilization in the cement industry is 70 to 75 per cent. In its estimates, the company has assumed a retention price of Rs. 247.72 per tonne. However, with the recent liberalization of the cement pricing policy and partial decontrol, the profitability of the cement units is expected to improve.

MML expects to draw Rs. 1056 lakh of the term loans from the financial institutions by 1982. It also proposes to draw the term loan from the commercial bank in two instalments of Rs. 360 lakh each in the first and second quarter of 1983. The term loan is proposed to be repaid in 16 half-yearly instalments commencing from March 1985.

GROWTH PROSPECTS

In July 1982, the financial manager of MML was expecting net sales from the existing operations to increase respectively by 4 per cent and 5 per cent. Net profits were expected to be around 6 per cent and 9 per cent of sales respectively in the years 1982 and 1983. The comparative position of MML's performance during the years 1980 and 1981 is as follows:

	<i>(Rupees in lakh)</i>			
	1980		1981	
	<i>Estimate</i>	<i>Actual</i>	<i>Estimate</i>	<i>Actual</i>
Net Sales	3,416	3,864	3,360	4,970
Net Profit	104	160	102	174
Cash Accruals	130	202	132	216
Tangible net Worth	587	637	669	792
Net Working Capital	226	216	282	280

The company has outstanding orders amounting to Rs. 81.96 crore and upto 30th June, 1982, the production and sales achieved were Rs. 2,529 lakh and Rs. 2,329 lakh. In view of its expected enhanced operation, the company is expecting its working capital requirement to go up. Currently, MML has a fund-based working capital credit limit of Rs. 790 lakh from a commercial bank. In view of its increased working capital requirement, the financial manager is planning to request the bank to increase the limit to Rs. 1,270 lakh. For justifying his case, he has prepared actual and projected financial statements (Exhibits V to VII) for presentation to the bank. The same bank has already agreed to give term loans to MML for its shipping and cement projects.

LONG-TERM FINANCING PLAN

While reviewing the future prospects of the company, Mr. Rakesh Mehta felt that possibly the long-term funds base of the company needs strengthening. He also thought that the company will have to choose among or a combination of the following financing alternatives: (i) share capital, (ii) debentures, and (iii) public deposits. As regards increase in the share capital, Mr. Rakesh would like to consider the state of the capital market and the behaviour of the prices of the company's shares and the strain on company's cash resources on account of dividend. The company's debentures held by the financial institutions are maturing on 31st March 1983.

The maturity of these debentures can be further extended by 10 years. In fact, MML is planning to do so and also increase the amount of debentures from Rs. 160 lakh to Rs. 200 lakh. In regard to the issue of debentures, the government has a stipulation of a ceiling of funded-debt to equity ratio of 2:1. At present, the total public deposits of the company are Rs. 32 lakh: as per the current rules the company can raise further deposits of Rs. 240 lakh.

DISCUSSION QUESTIONS

1. Evaluate MML's performance in the light of its operating conditions.
2. Critically evaluate its working capital management. Is the working capital fund needed by the company justified? What would be banker's concerns?
3. Give a qualitative assessment of MML's decision to diversify into cement and shipping? Should it accept these projects if evaluated in terms of profitability?

Exhibit I**MACHINERY MANUFACTURERS LIMITED**

Production, Sales and Profits, 1969–81

(Rupees in crore)

<i>Year</i>	<i>Production</i>	<i>Sales</i>	<i>Profit after tax</i>	<i>Profit before tax</i>	<i>Profit before interest & taxes</i>
1969	7.00	6.73	-0.50	-0.50	N.A.
1970	11.32	10.87	-	-	N.A.
1971	14.37	11.29	-	-	N.A.
1972	16.24	18.93	0.08	0.08	1.10
1973	19.69	17.58	0.60	0.60	1.58
1974	22.54	20.97	0.70	0.70	1.86
1975	24.51	22.98	0.53	0.70	2.02
1976	24.96	29.90	0.81	1.81	3.24
1977	24.47	24.63	0.82	2.06	2.68
1978	23.68	21.88	0.46	0.98	1.74
1979	30.90	29.62	0.58	1.30	2.18
1980	40.90	40.31	1.12	2.51	3.55
1981	70.81	70.30	1.74	2.58	4.66

Exhibit II**MACHINERY MANUFACTURERS LIMITED**

Finance Data

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Sales per share (Rs.)	157.80	146.58	174.72	191.45	249.13	205.25	182.52	246.82	335.95	468.69
Earnings to equity (%)	-0.46	25.61	22.51	13.05	16.13	17.63	10.12	11.84	18.51	17.73
Dividend to equity (%)	-	-	1.55	1.81	3.39	4.41	4.15	3.82	3.96	2.29
Earnings per share (Rs.)	-0.06	4.13	5.10	3.61	4.76	5.99	3.66	4.66	9.33	11.63
Earnings-price ratio (%)	-	18.34	33.77	32.09	37.33	34.72	13.75	18.64	24.00	16.32
Earnings distributed (%)	-	-	6.87	13.84	21.00	25.83	41.00	32.21	23.17	11.44
Dividend per share (Rs.)	-	-	0.35	0.50	1.00	1.50	1.50	1.50	2.00	1.50
Dividend (%)	-	-	3.50	5.00	10.00	15.00	15.00	15.00	20.00	15.00
Dividend yield	-	-	2.32	4.44	7.84	8.70	5.63	6.00	5.14	2.11
Book-value per share (Rs.)	13.52	16.11	22.64	27.64	29.51	34.00	36.16	39.31	50.40	65.61
Market value:										
High (Rs.)	12.12	22.52	24.50	11.25	13.75	17.50	26.75	26.90	57.75	86.00
Low (Rs.)	8.00	9.80	15.10	11.25	11.25	14.00	18.00	23.25	20.00	56.60
Average (Rs.)	10.06	16.16	19.80	11.25	12.50	15.75	22.37	25.07	38.88	71.25

Exhibit III

MACHINERY MANUFACTURERS LIMITED

Data on Shipping Project

Freight Receipts: (Starting from 1982)

	<i>Voyage- Time (Days)</i>	<i>Cargo Qty in tonnes</i>	<i>Freight rate (Rs.)</i>	<i>Total freight (Rs. in lakh)</i>
Voyage No. 1	70	19,840	270	53.57
Voyage No. 2	35	19,840	200	39.68
Voyage No. 3	66	19,840	400	79.36
Voyage No. 4	38	19,840	210	41.66
Voyage No. 5	66	19,840	400	79.36
	<u>275</u>	<u>104,000</u>		<u>293.63</u>
Voyage No. 6		at US \$ 6,560 daily		
Time charter	60			35.42
	<u>335</u>			<u>329.05</u>
Non-operating days	30			
	<u>365</u>			<u>329.05</u>
Standard Expenses (p.a.)				186.84
Provision for Special Survey (p.a.)				
1986-1990				6.40
1991-1994				8.00
Straight-line Depreciation (p.a.)				76.16
Interest Rate (p.a.)				15.0 per cent
Service Charges (p.a.)				0.5 per cent

Exhibit IV**MACHINERY MANUFACTURERS LIMITED****Profitability Estimates of the Cement Project***(Rupees in lakh)*

<i>Year</i>	<i>Capacity Utilization (per cent)</i>	<i>Sales</i>	<i>Operating Profit (Loss)</i>	<i>Cash Flow</i>
1984	60	894	-200	-23
1985	75	1117	-94	83
1986	90	1341	31	208
1987	90	1341	24	201
1988	90	1341	64	241
1989	90	1341	103	280
1990	90	1341	143	320
1991	90	1341	183	360
1992	90	1341	223	400
1993	90	1341	262	439

Exhibit V**MACHINERY MANUFACTURERS LIMITED**

Profit & Loss Account (Actual & Projected)
for the year ended on December 31

(Rupees in lakh)

	<i>Actual</i>		<i>Projections</i>	
	<i>1980</i>	<i>1981</i>	<i>1980</i>	<i>1981</i>
Net Sales	3864.36	4969.69	4996.00	5144.00
Freight earnings (shipping)			185.60	305.60
<i>Total</i>	3864.36	4969.69	5181.60	5449.60
Cost of sales	3086.01	3967.20	4108.80	4292.80
Gross Profit	778.35	1002.49	1072.80	1156.80
Other expenses:				
Selling & admn etc.	452.88	478.18	480.00	488.00
Interest	90.62	76.07	152.00	180.00
<i>Total</i>	543.50	554.25	632.00	668.00
Operating Profit	234.85	448.23	440.80	488.80
Other surplus (deficit)	65.09	-1.72		
Profit before tax	299.94	446.51	440.80	488.80
Provision for taxes	140.00	272.00	114.40	0.00
Profit after tax	159.94	174.51	326.40	488.80

Exhibit VI**MACHINERY MANUFACTURERS LIMITED**

Statement of Cost of the year ended on December 31

(Rupees in lakh)

	<i>Actual</i>		<i>Projections</i>	
	<i>1980</i>	<i>1981</i>	<i>1980</i>	<i>1981</i>
Raw material consumed:				
Imported	156.42	130.45	128.00	128.00
Indigenous	2180.81	2839.34	2951.68	2872.00
<i>Total</i>	2337.23	2969.79	3079.68	3000.00
Power & fuel	110.93	151.40	160.00	160.00
Direct labour	463.88	547.46	612.00	612.00
Misc manufacturing exp	187.98	212.10	224.00	224.00
Depreciation	42.38	41.83	106.40	108.00
<i>Total</i>	3142.40	3922.58	4182.08	4104.00
<i>Add: Opening stock-in-process</i>	210.80	189.58	163.38	200.00
	3353.20	4112.16	4345.46	4304.00
<i>Less: Closing stock-in-process</i>	189.58	163.38	200.00	200.00
Cost of goods produced	3163.62	3948.78	4145.46	4104.00
<i>Add: Opening stock of finished goods</i>	419.58	497.20	478.78	640.00
Cost of goods available for sale	3583.20	4445.98	4624.24	4744.00
<i>Less: Closing stock of finished goods</i>	497.20	478.78	640.00	640.00
Cost of sales	3086.00	3967.20	3984.24	4104.00

Exhibit VII

MACHINERY MANUFACTURERS LIMITED

Balance Sheet as on December 31

(Rupees in lakh)

	<i>Actual</i>		<i>Estimated</i>	<i>Projected</i>
	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
<i>Liabilities</i>				
<i>Current Liabilities</i>	2285.98	2896.15	2619.58	2623.08
Bank borrowings	787.71	825.77	1269.60	1269.60
Trade creditors	498.81	615.45	480.00	480.00
Expenses payable	336.63	380.35	320.00	320.00
Advances from customers	509.85	734.76	480.60	484.77
Misc liabilities and provisions	152.98	339.82	69.98	68.71
<i>Term Liabilities</i>	649.96	671.21	2108.94	3634.60
Debentures	160.00	160.00	160.00	160.00
Term loans	421.86	449.59	1850.54	3377.00
Misc. liabilities	68.10	61.62	98.40	97.60
<i>Total Liabilities</i>	2935.94	3567.36	4728.52	6257.68
<i>Net worth</i>	637.05	787.60	1092.05	1554.90
Share capital	152.00	152.00	152.00	152.00
Reserve	485.05	635.60	940.05	1402.90
<i>Total Funds</i>	3572.99	4354.96	5820.57	7812.58
<i>Assets</i>				
<i>Current Assets</i>	2502.08	3175.95	2884.00	2884.00
Cash & bank balance	60.17	112.96	80.00	80.00
Investment	5.02	116.97	4.00	4.00
Receivable	765.57	1053.81	640.00	640.00
Inventory: R.M. Imported	136.00	160.00	160.00	160.00
Indigenous	647.56	758.74	800.00	800.00
Stock-in-process	189.58	163.38	200.00	200.00
Finished goods	497.20	478.78	640.00	640.00
Consumable spares	14.40	32.00	40.00	40.00
Advances to suppliers	158.78	226.08	240.00	240.00
Misc. assets	27.80	73.23	80.00	80.00
<i>Fixed Assets (Net)</i>	513.24	676.62	2521.42	4513.42
Gross block	1193.46	1396.18	3347.38	5447.38
Less: Depreciation	680.22	719.56	825.96	933.96
Other non-current assets	557.67	502.39	415.15	415.15
<i>Total Assets</i>	3572.99	4354.96	5820.57	7812.58

BHARAT HEAVY ELECTRICALS LIMITED (BHEL) – (A)¹

“We were a dead company in 1980-81, and financially bankrupt in 1982-83; today, at the end of 1984-85, we have emerged as a strong, profitable and highly liquid company.” This is how Mr. KN Khanna, the Director of Finance, Bharat Heavy Electricals Limited (BHEL) summarized his company’s financial performance during the period from 1981 to 1985. At the end of the 1984-85, BHEL had a cash surplus of Rs. 1,830 million and was expected to build still larger cash surpluses in years to come. In the beginning of the year 1985-86, the company was considering its long-term financial plan and debating its policy of consolidating profitability and liquidity and using its improved funds position for growth through diversification and for strengthening its competitive position. The main concern of the management was to identify business area for diversification and to design a financial policy consistent with its business plan.

BACKGROUND

BHEL is an outcome of the planning process in India. In 1956, Heavy Electricals (India) Limited [HE(I)L] was set up in Bhopal. Bharat Heavy Electricals Limited came into existence in 1964, both to complement and supplement HE(I)L to enlarge the country’s potential for producing heavy electrical equipment. BHEL’s manufacturing plants were set up at Haridwar, Hyderabad and Tiruchi. HE(I)L and BHEL merged in 1974 under the name Bharat Heavy Electricals Limited to promote greater coordination and efficient production.

BHEL is the largest engineering company in India. It has its manufacturing operations in the core sectors of power, industry and transportation. It supplies a very wide set of products, systems and services to these sectors. BHEL has 13 manufacturing units and 8 service centres. Its erection, commissioning and supervision activities are widely distributed over a large number of project sites throughout India.

BHEL is a high tech company, and it has technical collaborations with world renowned international companies. It employs 75,000 employees including about 10,000 executives. The company has highly qualified engineers, with a broad spectrum of capabilities and skills in designing, erecting, commissioning and servicing. The company is committed to quality products and services. It operates internationally. It provides industrial equipment, including

power stations, consultancy services and technical manpower to about 45 countries which include USA, UK, West Germany, USSR, New Zealand, Indonesia, Thailand, Malaysia, Saudi Arabia, Libya, Turkey, etc. It has been recognized in the world market as a renovation, services and maintenance expert. The company gets repeat orders for the renovation of old boilers and TG sets of well-known international suppliers. BHEL is among a few Indian companies that rank in 'Fortune 500' biggest industrial giants of the world.

NATURE OF BUSINESS

In the year 1984–85, about 60 per cent of BHEL's business was in the power sector; the industry sector contributed about 20 per cent and the transport sector and others accounted for the remaining 20 per cent.

Power Sector: BHEL plays a lead role in the growth of the Indian power sector with its capability of supplying total systems for generation, transmission and utilization of power—thermal, hydro, and nuclear. BHEL power equipment accounted for 23,902 MW or 56 per cent of the installed capacity in the country in 1985 (Exhibit I). The performance of the company's plants has been improving over the years (Exhibit II). Important projects executed abroad include 240 MW (2×120 MW) Thermal Power Station in Libya, 6×7 MW Diesel Power Station in Saudi Arabia, 11 Nos. or 80 per cent of boilers installed in Malaysia.

For thermal projects, the company has developed total turnkey capabilities. It undertakes complete system responsibility from feasibility studies, project engineering design, manufacture and coordination of supply of equipment to erection and commissioning. BHEL manufactures boilers and turbo-sets up to 500 MW. It has the technology capability to produce equipment up to 1,000 MW rating. It also offers after-sales-service facilities in terms of equipment overhaul and supply of spares.

BHEL has developed capabilities of developing in-house technologies. Some of the technologies developed in-house and in use are fluidized bed boilers upto 30 MW capacity and combined cycle power plants and the Direct Ignition of Pulverized Coal (DIPC) system to cut down fuel oil consumption. Facilities to custom-engineer Hydro-sets of Francis, Pelton and Kaplan types, operating at heads up to 1,000 metres, are available with the company. Mini-micro hydro-electric sets have been developed through in-house engineering capabilities.

In the field of nuclear power, the energy source of the future, 235 MW steam generators, turbine generators and associated auxiliaries for Atomic Power Plants at Kalpakkam, Narora and Kakrapar have been manufactured by the company. The company has geared itself for the design and manufacture of 500 MW and the next higher rating of generating sets for nuclear power stations.

In the transmission field, the company manufactures equipment required to meet the entire needs of substations and switchyards. For economic transmission of bulk power over long distances, 'High Voltage Direct Current' (HVDC) technology has been taken up. For reducing transmission losses, the 'Series and Shunt Compensation System' (SCS) has been developed by BHEL.

Industry Sector: The company has made notable contributions to different industrial sectors like power, cement, chemicals, fertilizers, mining, petro-chemicals, paper and steel. The range of equipment supplied includes compressors and turbo-sets, large electric motors and control gears, drives and control, oil field equipment, pumps and heat exchangers. In addition, the company undertakes systems engineering, design of control schematics, and erection and commissioning of such equipment.

The company's technological ability has been proved with various technically advanced machines like the largest transformer to Ramagundam Fertilizer Project and the largest DC motor to the Rourkela Steel Plant. Systems of drives and controls have been supplied and commissioned for the Rourkela hot strip mills and Bokaro cold rolling mill. Process control and automation system to improve the performance of blast furnaces and effect savings in material and energy consumption have also been developed for the Bhilai Steel Plant. For prevention of corrosion in drilling rigs, vessels, oil pipelines, manufacture of 'Cathodic Protection System', which was being imported so far, has been taken up. X-mas tree valves and well-heads for use in oilfields are also being manufactured by BHEL.

Transportation Sector: In the transportation sector, BHEL designs, manufactures and supplies electric traction equipment for a wide variety of electric and diesel locomotives, electric multiple units for suburban trains, complete traction equipment for underground metro coaches and 500 KW diesel generators and marine turbines for the Indian Navy. BHEL designed and manufactured pollution-free battery driven passenger vans which have been put into service in the walled city in Delhi. Broad-gauge AC locos for railway and diesel shunting locos for industries are new lines of production for future business growth in this area.

Non-Conventional Energy and Pollution Control, etc: Technologies for non-conventional and renewable sources of energy have been developed to serve remote rural areas that are otherwise inaccessible to conventional power systems. A pump, driven by solar energy, with a capacity to supply 50-70 thousand litres of water per day and a desalination plant with a capacity to convert 50,000 litres of brackish into potable water has been commissioned. BHEL is playing a prominent role in curbing pollution through its Pollution Control Research Institute (PCR). The institute has been set up at Hardware with UNDP assistance to develop new technology to prevent air, water, noise and solid waste pollution.

From the description of BHEL's product profile, it is clear that it produces a wide variety of products in core sectors of the economy. The characteristics of these products vary significantly. A number of its products such as hydro and thermal sets, boilers, boiler auxiliaries, compressors, industrial turbo sets and oil rigs are long production cycle items. It is normal in BHEL's contract business to receive 10-20 per cent advance, 70-80 per cent against despatches and the balance on successful commissioning and handing over of sets in case of its main equipment such as boilers and turbo generators. In respect of other products, 90 per cent of payment is received against despatches and balance on commissioning and handing over. A portion of the company's revenue, however, is derived from large contracts. Profits on long-term turnkey contracts are not reckoned until progress of the contract reaches 30 per cent or more; estimated profit on the

contract is computed at the end of the accounting period based on costs incurred and expected completion cost of the balance work.

RESEARCH AND DEVELOPMENT

BHEL operates in the high technology area. Therefore, to remain competitive, innovative and creative, it places special focus on research and development. It has R&D facilities at various manufacturing units and at its corporate R&D complex at Hyderabad. BHEL spends about two per cent of its turnover on research and development. According to the company, 20 per cent of the R&D expenditure is devoted to the potential areas of research and development to foster the technology growth in the country. The company's current policy is to focus on electronics, including electronic products and systems (see Exhibit III for the company's expenditure on R&D).

In-house R&D has been pursued as part and parcel of the company's technology plans, and is supplemented with knowhow acquired through collaborations with international companies. The company is thus able to keep its designs and engineering capabilities constantly upgraded. Some of the projects currently in progress are microprocessor-based control systems for power, process and mining industries, colour graphics, metallic glass core transformers and reactors, fuel cells, industrial robotics and magnetic levitation systems. Research and development in fundamental disciplines like material sciences, stress, heat transfer, vibrations, etc. is a continuing activity for improving product and systems performance.

A 5 MW Thermal Magneto Hydro Dynamics (MHD) facility unit has also been set up at Tiruchi.

Orders bagged for products developed through indigenous technology include fluidized bed boilers, mini-micro hydrosets, static compensation systems, vacuum circuit breakers, solar devices, etc. In addition, BHEL has transferred by sub-licencing to other Indian companies, indigenous technologies, like fluidized bed boilers up to 15 tonne/hour, mica paper insulation and special purpose welding electrodes.

CORPORATE MISSION, OBJECTIVES AND SYSTEMS

For almost over two decades, BHEL has been practising organized planning. The process of planning has helped the company to understand its environment and to clarify its mission and objectives in operational terms. The company has defined its mission as follows:

To achieve and maintain a leading position as suppliers of quality equipment, systems and services, to serve the national and international markets in the field of energy. The areas of interest would be the conversion, transmission, utilization and conservation of energy for applications in the power, industrial and transportation fields. To strive for technological excellence and market leadership in these areas.

The focus of BHEL's long-term objectives is on growth, profitability, image and continuity: **Growth:** To ensure steady growth in business so as to fulfil national expectations from BHEL and expand international operations.

Profitability: To provide a reasonable and adequate return on capital employed, primarily through improvements in operational efficiency, capacity utilization and productivity and generate adequate internal resources to finance the company's growth.

Image: To build up a high degree of customer confidence by sustaining international standards of excellence in product quality, performance and service, particularly in regard to supply of spares and after-sales service. To fulfil the expectations which shareholders like Government as owner, employees, customers and the country at large have from BHEL.

Continuity: To invest in human resources development, sustained research and development, strive for excellence in management and other long range activities to ensure a leadership status for BHEL.

Today, BHEL's scope of operations and capabilities, made possible to a large extent by its commitment to organized planning, have enlarged manifold. The formal corporate planning system in BHEL was introduced in 1974 when the first corporate plan was prepared. The corporate plan was used to synthesize product, divisional, business and functional plans across the company to gain synergy. The strategic focus of the plan was on: functional organisation, rationalization and standardization of products, development of basic R&D facilities, business orientation towards systems sales and consultancy, business expansion, customer services, exports, development and commercialization of non-conventional energy systems, etc. Various integrating devices and systems such as an Executive Committee, the Functional Committees and the Product Committees as well as performance budgeting were introduced. Computer and information processing facilities were also introduced at major centres of the company. The company was able to enlarge its business, scope, customer coverage, turnover and earnings as envisaged in the Corporate Plan.

By the end of seventies, BHEL had developed strengths in engineering and manufacturing areas to take up production of complex equipment. Latest technologies had been successfully absorbed and assimilated. R&D efforts in various fields started bearing fruits. The company had been making profits over the past several years. Budgeting and management reporting and information systems had become well established within the organization. Given this past experience, the company in 1980s laid down before it the following objectives: maintain growth and profitability, strengthen internal resource position and provide higher customer satisfaction. Achieving these objectives necessitated a review of the companies strengths and weaknesses and operating strategies, which culminated in the second Corporate Plan in 1982. Annual budgeting was integrated with the plan goals and objectives with a view to sharpen the effectiveness of Corporate Plan. Best services to the customers was the main focus.

During the mid-80's, the company achieved significant business growth in the face of stiff competition both from within the country and abroad. In terms of profits the company did well, but it suffered from serious cash shortage.

LIQUIDITY CRISIS OF 1981-83

Exhibit IV provides summary of BHEL's financial performance during 1975-76 to 1982-83. The company's sales increased by more than three times during the period, and PBIT almost

doubled. However, PAT showed fluctuations, and remained almost at the same level during 1980–83. The company has regularly paid dividend since 1977.

In spite of its good sales and profit performance, BHEL faced a serious liquidity problem, particularly during the beginning of eighties. It had a cash deficit of Rs. 1,170 million at the end of 1980–81, which increased to Rs. 1,810 million in 1981–82 and to Rs. 2,400 million in 1982–83 (Exhibit V). The working capital requirement of the company was very high on account of growing sales and high levels of inventories and debtors which also resulted from loose controls and the nature of BHEL's business. The company's internally generated funds were insufficient to finance its working capital needs. Thus, it had to depend heavily on bank borrowings. The interest burden further strained the company's funds position. The levels of inventories, book debts, working capital and bank finance during 1981–83 are given below:

	<i>(Rupees in million)</i>		
	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>
Inventory	6,410	6,870	7,490
Book debt	2,660	4,060	5,810
Working capital	3,610	4,640	5,230
Cash credit from bank	980	1,890	3,520

BHEL's liquidity position was also pressurized because of its capital investments (Exhibit VI). The company incurred capital expenditure for updating its technology, expanding its capacity to meet increasing demand for its products and entering new areas such as oil sector.

BHEL produces mostly custom built long cycle products against firm orders. It also faces infrastructural difficulties like non-availability of wagons, congestion in ports, irregular supply of indigenous raw materials and customer's inability to list supplies ready for despatch. BHEL's inventory is very high (Exhibit VII), particularly in comparison to that of large companies such as General Electric, Siemens and TELCO, largely on account of its multi-product range, including products which have long-production cycles, sizeable imported raw materials and components, involving long lead times requiring insurance quantities built into the inventories, and compulsory bulk purchases of items like steel and copper in line with availability from SAIL or MMTC.

BHEL sells primarily to government departments, State Electricity Boards (SEBs) and public sector undertakings (PSUs). Its bills are expected to be paid in 45 days. But in practice customers take longer in paying dues. The company's outstanding book debts have been increasing year after year (Exhibit VIII). Some of the book debts are outstanding for more than three years (Exhibit IX). This is largely due to the fact that the State Electricity Boards, the company's main customers, have chronic cash problems. It is noticeable that State Governments and SEBs work under severe fund constraints. This is further aggravated by project delays and escalating costs. In these circumstances, projects for immediate completion get priority in funds allocation in preference to other ongoing projects and new projects. In circumstances like this,

BHEL supplies that are built to customer specification, continue to be supplied as these could be handed at short notice and thus the inventory is increased. Given a situation involving supply of tens of thousands of items which include factory production, production through ancillaries and also imported components, it is not possible to strictly adhere to any supply sequence. By and large, the company ensures that the supplies follow the erection requirements, and that the commissioning date is not postponed on account of delay in supplies. In such a scenario, some disputes regarding withheld payments is inevitable.

To solve its funds problem, BHEL management in 1982 approached the Cabinet Secretariat for an interest-free budgetary support of Rs. 2,000 million, which was finally turned down at the Ministry of Finance level because of the shortage of the government funds. The government on the contrary required BHEL to refund Rs. 1,300 million government loan within a week. BHEL had no option but to approach the Reserve Bank of India (RBI) for sanctioning ad hoc limits. After great persuasion and promise by the BHEL management to improve its financial management, the Reserve Bank of India agreed to the company's request. It was clear to the BHEL management that in future they would not be able to obtain any funds from the government or the Reserve Bank of India if the liquidity crisis persisted.

RESPONSE TO LIQUIDITY CRISIS

BHEL's efforts to strengthen its liquidity position started after the very difficult situation of 1980-81. The first step taken by the company was to change its accounting policies to conserve cash. Earlier the manufacturing units were permitted to take sale values on the completion of products which resulted into payment of taxes on 'profit which had not occurred'. This policy was changed; the manufacturing as well erection units were allowed to take sale value only on the items despatched and billed. This had two effects: (a) it put pressure on units to despatch goods, and (b) as a consequence, the inventory of finished goods declined. Since taxes were affected, the company's cash flows were also influenced. The second effort was affected in the area of production budget. The production plans were coupled with the availability of cash. Units were required to specify three types of budgets. 'A-category' or 'core' production budget to incorporate those items for which the company is contractually liable to supply and where it is sure of recovering cash. This category includes production for customers such as NTPC, NALCO, ONGC or to those for which Planning Commission allocations exist or those who do not have any problem of funds. 'B-category' production budgets are the ones where the company has obligation to supply but cash may or may not be available. 'C-category' production budgets include off-the-shelf supply products such as meters or insulators and those products which may be manufactured for the purpose of capacity utilization. This system helped the corporate office to decide the production priorities. The net effect of the cash-coupled-production budgets has been to make units cash conscious.

The third major step taken by BHEL to improve its liquidity position was the tight monitoring and control of inventory and book debts. The company constituted a cell in the Corporate Office for monitoring inventory holdings. The inventory control was initiated at the

purchase commitment stage itself. The purchases were controlled by the material management group reporting to the Director of Finance. The company provided for weekly meetings between material planning, production control and purchase departments for better matched material availability. Review of total inventory once a month at the level of chief executive of plant and corporate management level was also provided for. Also, the inventory control was dovetailed with the budgeting systems and top 100 items were identified for closer scrutiny and control. Through these efforts the company has been able to bring down its inventory. Also people all around the company have become cost conscious.

Management of debtors has been a great problem for the company. It is very difficult for the company to recover its receivables from SEBs which have chronic cash problems. BHEL attempted the following steps to improve its collection and management of book debts:

- Maintain strict watch on customer commitments and delivery schedules and discouragement of non-sequential despatches.
- Maintain continuous interaction amongst business groups manufacturing units and the Government/Planning Commission to ensure adequate allocation of plan funds and develop/change production schedule in line with availability of funds/site readiness.
- Strengthen the branches of ROD and commercial departments working towards speedy despatch/verification of bills, reconciliation of outstandings with customers, clearance of outstanding disputes/withheld amounts and the prompt collection of bills whenever funds are available with the customers.
- Continuous monitoring and analysis of monthly billing and cash collection programmes, agewise analysis of outstanding followed up by putting pressure on the customers directly or through Planning Commission/Ministry.

The erratic behaviour of customers in paying their bills has rendered management of cash in BHEL difficult. Mr. K Ramachandran, General Manager (Finance) stated:

Our cash outflows are certain while inflows are very uncertain; it is very difficult for us to predict cash inflows on an annual basis. What is known is that the bulk of cash inflows will come in March, particularly the last week of March.

Exhibit X provides information on the company's monthly cash flows. BHEL does not get much credit from its suppliers. They generally supply inputs either against advance payments or on cash basis. The list of BHEL's major suppliers is given in Exhibit XI. To keep track of its cash flows, BHEL has developed a cash monitoring system. At the levels of general manager (finance) and deputy general managers daily cash reports are prepared and examined to indicate the bank and cash balance, cash allocated to units and their cash inflows. Daily position of cash receipts, payments and balance is also examined by Director of Finance. Cash position is also periodically discussed in Management Committees consisting of senior executives. The company also prepares annual and monthly cash plans.

BHEL has introduced a centralized cash management system. Under this, all collections made by the branch offices of the company's bank units are transferred to the centralized cash credit account maintained and operated by the corporate office. Notional limits are transferred

to the divisions at periodical intervals based on projections received from them. The corporate office examines their requests with reference to the monthly cash budget.

BHEL also restructured its loan portfolio to salvage its liquidity position. As per the banking norms for a public sector company like BHEL, it should finance its 'core' current assets entirely by the long-term funds, non-seasonal fluctuations in current assets by liquidating 'trade' investments and seasonal need of current assets by cash credit from banks. In the past, BHEL was meeting its entire working capital requirements through cash credit from bank. At one stage, the cash credit increased to about Rs. 3,800 million, Rs. 1,800 million as permanent, Rs. 700 million temporary and Rs. 1,300 million as ad hoc limit. As a result, BHEL's interest burden rose; it was paying total interest of Rs. 990 million in 1982-83 (see Exhibit XII for interest charges on various types of loans). The company then decided to reduce its dependence on the high-cost bank funds by restructuring its loan portfolio in favour of low cost sources. The company attracted three-year public deposits which now stand at about Rs. 1,000 million. The company also sold debentures to financial institutions; this source has contributed about Rs. 650 million. Both these sources were not only cheaper than the bank fund, but they were also of longer duration. Bank funds come with a number of strings attached and can be called on short notices. The company also borrowed funds from the euro-currency markets and saved an interest differential of about 5-6 per cent. BHEL not only restructured its loans but has also reduced its dependence on borrowed funds. The consequence of these efforts has been the reduction in the company's interest burden (Exhibit XII).

Another strategy which BHEL has continuously focused on over the last couple of years to turnaround its liquidity via improved performance is to save costs through improvements in productivity. It was in April 1982 that the company decided to tackle productivity as an 'organizational culture/management style'. Accordingly, an appropriate organization was devised both at the corporate and unit levels. A Corporate Productivity Group was formed at the corporate level to coordinate the efforts of the units to get programmes going as well as to lay out overall corporate guidelines. Within the overall corporate guidelines laid by corporate office, units were given freedom to build up their own methods of planning, organization, coordination and control. A network of coordinators got evolved to form a full-fledged productivity department broadly from finance and accounts, engineering and design, materials management, production and maintenance, industrial engineering and management service. In the SWOT analysis that was carried out by the individual units with the active participation of all employees, areas with greatest potential savings were identified and later collated as an inter-unit productivity coordinators meet. These areas are reviewed every year. Thus, having started with five thrust areas, they have been doubled to 10.

IMPACT OF LIQUIDITY CRISIS

One result of the 1981-83 difficulties and the company's subsequent response was the realization by the management of the need for effective and efficient management of finances, particularly working capital, through a formal monitoring and planning system. It was decided

that control of inventories, debtors and cash should be given top priority both at the division and corporate levels. The company also decided that corporate planning should be designed to ensure expansion and diversification in economically attractive areas.

From the perspective of growth with profitability and liquidity, BHEL's management viewed the importance of identifying products as profit centres under the control and supervision of product managers. The function of the product manager was to maximize profitability and cash. For example, writing to the division heads, Director of Finance in his letter in October 1985 stated:

. . . In the last Board Meeting, during the course of discussion on Annual Accounts, one of the suggestions made was that in budgeting and accounting focus should primarily be on product profitability. It is, therefore, necessary that in formulating the budget for 1986-87 productwise profitability should receive special attention and the entire exercise should be centred around productwise contribution and margin . . .

A final consequence of the liquidity crisis was the resolve of the management to maintain financial flexibility. Management would not like to find itself in a cash shortage position. The significant implication of this attitude was that the company would finance its working capital and investments mostly out of the internally generated funds.

PERFORMANCE DURING 1981–85

BHEL's profit and loss accounts and balance sheets for the periods 1980-81 through 1984-85 are given in Exhibits XIII and XIV. The company has shown good performance in terms of sales and profits. During the period, 1980–81 to 1984–85, the company's net sales have almost doubled from Rs. 7,748 million to Rs. 14,365 million representing an annual compound growth rate of 17 per cent. Profit before tax for the same period has increased at an annual compound rate of 32 per cent – from Rs. 376 million in 1980–81 to Rs. 1,135 million in 1984–85 (Exhibit XIII). Increased profits, after deduction for tax and dividend, have helped to improve the reserve position of the company (Exhibit XIV). BHEL has achieved growth in sales and profits against stiff competition both from domestic and international competitors in major product areas. (Exhibit XV for BHEL's competitors in India), and it continues to retain its market share in all major products. Of BHEL's total sales, about 20 per cent is made in competition with indigenous manufacturers, 20 per cent as deemed exports under global tenders in competition with the foreign suppliers and balance is negotiated with customers as per the norms of prices recommended by the Bureau of Industrial Cost and Prices (BICP). Although the government guidelines provide for price preferences, BHEL has so far claimed it only in respect of those deemed as exports.

Raw material forms the major part of BHEL's costs, followed by personnel payments. The wage revision agreement concluded in 1983-84 has slightly increased the relative share of personnel payments in the recent years. Interest charges have been sizeable expenses for BHEL, but their relative share has come down now. It is worth noting that BHEL has been earning profits continuously since 1970–71.

It can be seen from BHEL's balance sheets (Exhibit XIV) that its capital structure has undergone some changes. Long and medium-term loans in the form of debentures, etc. have been substituted for bank borrowings and inter-corporate loans. The share of the government loans has also come down (Exhibit XVI).

During the 1980–81 to 1984–85 period, BHEL has made capital investments generally in accordance with its plans (Exhibit VI). Its actual capital expenditure during this period amounted to Rs. 3,550 million. The aim of BHEL's investment policy during this period was to augment capacity for production of power equipment (from around 2,500 MW to 4,500 MW in thermal sets, 625–800 MW in hydro sets and matching auxiliaries), and to establish third generation plants to make way for production of high-tech and sophisticated components in existing plants. Thus, two new plants were also established at Jagdishpur and Ranipet at a cost of Rs. 550 million. About 40 per cent of the capital investment during 1981–85 was financed out of internal resources and remaining from the budgetary support from the Government.

BHEL has made a significant contribution to the public exchequer during the period of 1981–85. It made a total contribution of Rs. 16,110 million in the form of excise duty (Rs. 3,770 million), custom duty (Rs. 7,040 million), sales tax (Rs. 1,880 million), interest (Rs. 1,260 million), dividend (Rs. 650 million), and income tax (Rs. 1,510 million). During 1976–80, BHEL had contributed Rs. 7,370 million to the exchequer.

Exhibit XVII provides a comparative picture of some major financial indicators for BHEL and the engineering industry for the years 1984 and 1985. BHEL's profitability compares well with, say, TELCO, a private sector heavy-engineering company and HMT, a public sector engineering company, although much is desired in regard to the management of inventories and debtors as shown below:

	<i>BHEL (1985)</i>	<i>HMT (1985)</i>	<i>TELCO (1985)</i>
PBIT to capital employed	19.1%	12.8%	14.5%
PAT to net worth	14.8%	11.2%	11.1%
Inventory, days	179	179	97
Book debt, days	208	57	66

FUTURE CORPORATE POLICY AND FINANCIAL GOALS

In the beginning of the year 1985–86, the BHEL management thought that it would not be a wise policy to depend heavily on the power sector in the long-run for two reasons. First, looking at the expected improvements in the country's future power position, particularly during the eighth five year plan, BHEL would not get enough orders to fill its capacity. Also, the power requirements will be met through bilateral and multilateral arrangements where the foreign suppliers will offer equipments along with very attractive financial packages. It would not be possible for BHEL to match the resources of such global suppliers. Second, in the power sector, BHEL's major customers are SEBs who are financially weak, and therefore, it is very difficult for

BHEL to recover its dues from them. Even if SEBs have funds in the future, they may divert it to other activities giving BHEL lowest priority, as it is a large government company. Thus, it will not be advantageous for BHEL to expand the power sector business which today forms about two-thirds of its total business.

The BHEL management was therefore actively thinking of long-term diversification plan. Some possible major areas are electronics, AC locos, gas turbines and defence. Most of the foreign companies, such as General Electric, have major defence contracts and a bulk of their funds come from defence business. BHEL maybe able to improve its performance and liquidity by going into defence production since the government will have no dearth of funds to pay for the defence items.

BHEL can also expand into the transportation sector. It has decided to manufacture AC locos. A demand of about 600 locos exists during the seventh five year plan. The existing manufacturing units are capable of producing only about 300 locos. BHEL has accepted an order for manufacturing 5 locos. In the years to come, it shall be able to manufacture 40–50 locos each year.

The field of electronics as a whole and telecommunication in particular is a potential growth sector. Some senior executives of BHEL strongly feel that BHEL should enter into manufacture of entertainment electronics to improve the company's profitability, funds position and image. It is argued that the electric companies abroad, such as Hitachi or General Electric, also manufacture domestic or electronic appliances. Some other executives feel that BHEL should consider only those business areas where it has strengths; it has no experience of highly competitive consumer goods markets.

Supply of services and spares is yet another business area which can receive BHEL's greater attention in future. The problem of funds remaining outstanding for long period may not arise in the case of services and supplies since they can be supplied on cash payment. Also, margin from this business is high.

By pursuing its proposed long-term diversification policy, BHEL intends to reduce its dependence on power sector to about 40 per cent. Its management feels that diversification will help to reduce risk and improve profitability and liquidity more importantly. In spite of its diversification, the management, however, feels that the power sector will remain important line of business, and that it will face significant competition from financially powerful foreign manufacturers.

In the medium term, the focus of BHEL's investment policy during the next five years, 1985–86 to 1989–90, will be on the consolidation of its existing business areas and diversification into allied areas and priority sectors like electronics, mass rapid urban transportation systems, etc. This objective is planned to be achieved through improved capacity utilisation of existing facilities and marginal investments in the manufacture of new products and productivity improvements through debottle-necking and replacements by and addition of CNC/NC machines. Investments will also be made for product quality improvement. A total capital expenditure of about Rs. 3,000–4,000 million is expected during the next five years.

The focus of BHEL's financing policy during the next years is that the bulk of its resources for operations and growth should come from internal sources. Commenting on BHEL's long-term capital structure goal, Mr. K N Khanna, Director (Finance) stated:

I don't believe in the use of borrowed funds; we have suffered a lot in the past. I feel that there should be a high component of equity in BHEL's capital structure. Since we can't issue equity to the public and we have decided not to obtain budgetary support from the government, our equity will have to come through retained earnings to support our working capital and investments. By the end of 1989–90, we would like 80 per cent of our capital employed in the form of equity. Being a public sector company, we can employ a debt/equity ratio of 1:1, but we would prefer low leverage because products in our line of business are very competitive and interest is a cost for us. I don't want our cost structure to increase on account of high interest component. Also, we want to build a financial policy which provides us flexibility for carrying out our long-term diversification plans.

BHEL's profit goal is to earn at least 12 per cent return on net worth. The management feels that being a public sector company, BHEL should protect the interests of its employees, customers and society; and therefore, a 12 per cent surplus on net worth is a reasonable compensation for the company's owners, that is, the Government of India. It would also like to pay 10 per cent dividend on the paid-up capital to the government. BHEL expects its sales to reach a level of Rs.30,000 million by the end of 1989–90, growing at a faster rate for the first two years and then slowing down slightly. As a desirable goal in the long run, it would also like to achieve an inventory holding of 90 days and book debts of 60 days. After phasing out its business in the long-run, BHEL would like to achieve a debtors' turnover of 45 days. The management of BHEL is quite aware of the difficulty of achieving its goal of collecting receivables faster.

DISCUSSION QUESTIONS

1. Explain BHEL's financial performance with reference to its operating and strategic context.
2. Describe the reasons for BHEL's liquidity crisis, particularly during 1981–83.
3. Discuss the process of BHEL liquidity management.
4. Critically review BHEL proposed strategic changes and financial objectives. Are they consistent?
5. Prepare a 5-year financial plan of BHEL. Justify your assumptions.

NOTE

1. This case draws material from the company's published annual reports, internal documents and data and information directly obtained from the company officials. Author specially acknowledges the help received from Shri K N Khanna, Director (Finance) and Shri K Ramachandran, General Manager (Finance), both of BHEL.

Exhibit I

BHARAT HEAVY ELECTRICALS LIMITED
 Total Installed Capacity: Thermal, Nuclear and Hydro

(Figures in MW)

	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1995</i>
Country (A)	30,299	32,474	35,539	36,627	42,491
BHEL (B)	12,729	14,739	17,589	21,304	23,902
A% of B	42.0	45.4	49.5	53.8	56.0

Exhibit II

BHARAT HEAVY ELECTRICALS LIMITED
 Performance of BHEL Plants

(per cent)

	<i>Operating availability</i>		<i>Plant Load Factor</i>	
	<i>All India</i>	<i>BHEL</i>	<i>All India</i>	<i>BHEL</i>
1980-81	66.4	59.6	44.2	38.9
1991-82	68.4	60.8	46.4	42.6
1982-83	66.5	63.7	49.4	46.5
1983-84	64.7	64.2	47.9	46.6
1984-85	—	65.6	50.1	48.0

Exhibit III**BHARAT HEAVY ELECTRICALS LIMITED****Expenditure on R&D Programmes***(Rupees in million)*

<i>Year</i>	<i>Expenditure</i>		<i>Total Expenditure on R&D</i>	<i>R&D Expenditure as % of turnover</i>
	<i>Revenue</i>	<i>Capital</i>		
1976-77	44.5	17.9	62.4	1.30
1977-78	50.7	65.0	115.7	2.32
1978-79	58.7	79.6	138.3	2.09
1979-80	98.6	80.6	179.2	2.46
1980-81	118.3	44.1	162.4	2.15
1981-82	123.5	30.6	154.1	1.63
1982-83	138.0	21.7	159.7	1.35
1983-84	162.2	29.6	191.8	1.48
1984-85	214.0	48.3	262.3	1.77

Exhibit IV

BHARAT HEAVY ELECTRICALS LIMITED

Summary of Financial Performance, 1976-83

	1976	1977	1978	1979	1980	1981	1982	1983
1. Net sales*	3,690	4,654	4,928	6,497	7,028	7,748	9,316	11,348
2. Value added	2,077	2,318	2,669	2,728	2,982	3,399	4,136	4,892
3. Operating profit	825	894	763	712	746	700	1,044	1,425
4. Non-operating profit	33	63	80	78	96	219	146	162
5. PBIT	858	957	843	790	842	919	1,190	1,587
6. PBT	546	630	574	502	432	376	517	604
7. PAT	224	315	284	252	382	376	302	374
8. Dividend	—	78	78	78	78	90	104	122
9. Net worth ^s	1,644	1,861	2,043	2,221	2,475	2,764	3,187	3,703
10. Borrowings	3,738	2,712	2,581	2,987	3,636	4,600	5,579	6,131
11. Capital employed	5,382	4,573	4,624	5,208	6,111	7,364	8,766	9,834
12. Net fixed assets [#]	1,844	2,184	2,584	2,910	3,162	3,461	4,014	4,488
13. Current assets	7,580	6,530	7,766	9,077	10,853	10,805	13,462	16,125
14. Inventories	5,022	4,614	5,129	6,039	6,279	6,405	6,871	7,495
15. Debtors	1,038	1,133	1,036	1,702	2,232	2,954	5,484	7,300
16. Current liabilities	3,547	4,379	5,777	6,480	6,392	6,902	8,712	10,778
17. Advances from customers	2,502	3,088	4,118	4,652	4,519	4,388	5,228	7,130

* Net sales exclude excise duty.

^s Net worth includes paid-up capital and reserve. Paid-up capital remained constant at Rs. 1,300 million during 1976-1980

[#] Net fixed assets include net block, capital work-in-progress and investment.

Exhibit V**BHARAT HEAVY ELECTRICALS LIMITED****Summary of Cash Flow During Year Ending on March 31***(Rupees in million)*

	1981	1982	1983	1984	1985
<i>Inflows</i>					
Operations:					
Customers	6,955	8,027	10,651	14,083	15,851
Other income	406	729	1,261	917	902
Receipts (A)	7,361	8,756	11,912	15,000	16,753
Expenses	7,282	8,851	10,544	11,204	12,823
Interest	298	373	1,105	627	951
Tax	5	67	165	(24)	383
Payments (B)	7,585	9,291	11,814	11,807	14,157
Net flow (A-B)	(224)	(535)	98	3,193	2,596
Government:					
Equity	200	232	300	260	156
Debt	234	352	312	120	104
Public deposits	144	210	272	287	124
Debentures & Others	—	—	—	740	155
Total Inflow (C)	354	259	982	4,600	3,135
<i>Outflows</i>					
Capital expenditure	480	749	701	677	751
Loan repayment	46	60	766	929	896
Dividend	78	90	104	120	137
Total Outflows (D)	604	899	1,571	1,726	1,784
Surplus/Deficit (C-D)	(250)	(640)	(588)	2,874	1,350
Beginning cash & bank balance	(916)	(1,166)	(1,806)	(2,394)	480
Cash & bank balance at end	(1,166)	(1,806)	(2,394)	480	1,830
Bank borrowings	(1,520)	(1,993)	(2,641)	(757)	(117)
Cash credit balance	295	108	119	1,104	1,625
Cash credit balance (net)	(1,225)	(1,885)	(2,522)	347	1,508
Cash and other bank balance	58	79	127	133	322
Cash and bank balance at the end	(1,166)	(1,806)	(2,395)	480	1,830

Exhibit VI

BHARAT HEAVY ELECTRICALS LIMITED BHEL's Capital Investments: 1980-81 to 1984-85

	(Rupees in million)											
	1980-81		1981-82		1982-83		1983-84		1984-85		1980-81 to 84-85	
	P	A	P	A	P	A	P	A	P	A	P	A
1. Capital Projects (Expansion, New Projects, and Diversification)	437	370	524	588	623	607	577	532	416	441	2,577	2,538
2. Science & Technology Schemes	57	43	50	28	48	27	55	30	60	33	270	161
3. Township & Welfare	50	32	40	32	40	62	60	62	40	70	230	258
4. Modernisation and Replacement Scheme	100	92	100	104	100	109	145	133	100	154	545	592
<i>Total</i>	644	537	714	752	811	805	837	757	616	699	3,622	3,549

P: Planned;

A: Actual

Exhibit VII

BHARAT HEAVY ELECTRICALS LIMITED

Performance Trend in Inventory Over the Years

Year	Materials (Stores+SIT)		Work in Progress (incl materials with fabricators)		Finished Goods				Total Inventory	
	Value Rs./m	No of days (a)	Value Rs./m	No of days (b)	Implant		With Customers		Value Rs./m	No of days (d)
					Value Rs./m	No of days (c)	Value Rs./m	No of days (c)		
1980-81	3,210	346	2,010	94	1,010	47	170	8	6,400	297
1981-82	3,250	228	2,480	103	1,000	39	140	6	6,870	266
1982-83	3,680	201	2,830	92	610	19	370	11	2,490	232
1983-84	3,180	165	3,150	92	440	12	110	3	6,890	190
1984-85	3,140	127	3,120	80	640	15	150	4	7,050	173

Source: Company's analysis for internal use.

Note:

- (a) Number of days materials is in relation to cost of material consumed.
- (b) Number of days WIP is in relation to cost of production.
- (c) Number of days finished goods is in relation to cost of goods sold.
- (d) Number of days inventory is in relation to turnover.

Exhibit VIII

BHARAT HEAVY ELECTRICALS LIMITED

Sundry Debtors: Categorywise

(Rupees in million)

Electricity Boards	1,219	2,554	3,643	4,046	4,135
Power Projects	229	503	938	873	796
Public Sector					
Undertakings	350	480	485	954	1,130
Railways	133	103	241	224	274
Govt. Departments	52	48	40	33	37
Private Parties	72	155	231	155	145
Exports	191	171	195	97	189
Others	111	43	33	42	32
Collection Book Debts	2,256	4,057	5,805	6,424	6,377
Post Shipment Credit	214	191	166	144	120
Deferred Debts	681	785	1,055	1,561	1,573
JV Valuation	420	565	438	181	61
	1,316	1,542	1,659	1,885	1,753
<i>Total</i>	3,572	5,599	7,463	8,313	8,491
Provision for bad and doubtful debts	102	114	163	231	311
Sundry Debtors	3,470	5,485	7,300	8,079	8,180

Note: Totals may not tally because of rounding off.

Exhibit IX

BHARAT HEAVY ELECTRICALS LIMITED

Book Debts Outstanding for More than One Year

(Rupees in million)

	1981		1982		1983		1984		1985	
	Govt. Depts.	Private Parties	Govt. Depts.	Private Parties	Govt. Depts.	Private Parties	Govt. Depts.	Private Parties	Govt. Depts.	Private Parties
	Outstanding for									
> 1 year but < 2 years	364	64	566	94	826	132	1,153	272	1,404	32
2 years to < 3 years	131	47	371	56	334	21	323	62	670	27
3 years and more	139	53	233	78	461	94	278	328	539	59

Exhibit X

BHARAT HEAVY ELECTRICALS LIMITED

Monthly Cash Flow

(Rupees in million)

Month	1980-81		1981-82		1982-83		1983-84		1984-85	
	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow
April	180	340	410	440	500	510	450	530	520	740
May	390	450	440	620	850	870	420	700	690	1,010
June	260	550	670	760	990	910	880	820	1,150	1,140
1st Quarter	830	1,340	1,520	1,820	2,340	2,290	1,750	2,050	2,360	2,890
July	460	560	660	750	950	1,070	880	1,050	1,210	1,070
August	630	600	600	620	780	830	1,300	1,070	1,970	1,280
September	490	550	810	810	980	870	1,060	1,050	1,190	1,100
2nd Quarter	1,580	1,710	2,070	2,180	2,710	2,770	3,240	3,170	4,370	3,450
October	760	790	730	950	780	880	880	1,130	890	1,110
November	510	680	640	720	560	820	1,280	1,360	1,160	1,070
December	690	750	890	790	600	2,080	1,340	1,070	1,370	1,710
3rd Quarter	1,960	2,220	2,260	2,460	1,940	3,780	3,500	3,560	3,420	3,890
January	810	920	830	820	1,020	1,060	1,570	970	1,910	1,330
February	660	650	760	820	890	890	1,130	1,180	1,440	1,200
March	2,100	1,350	2,110	2,500	2,900	2,600	5,220	2,600	4,790	3,180
4th Quarter	3,570	2,920	3,700	3,730	5,810	4,550	7,920	4,750	8,140	5,710
Total	7,940	8,190	9,550	10,190	12,800	13,390	16,410	13,530	17,290	15,940
Surplus/Deficit	(250)	(640)	(590)	+2,880	+1,350					
Add: Balance at the beginning	(920)	(1,170)	(1,810)	(2,400)	+480					
Balance at the end	(1,170)	(1,810)	(2,400)	+480	+1,830					

Exhibit XI

BHARAT HEAVY ELECTRICALS LIMITED

Major Suppliers of Inputs

<i>Inputs</i>	<i>Payment Terms</i>
<i>Domestic</i>	
1. SAIL, TISCO, IISCO, CCI, SRI CEMENT ETC. MMTC	100% as advance + 5% extra to cover price rise, etc.
2. Larsen & Toubro	(a) 10% advance against bank guarantee for equal amount.
3. Siemens India Ltd.	(b) 80% payment against despatch document through bank.
4. Ion Exchange India	(c) 10% after receipt of material at site
(This is an indicative listing as there are many suppliers)	
<i>Foreign</i>	
1. KWU, West Germany	Turbine/Generator Components
2. Combustion Engg., USA	Boiler Components
3. Brown Boveri, Switzerland	Programmable controllers
4. General Electric, USA	Gas Turbine components
5. Hitachi, Japan	Motors
6. BSC, UK, Hyundai, S. Korea, Mitsui, Sumitomo, Japan, Mannesman, Thyssen, WG	Piping, Special Steel, etc.
(These are also BHEL's main collaborators, except 5 and 6)	

All foreign suppliers require 100% against L/C

Exhibit XII**BHARAT HEAVY ELECTRICALS LIMITED****Interest Charges on Various Types of Loans: 1981-1985***(Rupees in million)*

	1981	1982	1983	1984	1985
Government	221	280	294	239	232
Bank Borrowings	287	316	568	395	75
Foreign financial institutions	-	-	01	10	21
Public deposits	08	37	76	122	153
Deferred credits	16	16	16	14	13
Debentures	-	-	-	06	77
Others	12	24	28	200	89
	543	673	983	987	660

Exhibit XIII**BHARAT HEAVY ELECTRICALS LIMITED****Summary of Profit and Loss Account for the
Year Ending on March 31***(Rupees in million)*

	1981	1982	1983	1984	1985
1. Gross sales	8,193	98,672	12,083	13,662	15,435
2. Excise duty	445	551	735	965	1,070
3. Net sales (1 – 2)	7,748	9,316	11,348	12,697	14,365
4. Change in WIP and FG	169	176	48	(252)	181
5. Value of production	7,917	9,492	11,396	12,445	14,546
6. Direct material	4,093	4,879	5,850	6,210	7,687
7. Cost of sub-contract	290	283	414	330	374
8. Power and fuel	135	194	240	260	280
9. Cost of goods or services acquired outside (6 + 7 + 8)	4,518	5,356	6,504	6,800	8,341
10. Value added (5 – 9)	3,399	4,136	4,892	5,645	6,205
11. Personnel payments	1,143	1,307	1,547	1,860	2,116
12. Consumable stores	565	707	703	701	690
13. Other expenses	647	666	845	1,020	1,170
14. Provisions	101	151	93	198	382
15. Depreciation	243	261	279	459	535
16. Cost of goods or services acquired inside (11 to 15)	2,699	3,092	3467	4,238	4,893
17. Operating profit (10 – 16)	700	1,044	1,425	1,407	1,312
18. Non-operating income	219	146	162	330	483
19. PBIT (17 + 18)	919	1,190	1,587	1,737	1,795
20. Interest	543	673	983	987	660
21. PBT (19 – 20)	376	517	604	750	1,135
22. Provision for tax	–	215	230	375	405
23. PAT (21 – 22)	376	302	374	375	730
24. Dividends	90	104	122	138	196

Exhibit XIV

BHARAT HEAVY ELECTRICALS LIMITED
Summary of Balance Sheet as on March 31

(Rupees in million)

	1981	1982	1983	1984	1985
<i>Net Worth</i>					
Share capital	1,500	1,732	2,032	2,292	2,448
Reserve	1,264	1,455	1,671	1,926	2,486
Net worth (A)	2,764	3,187	3,703	4,218	4,934
<i>Borrowings</i>					
Long-term	2,912	3,226	2,730	3,211	3,263
Short-term	168	360	760	1,295	1,096
Bank borrowings	1,520	1,993	2,641	757	117
Borrowings (B)	4,600	5,579	6,131	5,263	4,476
Capital Employed (A + B)	7,364	8,766	9,834	9,481	9,410
<i>Fixed Assets</i>					
Gross block	4,926	5,406	6,012	7,075	8,353
Less: depreciation	1,931	2,195	2,478	2,932	3,465
Net block	2,995	3,211	3,534	4,142	4,888
Capital work in progress	465	802	953	785	403
Investments	01	01	01	01	01
Net fixed assets (C)	3,461	4,014	4,488	4,928	5,301
<i>Current Assets</i>					
Inventory	6,405	6,871	7,495	6,892	7,047
Sundry debtors	2,954	5,484	7,300	8,079	8,180
Cash & bank balance	353	186	246	1,236	1,947
Other current assets	03	03	01	02	02
Loans and advances	1,090	918	1,083	1,420	1,503
Current assets (D)	10,805	13,462	16,125	17,629	18,679
<i>Less Current Liabilities</i>					
Creditors	816	1,326	1,263	1,131	1,189
Advance from customers	4,388	5,228	7,130	8,652	10,195
Other liabilities	1,237	1,490	1,515	2,304	1,835
Provisions	461	668	870	987	1,351
Current liabilities (E)	6,902	8,712	10,778	13,074	14,570
Net Current Assets (D - E) (F)	3,903	4,750	5,347	4,555	4,109
Net Assets (C + F)	7,364	8,766	9,834	9,481	9,410

Exhibit XV

BHARAT HEAVY ELECTRICALS LIMITED List of Competitors in India for BHEL Products

<i>Product</i>	<i>Competitor</i>
1. Utility Boilers	ABL
2. Industrial Boilers	BHPV, IJT Yamanagar, ABL, Thermax-Poona; Walchand Nagar Industries.
3. Industrial Turbines	Triveni Engineering Works; Bellis-Morcam
4. Power Transformers	CGL (Crompton Greaves Ltd. Mumbai); Transformer & Electricals Ltd. – Kerala; NGEF – Bengaluru; GEC – Naini; Bharat Bijli – Mumbai; Apex Electricals – Mumbai; Voltamp – Mumbai; EMCO – Mumbai; Voltas – Mumbai; EASUNS – Chennai; Nagpur Transformers; ECE – Sonapat
5. Instrument Transformers	TELK; CGL; HBB – Baroda; Nagpur Transformers Ltd.; AEP (Automatic Electricals Ltd.); Systems Controls Transformers Ltd.; AMEI (Andhra Mech. & Elec. Industries) Hyderabad; Trait.
6. Insulators	W.S. Insulators – Chennai; Jayshree Insulators – Kolkata; Seshashayee Industries Ltd. – Chennai; H.T. Insulators – Ranchi; Modern Insulators – Mount Abu; Punjab Ceramics – Bhandinda; Allied Ceramics – Alwar; Laxmi Porcelain – Hyderabad
7. Switchgear	TELK; HBB; NGEF; CGL; GEC; S&S; Andrew Yule – Kolkata; Voltas – Mumbai; ASEA – Nasik; Siemens – Mumbai; MEI; Alind; Jyoti – Baroda.
8. Energy Meters	Universal Electricals – Kolkata; ECE – Hyderabad; India Meters – Chennai; Jai Meters; Meters & Instrument – Chandigarh; Das Hitachi – Ghaziabad; Haveli's – Ghaziabad; Baroda Meters – Baroda

Contd ...

Exhibit XV Contd . . .

Product	Competitor
9. A/C Motors	KEC – Bengaluru (Kirloskar Electric Co.); NGEF – Bengaluru; Siemens India – Mumbai; Crompton Greaves – Mumbai; Jyoti – Baroda; GEC – Kolkata
10. D/C Motors	KEC; Crompton Greaves; and NGEF
11. Field Equipment	Central Electricals Ltd.; Jyoti
Solar Power Panels	Audco – Chennai
Well Head Xmas	Surendra Engg. Company; Richardson Cruddas Ltd.
Tree	
Saw Tubulars	
12. Mini-micro hydro sets	Jyoti – Baroda; Flovel – Faridabad; L&T – Kolkata; PSIDC – Chandigarh; Crompton – Mumbai; Fouress Boving – Bengaluru; Kirloskar – Mumbai; GEC – Kolkata; and Beacon Nyrpic – Chennai.
13. Thyrister	ASEA; L&T; Jyoti; NGEF; Culter Hammer; Debikey Electronics; Siemens; Hind Rectifier; Usha Rectifier; and UPTRON
14. Devices	Usha Rectifier; Hind Rectifier; NGEF
15. Control Systems	Bell Controls; ILK; Keltron; CEGELEC; Allen Bradley (India); ASEA; Blue Star; Siemens; Uptron and ESPL.

Exhibit XVI**BHARAT HEAVY ELECTRICALS LIMITED****Loan Portfolio: 1981–1985***(Rupees in million)*

	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>
<i>Borrowings:</i>					
From government	2,229	2,522	2,071	2,022	1,586
From bank	1,520	1,993	2,641	757	117
From financial institutions	-	-	100	100	12
From foreign financial institutions	-	5	-	225	535
From companies	24	2	33	282	47
Public deposits	144	354	625	913	1,037
Deferred credits	498	509	486	422	367
Debentures	-	-	-	400	655
Post-shipment credit	185	195	172	144	120
<i>Total</i>	<i>4,600</i>	<i>5,580</i>	<i>6,128</i>	<i>5,265</i>	<i>4,476</i>

Exhibit XVII

BHARAT HEAVY ELECTRICALS LIMITED

Financial Indicators for BHEL and Engineering Industry for 1984 and 1985

<i>Financial Indicators</i>	<i>1984</i>	<i>1985</i>	<i>1984</i>	<i>1985</i>
Net sales (Rs. millions)	12,700	14,370	75,760	85,360
Net worth (Rs. millions)	4,220	4,930	20,110	23,920
Total borrowings (Rs. millions)	5,260	4,480	9,030	10,490
Capital employed (Rs. millions)	9,480	9,410	29,140	34,410
Inventories (Rs. millions)	6,890	7,050	21,340	22,690
PBIT/Sales (per cent)	13.7	12.5	9.4	9.4
Sales/Capital employed (times)	1.34	1.53	2.60	2.48
PBIT/Capital employed (per cent)	18.4	19.1	24.5	23.3
PAT/Capital employed (per cent)	4.0	7.8	7.6	6.8
Capital employed/Net worth (times)	2.25	1.91	1.45	1.44
PAT/Net worth (per cent)	9.00	14.9	11.0	9.8
Retained profit/PAT (per cent)	63.2	73.1	59.2	58.9
Current ratio (times)	1.35	1.28	1.37	1.33
Debt-equity ratio (times)	1.25	0.91	0.45	0.44
PBIT/Interest (times)	1.76	2.72	1.91	1.90
Interest/Sales (per cent)	7.8	4.6	4.9	4.9
Sales/Inventories (times)	1.84	2.04	3.55	3.76
Inventories in days	198	179	103	97

Note: The source of financial data for engineering industry is Reserve Bank of India Bulletin, December, 1986.

BHARAT HEAVY ELECTRICALS LIMITED (BHEL) – (B)

Bharat Heavy Electricals Limited (BHEL) is the largest engineering company in India basically in the energy sector. Until 1991, it was totally a government company. A year later, a part of the equity of the company was disinvested to the public. With the change in the ownership pattern, the company enjoys a lot of autonomy and freedom of operations and decision-making; it is being run as a private sector company.

As of 2010, the company has installed equipment for over 90,000 MW of power generation and has supplied over 2,25,000 MVA transformer capacity and other equipment operating in the transmission and distribution network up to 400 kV (AC and DC). During 2005–10, the company has grown at a rate of 21.83 per cent with the revenues increasing to Rs. 34,514 crore from Rs. 10,682 crore. The reserve and surplus has increased by Rs. 2979 crore during 2009–10 after addition of profit after dividend distribution. BHEL's major share of business is dependent on domestic projects making it vulnerable to the fluctuations of the Indian economy. The management addressed the concerns of potential margin squeeze due to the threat of new entrants by highlighting its competitive advantages from vertical integration and large scale of operations.

BHEL is still the largest manufacturer in India in the power equipment sector supplying a wide range of products and systems for thermal, nuclear, gas and hydro-based companies and captive power plants. It provides total service—from concept to commissioning—to its customers. In 2010, BHEL-supplied utility power generating sets have gone up to 91,731 MW maintaining the record of nearly two-thirds of the overall installed capacity and around three-fourths of the power generated in India. BHEL supplies steam turbines, generators, boilers and matching auxiliaries up to 800 MW ratings including sets of 660/800 MW based on supercritical technology. It is a leading manufacturer of a variety of electrical, electronic and mechanical equipment to meet the demand of a number of industries, such as metallurgical, mining, cement, paper, fertilizers, refineries and petrochemicals; besides captive/industrial power utilities. BHEL is present in more than 70 countries across the world and is geared to expand to new world markets.

In the past, BHEL was a debt-heavy company. Now it is dominantly equity financed with a meagre Debt/Equity ratio of just 0.01:1. EPS in 2009–10 was Rs. 88.06 increasing from Rs. 64.11 in the previous year. The future looks promising with infrastructure development in the country and the governments focus on improving power supply in the country. The huge power deficit in India (16%) and large T&D losses (27%) opens tremendous opportunities for the company in power sector. In the utility segment, the company secured highest ever orders from private sector in 2009–10. As in the past, the company has focussed on R&D and invested Rs. 829 crore in 2009–10 (2.43% of turnover), which was 20 per cent higher than the previous year. BHEL is the highest spender on R&D in India in its segment. The company has been contributing to the environmental cause by developing and promoting renewable energy-based products on a sustained basis.

However, there are risks also involved in the overall macro environment, which could impact BHEL's operations. The risk factors for BHEL include sluggish and uncertain global environment, uncertain commodity and energy prices, and potentially intense domestic competition with the stress on super-critical technology projects and domestic players exploring and procuring equipment/machinery through their tie-ups with the international players in China, Germany, Japan, etc.

Exhibit I provides the summary of the company's performance during last 10 years. The company's share price movements (monthly) vis-à-vis SENSEX between 2005 and 2010 are shown in Exhibit II.

DISCUSSION QUESTIONS

1. What have been the changes in BHEL operating and financial conditions over the years?
2. Critically evaluate the company's financial performance and financial policy.

Exhibit I**BHEL: SUMMARY OF 10-YEAR FINANCIAL PERFORMANCE
(RS. IN CRORE)**

	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03	2001-02	2000-01
EARNINGS										
Turnover (Gross)	34154	28033	21401	18739	14525	10336	8662	7482	7287	6348
Other Income	1648	1497	1445	824	547	656	513	838	770	1295
Changes in stock	787	1152	827	181	386	540	-31	-45	-37	251
Total Earnings	36589	30682	23673	19744	15458	11532	9144	8275	8020	7894
Materials, Erection & Engineering Expenses	20672	17620	11821	10018	8147	5871	4229	3607	3724	3486
Personnel Payments	6449	2984	2608	2369	1879	1650	1640	1505	1445	2170
Other mfg., admn. & selling expenses	2385	4864	4482	3305	2564	2128	2003	2121	1921	1741
Outgoings before interest & depr.	29506	25468	18911	15692	12589	9650	7872	7233	7090	7397
Profit before depreciation, interest & tax	7083	5214	4762	4052	2869	1882	1272	1042	930	497
Depreciation	458	334	297	273	246	219	198	185	169	158
Gross Profit	6625	4880	4465	3779	2623	1663	1074	857	761	339
Interest	34	31	35	43	59	81	60	55	97	44
Profit before tax	6591	4849	4430	3736	2564	1582	1014	802	664	295
Provision for tax	2280	1711	1571	1321	885	628	357	358	195	-19
Profit after tax	4311	3138	2859	2415	1679	953	657	444	469	314
Dividend	1141	832	746	600	355	196	147	98	98	73
Corporate Dividend Tax	191	142	127	93	50	27	19	13	0	7
Retained Profit	2979	2164	1986	1722	1275	731	491	333	371	234
II WHAT THE COMPANY OWNED										
Gross Block	6580	5225	4443	4135	3822	3629	3460	3349	3182	3004
Less:	4165	3754	3462	3146	2840	2585	2365	2179	2005	1861
Accumulated Depreciation & Lease Adj.										
Net Block	2415	1471	981	989	982	1044	1095	1170	1177	1143
Capital WIP	1530	1157	658	303	185	95	109	59	57	61
Investments	80	52	8	8	8	9	29	10	10	10
Current Assests, Loans & Advances	42935	36901	27906	20980	16331	13343	10425	8348	8054	7576
Total assests	46960	39581	29554	22280	17506	14491	11658	9587	9298	8790

III WHAT THE COMPANY OWED										
Borrowings (incl. Credits for assests taken on lease)	128	149	95	89	558	537	540	531	666	1026
Current liabilities & provisions	32442	28333	20022	14337	10320	8446	6337	4756	4714	4163
Total liabilities	32570	28482	20117	14426	10878	8983	6877	5287	5380	5189
IV NET WORTH OF THE COMPANY										
Share Capital	490	490	490	245	245	245	245	245	245	245
Reserves & Surplus	15427	12449	10285	8544	7057	5782	5051	4559	4225	3586
Less: Deferred Revenue Expenditure	-	-	-	-	-	-	18	96	249	229
Net Worth	15917	12939	10775	8788	7301	6027	5278	4708	4221	3602
VII RATIOS										
PBDIT to total assets (%) #	16.37%	15.08%	18.4%	20.4%	17.9%	14.4%	12.0%	11.0%	10.3%	5.9%
Gross profit to capital employed (%) #	57.41%	51.47%	54.1%	51.6%	40.5%	29.8%	21.5%	18.4%	16.7%	8.4%
Turnover/ gross block	5.2	5.4	4.8	4.5	3.8	2.8	2.5	2.2	2.3	2.1
Earnings per share (Rs.)	88.06	84.11	58.4	98.7	68.6	39.0	26.9	18.2	19.1	12.8
Net worth per share (Rs.)	325.16	264.32	220.1	359.0	298.31	246.24	215.64	192.36	172.43	147.16
Current Ratio	1.32	1.30	1.4	1.5	1.6	1.6	1.7	1.8	1.7	1.8
Total Debt/ Equity	0.01	0.01	0.01	0.01	0.08	0.09	0.10	0.11	0.16	0.28
Return on Net Worth	27.1%	24.3%	26.5%	27.5%	23.0%	15.8%	12.5%	9.4%	11.1%	8.7%
Gross Profit margin	19.4%	17.4%	20.9%	20.2%	18.1%	16.1%	12.4%	11.5%	10.4%	5.3%
Net profit margin	12.6%	11.2%	13.4%	12.9%	11.6%	9.2%	7.6%	5.9%	6.4%	4.9%

On the basis of average net assets and capital employed

Figures upto 2008-07 are based on number of shares pre-bonus issue of 1.1.

Exhibit II

BHEL VS SENSEX MONTHLY SHARE PRICES

<i>Date</i>	<i>Sensex</i>	<i>BHEL</i>	<i>Dividend</i>	<i>Return</i>	<i>Market Return</i>
1-Dec-10	20509	2325			
1-Nov-10	19521	2206		-0.05	-0.05
1-Oct-10	20032	2446		0.11	0.03
1-Sep-10	20069	2484	12.3	0.02	0.00
2-Aug-10	17971	2408		-0.03	-0.10
1-Jul-10	17868	2439		0.01	-0.01
1-Jun-10	17701	2461		0.01	-0.01
3-May-10	16945	2357		-0.04	-0.04
1-Apr-10	17559	2492		0.06	0.04
2-Mar-10	17528	2385		-0.04	0.00
1-Feb-10	16430	2352	11	-0.01	-0.06
4-Jan-10	16358	2406		0.02	0.00
1-Dec-09	17465	2406		0.00	0.07
3-Nov-09	16926	2245		-0.07	-0.03
1-Oct-09	15896	2217		-0.01	-0.06
1-Sep-09	17127	2325	8	0.05	0.08
3-Aug-09	15667	2315		0.00	-0.09
1-Jul-09	15670	2228		-0.04	0.00
1-Jun-09	14494	2204		-0.01	-0.08
4-May-09	14625	2175		-0.01	0.01
1-Apr-09	11403	1652		-0.24	-0.22
2-Mar-09	9709	1504		-0.09	-0.15
2-Feb-09	8892	1396	9	-0.07	-0.08
2-Jan-09	9424	1320		-0.05	0.06
1-Dec-08	9647	1362		0.03	0.02
3-Nov-08	9093	1361		0.00	-0.06
1-Oct-08	9788	1282		-0.06	0.08
1-Sep-08	12860	1586	6.25	0.24	0.31
1-Aug-08	14565	1707		0.08	0.13
1-Jul-08	14356	1679		-0.02	-0.01
2-Jun-08	13462	1381		-0.18	-0.06
2-May-08	16416	1662		0.20	0.22

<i>Date</i>	<i>Sensex</i>	<i>BHEL</i>	<i>Dividend</i>	<i>Return</i>	<i>Market Return</i>
1-Apr-08	17287	1897		0.14	0.05
3-Mar-08	15644	2057		0.08	-0.10
1-Feb-08	17579	2282	9	0.11	0.12
2-Jan-08	17649	2064		-0.10	0.00
3-Dec-07	20287	2584		0.25	0.15
1-Nov-07	19363	2680		0.04	-0.05
1-Oct-07	19838	2613		-0.02	0.02
3-Sep-07	17291	2033		-0.22	-0.13
1-Aug-07	15319	1889	6	-0.07	-0.11
2-Jul-07	15551	1732		-0.08	0.02
1-Jun-07	14651	1538		-0.11	-0.06
3-May-07	14544	1399		-0.09	-0.01
2-Apr-07	13872	2487		0.78	-0.05
1-Mar-07	13072	2261		-0.09	-0.06
1-Feb-07	12938	2177	12.5	-0.03	-0.01
2-Jan-07	14091	2517		0.16	0.09
1-Dec-06	13787	2298		-0.09	-0.02
1-Nov-06	13696	2507		0.09	-0.01
3-Oct-06	12962	2415		-0.04	-0.05
1-Sep-06	12454	2393	2	-0.01	-0.04
1-Aug-06	11699	2261		-0.06	-0.06
3-Jul-06	10744	2045		-0.10	-0.08
1-Jun-06	10609	1952		-0.05	-0.01
2-May-06	10399	1902		-0.03	-0.02
3-Apr-06	11852	2347		0.23	0.14
1-Mar-06	11280	2247		-0.04	-0.05
1-Feb-06	10370	2026		-0.10	-0.08
2-Jan-06	9920	1798		-0.11	-0.04
1-Dec-05	9398	1386	4	-0.23	-0.05

BLACKSTONE–GOKALDAS EXPORTS

Amit had just finished making a presentation to the investment committee. Amit was a managing director at newly set-up private equity and investment firm managing close to \$2 billion of assets. During the presentation the Blackstone–Gokaldas Exports deal was discussed¹. Three weeks ago, Blackstone had been approached by Kotak, an Indian investment bank on behalf of their client, Gokaldas Exports, India's largest garment manufacturer and exporter. The promoters of Gokaldas had realized that they would not be able to take their company to the next level of growth on their own. They needed huge investments and a global client network to achieve their goal of global leadership. They were offering to divest a significant stake in their company to Blackstone.

THE BLACKSTONE GROUP

In 1985, Peter G. Peterson and Stephen A. Schwarzman founded the Blackstone Group with a shared secretary and a balance sheet of \$400,000. Today, Blackstone is a leading global alternative asset manager and provider of financial advisory services listed on the New York Stock Exchange with total assets under management of approximately \$98.2 billion¹ as of September 30, 2007. Their business is organized into four business segments:

- Corporate Private Equity
- Real Estate
- Marketable Alternative Asset Management
- Financial Advisory

BLACKSTONE CORPORATE PRIVATE EQUITY GROUP

Blackstone is a world leader in private equity investing, having managed five general private equity funds as well as one specialized fund focusing on media and communications-related investments. They established this business in 1987. They pursue transactions throughout the world, including not only typical leveraged buyout acquisitions of seasoned companies but also transactions involving start-up businesses in established industries, turnarounds,

minority investments, corporate partnerships and industry consolidations. As of September 30, 2007, the corporate private equity operation had approximately \$32.7 billion² of assets under management with investments in 44 companies.

Unlike many of their competitors, Blackstone is sector-agnostic, i.e., it is willing to invest in any sector as long as its IRR targets can be met.

VENTURE CAPITAL/PRIVATE EQUITY INDUSTRY IN INDIA

The Indian economy has been growing at 8–9% annually in real terms and since some sectors (e.g., the services sector and the high-end manufacturing sector) started growing at 10–14% a year in real terms, VC-PE firms from across the world have been strongly attracted to India. As per a report by Evalueserve⁵, there are over 366 firms currently operating in India and another 69 are planning to start operations soon.

India received \$14.2 billion⁴ of VC/PE funding in 2007, almost double the 2006 figure of \$7.5 billion. The number of deals stood at 390 compared to 299 deals in 2006. Of this, VC investments (seed, early stage and growth capital) accounted only for \$560 million across 100 deals. IT/ITeS accounted for 70% of the deals, healthcare and life sciences 10% while other hot sectors were media, telecom, retail and food and beverages.

BLACKSTONE INDIA

Blackstone has been a late entrant to India, setting up office here only in mid-2005. Earlier, it had hired several consulting firms, including McKinsey & Co. and looked at investing in various emerging markets. It was greatly attracted to India for the following reasons:

The huge demand: With the growth in the per capita income, the middle class has more purchasing power now. There is a lot of hectic activity—thanks to consumerism. Sectors, such as media and entertainment, real estate and retail are beneficiaries of this.

India's advantage in the emerging knowledge economy: There is a huge talent pool available here that is now being recognized by companies all across the world. Cost-performance arbitrage that India is now in a position to offer makes it attractive.

Huge investments in infrastructure: Investments in infrastructure, such as roads, ports and airports, is going to make the business climate much more favourable.

Thus, it chose India as the place to set up its next in-country office and set itself the goal to invest \$1 billion⁶ in local companies. Akhil Gupta was appointed at its senior managing director. In an interview to *Businessworld* magazine⁸, he said that he favoured the pharmaceuticals, real estate, export and infrastructure sectors for investment in India. Also, he would not be interested in any deal less than \$25 million (Rs. 125 crore).

What differentiates Blackstone from other big-ticket private equity players is its investment philosophy. They believe that creating value is not about just buying and selling smart. They tell Indian promoters that they can work with their portfolio companies to realize their full

potential for growth, especially in the context of globalization. They position themselves as catalysts for cross-border activities and as partners for growth over a long term. They are performance-driven at any stage of the partnership.

GOKALDAS EXPORTS

Incorporated in 1979, Bangalore-based Gokaldas Exports is India's largest manufacturer and exporter of garments. It operates through 48 plants predominantly in Karnataka and supplies to global apparel companies, such as Nike, Adidas, GAP, Tommy Hilfiger, Mothercare Plc and Abercrombie & Fitch. It recorded sales of \$258.5 million (Rs. 1034 crore) in 2006–07, employs 52,000 people and makes 2.5 million garments a month.

Its growth is focused on the following objectives:

1. Increase market share in established markets, such as USA, Europe and the UK
2. In India, concentrate on the new retail market that is set to grow exponentially (domestic retail industry is expected to become a Rs. 100,000 crore industry by 2010)
3. Upgrade products so that more value addition can be achieved, thereby trying to increase the profitability

Gokaldas has been spending around \$20 million, a year over the last three fiscal years expanding capacity. It is also spending about \$100 million on a special economic zone (SEZ), large tax-free industrial enclaves that the Indian government wants to use to boost industry and exports.

To fund its growth, Gokaldas had the following options available to it:

Internal accruals

So far, Gokaldas maintained a dividend of Rs. 2–3 per share for its shareholders (see Exhibit 2 for Gokaldas Exports Dividend History). Changing the dividend policy might send negative signals to the shareholder community and the investments required were also large.

Debt

The retail corporate debt market is comatose in India due to a variety of reasons, so this option was ruled out. On March 31, 2007, the company had a Debt/Equity (BV) ratio of 74%; Debt/Equity (Market Value) of 38%. If Gokaldas were to go for raising debt, it would surely be able to get it at the prime lending rate.

Infusion of equity

An additional infusion of equity could happen through a follow-on offering or private placement. A follow-on public offering would involve significant costs including hiring an investment bank, running a roadshow, etc. and the equity would have to be sold at a discount to entice investors because of the cost of asymmetric information. This cost would be lower in the case of private

placement of equity to an institutional investor, such as a mutual fund or a private equity firm or a strategic investor.

The promoters wanted to give up their controlling stake and take a backseat role in the day-to-day management of the business. Thus, acquisition of stake by a private equity investor or strategic investor made the most sense. So they asked Kotak, an investment bank to scout for buyers. Kotak contacted Blackstone and since the first impressions appeared promising, a team of four was assigned to do the due diligence.

BLACKSTONE'S DUE DILIGENCE OF GOKALDAS EXPORTS

Due diligence is the process by which a potential acquirer evaluates a target company or its assets for acquisition. It involves verification of facts presented by the company and an independent evaluation of the financial, legal, labour, tax, environment and market/commercial situation of the company. In addition, it involved checking whether the company fit in with the investment criteria of Blackstone.

The Indian Textile Sector

India has been one of the biggest beneficiaries of the abolition of quotas on textile imports by the US and EU after the Agreement on Textiles and Clothing expired on January 1, 2005. Global retailers, accounting for the bulk of imports into their countries, used to source from all over the world because of the quotas that were allocated to various countries. These retailers are now consolidating their sourcing activities and reducing the number of countries they source their products from the primary consideration being the cost of production and manufacturing lead times.

Further, the Indian domestic textile market is witnessing strong growth led by a young consuming population (median age of 24 years), its fast growing economy and rising household income levels, and over 30% growth in the organized retailing sector (See Appendix 1 on textile industry).

Government Policies

The government's policies were not very friendly to the sector at the moment—unfavourable labour laws and a tax regime that favoured small companies were troublesome—but it was nonetheless a very viable business. Further, the government was slowly waking up to the fact that it would have to improve its policy framework if it wanted the Indian industry to successfully compete with China, Bangladesh, etc.

Legal

The researching team was disturbed by some items in the foreign press¹³ that accused the Indian textile industry, and even Gokaldas in particular, of running sweatshops. The reports claimed that workers were not adequately compensated and that their working environment was unsafe.

If true, this could seriously affect Gokaldas' credibility and it might face boycott from some big retailers because of pressure from their customers. However, deeper investigation revealed that the charges were baseless and that they could pre-empt any future problems on this front by getting their factories accredited by some multinational NGOs.

Foreign Exchange Rate Risk

The Indian rupee had quickly appreciated by about 10% in the span of two months from March to May 2007. This made the present investment cheaper but it was obvious that another move like that could wipe out the margins of a highly export-dependent company with low bargaining power with its customers. However, this seemed highly unlikely.

Investment Criteria

For Blackstone, underlying each decision to invest are five broad themes:⁷

- (i) Is the target growing on the back of domestic demand?
- (ii) Does it bring arbitrage opportunities to the table?
- (iii) Is it an infrastructure player?
- (iv) Is it highly export-oriented?
- (v) Are its operations synergistic with the other group companies?

Clearly, Gokaldas satisfied conditions (i), (iv) and (v) well.

VALUATION

The usual process was to use as many of the following methods of valuation to arrive at a ballpark figure. Typically used methods included:

- Discounted Cash Flow method
- Comparables (Ratio analysis)
- Venture Capital Method
- Options Analysis

The Venture Capital Method was useful for valuing small, growing companies that didn't have a track record of revenues and profits. The Options Analysis method was useful when the investment decision required consideration of real options. Thus, for the valuation of Gokaldas, only the first two methods were used. See Exhibits II–IV.

Based on a cost of equity of just over 15% and a historical debt rate of around 10%, the weighed average cost of capital for the firm was 11.21%. Based on projected cash flows with a very conservative terminal growth rate of slightly over 3.34%, the value per share of the firm was approximately Rs. 236.

Comparable analysis was tough because Gokaldas was quite different from Indian firms and its business model of being a garmenting company that sold products to branded retailers

or private label was unlike any company in the US or European markets for which data was publicly available. The four largest listed companies in the Indian textile sector apart from Gokaldas were considered—KPR Mill, Page Industries, Zodiac Clothing and House of Pearl. Based on a comparable analysis of ratios, such as P/E, EV/Sales and EV/EBITDA, the price per share for Gokaldas ranged from Rs. 140 to Rs. 694. Based on industry multiples, average price for Gokaldas was Rs. 289.

Considering the fact that the current share price was approximately Rs. 220 and that the promoters were willing to hand over control to Blackstone (very rare in India where promoter families are very wary of giving up control), the promoters were asking for a price of Rs. 275 per share.

THE TERM SHEET

In this case, the term sheet was fairly simple. Blackstone would simply pay a price of Rs. 275 per share for 51% of the shares of Gokaldas from the promoters. Including the open offer for 20% of the stake, they paid Rs. 660 crore for the deal.

FINAL THOUGHTS

Amit was wondering whether this deal would go through. The Indian private equity market was hot and Gokaldas Exports could easily find another buyer if Blackstone did not act fast. At the same time, it was well known that much of Blackstone's success was owed to the fact that they almost never overpaid. Will the investment committee of Blackstone go ahead?

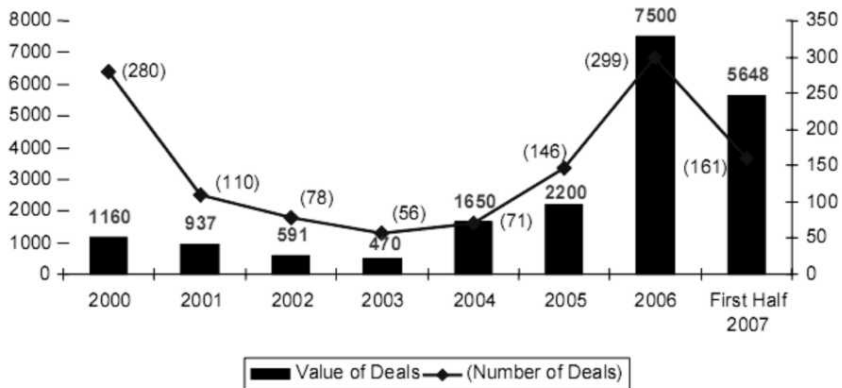
DISCUSSION QUESTIONS

1. Do you think the asking price of promoters is justified? What is valuation arrived at using the discounted cash flow method? What is the appropriateness of other venture capital method in the current situation?
2. What criterion does the Blackstone use in evaluating the investment opportunity?
3. What role does private equity play in the growth and development of companies

Exhibit I

Growth of PE/VC in India

Growth of PE/VC in India 2000 – 1H2007 (US\$ millions)



Source: Indian Venture Capital Association Industry Statistics Report, 2007

Exhibit II

Calculation of WACC

	Equity	Debt
Weight (W)	71.0%	29.0%
Cost after-tax (C)	14.08%	10.63%
W × C	9.99%	3.09%
 WACC	 13.08%	

CAPM

Cost of equity	14.08%
Rf	7.89%
Equity risk premium	6.19%
Beta	0.825
× Country premium	7.50%
Expected market return	15.39%
– Risk free rate	7.89%

Avg Share Price over 1.5 month

215

No. of Shares outstanding

34.4 mil

Market Cap

73960 lakhs

2nd April -29th June 2007

$$\bar{r}_a = r_f + \beta_a (\bar{r}_m - r_f)$$

Where:

r_f = Risk free rate

β_a = Beta of the security

\bar{r}_m = Expected market return

Exhibit III

Valuation using Free Cash Flow Method

Valuation date 02/08/07

Valuation Assumptions

WACC 13.08%

Terminal growth 3.34%

Domestic Sales 3.00%

Export Sales 4.00%

Terminal EBITDA margin 6.40%

Capex Rate 10.00%

Free Cash Flow (FCF)

INR m	2007	2008	2009	2010	2011	2012	TV
EBITDA	12,495	11,766	12,924	13,894	15,480	16,432	15,411
EBIT	9,998	7,993	5,761	728	-8,381	-10,376	-15,422
-Cash taxes on EBIT	771	416	-125	-1,213	-2,532	-3,258	-4,350
=NOPLAT	9,227	7,577	5,886	1,941	-5,849	-7,118	-11,072
+D&A	2,497	3,773	7,162	13,166	23,861	26,808	30,833
-Net capex	-7,144	-19,383	-34,700	-62,121	-18,535	-22,812	-28,077
+ Interest Expense	1,886	3,524	6,697	12,544	16,631	21,896	27,769
+ Taxes	771	416	-125	-1,213	-2,532	-3,258	-4,350
- Increase/+decrease in working capital	-9,066	-6,521	-7,816	-10,311	-12,455	-11,012	-2,841
= Free cash flow (FCF)	-1,829	-10,614	-22,896	-45,993	1,121	4,503	12,261
Undiscounted terminal EV	155,862						

Exhibit IV

Valuation using Comparable Analysis of Ratios

<i>Comparables</i>	<i>Gokaldas</i>	<i>KPR Mill</i>	<i>Page Industries</i>	<i>Zodiac Clothing</i>	<i>House of Pearl</i>
EPS	16.62	17.77	15.27	21.99	5.6
Market cap	684.04	471.6	529.81	443.01	370.41
Total Debt	302.71	311.17	25.32	29.07	0
EV	986.75	782.77	555.13	472.08	370.41
PBDIT (cr)	121.00	110.24	29.35	29.58	79.5(Est)
Sales (cr)	1050.75	421.45	141.65	218.82	914.1(Est)
Net Profit (cr)	70.28	75.52	17.03	14.09	10.67
EV/PBDIT	8.15	7.10	18.91	15.96	4.66
EV/Sales	0.94	1.86	3.92	2.16	0.41
P/E	11.98	7.04	31.11	24.09	33.92
Operating Margins	11.52%	26.16%	20.72%	13.52%	25.43%
NPM	6.69%	17.92%	12.02%	6.44%	7.78%
Interest Coverage Rate (EBITDA/Interest)	4.69	6.87	11.53	9.38	N/A
Debt/Equity	0.74	1.39	0.37	0.29	N/A
Comparable Price Using					
• (P/E)*EPS	244.99	143.97	636.13	492.64	693.66
• (EV/PBDIT)	244.99	213.32	568.22	479.45	139.97
• (EV/Sales)	244.99	484.54	1022.40	562.82	105.71
Price Range (Rs./Share)	140-694				
Using Industry Multiples (Rs. /Share)	289				

APPENDIX 1

Textile Industry

After more than 40 years of import quotas, the textile and clothing sector has become subject to the World Trade Organization (WTO) from January 1, 2005 with the removal of quotas. Protectionist measures against low-cost Asian textile/garment producers were in place since the 1950s, originating from various bilateral trade agreements that the US and various European countries signed with countries such as Japan, Hong Kong and India. Since 1974, the global trade in textile and garments had been governed by the rules of the Multi-Fibre Arrangement (MFA) that imposed quotas on exports of textiles and clothing. The aim behind quota restrictions was to protect the domestic textile/garment industries of rich industrialized countries.

Textiles and clothing are closely related, with textiles providing the major input to the clothing industry. International trade in the two sectors was hitherto regulated by the Agreement on Textiles and Clothing (ATC) at the multilateral level, with various bilateral and regional trade agreements linking the two sectors through rules of origin accompanying preferential market access.

Textiles constitute an important segment of global trade comprising six per cent of the world trade. The ATC called for a progressive phasing out of all the MFA restrictions and other discriminatory measures in a period of 10 years up to January 1, 2005. The MFA that allowed the US and Europe to negotiate bilateral quantitative restrictions with developing countries was a discriminatory trade practice. Hence, the developing nations pressed for stamping out the quota regime as a pre-condition to the formation of the WTO. With effect from January 1, 2005, quotas on textiles and clothing stand abolished.

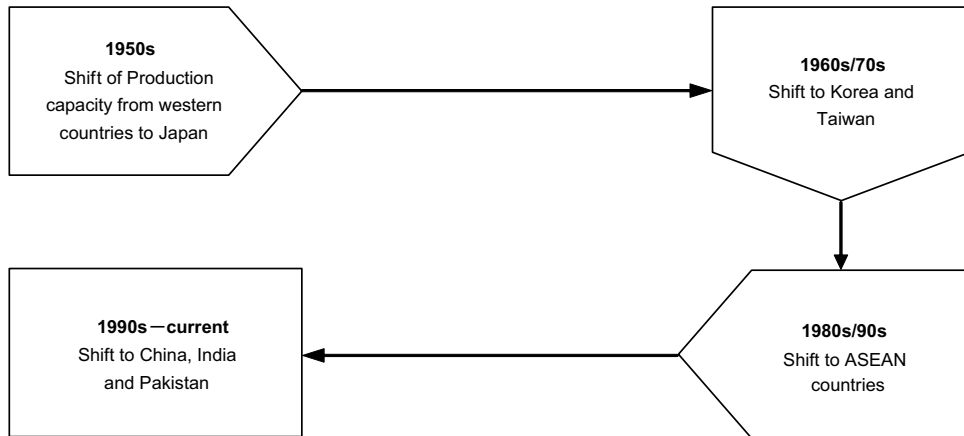
Apparel Industry

Apparel sector is structurally a labour-intensive, low wage industry with some differences across its market segments.

In the high-quality fashion market, the industry is characterized by modern technology, relatively well-paid workers and designers and a high degree of flexibility. The competitive advantage of firms in this market segment is related to the ability to produce designs that capture tastes and preferences, and even better—influence such tastes and preferences—in addition to cost effectiveness. The core functions of firms servicing this market segment are largely located in developed countries and often in limited geographical areas or clusters within these countries. However, this market segment has also seen a significant amount of relocation of production and outsourcing to lower-cost producers, often in geographical proximity to the major market.

The other major market segment is mass production of lower-quality and/or standard products such as T-shirts, uniforms, white underwear, etc. Manufacturers for this market segment are largely found in developing countries, often in export processing zones and/or under so-called outward processing agreements with major importers.

The apparel industry's reliance on labour cost is also evident from the fact that apparel manufacturing, on a global scale, has shifted its base several times over the last 50 years and concentrated to such countries/location that offers most competitive labour cost structure as given in the following diagram:



However, developing countries, such as China and India could not fully exploit the opportunity offered by their low domestic cost structure, because of quotas/restrictions imposed by developed countries. Share of developing countries in worldwide apparel trade is expected to rise with the removal of quota restriction on January 1, 2005.

Reasons for the relocation of global apparel industry

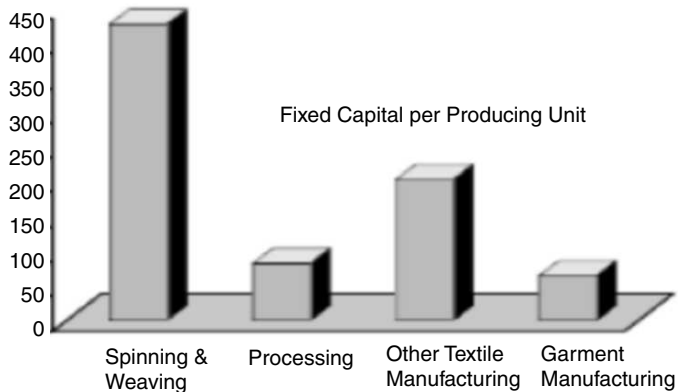
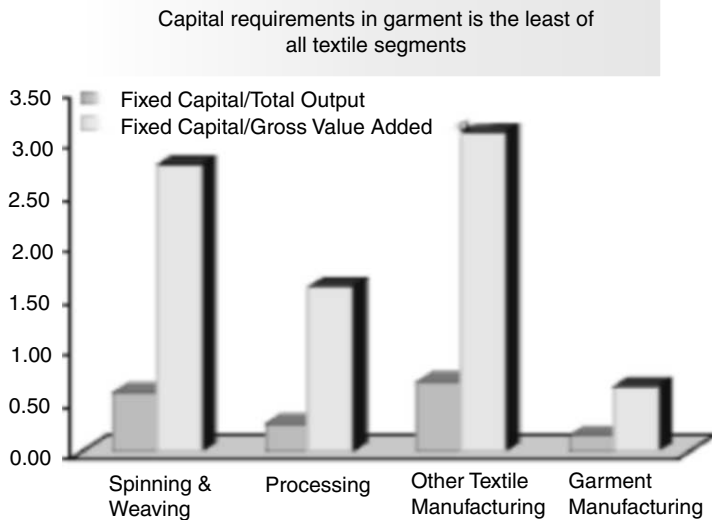
Developing countries always have an edge over developed countries in apparel/garment making because of the following reasons:

- Labour cost as a percentage of total cost is high for the textile value chain, with apparel manufacture being the most labour-intensive. This provides developing countries with an edge over developed countries because of their lower labour costs. The findings of a comparative study of labour cost as a percentage of total cost among various segments of the textile industry is given in the following:

<i>Various segments of textile industry</i>	<i>Labour cost as a percentage of total cost</i>
Spinning	30%
Weaving	39%
Knitting	35%
Apparel/garment making	69%

(Source: CII-Accenture report "Textile Industry: Road to Growth", November, 2001)

- Additionally, the clothing industry is not capital intensive. Traditionally, developing countries lag behind developed countries with respect to industrialization because of lack of capital that is not the case with the clothing industry. The findings of a comparative analysis of various segments of textile industry with respect to their capital requirement are given below.



... and value additions and margins are maximum

(Source: CII-Accenture report “Textile Industry: Road to Growth”, November, 2010)

Removal of Quotas in 2005

Protection of the textile and clothing sector has a long history in United States and Europe. In the 1950s, Japan, Hong Kong, China, India and Pakistan agreed to voluntary export restraints for cotton textile products to the United States. In 1962, a long-term agreement (LTA) regarding international trade in cotton textiles was signed under the auspices of the GATT (replacing a one-year short-term agreement). The LTA was renegotiated several times until it was replaced by the MFA that extended restrictions on trade to wool and man-made fibres in addition to cotton.

Since 1947, when the General Agreement on Tariff and Trade (GATT) was first signed, an increasing proportion of international trade was regulated by international agreements, designed to ensure countries could erect or maintain barriers to international trade only under mutually agreed terms.

Apparels/readymade garments were not included in GATT provisions. In 1974, the Multi-Fibre Agreement (MFA) was signed, without reference to GATT, essentially ratifying countries' right to impose quotas on textiles and apparel/readymade garment imports from each other. This was intended to be a temporary measure allowing developed countries time to restructure their apparel/readymade garments and textile industries before opening them up to competition from developing countries.

In practice, the MFA was frequently renewed. In 1994, GATT signatories signed the Agreement on Textiles and Clothing (ATC), committing to phasing out MFA and replacing it by the general systems for agreeing trade barriers and disputes that the GATT had laid down. Almost simultaneously, the GATT was replaced by the World Trade Organization (WTO).

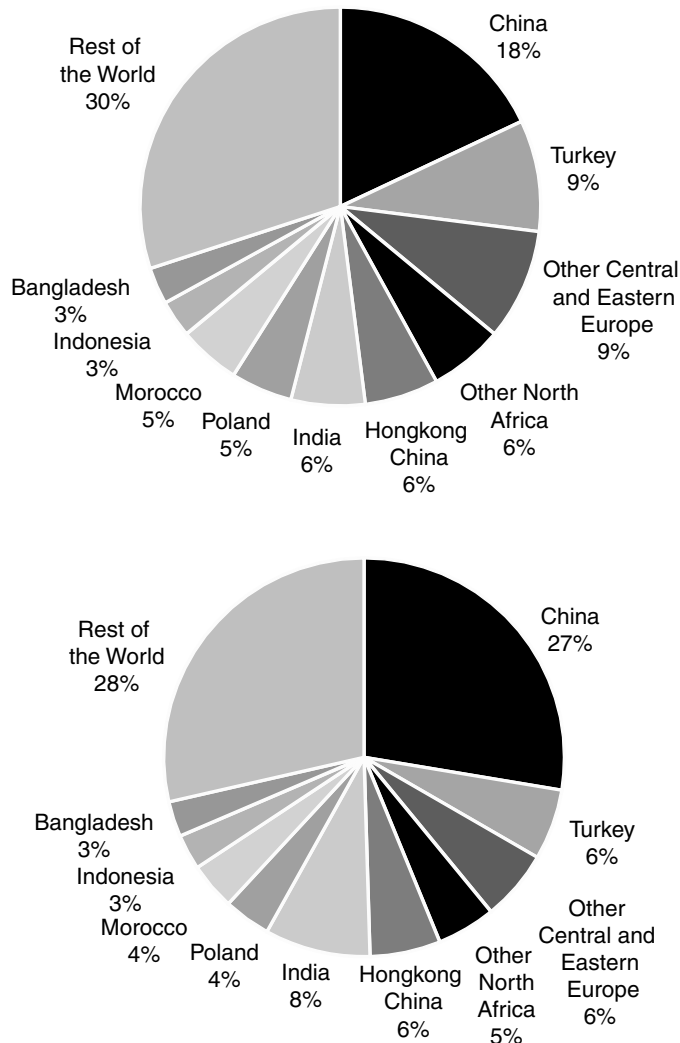
The most important underlying principles of the ATC are as follows:

- That quotas would be phased out to an agreed timetable (16% of imports quota-free by 1/1/95, a further 17% by 1/1/98, a further 18% by 1/1/02 and the remaining 49% by 1/1/05)
- There would be no extension date.
- The ATC would be binding only on trade between WTO member states.
- There would be no temporary provisions while the ATC was in force for monitoring progress and managing duties.

Accordingly, quota restrictions have been removed with effect from January 1, 2005. This removal of world trade quota restrictions is expected to bring a change in the global apparel trade. Productivity, labour costs, quality and creativity will determine which countries will eventually emerge as winners.

Trade flows in apparel after removal of quotas

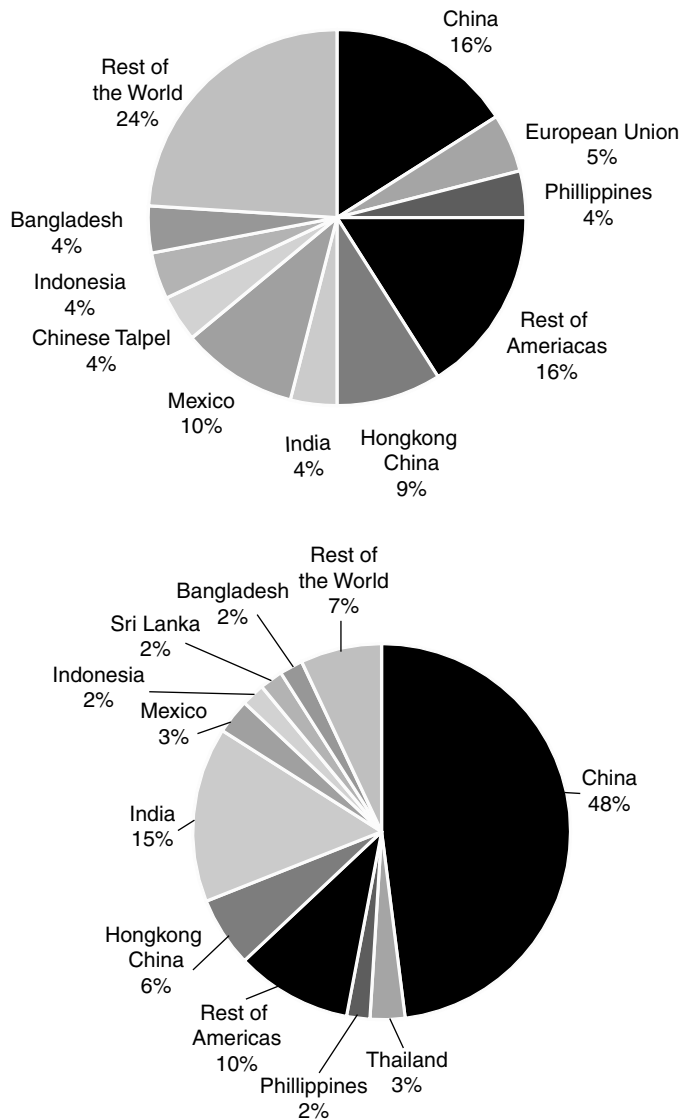
A discussion paper, The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing by Hildegunn Kyvik Nordås (WTO) estimates the likely changes in trade flows in apparel with the removal of quotas in 2005 that is likely to change the market shares of various countries in international trade as given below.



Market shares before and after quota elimination, clothing, EU

(Source: Staff of the WTO Secretariat)

Both India and China are likely to almost double their market share, and China is expected to emerge as the single largest exporter to the EU. All the countries listed above with quotas equivalent to an export tax of more than 5 per cent in absolute value are expected to gain market share, while Africa, the United States/Canada, Turkey, Central and Eastern European countries and richer Asian countries and territories such as Republic of Korea and Chinese Taipei are likely to lose market share.



Market shares before and after quota elimination, clothing, USA

(Source: Staff of the WTO Secretariat)

China and India combined are expected to take 65 per cent of the export market to the USA—with China expected to triple its market share and India’s market share likely to quadruple as per the Discussion Paper.

The above takes into account changes in relative prices, rendering the previously restricted low-cost producers more competitive and thus increasing their market share. The limits of such low-cost producers’ expansion in the model simulations are production capacity constraints

and the fact that increased demand for unskilled labour in textiles and clothing industries raises the wage rate and cost competitiveness is somewhat reduced as a result. The model simulations do not capture the changes in technology and possible increase in the relevance of time and distance as a trade barrier.

Therefore, the projected decline in the market share of Mexico and the rest of Latin America may be exaggerated in the model simulation. Nevertheless, it is expected that India and China will increase their world market share substantially in the textiles and clothing sector following the elimination of quotas as agreed under the ATC.

China is expected to gain market share significantly as has been experienced in categories that were opened up to China in the previous years. However, buyers would want to de-risk their procurement across geographies and would outsource their requirements to other countries also.

Though apparel exports have grown impressively in past few years, India is still a dwarf compared to other countries in global apparel export market. India seems poised to benefit the most after the dismantling of the MFA because of the following factors:

- **Design Skills** Consumer demand is relatively difficult to forecast and orders are usually placed in small lots according to seasonal sales trends. An ability to suggest design changes, a skilled workforce are needed for the successful manufacture of these garments. The focus on value-addition will also automatically ensure development and growth of upstream segments of the textile value chain. With the establishment of training institutions such as the National Institute of Fashion Technology (NIFT), many high-quality designers, who are able to create modern designs and interact with buyers, are emerging. This is a distinctive strength that Indian companies have not yet exploited.
- **Raw Material Advantage** India's position in the global market is strong, with a 3 per cent share of the global textile trade. In some segments, such as cotton textiles, India's share is even higher. India is the world's third-largest producer of cotton, second-largest exporter of cotton yarn, third-largest exporter of cotton fabric and fourth-largest exporter of synthetic fabric.
- **Skilled Labour** India already enjoys a significant competitive advantage in terms of labour cost per hour, over developed countries, such as the US and EU; newly-industrialized economies, such as Hong Kong, Taiwan, Singapore and nations, such as Mexico and China. India is rich in traditional workers adept at value-adding tasks, such as embroidery, mirror work, beading and at making complex garments.

OVERVIEW OF INDIAN TEXTILE INDUSTRY

The Indian Textile Industry is a vertically integrated industry that covers a large gamut of activities ranging from production of its own raw material namely, cotton, jute, silk and wool to providing to the consumers high value-added products such as fabrics and garments. India also produces large varieties of synthetic and manmade fibres such as filament and spun yarns from polyester, viscose, nylon and acrylic that are used to manufacture fabric and garments.

The textile sector plays a significant role in Indian economy by contributing to the Gross Domestic Product, generating employment and earning foreign exchange. An estimated 35 mil-

lion people are directly employed in the Indian Textile Industry that contributes to 4% of GDP and 20% of total export earnings. (Source: Ministry of Textiles Annual Report 2003–2004)

India is globally a significant player in the textile sector and is globally the

- Third largest producer of cotton and cellulose fibre/yarn.
- Second largest producer of cotton yarn.
- Largest producer of jute, second largest producer of silk.
- Fifth largest producer of synthetic fibre/yarn.

(Source: Wake up Call for India's Textile Industry, Report of Expert Committee on Textile Policy, ICAC)

Cotton is one of the major crops cultivated in India. India has the largest cotton acreage in the world and cotton is the dominant fibre in Indian Textile Industry. About 69% of the total yarn and about 43% of the total fabric produced in India was cotton in 2003–04. Almost all cotton used in India is grown locally and a tiny amount is imported. Cotton textiles account for two-thirds of India's textile exports.

(Source: Ministry of Textiles Website and Annual Report 2003–2004)

During the last five decades, the production of cotton in India increased from 30 lakh bales of 170 kg each in 1950–51 to an estimated 67.5 lakh bales (170 kg each) in 2003–04. There has also been a rise in area under cultivation from 58.9 lakh hectares in 1950–51 to an estimated 76.7 lakh hectares in 2003–04.

(Source: Ministry of Textiles Annual Report 2003–2004)

The man-made fibre and yarn industry in India comprises fibre and filament yarn manufacturing units of cellulosic and non-cellulosic origin and accounts for about 39% of the fibre consumption in the textile sector.

(Source: Ministry of Textiles Annual Report 2003–2004)

INDIA'S TEXTILE EXPORTS

India's textile exports accounted for 20% of its exports at US\$ 13 billion in FY 2004. Apparel exports accounted for US\$ 6 billion within the overall textile exports.

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Readymade Garments	3676	3753	3876	4365	4765	5570	4994	5389	6048
Cotton Textiles	2638	3565	3485	2821	3107	3548	3044	3497	3478
Man-made Textiles	772	722	823	720	855	1095	1084	1364	1805
Others	1442	1515	1613	1643	1781	1885	1577	1833	1741
Total	8527	9555	9797	9548	10509	12098	10699	12082	13072

Figures in USD billion

Source: Foreign Trade Statistics of India (PC & C), DGCIS, Kolkata

India's textile exports are expected to grow from the current levels to US\$ 50 billion by 2010, consequent to the quota removal. Apparel is expected to be the key export driver, and is expected to reach US\$ 25 billion by 2010 (Source: New Textile Policy, 2000, Government of India).

According to the Vision Statement of ICMF for the textile industry, the apparel segment of the value chain will drive the textile industry growth in India. This sector provides the highest value addition for India's exports. This segment of the value chain is labour-intensive and India's competitive advantage—labour availability at low cost—is a core strength that can drive success in this segment.

India thus has the potential to build a large-scale sourcing base. To achieve this, apparel companies need to choose between 'operational excellence' and 'design and innovation'. Operational excellence-led companies will compete on the basis of lower costs and will be distinctive in their economies of scale, sourcing of fabrics and labour productivity. Best practices in operations and quality enhancement measures will ensure their success. Players competing through design and innovation will be characterized by innovative fabric R&D, close relationships with supplier mills, relationships with retailers' design departments, a good understanding of fashion trends and an ability to offer a range of readymade designs to customers.

- | | |
|----------------------|---|
| Strengths | <ul style="list-style-type: none"> • Strong cotton base • Strong entrepreneurial class • Flexibility in production of small order lots • Ability to handle value additions, embellishments, etc. • Adequate labour supply at relatively low wages • Good "cultural" comfort with US and Europe |
| Weaknesses | <ul style="list-style-type: none"> • Poor work practices resulting in higher than normal labour cost component in many staple garments, in spite of low labour costs • Rigid government policies, specially labour policy • Too much emphasis on cotton, synthetic fibre base not equally developed • Fabric/processing still to gear up to meet international standards • Highly fragmented, unit production capacities very low by international standards |
| Opportunities | <ul style="list-style-type: none"> • Quotas may carry on in China after 2005 • Good political equation with the US and EU |
| Threats | <ul style="list-style-type: none"> • Trade blocs and partnerships at the exclusion of India • Location disadvantage—long transit times to key markets • Pricing pressure, following opening up of quotas • Enhanced competition from other countries similarly constrained by quotas |

India's performance in apparel/garment export market

India's garment exports have been growing at a CAGR of 12.89% in last decade. Of the total apparel exports in the year 2004, quota exports (exports of products covered under quotas by the importing countries) accounted for about Rs. 21,900 cr. Non-quota exports (products that could be exported freely without any quota restrictions) accounted for 27% of India's apparel exports at Rs. 8,100 cr.

<i>Year</i>	<i>Quota Exports</i>	<i>Non-Quota Exports</i>	<i>Total Apparel Exports</i>
1995	NA	NA	14,905
2000	19,710	6,864	26,575
2001	19,070	6,014	25,084
2002	20,458	7,486	27,943
2003	21,848	8,077	29,925
2004	21,900	8,100	30,000

India currently exports more than one hundred garment product-categories, though these mainly fall within the semi-fashion, mid-price casual wear segment, particularly T-shirts, men's shirts, ladies' blouses, dresses and skirts. Cotton apparel exports dominate, contributing nearly 76% by value in 2003–04; while synthetic constituted for about 12%, and wool, silk, linen and other fibres for the balance apparel exported (Source: Foreign Trade Statistics of India (PC&C), DGCIS, Kolkata).

Characteristics of Indian Apparel Industry

Structurally, clothing industry is one of the most fragmented sectors of the Indian textile industry, due to historical government policies that favoured the small scale. The clothing industry comprises manufacturers of readymade apparel making for either the domestic or export markets or, in certain cases, both. The constituents of this segment are very diverse in terms of their size, production facility, the type of apparel manufactured, the quality of output, fabric requirement, price sensitivity, and so on.

The segment is extremely fragmented, with an estimated 27,000 domestic manufacturers, 48,000 fabricators (job contractors) and around 1000 manufacturer-exporters. Ownership of the firms in the apparel industry, are by and large either proprietorship/partnership.

Typically, a so-called 'large' apparel/readymade garment maker, producing apparel/readymade garment under his own brand and marketing it regionally or nationally, has a factory of about 20–25 machines, an annual sales turnover of less than Rs. 1 crore and a total consumption of various fabrics of 1–1.2 lakh m per year.

There are few companies with production capacities of over 100 sewing machines. Even in such cases, the machines are installed in different areas/sheds, and are often under separate company names.

Break up of Garment Exporters by size

Low Labour Cost

Indian clothing industry is internationally cost competitive as cost of labour in India is cheap compared to other countries. A comparative analysis of India and other countries with respect to labour cost as a percentage of total manufacturing cost of apparel/garment making is given in the following:

The competitiveness of the Indian clothing industry has attracted a number of international buyers and buying houses to India, especially with the removal of quantitative restrictions.

<i>Country</i>	<i>Labour cost as a percentage of total manufacturing cost of apparel/garment making</i>
Germany	69%
Singapore	55%
S.Korea	51%
Taiwan	48%
Malaysia	44%
Hongkong	37%
Phillipines	31%
Turkey	29%
Thailand	22%
Mexico	19%
China	10%
India	6%
Indonesia	5%

Source: CII-Accenture report 'Textile Industry: Road to Growth', November, 2001

Low Productivity

However, labour productivity of Indian clothing industry is low compared to other countries that do to an extent erode the advantage of cheap labour. Findings of comparative analysis of productivity levels of Indian apparel/garment making units vis-à-vis their counterparts in other countries are given in the following:

	<i>No. of pieces/machine/day</i>				
	<i>Ladies Blouses</i>	<i>Gents Shirts</i>	<i>Ladies Dresses</i>	<i>Ladies Skirts</i>	<i>Trousers</i>
Hongkong	20.6	20.9	20.2	19.3	19.3
Taiwan	18.9	18.2	12.4	16.6	16.1
Thailand	17.0	19.8	12.2	20.5	13.1
S.Korea	14.6	17.4	8.8	17.5	15.6
China	10.9	14.0	7.8	13.0	6.7
India	10.2	9.1	6.3	9.6	6.8
Difference between the productivity levels of India and the best	102%	130%	221%	114%	184%

Source: CII-Accenture report 'Textile Industry: Road to Growth', November, 2001

Policy Initiatives

Over the past five years, the Indian government has removed many of the barriers hindering the sector's growth. But to fulfil the potential of the country's apparel-export industry, the government needs to eliminate the remaining restrictions that perpetuate the lack of scale and poor operational and organizational performance of local manufacturers and that discourage investment, particularly foreign direct investment.

- Regulations still protect small-scale producers in a number of ways. While the production of readymade garments is no longer reserved for small-scale manufacturers, a few product markets, such as hosiery, still are.
- In addition, Indian manufacturers often choose to set up several small plants, instead of a single big one, to take advantage of labour laws. As a result, Indian apparel/garment making units typically have less number of machines than its counterparts in other countries.

In order to encourage upgradation of textiles sector and to give a fillip to exports of textile products, some of the important initiatives taken by the Government of India are as follows:

- (i) **Announcement of New Textile Policy:** One of the main objectives of the New Textile Policy (NTxP-2000) announced in November 2000 is to facilitate the textile industry to attain and sustain a pre-eminent global standing in the manufacture and export of clothing. The policy endeavours to achieve the target of textile and apparel exports from the present level to US \$ 50 billion by 2010, of which the share of garments will be US \$ 25 billion. Subsequent to the announcement of NTxP-2000, woven segment of readymade garment sector has been de-reserved from SSI and the announcement has been made for de-reservation of knitwear from SSI.
- (ii) **Technology Upgradation Fund Scheme:** In view of the urgent need for stepping up the process of modernization and technology upgradation of the textile industry in India, Ministry of Textiles launched a Technology Upgradation Fund Scheme (TUFS) for the textile and jute industry for a five years time frame w.e.f. 01.04.1999 to 31.3.2004, providing for 5% interest reimbursement in respect of loans availed thereunder from the concerned financial institutions for investments in benchmarked technology for the sectors of the Indian textile industries specified thereunder.
- (iii) **Liberalization of FDI Policy:** Government has allowed foreign equity participation up to 100%, through automatic route, in the textile sector with the only exception in knitwear/knitting sector that is still reserved for SSI. SSI investment limit for the knitwear/knitting sector has been increased from Rs. 1 crore to Rs. 5 crore.
- (iv) **Export Promotion Capital Goods (EPCG) Scheme:** The scheme facilitates import of capital goods at 5% concessional rate of duty with appropriate export obligation. Import of second-hand capital goods is allowed under the EXIM Policy as announced on 31.03.2003.
- (v) **Advance Licensing Scheme:** With a view to facilitating exports and to access duty-free inputs under the scheme, standard input-output norms for about 300 textiles and clothing export products have been prescribed and this scheme remained under operation.
- (vi) **Duty Exemption Pass Book (DEPB) Scheme:** DEPB credit rates have been prescribed for textiles and clothing products.

- (vii) Duty Drawback Scheme: The exporters are allowed refund of the excise and import duty suffered on raw materials under the scheme so as to make the products more competitive in the international market.
- (viii) Human Resource Development: Attention has also been paid to Human Resource Development in the textile sector. National Institute of Fashion Technology (NIFT) that is imparting training to Fashion Designers and Fashion Technologists to cater to the human resource requirements of garment industry has 7 branches at Delhi, Mumbai, Calcutta, Hyderabad, Bangalore, Chennai and Gandhinagar. Ministry of Textiles has established a Nodal Centre for Upgradation of Textile Education at the Indian Institute of Technology, Delhi with funding from the Ministry of Textiles.
- (xi) Construction of Apparel International Mart: Apparel Export Promotion Council is constructing an Apparel International Mart at Gurgaon with assistance from Government.
- (x) Setting up of modern laboratories: The Ministry of Textiles has assisted the Textile Committee in setting up of modern textile laboratories to ensure that the textiles exported from the country meet all international environmental standards.
- (xi) Apparel Park for Exports Scheme: A centrally sponsored scheme titled “Apparel Parks for Exports Scheme” has been launched. The scheme is intended to impart focused thrust to setting up of apparel manufacturing units of international standards at potential growth centres and to give fillip to exports. Since the inception of scheme in March 2002, eleven Project Proposals has been sanctioned for setting up Apparel Parks at Tronica City and Kanpur (U.P.), Surat (Gujarat), Thiruvananthapuram (Kerala), Visakhapatnam (Andhra Pradesh), Ludhiana (Punjab), Bangalore (Karnataka), Tirupur and Kanchipuram (Tamil Nadu), SEZ, Indore (Madhya Pradesh) and Mahal (Jaipur, Rajasthan).
- (xii) Textile Centres Infrastructure Development Scheme (TCIDS): Development of infrastructure facilities at predominantly textile/apparel sector areas is one of the thrust areas of NTxP-2000. For attaining this objective, a new scheme (TCIDS) has been launched for upgrading infrastructure facilities.

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SUPALAI PUBLIC COMPANY LIMITED¹

Supalai Public Company Limited (Supalai Pcl) is one of the biggest residential property/real estate development companies in Thailand. Founded by Prateep Tangmatitham in 1989, it became a listed company in 1993. Though a public company, Supalai is closely controlled by the founder. As of September 30, 2009, it had 1,716 million Baht (equivalent to US \$ 53 million) of registered capital, total assets of 13,928 million Baht (US \$430 million), total revenue of 6,957 million Baht (US \$215 million) and a net income of 1,814 million Baht (US \$56 million).

Real estate is a capital-intensive business. However, real estate projects have short lives, most of them getting completed in three years. Supalai has to develop and sell properties on a regular basis for its growth and thus make capital expenditure on a continuous basis, year-after-year. It practises a capital budgeting process that is mostly informal and is driven by its strategic planning, functional structure and centralized, owner-driven decision-making. The owner has now started contemplating the delegation of decision-making for projects, but he is moving slowly in this direction. There is a need for him to ensure that the current capital budgeting process is comprehensive and does not have serious flaws. Also, he is concerned about how to effectively link the capital budgeting process with strategic planning and develop appropriate control and performance evaluation system for long-term profitability and sustainability of the business.

BACKGROUND OF THE COMPANY

Supalai Pcl was incorporated in June 1989 with a registered capital of 100 million Baht (US \$308) for developing both residential and commercial properties. In Thailand, real estate development can be classified as housing and condominiums for residential estates. Housing projects can include single houses, townhouses, duplex houses or a combination. Condominiums can be either high-rise or low-rise. The first project of Supalai, launched in October 1989, was a single-house project. The first condominium project, started in 1990, consisted of high-rise buildings.

Supalai means 'good house' in Thai. The company is committed to providing good residences to home buyers. It has consistently expanded since its inception to become one of

the most outstanding players in the industry; it has also invested in China. The rapid expansion continued till 1997, when it became one of the victims of the great economic crisis that forced the company to join a debt restructuring programme with the Bank of Thailand. At that time, the company had a total principal debt of 4,856 million Baht (US \$150 million) with an accrued interest of 1,251 million Baht (US \$39 million). When the lenders called back the loans, the company could not repay; it finally became delinquent, and its liquidity and trust soon vanished. Indonesia and South Korea experienced the effect later. Supalai was also impacted by its US dollar loans as the US dollar doubled in value against the Thai Baht. It suffered a huge foreign exchange loss. The company had to enter a debt negotiation programme with lenders. It had to delay payments, stop overseas investment, reduce the number of projects in Thailand and reduce operational costs including voluntary reduction in the executives' salary, etc. The company could successfully get out of the trouble through an elaborate plan in consultation with and with the cooperation of customers, financial institutions, sub-contractors and employees. It could service all debts under the debt negotiation programme and has now emerged as one of the biggest companies in the industry, especially in 2009, which was a golden year for the company. According to the owner–manager, the 2009 sales of 12,200 million Baht (US \$377 million) was due to the fact that in the last quarter of the year, the firm opened four projects and customers made reservations and deposits that were well beyond expectations.

The success of the firm can be attributed to the vision and dedication of Prateep Tangmatitham—the owner–manager—and his experienced and capable management team. The owner–manager has lived with property development, construction materials and construction business all his life and hence is able to see through the entire business cycle from the behaviour of customers, economic trends, and different situations. For example, Supalai sets up projects in the inner city that makes their housing units sell well even in times of rising gasoline prices. The owner–manager, based on his long experience, believes that people like to buy houses when the gasoline prices rise. They may fear that if they delay buying, the prices of homes would increase. Supalai also sets up its projects in response to customers' needs; it thus focuses more on the development of condominiums along the line of the skytrain, the banks of the Chao Praya River and the downtown of the city. Unlike Supalai, most real estate firms in Thailand follow fixed patterns of housing projects, such as horizontal, vertical and low rise buildings; large projects are usually meant for remote areas; alternatively, too many horizontal projects are put up at the same time making it difficult for them to control costs.

BACKGROUND OF THE OWNER–MANAGER

Prateep Tangmatitham—the founder and the owner–manager of the company—is a respected man not only within the company but also in the entire real estate and property development sector in Thailand. He has been contributing to the growth of his company and the entire industry, and is regarded as one of the most outstanding figures responsible for the boom in the condominium sector of Thailand. In the past, the condominium was composed of more

speculators than real buyers. Once the speculators went bust or could not sell their occupied units to real buyers, their units would be empty and without maintenance. This made condominiums look like haunted places. The developers would not take the responsibility as they would have either already sold them off or were financially incapable to help. Tangmatitham invited several well-known figures from the industry and the related industries to establish a commercial condominium association in 1984 for saving the troubled customers from the hands of the malicious developers and ensuring the implementation of standard practices, rules and regulations for their protection. Now, after his initiative and efforts, condominiums are one of the most popular real estate purchases in Thailand.

Prateep Tangmatitham was born in November 28, 1948. He has a Bachelor's Degree in Architecture from the Chulalongkorn University and a master's Degree in Architecture, (Hons.) (Housing) from the University of Illinois at Urbana-Champaign, USA. The Tangmatitham family has been in the construction and property development industry since Prateep's father's time. Prateep helped his father in selling construction materials, first as a Sales Manager and then as the General Manager, until he could save enough capital to open his own shop—Gian Tang—for selling construction materials. His father had three sons and one daughter, all of whom were acquainted with the construction and property development business from their childhood. The eldest son established and owned M K Real Estate Development Pcl. Prateep, the second son, established and owned Supalai Pcl. The daughter owned a manufacturing firm for PVC carpets under the brand name, Durafloor.

The youngest son, with a Ph.D (Finance) from USA, has been an executive in many companies belonging to the family members, and is also involved in research on real estate and construction business.

Prateep's inclination towards drawing motivated him to further his study in Architecture at the Chulalongkorn University. While pursuing his study, he also helped his elder brother by taking up drawing and designing assignments. After completing his graduation, he worked in several architectural firms and even obtained overseas experience in various styles of designing. He decided to go to the US for pursuing higher studies. For this, while he took some monetary help from his parents, he could manage the remaining funds by taking up drawing jobs and later by earning a scholarship from the university. In the US, he chose to get trained in the field of housing as he was inspired by the first award that he had received in housing design while working in Thailand.

After completing his study with a first class honours Master's degree, he came back to Thailand and established his own architectural firm. Not long after that, his elder brother asked him to join him for property development. Both of them jointly set up a firm to develop the housing estate business which later became M K Real Estate Development Plc. Prateep was responsible for architectural design. During his tenure in this firm, he received fame in many areas. One condominium project particularly had a big success and got the best marketing award. He was considered an exemplary father in the real estate industry; he was also nominated for the young Marketer Award and Young Entrepreneur Award.

After collaborating with his elder brother for many years, Prateep moved out of M K Real Estate Development Pcl in 1989 to establish his own business, Supalai pcl. He had joined his brother with the hope that he would get an opportunity to work on his own ideas in his own style.

Although it was good to work with his elder brother, at times there were conflicts of ideas as well as in the style of doing business. According to him, his elder brother was too conservative. For example, Prateep had floated the idea of condominiums; but his elder brother feared failure and hence approved the construction of only 17 floors against the proposal of 20 floors. He was always being stopped from trying new things. Under these circumstances, his elder brother suggested that he could set up his own firm for carrying out his own business ideas aligned with his own style and preferences. While Prateep does not cite this as the main cause for starting Supalai, it must have surely helped in firming up his decision. The main motivation for starting Supalai was his artistic temperament combined with his specialization in architecture and property development. He loved drawing, developing housing projects, generating innovative ideas, reading books on subjects such as principles of Gandhi, Confucius, and Lao ji, trying new things and collecting models of outstanding world buildings and following the ethics of hedonism.

NATURE OF THE REAL ESTATE BUSINESS

The real estate business has been considered as one of the main drivers of the Thai economy. The business is composed of several segments, such as commercial building for offices and car parking, retail businesses, departmental stores, shopping complexes (including departmental stores, retail, wholesale and hotel), housing projects, residential condominium, both lowrise and high-rise, industrial estates, hotel and resort development, entertainment complex development, golf course development, land development—both in Bangkok and upcountry. According to the research of the Agency for Real Estate Affairs, in 2007, the real estate market in Bangkok and its vicinity had projects totalling 83,832 units valued at 208,313 million Baht (US \$6,444 million) Besides, the business has the chain effect upon other upstream, downstream and even complementary businesses, such as construction materials, construction businesses, contractors and subcontractors, engineering and architectural firms, land acquisition and related activities such as land improvement or land survey, real estate agencies and brokers, banking and financial institutions, utility industry, fuel suppliers, retailers and wholesalers.

The real estate market has some unique characteristics:

- Real estate is an immovable asset. Therefore, location is one of the key factors for determining price. Even the different sides of the same road or the same river can have prices varying by double, triple or even more.
- The holding of real estate needs a title deed that will declare who the owner is. In Thailand, there are many types of title deeds whereby different types could mean different prices.
- Real estate is deemed to be one of the most important assets for people.

- The real estate market condition varies with the economic and political situation of the country.
- It is sort of a perfect market, there being no dominating firm in the market. From the data of AREA (Agency for Real Estate Appraisal), generally the market leader occupies a maximum of 6.5 per cent of the market share.
- Real estate reflects the efficiency of land allocation among native people. If land ownership is concentrated and owned by only a few groups of people, it would indicate the problem of resource allocation in the country. In this regard, property development can help manage and improve the allocation of land ownership. Without this business sector, many individuals may not afford to buy and own a large land area, which only the rich can afford.
- Real estate development is mainly meant for native people. The permission to let foreigners own and develop real estate is still very limited. Thus, the development projects must appropriately respond to the needs of the natives.
- The real estate market has a life cycle: boom, full blown growth, decline and bust. As is generally noticed, the life cycle takes approximately 10 years to get completed.

COMPANY'S STRUCTURE AND PERFORMANCE

Supalai has divided its organization into three main groups according to their areas of responsibilities:

- **Marketing, Sales and Business Development:** This group is responsible for marketing research, feasibility study, market and customer survey, marketing and sales planning, customer relations, marketing and sales events and other related duties. The main goal is to optimize sales volume and new opportunities
- **Building and Construction:** This group is responsible for cost estimation, construction diagram scheduling, construction site management, sub-contractor management and coordination with government agencies supervising construction works. This part is composed of a low-rise building department—single or duplex or a combination and high-rise building department—condominium or office building. The main objective is to complete construction work within the scheduled timeframe.
- **Back-office Operation:** This group is responsible for accounting management, financial management, taxation, investor relations, office administration, purchasing, legal, human resources management and land acquisition. Its main goal is to support the above two groups for enabling them to do their work effectively and efficiently, to manage the budget as pre-determined and to manage the logistic work, such as delivery of construction materials and subcontractors as needed by the building and construction group.

Table 1 provides financial data and ratios of the company. In 2008, the company had 6,241 million Baht (US \$193 million) of revenue from the sales of real estate which was a 26 per cent

increase from the previous year. The net profit was 1,087 million Baht (US \$34 million), which was a 31 per cent increase from the previous year. It managed and controlled the selling and administrative expenses better, by reducing them by 6 per cent from the previous year. Apart from the financial success, the company has received many awards, such as ‘Good Property Developer’ from the office of Customer Protection and ‘Excellent Energy Conservation House’ from the Ministry of Energy.

Corporate Strategic Plan

Supalai, in spite of being a listed public company, has still been mainly owned and driven by its founder. Under the direction and guidance of the owner – manager, the company has developed a long-term corporate strategic plan (Table 2) that has already been delivered to all executives and staff in the firm and to the public for clear understanding about the direction and goals of the company.

The long-term strategic plan of Supalai is meant to be executed over several years, but the company looks at the plan every years and pursues the following processes:

- By October or November of each year, there is an executive meeting to discuss whether the plan needs any revision or correction. The executives present in the meeting are the Department Heads, Assistant Managing Director, Deputy Managing Director, Managing Director, and the CEO and Chairman.
- The following significant issues are seriously discussed in the meeting:
 - Real estate market overview
 - Market direction
 - Customer preferences and needs regarding location, type of housing, infrastructure, etc.
 - Competitive situation
 - Change in government rules and regulations, such as city planning customer protection regulations, changes in mortgage land fees and land transfer fees, property tax, rules over civil construction, zoning and laws of environmental protection.
 - Situation in banking and financial institutions
 - General current economic conditions
 - Direction of city expansion.
- Gather information for discussion from internal and external sources. The Business Development Department is responsible for documenting internal information through internal database, customer surveys conducted on a monthly basis, and internal desk research. Apart from these internal source, the firm also buys information from external agencies, such as the AREA, which is the biggest real estate research agency in Thailand.

- The meeting for discussing the long-term plan takes one or two sessions, and then any suggestion, revision or correction in the plan is forwarded to the Board of Directors for final approval.

The corporate plan of the company forms the basis for the company's capital budgeting projects. The company does not have a written manual for its capital budgeting process; it draws from the interviews with the owner– manager, top management and a number of other executives as well as from certain capital budgeting meetings.

Capital Budgeting Process

Capital budgeting is vital for property development firms as their success depends on the property development projects undertaken by them. Each project has a short life; so real-estate firms have to keep innovating and building projects on a continuous basis. It might not be wrong to say that new project development is like developing a new venture or a new company since almost all the factors in one project are different from that of the other. The property development projects must be in line with the long-range goals to bring all variables and factors into consideration for optimizing the firms' value. Thus, the success of the real estate or property development firms has been traditionally viewed in terms of the effective linkage between capital budgeting process and corporate planning. The application of the theoretical model to real-life situations in the real estate business is a challenging task. The realistic evaluation of the projects will be determined not only by the capital budgeting process practiced, but also by the attitudes and preferences of the top management.

Supalai has no formal written manual for capital budgeting. According to a finance executive and a construction and building executive, the company has only an operations manual as per ISO 9001:2000 for the housing and condominium business. A construction and building executive stated, "The housing and condominium construction that the company has been undertaking is so repetitive that all staff members know very well how to go about completing the project as per the blueprint. The construction is the same everywhere." All the staff members know the capital investment process that is followed by the company.

During the last five years, Supalai has spent on an average 5,000 million Baht (US \$155 million) a year as capital expenditure. According to the CFO, the firm has not been able to spend the whole of the capital budget in most of the years; approximately 70–80 per cent of the budget is generally used. The under-utilization of capital budget is caused by slow progress of some projects and/or the cost of land and construction turning out to be lower than estimated. Supalai's strategy is to have a sustainable growth that is defined as 'above industry average growth.' For 2009 and 2010, the firm has set up a goal that will increase the utilization of capital budget to 10,000 million Baht (US \$309 million). The company had also targeted a 10,000 million Baht (US \$ 309 million) revenue in 2009, particularly to coincide with its 20th anniversary. It still focuses on its core business, viz. developing residential property and office buildings in major cities, the two areas in which it has both experience and expertise.

Supalai considers any expenditure on assets exceeding 2,000 Baht as capital expenditure for accounting purposes. However, the capital expenditures that have to follow the prescribed process and need the Board of Directors' approval are expenditures on property development. Expenditures on major changes in IT system are also treated the same way as property development expenditures. The company has the following procedure for capital expenditure on land acquisition and project development:

- The Land Acquisition Department looks out for land from anyone who proposes to sell provided it is commercially viable and is in compliance with the company's policy. The Department is assigned to report directly to Mr. Prateep Tangamatitham, who is the Chairman and CEO of the company.
- The decision to acquire any land in the CBD (central business district) or in attractive locations, such as on the banks of the Chaopraya River, or near a skytrain station with a reasonable price would need prompt action; otherwise, it would lose a good business opportunity. In such cases, the Chairman and CEO of the company quickly approves the business transaction and gets ratification from the Board of Directors later.
- The Chairman and CEO may seek the opinion of the Business Development Department for ideas of project development or he may have his own ideas that he may propose to the Board of Directors for approval.
- Whenever any land in hand is scheduled for development, the Business Development Department prepares pre-feasibility study for the consideration of the Executive Committee (ExCom) composed of the Chairman, Vice Chairman, Managing Director, Assistant Managing Director: Low-Rise (horizontal), Assistant Managing Director: High-Rise (vertical) and Assistant Managing Director: Finance and Administration. The pre-feasibility study indicates land price, land area, location, proposed type of development, marketability and compliance requirements for construction, duration of construction, sales until completion and estimated return. Then if the ExCom agrees, the proposal goes to the Board of Directors for approval.
- After being approved by the Board of Directors, the Business Development Department coordinates with Building and Construction, Sales and Marketing, Finance and Purchase Departments for appropriate action as per each one's responsibility, such as Finance Department for preparing documents to borrow money from banks, Construction Department for staff and site preparation, Purchase Department for construction materials and sub-contractor procurement, Legal Department for drafting of any contract, and Sales and Marketing Department for sales planning and marketing campaign and other related activities.
- Once approved, the Chairman and CEO assigns the project to the Building and Construction Departments—Low-rise or High-rise—to oversee the construction work.
- The company has a policy of outsourcing all construction work to sub-contractors. It does only construction management and control, the reason being that it does not

want to have cost overruns and extension of construction periods; it is easier to manage sub-contractors in terms of cost and time. For high-rise construction projects that are sophisticated or unfamiliar to the company, construction consultants are hired.

- The ongoing projects are reviewed through project-monitoring meetings on site, at the executive committee meetings, and at the Board of Directors' level. The review is done against the budget estimation on proposal, percentage of completion, compliance with laws and regulations, optional solutions to problems (if any), pre-sales activity, sales bookings, deposit payments, installment payments, ownership transfers, effectiveness in servicing customers and in handling customer complaints.

Unlike many other firms, Supalai does not keep many pieces of land as land bank; it has been running at full 'production capacity' in terms of utilization of the purchased land. The company has a policy of developing a piece of land within one year from the time of acquisition. According to the company's financial statement in 2008, land held for development is recorded as only 170 million Baht (US \$ 5 million) or 1.3 per cent of the total assets.

The company has never formally prescribed in writing the pre-determined criteria for making investments. However, corporate culture regarding the capital budgeting process has for a long time been so well-embedded that those involved in the property development projects state that all projects of Supalai must have certain common characteristics as follows:

- Land price must be appropriately fixed so that the company gets a 30–35 per cent gross margin after development.
- Proposed project must be in 'medium to high' market position.
- Size of land and investment value must not be very different from the past.
- Project location must be in Bangkok or a big city like Phuket.
- The company should not do construction itself but use the services of sub-contractors who have been doing business with the company for a long time.
- Construction department should be given the responsibility for managing construction projects on time. Procurement of the construction materials and engaging sub-contractors will be the duty and responsibility of the Head Office.
- Type of projects horizontal or vertical, size of projects, design and style of projects and other key elements of the projects, such as source of funds and construction schedule must be agreed upon by the owner–manager before the formal feasibility report is prepared and forwarded in the normal chain of command for the formal approval by the Board of Directors.

Investment Opportunity Identification

The Executive Committee meetings are held on a weekly basis to identify investment opportunities and discuss other managerial activities and decisions. Issues relating to unused land and their development opportunities and potentials are usually raised at these meetings. The Chairman, an active player in these meetings, gives guidance and his views and recommendations

are open for discussion. However, according to some senior executives, while discussion is always welcome, only the risk factors and risk-prevention ideas are generally recognized. The investment development ideas usually come from the Chairman and CEO—his experience, internal management's experience, internal database and external sources, such as news from many real estate associations in Thailand or commercially available business research information from professional research firms are the major sources of ideas. Since marketing research is important for capturing the market trends and the competitive situations, the company has made the Business Development Department responsible for doing research, both desk and field. Field research is focused on customer preferences in housing and condominium styles, price levels, design, accessories, location, premium types, preference communication channel for company news and information, etc. On a regular basis, when customers visit the company's housing project sites or its website, they will be asked to fill in a questionnaire. Alternatively, the Department conducts direct random surveys on a monthly basis. Besides, the firm uses external research. It is hard to tell whether most of the ideas for investment come from internal or external source. The top three executives of the company play vital roles in many real estate associations—e.g., as members or chairmen of architectural associations, housing estate associations and condominium associations—in which information is shared among the top-notch people from the industry. According to the Chairman and CEO of the company, most ideas come from the meetings of these associations.

Cash Flow Forecasts and Evaluation

The Business Development Department is responsible for forecasting cash flow in terms of sales estimation by home-type and style, number of units on each floor in the case of high rise buildings, cash payment from the date of booking, date of contract, monthly instalment, down payment, and date of ownership transferred, construction period, construction cost payments, estimation of selling and administrative expenses, etc. However, the estimates of a proposal will come from many sources such as the Finance Department for funds, interest, and repayments and the Construction and Building Department for construction costs. The format of cash flow is quite simple including revenue, cost of land, construction costs, selling and administration expenses, interest, tax and repayment. No cost allocation from the Head Office is put into the project. The cash flow forecasts for projects are made on monthly-basis for a period of 36 months. The forecast format includes cash inflows and cash outflows for each project and loan repayment. These forecasts are used for project finance borrowing from banks. Table 3 provides a sample of the format of cash flow forecasting used by the company.

The manager-owner, top management and lower key officers of Supalai have been in the real estate industry for a long time. Given their experience, the executives are able to capture market trends and potentials for each project very quickly. They do not employ sophisticated economic analytical tools; instead they can forecast using their own experiences.

The popular investment evaluation technique used by most of the real estate developers in Thailand, including Supalai, is the accounting rate of return. It is noteworthy that a real-estate

project has short life, at the most three years; once the real estate gets developed, the firm sells it. The shorter time a developer takes to sell out the project, the better will be the competitive advantage for the developer. Generally, because of the short life cycle of project, the residential real estate developers pay more attention to monthly cash flows and risks for the project. They need cash to pay for land or construction materials or to subcontractors in short notice to avail of cash discount. In the process, they can also gain the trust of suppliers, subcontractors and bankers that is critical to succeed in the highly competitive real estate business in Thailand.

The top management and the other executives of Supalai do realize the importance of using discounted cash flow and IRR for project evaluation, but like other real estate firms in Thailand, they use accounting rate of return and justify it on the following grounds:

- The property development projects are not long-term; the maximum life of a project being three years. Since the cash flows occur quite early over a short period, the discounting impact will not get severed.
- The company is more interested in the balance of as much cash flow as possible after repayment of borrowed funds.
- The company does not intend to own developed property projects for long and would in fact be happy to close the projects on schedule and within a predetermined budget and cash flow projections.

As the company does not use the DCF evaluation techniques, it does not estimate the cost of capital. It has a pre-determined accounting-based acceptance rate; it decides to buy land which can give gross profit margin of 35–40 per cent and a net profit margin of 15–20 per cent. Although the margin is not announced as a written policy, the members of the executive committee realize that a higher margin would increase the chances of convincing the relevant authority to give approval.

Investment Risk Identification

The real estate industry has been hit the hardest by risks and uncertainties. For instance, it has suffered a lot due to economic crisis. The management of Supalai has, therefore, established a risk identification and risk priority ranking system along the following lines:

- **Laws and Regulations:** The company must comply with laws and regulations of the country. Many laws and regulations are issued by the government for controlling and managing the property developers such as environmental rules and laws, city planning regulations, laws governing engineers and architects, changes in time for construction or for heavy-duty trucks on traffic, change in rules over private and public areas for each project, etc. Changes in laws and regulations can lead to a sharp increase in development costs and project viability.
- **Land Purchase:** Developers purchase land for their land bank. Land constitutes one of the most significant development costs. The time lag between the purchase and development of land might result in a change in the price. For example, some areas

may be declared as off-limits for high-rise buildings; or development of government utility/infrastructure may enhance the value of certain areas while being detrimental for other areas. Supalai, therefore, follows the policy of developing land within a year for minimizing risk factors.

- **Financial Risk:** Financial risk might arise from an increase in interest rate, shortage of credit facilities, or customers' reluctance to transfer ownership leading to a delay in the lump sum payment to the company or rigid housing loan regulations for individual home buyers. Supalai focuses on maintaining good relationship with financial institutions and customers.
- **Construction Raw Materials:** Increase in the price of construction raw materials or their shortage can lead to a higher cost of construction and the possibility of delay in the construction project. The contractors' activities are very closely monitored by the company.
- **Change in Customer Preferences and Competitive Circumstances:** More customers tend to reside in condominiums close to the MRT (mass rapid transit) area which raises the cost of land in these areas. Pre-fabricated condominiums and housing estates tend to attract more customers because of higher credibility, but the developers need to have deep pockets of capital investment funds and also need to bear the risk of greater uncertainties. Through its annual corporate plan evaluation, the company always keeps track of the consumer preferences and its competitive position.

The company manages risk through a Risk Management Committee. Each department is assigned a risk centre unit to identify the specific risks and propose ways of handling and minimizing them. Each department comes up with a list of risks concerning it and proposes recommendations for risk mitigation to the risk management committee for its final consent and approval.

According to the owner–manager, changes in laws and regulations are the highest risk factor because they are really beyond his control. He regards other economic impacts and risk factors as manageable as he gets some time to chalk out business strategies and plans for tackling them.

Approval and Control

The investment proposal for property development goes to the Board of Directors for approval after a thorough pre-screening by the Executive Committee and the President. However, each step of the project has to be first approved by the owner-manager before it goes for the Board of Directors' approval.

The company has a performance tracking system in each project for analyzing the percentage of completion against schedule, expenses incurred against the budget, and quantity and quality as specified in the Bill of Quantities (BOQ) that stands for specification of the specified items in construction work. The company holds meetings at different management levels comprising

construction site meetings, departmental meetings, executive meetings and the Board of Directors' meetings to review and monitor the ongoing projects.

Control and Performance Evaluation

Supalai is closely controlled and run by the owner–manager, on whom rests the final decision-making power. According to the CEO, “Management change is certain but it needs to be done on a ‘step-by-step’ basis.” The CEO has been running the business since the beginning; and he has gained respect of all employees to such an extent that his ideas get easily accepted as the policy of the company. He has now started delegating authority to the lower levels by getting the Department Heads, Assistant MD, and Deputy MD more involved in long-term planning, budgeting, project development, risk management and performance evaluation system. He knows that as long as he is at the helm of affairs, people would directly approach him for final decision, no matter which system is followed.

For performance evaluation, Supalai has been using the KPI system for some time now. The CEO now feels the need to have a system for evaluating the staff performance while making it clear that he does not want any competition among employees which might become uncontrollable and could ultimately affect the overall corporate performance. As he has stayed the longest in the company, he is fully aware of the performance of each of the key persons. The KPI system was meant to achieve the company's goals and objectives.

The big difference between Supalai and the other large real estate companies in Thailand is that Supalai does not have independent business units; in fact, all its departments are interdependent. The construction site is responsible only for controlling the construction schedule and managing and controlling the sub-contractors to do their jobs as per the contract; they do not need to make any procurement, hire staff or make decisions. In other companies, the construction site plays a vital role because they are set up as separate business units involved in setting the site budget, cost control, selling and having a definite bottom line. The Supalai CEO emphasizes the need to instil cooperation rather than competition. According to him, under internal competition, some projects might perform excellently while some other might underperform.

The Deputy Managing Director, who is answerable only for business development and sales and marketing functions, thinks that the functional structure is good for Supalai as each department can focus on its own speciality. Interdependence and cooperation make the firm grow steadily. Competition for budget can be seen as normal for the company and should not be taken seriously.

The Assistant Managing Director responsible for condominium construction stated that the evaluation system and the division of responsibility are such that the staff can focus on their specialization. According to him, if people are given absolute power, they would like to create their own empire through boundless expansion which may lead to the downfall of the company, each individual taking care of his/her own ‘empire’ and ignoring the interests of the organization. He explained further that the key executives have lived with the firm for such a

long time that the CEO fully knows each aspect of their character and performance potential. Besides, budget allocation can be peacefully settled. According to the Assistant Managing Director, the workload at Supalai has so far been so heavy that people need not compete for budget.

The Assistant Managing Director for Finance and Accounting also supports the current system of functional responsibility, budget allocation and performance evaluation. No system is perfect; so, any system that can help evaluate performance in a fair manner should be acceptable. The evaluation system should be used to strengthen the team work. As long as the overall corporate performance does not drop, the competitive position in the market can be maintained.

TASKS AHEAD

In spite of Supalai being a listed public company, it is controlled, guided and managed by the founder, who essentially follows a centralized management system. He controls capital spending, decision-making and performance evaluation. Most business ideas and projects of the company have originated from him. Is there a need for change? Can the company sustain its growth momentum through its centralized capital budgeting system and decision-making? Does the company need to decentralize and professionalize its management? What kind of control, performance and incentive system should the company have in order to follow a decentralized system of project investment and management?

DISCUSSION QUESTIONS

1. Describe the entrepreneurial, operational, and strategic context of Supalai?
2. Critically discuss the current capital budgeting process and decision-making environment of the company.
3. Why is there a need of change in the capital budgeting process? What should be the change?
4. How should the proposed capital budgeting process be linked to the strategic planning and control system of the company?

NOTE

1. This case has been prepared by Worata Kongseanitsara and I.M. Pandey for classroom discussion. Worata Kongseanitsara is an audit committee member of RNC (Thailand) and also an investment consultant to the Chairman of a company. He is pursuing the Doctor of Business Administration programme at the Asian Institute of Technology (AIT) where he had earlier obtained an MBA degree. Earlier he had worked as a Financial and Investment Executive in several firms, such as Citibank, Nithipat Finance

Plc., RNC (Thailand) Ltd., UOB Bank (Thailand), Advanced Agro Holding Plc. and Unique Mining Plc. He has served on the top management posts, especially in the fields of finance and investment for several years. He has had outstanding success in establishing new business from scratch, for example, a risk management unit for consumer banking business of Citibank and Infrastructure Financing unit of Nithipat Finance Plc.

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Exhibit I

SUPALAI'S FINANCIAL PERFORMANCE HIGHLIGHTS

<i>Unit (in million Baht)</i>	2008	2007	2006	2005	2004	2003	2002	2001
REVENUE	6,241	4,977	4,694	3,504	2,174	3,751	2,273	956
EBIT	1,880	1,293	1,438	1,036	635	1,391	566	202
EBITDA	1,956	1,358	1,476	1,056	655	1,414	620	223
NET INCOME	1,087	831	880	830	481	1,214	949	737
TOTAL ASSETS	13,473	10,623	8,311	7,373	5,748	5,207	5,371	6,092
FIXED ASSETS	1,540	1,587	1,687	1,500	1,264	1,235	1,419	1,571
CURRENT ASSETS	11,933	9,036	6,624	5,873	4,484	3,972	3,952	4,521
TOTAL DEBTS	8,182	5,833	3,847	3,754	2,687	2,519	3,499	5,166
EQUITY	5,291	4,790	4,464	3,619	3,061	2,688	1,872	926
Ratios								
EBITDA/REVENUE (%)	31	27	31	30	30	38	27	23
EBIT/REVENUE (%)	30	26	31	30	29	37	26	21
REVENUE/TOTAL ASSETS (%)	46	47	56	48	38	72	42	16
TOTAL DEBTS/TOTAL ASSETS (%)	61	55	46	51	47	48	65	85
EBITDA/TOTAL ASSETS (%)	15	13	18	14	11	27	12	4
EBIT/TOTAL ASSETS (%)	14	12	17	14	11	27	11	3
NET INCOME/EQUITY (%)	21	17	20	23	16	45	51	80

Exhibit II

LONG-TERM CORPORATE STRATEGIC PLAN

	<i>1989–1994</i>	<i>1995–1999</i>	<i>2000 onwards</i>
Mission	To be a listed company	To rank among top 10 listed real estate companies	To rank among top 5 listed real estate companies
Business Result	Rapid growth and high profit	Above-industry average	Above-industry average
Core Business	Residential development	Residential development	Real estate development
Diversification	High-rise and Low-rise	Resort/Commercial/Provincial	Resort/Commercial/Provincial/ property management
Revenue Type	Sales	Sales/Rents	Sales/Rents/Service commission
Marketing	1. Value-added product 2. Competitive price	Promotion-oriented	Value-oriented

Exhibit III

Format for Cash flow Forecasting

<i>Supalai Project-Suanplu</i>	<i>Total</i>	<i>1st Month</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>5th</i>	<i>6th</i>	<i>7th</i>	<i>36th</i>
Cash Inflow									
Sales									
Townhouse Type-A									
Townhouse Type-B									
Total									
Payment received on contract signing 5%									
Down payment 10%									
1st installment									
2nd									
3rd									
4th									
5th									
6th									
10th									
Ownership transferred 85%									
Total Cash Inflow from Sales									
Cash Outflow									
Land purchase									
Construction costs									
Admin and selling expenses									
Business tax 3.3%									
Corporate income tax 1%									
Ownership fee 1%									
Advertising 2% of sales									
Administrative expenses 8.5%									
Total Cash Outflow									
Net Cash Received									
Plus loan for land received									
Loan for construction received									
Less loan repayment 70% of selling price									
Less interest payment									
Financial fee									
Net Cash after Finance									
Accumulated Loan Amount									
Cash in Hand									
Accumulated Cash in Hand									