

December 04, 2001

STRATEGIC FINANCIAL MANAGEMENT

(MARKS 100)

PE-2 (PAPER-2)

(3 HOURS)

Q.1 A newly formed company is considering three options regarding its capital structure i.e. (i) 80% Equity 20% Debt (ii) 60% Equity 40% Debt (iii) 50% Equity 50% Debt. The company expects to earn a return of 15% before financial charges and taxes. It can obtain finance at the following rates (i) upto 25% of equity @ 8% (ii) Amount in excess of 25% of Equity @ 10% (iii) Amount in excess of 50% of equity @ 16%. The rate of tax applicable to the company is 40%.

Required: Determine which option will provide maximum return to the shareholders. **(10)**

Q.2 The directors of Universal Trading Co. are concerned about the ever increasing financial charges. The management has formulated a strategy to reduce the operating cash requirements and thereby controlling financial costs. It has decided to take the following steps:

- Reduce the credit period allowed to customers from 30 days to 20 days.
- Delay payment to suppliers by 5 days. Currently credit allowed by suppliers is 15 days.
- Reduce inventory levels so as to increase the annual inventory turnover from 6 times to 8 times.

Required: a) Determine the expected reduction in financial charges if present operating cash requirements are Rs.10 million and cost of borrowing is 12%. **(5)**

b) Discuss any adverse effects that the above strategy may have on the business of the company. **(5)**

Q.3 The Big Co. Ltd intends to acquire Small Co. Ltd. The sales of Small Company have been growing at 5% per annum during the past five years. The management of Big Company estimates that it can raise the sales growth rate to 6, 7, 8 & 9 percent during the next four years and thereafter at nine percent each year for atleast next four years. Similarly it expects to reduce the cost of goods sold to 60% and Selling/Administration Expenses to 13% of sales within the next four years. Capital expenditure in Small Co. Ltd. will be required at 5% of sales. The assets are to be depreciated on a reducing balance method and average depreciation rate on all assets is 12%.

(2)

The past financial statements of Small Co. Ltd are as under.

SMALL COMPANY LIMITED SUMMARISED PROFIT & LOSS ACCOUNT					
	1997	1998	1999	2000	Rs.'000 2001
Net Sales	1,840	1,908	1,982	2,069	2,152
Cost of goods sold	1,170	1,225	1,249	1,316	1,382
Depreciation	78	90	102	102	90
Selling & Admin Exp	305	326	329	352	368
Total Expenses	1,553	1,641	1,680	1,770	1,840
EBIT	287	267	302	299	312
Interest	76	73	84	88	96
PBT	211	194	218	211	216
Tax	74	68	76	74	76
PAT	137	126	142	137	140
Dividend Per Share	1.50	1.40	1.60	1.50	1.50
Market Value (Average)	14.52	16.33	15.14	16.98	16.42

SMALL COMPANY LIMITED
SUMMARISED BALANCE SHEET
AS ON JUNE 30, 2001

	Rs. '000
Fixed Assets	1,000
Accumulated Depreciation	340
	660
Long Term Assets	120
Current Assets	1510
Less: Current Liabilities	640
Net Assets	1,650
Represented By	
Shareholder's Equity	

Paid up Capital (45,000 shares of Rs. 10 each)	450
Reserves	600
	1,050
Borrowings	600
	1,650
	=====

Required: Determine the maximum price that the Big Company Ltd. can pay for Small Co. Ltd.

(20)

Q.4 Imperial bank is authorised to carry out foreign exchange transactions. Bank's base currency is Pak Rupee and it's UK Pound and US \$ positions as at March 31, 2001 were as follows:

	UKP'000	Equivalent Rs'M
Cash	200	18.00
Nostro accounts	75	6.75
Deposits	(980)	(88.20)
	(705)	(63.45)
Forward contracts	850	78.58

(3)

	<u>US\$'000</u>	<u>Equivalent Rs'M</u>
Cash	1,800	108.00
Nostro accounts	5,600	336.00
Deposits	<u>(10,840)</u>	<u>(650.40)</u>
	(3,440)	(206.40)
Forward contracts	<u>8,560</u>	<u>508.62</u>
	<u>5,120</u>	<u>302.22</u>

The maturities and the contracted rates of the forward contracts as at March 31, 2001 were as follows:

Currency	Maturity date	Foreign Currency '000	Forward rates at March 31	Equivalent Rs'M
UK Pound	April 30	600	92.40	55.44
	May 31	480	94.80	45.50
	June 30	<u>(230)</u>	97.20	<u>(22.36)</u>
		<u>850</u>		<u>78.58</u>
US \$	April 30	11,550	59.80	690.69
	May 31	(4,800)	61.50	(295.20)
	June 30	<u>1,810</u>	62.50	<u>113.13</u>
		<u>8,560</u>		<u>508.62</u>

Forward rates as at April 30 are as follows:

	<u>UK Pound</u>	<u>US\$</u>
May 31	85.40	63.40
June 30	85.80	63.80
July 31	86.00	64.30
August 31	86.40	64.90
September 30	86.80	65.40
October 31	87.50	65.90
November 30	88.30	66.30

Spot rates prevailing from March 31 till April 30 were as follows:

	<u>UK Pound</u>	<u>US\$</u>
March 31	90.00	60.00
April 11	89.00	61.00
April 15	87.00	62.00
April 30	85.00	63.00

During the month of April following transactions took place:

- i) On April 11, the bank took a deposit of US\$ 8 million repayable in 6 months time
- ii) The money was converted into UK Pound the same day by a spot deal
- iii) The proceeds in UK Pound were used to pay liabilities arising on maturing UK Pound deposits
- iv) UK Pound 1 million were sold for Rs 91.5 million, value date October 31
- v) All outstanding forward deals for April matured and settled

(4)

Required:

- a) Determine the UK Pound and US\$ currency positions as at April 30 in the following format:
- | | | |
|--|---------|---------|
| UK Pound '000 | Spot | Forward |
| Positions as at March 31 | (705) | 850 |
| ii) 6 month deposit converted into UKP | | |
| iii) Funds in (ii) used to settle deposit maturities | | |
| iv) 6 months forward sale of UKP | | |
| v) April forward exchange deals mature | _____` | _____` |
| Positions as at April 30 | _____` | _____` |
| US \$'000 | | |
| Positions as at March 31 | (3,440) | 8,560 |
| i) 6 months deposit taken | | |
| v) April forward exchange deals mature | _____` | _____` |
| Positions as at April 30 | _____` | _____` |
- b) Revalue the UK Pound and US\$ currency positions as at April 30
- c) Calculate the profit and loss on foreign exchange for the month of April for the two currencies in the following format:

(Rupees in million)

	<u>Value at March 31</u>		<u>Value at April 30</u>		<u>Net difference</u>
	Spot	Forward	Spot	Forward	
<u>UK Pound</u>					
Spot					
Forward					
<u>US\$</u>					
Spot					
Forward					
Rupee Forward					
Net profit					

(Ignore interest payable on deposits in your solution)

(20)

Q.5 Credit Bank has been requested by a pharmaceutical company to arrange for a financing of Rs.400 million to import plant and machinery to extend its production facilities. The bank does not want to extend an advance but is prepared to offer a facility as per one of the proposals identified below. After working on several proposals the bank has identified following three options:

a) LEASING

The bank extends a lease to the company and records the asset in its books. Assume that the asset will qualify for depreciation and the bank will be able to claim First Year Allowance @ 30%, Normal depreciation @ 10% pa and Extra-shift depreciation @ 10% pa.

The terms of the lease will be as follows:

Lease amount	Rs 400 million
Life of lease	4 years

The asset shall be sold to the company at the end of the lease term. The lease shall be adjusted against the sale proceeds and no further amount will be payable or receivable. The disposal shall be allowed for tax purposes and the bank shall have sufficient taxable income to absorb that loss.

b) MODARABA

The bank sets-up a modaraba for the purpose of investment into the company. The modaraba will have a life of 4 years and will be wound up at the end of 4 years. The bank will invest Rs.400 million in the form of modaraba company shares and modaraba certificates. The dividend income from the modaraba is estimated to be Rs 60 million per annum. The cost of setting-up modaraba is estimated to be Rs 5 million whereas the annual operating cost of modaraba is estimated to be Rs 2 million. Further, it will cost Rs 4 million to wind-up the modaraba at the end of 4 years.

The dividend income from modaraba shall be subject to 5% with-holding tax. The income shall not attract any further taxation. The cost of setting up, running and winding-up of modaraba shall not be tax allowable for the bank. The investment in modaraba shall be realised at the end of 4 years at no capital gain or loss.

c) ISSUANCE OF GUARANTEE

The bank shall arrange another financier to finance the company. The financier shall lend Rs.400 million to the company to be paid back in 16 quarterly installments of Rs 35 million each. The bank shall act as an arranger, guarantor and project monitor for the financier.

Bank's return on the transaction shall be as follows:

Arrangement fee	1% upfront to be paid by the borrower
Guarantee commission	1% per annum to be paid in advance by the borrower
Project Monitoring fee	10 % share in the profits of the financier paid at the end of each year

Required:

Using bank's after tax cost of capital of 12% and assuming that the tax rate applicable on bank is 50% which is paid at the end of next year of the year of income, you are required to evaluate all three options using NPV method and recommend the option with the highest NPV of returns to the bank. (20)

Q.6 Strong Construction Ltd, (SCL) a locally incorporated subsidiary of UK based construction group, is bidding for the main contractor of the project for construction of a dam in the northern part of the country. The project shall be completed in 4 years time in the following phases:

Phase I Design and planning of the project	1 year
Phase II Construction of the project	3 years

Phase I shall be sub-contracted to another group company, Intelligent Designs Ltd (IDL), which specialises in architecture and planning activities whereas phase II shall be carried out by SCL. The project shall involve high level of technical expertise, which will be sourced from UK.

The work will involve import of high value earth-moving equipment which shall be imported from UK. Under an arrangement, the import of the equipment will be exempt from import duties upon SCL furnishing a commitment to the government that the equipment will be re-exported upon completion of the project.

Under the arrangement, the company is also required to furnish a performance bond of Rs.100 million to be provided by a bank immediately which will expire at the completion of the project.

(6)

The critical dates of the project are as follows:

Start of the project	January 1, 2002
Completion of Phase I	December 31, 2002
Completion of Phase II	December 31, 2005

The details of the project costs are as follows:

a) The company will sub-contract Phase I of the project to IDL at a cost of Rs 20 million to be paid as follows:

	%
On January 1, 2002	25
On March 31, 2002	5
On June 30, 2002	10
On September 30, 2002	10
On December 31, 2002	50

b) Material cost is estimated to be as follows:

During 1 st year of Phase II	Rs 30 million
During 2 nd year of Phase II	Rs 50 million
During 3 rd year of Phase II	Rs 40 million

The company already holds materials costing Rs 10 million which was acquired for another project but was never used on that project due to change in requirement. The replacement cost of this material is Rs 15 million whereas the realisable value is Rs 7 million.

c) Import of earth-moving equipment will cost the company UK Pound 1 million to be paid at the time of import of equipment. The material shall be imported at the start of Phase II. Other import related costs are estimated to be Rs 2 million. The equipment will be recorded in the books of SCL and will be depreciated @ 33% per annum. At the end of the contract, the equipment will be re-exported at an estimated value of UK Pound 300,000 at a cost of Rs.1 million. Annual running and maintenance cost of the equipment is estimated to be Rs 2 million.

d) Labour cost will have following 2 components:

Local labour is estimated at Rs 500,000 per month during the whole of Phase II.

Expatriate staff cost is estimated at UK Pound 40,000 per month during the first year of Phase II and UK Pound 20,000 per month during the remaining 2 years.

e) Details of other costs are as follows:

Travelling and lodging costs	Rs 600,000 per annum
Project administration expenses	Rs 2.4 million per annum

f) Cost of performance bond payable to bank is 2% per annum.

All the above local currency costs excluding sub-contract price and the cost of performance bond are subject to an estimated inflation of 4% per annum.

The Rupee/UK Pound exchange rate is 90 currently while the forecast is as follows:

<u>YEAR</u>	
1	95
2	98
3	100
4	101

Required:

Assuming that all the cash flows except the payments to IDL, occur at the beginning of the year, the company's cost of capital is 17% (quarterly 4.25%) and the company makes profit @ 4% of contract value, you are required to estimate the price of the contract using NPV method. (20)