



Business Finance Decisions

Final Examination
Summer 2013
Module F

5 June 2013
100 marks - 3 hours
Additional reading time - 15 minutes

- Q.1 Haala Car Rental Service (HCRS) owns and operates a large fleet of vehicles. It is considering whether to dispose of the five cars which were purchased two years ago or to retain them for a further period of two years as these cars are not popular among the customers.

Following further information is available:

- (i) HCRS had acquired these cars under lease financing arrangements on the following terms and conditions:

Lease period	4 years
Security deposit	10% of cost
Interest rate implicit in the lease	1-year KIBOR + 2%
Payment of lease rentals	Annually (payable in arrears)
Early termination penalty	5% of principal outstanding

KIBOR rates in Year 1 and Year 2 were 12% and 11% respectively. In Year 3, KIBOR is expected to be 10% and is likely to remain at the same level for the next two years.

- (ii) At the time of acquisition, HCRS had estimated that the cars would be rented out for approximately 180 days in a year and had fixed the rental amount to achieve an IRR of 20%. However, the cars were rented out for an average of 120 days per year in each of the first two years. HCRS expects the demand to remain at the same level during the following two years.

Actual/estimated annual maintenance expenditures on each car are as follows:

Year	Actual		Estimated	
	1	2	3	4
Annual maintenance expenditures (Rs.)	60,000	80,000	100,000	120,000

- (iii) The cars are estimated to have a residual value of 50% of cost at the end of their useful life of 4 years. Depreciation is charged on straight line basis.
- (iv) The cost of each car is Rs. 1,850,000 and their present realisable values are as follows:

Cars	A	B	C	D	E
Realizable value (Rs.)	1,200,000	1,300,000	1,150,000	1,350,000	1,250,000

- (v) Applicable tax rate for the company is 35%.

Required:

Advise HCRS about the cars which need to be disposed of.

(20)

- Q.2 (a) Briefly explain any **seven** factors that are considered for establishing the credit rating of a debt instrument. (07)
- (b) Harappa Pakistan Limited (HPL) wishes to invest Rs. 400 million in a project which would be financed by issuing debentures of Rs. 250 million and the balance amount would be financed through excess cash available with the company. HPL anticipates that the project itself will generate sufficient cash flows to be able to redeem the debentures in five years. The directors are considering the following three alternatives for raising the finance:
- (i) Issuance of debentures at a discount with fixed interest rate of 8%.
 - (ii) Issuance of zero coupon debentures which would be redeemed at the end of year 5 at face value.
 - (iii) Issuance of debentures at face value at market interest rate.

HPL had also issued debentures amounting to Rs. 150 million previously. These are due to be redeemed in three years and carry mark up at the rate of 10% payable annually and are being traded at Rs. 94.80. The face value of existing as well as proposed debentures is Rs. 100 each.

The credit rating of existing debentures is 'A+'. The directors anticipate that after the new issue, the credit rating for both debentures would be 'A'.

The investors are expected to invest in the debentures if the following rates are offered:

Credit rating	Year 1	Year 2	Year 3	Year 4	Year 5
A+	7.45%	8.62%	9.78%	11.13%	11.84%
A	7.70%	8.92%	10.14%	11.60%	12.34%

Required:

Analyse each of the above three alternatives relating to issuance of debentures and discuss the circumstances under which each alternative would be advisable. (13)

- Q.3 Shahriq Holdings Limited (SHL) is a subsidiary of a UK based company. It entered into an agreement to acquire 60% shareholding in a local company for which it received an advance of GBP 2.5 million from its parent company. The advance is repayable on 30 September 2013.

SHL is exploring various options to hedge against any adverse movements in foreign exchange rates, for which the following data is available:

- (i) **Exchange rates on 1 June 2013**

	GBP 1	
	Buy	Sell
Spot	Rs. 153.65	Rs. 153.90
4-months forward contract	Rs. 157.49	Rs. 157.75

- (ii) **Currency futures (GBP) on 1 June 2013**

Futures have a contract size of GBP 5,000 and the margin required is Rs. 7,500 per contract. Contract prices (Rupee per GBP) are as follows:

	GBP 1
June 2013	Rs. 154.67
September 2013	Rs. 157.36

The contracts can mature at the end of the above months only. It is expected that the difference between futures and spot prices would continue to remain the same.

SHL's incremental rate of borrowing is 10% per annum.

Required:

SHL estimates that on 30 September 2013, GBP 1 would either be equal to Rs. 154 or Rs. 155 or Rs. 156. Under each of the three possibilities, determine which method should be selected by SHL.

(11)

- Q.4 Katkhair Engineering Limited (KEL) is a 100% equity-financed company. The company designs and assembles a wide range of made-to-specification mechanical appliances for industrial customers. The actual manufacturing of the components used in appliances is usually outsourced but KEL ensures that the components conform to its specifications in terms of design and metallurgy. The individual components are finally assembled and tested at KEL's own facilities.

KEL has recently developed a new appliance 'EN-43' and is in the process of deciding as to whether it would be financially feasible to produce EN-43 on commercial basis. The following information is available:

Sales revenue and marketing expenses

- (i) EN-43 would generate cash flows for five years. It is estimated that each EN-43 will be sold for Rs. 9,000 and annual production and sales of the appliance will be 1,500 units in each of the five years.
- (ii) An expenditure of Rs. 3 million was incurred on the designing, testing and market research of EN-43. It includes amount of Rs 1.2 million incurred on materials and services.

Outsourcing costs

- (iii) Manufacturing of components would be outsourced at a total cost of Rs. 4,000 for each EN-43. It includes Rs. 1,200 for component L-17.

KEL already has 1,000 units of L-17 in stock. These were acquired for Rs. 800 each. If EN-43 is not produced, the existing units of L-17 would be returned to the vendor at Rs. 700 each.

Assembling costs

- (iv) Assembly of EN-43 would require separate premises whose rent is estimated at Rs. 450,000 per annum, payable in advance.
- (v) Assembly of each EN-43 would require 15 and 35 man hours of skilled and unskilled workers respectively. The rate of wages is Rs. 100 per hour for skilled workers and Rs. 60 per hour for unskilled workers. KEL pays 50% for idle hours. If EN-43 is not produced, 5,000 hours of unskilled workers would remain idle in years 1 and 2.
- (vi) Incremental overheads excluding depreciation are estimated at Rs. 500,000 per year.
- (vii) The assembling of EN-43 would require machines which would cost Rs. 4,400,000. The machines would have a useful life of five years after which these may be sold at 20% of their original cost.

Other information

- (viii) Tax rate applicable to the company is 35% and tax is payable in the same year. Allowable initial and tax depreciation on the machine is 40% and 20% respectively.
- (ix) KEL evaluates its investment using a nominal discount rate of 15%.
- (x) The rate of inflation is estimated at 10% per annum and would affect all costs and revenues.

Required:

- (a) Recommend whether or not KEL should proceed with the EN-43 project. *Assume that working capital requirements are immaterial and all cash flows arise at the end of the year unless specified otherwise.*
- (b) Carry out a sensitivity analysis to assess and compare the sensitivity of the project, to the following variables:
 - Sales price
 - Nominal discount rate

(17)

(07)

- Q.5 The Board of Directors of Taxila Power Limited (TPL) is considering to acquire the entire shareholding of Digari Power Limited (DPL) in a share exchange arrangement. TPL's Board is of the opinion that the proposed acquisition would enable TPL to:
- immediately increase the combined profits of the two companies by Rs. 12 million;
 - sell DPL's surplus fixed assets. These assets can be sold for Rs. 20 million; and
 - reduce TPL's risk factor as perceived by its shareholders which would result in decline in their annual return expectations by 2%.

DPL has maintained a steady level of profitability and dividend performance in the preceding years and its existing shareholders expect that this trend would continue in the future. Current market value of DPL's ordinary shares is Rs. 25.60 per share.

Following information has been extracted from the financial statements of both the companies for the year ended 31 May 2013:

	TPL	DPL
	Rs. in million	
Non-current assets	600	100
Current assets, less current liabilities	200	20
Share capital (Rs. 10 each)	100	50
Reserves	700	70
Net profit for the year	80	16
Dividend for the year (paid on 31 May 2013)	40	16

The current market value of TPL's ordinary shares is Rs. 56 per share. At present, the expected growth rate in net profits is 12% per annum which is expected to be maintained after acquisition. The Board intends to continue to maintain the same dividend payout ratio.

Required:

- Calculate the maximum price that TPL may pay for the acquisition of DPL. (08)
- The financial consultant of TPL is of the opinion that DPL's shareholders may be persuaded to sell the entire shareholding at a premium of 20% over the current market price. Based on this assumption:
 - Calculate the number of shares which TPL would be required to issue to the shareholders of DPL as price consideration. (04)
 - What benefits, if any, would accrue to the existing shareholders of TPL and DPL through the proposed acquisition? (03)
 - Discuss other relevant factors that the directors/shareholders of both companies may consider in assessing the proposed acquisition. (10)

Ignore taxation.

(THE END)