THE INSTITUTE OF CHARTERED ACCOUNTANTS OF PAKISTAN

Final Examinations Winter 2007

December 05, 2007

BUSINESS FINANCE DECISIONS

(MARKS 100)
(3 hours)

Q.1 Your company is planning to acquire the entire shareholding of Hamid Limited, an unlisted company. It has been suggested by on of the director to value the company using fresh cash flow analysis. Following are the extracts from the latest financial statements of Hamid Limited:

Profit and loss account for the year ended November 30, 2007

	2007 Rs. in million
Sales revenue	74,000
Cost of sales – excluding depreciation	(44,400)
Depreciation	(4,440)
Gross profits	25,160
Administrative costs – excluding depreciation	(7,881)
Depreciation	(925)
Amortization	(370)
Profit before interest and tax	15,984
Interest	(1,480)
Profit after interest	14,504
Taxation	(5,076)
Profit after tax	9,428

Extracts from Balance Sheet

	2007 Rs. in million	2006 Rs. in million
Receivables	1,700	2,030
Inventory	2,250	2,075
Other current assets	2,600	2,840
Current liabilities	1,800	2,120
Property, Plant & Equipment	14,000	12,500
Share Capital of Rs. 10 each	1,000	1,000

Bu considering the high growth of the company, it has been estimated that:

(i) Sales growth will be about 20% per annum for the next two years.
(ii) Cost of sales, excluding depreciation, will grown by 18% per annum.
(iii) Administrative costs excluding depreciation are expected to grow at the rate of inflation i.e. 8% annually.
(iv) Amortization represents an annual fixed charge @10% of the cost of an intangible asset acquired 2 years ago.
(v) Capital expenditures and working capital investments are expected to follow the same pattern as that of sale. Depreciation however, will grow by 25% per annum.

(vi) After two years, the free cash flows are expected to grow by only 5% per annum in perpetuity.
(vii) It is estimated that Hamid Limited's cost of equity is 17.15% and weighted average cost of capital is 15%.
(viii) The current coupon rate on the only debt of the company i.e. TFCs which are maturing in 8 years, is 11.84%. The market value of the debt is 118.35%.

Required:
Using the above estimates, work out the value of each ordinary share and total value of Hamid Limited. Assume that there will be no change in the debt equity ratio and tax rate in near future. **(15)**

Q.2 Zahid Limited is engaged in trading and manufacturing of electronic toys. In order to reduce the present net costs of financing the receivables and payables, the company is planning to introduce the following changes in its collection and payment policies:

– Offer 1% discount to its customers which is expected to shorten the average credit period by 30 days. Presently, the company sells 60% of its sales at 45-days credit.

– Avail the trade discount offered by the vendors of the company. Presently, the company buys finished goods on terms of 2/60, net 90 and raw materials on terms of 1/40, net 75 but the discount is not availed.

Presently, the company's working capital consists of the following:

	Rupees in '000'
Raw materials	5,000
Finished goods – Own manufactured	12,000
Finished goods – Purchased	14,000
Debtors	30,000
Cash balances	1,000
Trade creditors	(41,700)

The purchased finished goods inventory is maintained at an average level of 60 days' stock. At the end of the current year, the inventory of such stock is 25% higher as compared to the last year. Raw Material Turnover is approximately 24 times in a year.

The company finances its working capital through a running finance facility obtained from a local bank at 13% per annum.

Required:
Evaluate each of the above policies and give your recommendations. Support your answer with necessary workings. Assume a 360 day year. **(12)**

Q.3 Sajid Ltd has contacted a Hong Kong company (the supplier) for purchase of its annual requirement of 100,000 liters of chemical "X". The supplier has offered the following terms:

(i) The price per litre shall be HK$76.
(ii) Delivery shall be made thirty days after the placement of order.
(iii) Payment shall be made two months after the date of delivery.
(iv) The minimum value of the order shall be HK$3,800,000.
(v) If the company places an order exceeding HK$ 7,000,000, 3% bulk purchase discount shall be available.

The company estimated the following spot rates:

After three months	7.35/HK$
After six months	7.50/HK$
After nine months	7.70/HK$

Hong Kong $ is not directly quoted against Pak Rupees. Following forward rates are quoted in the market:

3 months forward rate PKR/US$	61.10 – 61.15
6 months forward rate PKR/US$	62.25 – 62.30
9 months forward rate PKR/US$	62.73 – 62.78
3 months forward rate HK$/US$	8.37 – 8.40
6 months forward rate HK$/US$	8.17 – 8.20
9 months forward rate HK$/US$	7.96 – 7.99

The company's cost of fund is 12% and its production is scheduled evenly throughout the year.

Required:
Analyse the following four options available with the company:
(i) Avail bulk discount with forward cover.
(ii) Avail bulk discount without forward cover.
(iii) Do not avail bulk discount and obtain forward cover.
(iv) Do not avail bulk discount not obtain forward cover. **(20)**

Q.4 Wajid Limited has acquired 10,000 convertible bonds of Abid Telecom Limited which is due for redemption after six years at the rate of Rs. 160 per bond. Interest is paid annually and the coupon interest rate is 11%. The required rate of return of Wajid Limited is 12% per annum.

The conversion option can be exercised at the end of third year at the rate of 5 ordinary shares per bond. Thereafter, this option will lapse. Following information has been obtained from the website of Karachi Stock Exchange:

	Face Value	**Market Value**
Bond	Rs. 100	Rs. 127
Share	Rs. 10	Rs. 25

Annual interest on the bonds has just been paid by the company. The dividend paid this year by the company was 18%. Capital gain is exempt from tax and the rate of income tax is 35%.

Required:
(a) Compute the minimum growth rate in the market price of the ordinary shares of Abid Telecom Limited at which you would advise Wajid Limited to hold the bonds and exercise the conversion options.

(b) What would be the best investment decision among the following options:
- hold the bonds until redemption.
- convert the bonds into shares if the growth rate worked out in part (a) is certain.
- sell the bonds now.

Support your decision with appropriate reasons. **(15)**

Q.5 Khalid Limited produces three products viz. Aay, Cee and Dee to a very limited number of customers. All the production of Cee is sold at Rs. 2,150 per unit. Presently, the plant which produces Dee is working at full capacity and there is a high demand for Dee in the market. The company has allocated separate spaces in the factory building for the production of each product.

The annual production and gross profit, for each of the next five years, has been estimated as under:

	Aay	Cee	Dee
	Rupees in thousand		
Sales	191,800	5,805	60,000
COST OF SALES			
Raw material	85,400	2,560	23,460
Labour	32,140	1,470	6,540
Factory overhead			
Depreciation – Building (allocated)	1,000	50	500
Depreciation – Plant (directly identified)	9,000	200	8,500
Depreciation – Others (directly identified)	840	24	750
Plant maintenance contract	600	225	600
Industrial waste management cost	2,700	50	1,200
Power	12,000	500	4,000
Others			
Variable	8,000	435	4,200
Fixed (directly attributable)	5,000	217	2,300
Fixed (Allocated)	1,600	81	732
Cost of sales	158,280	5,812	52,782
Gross Profit	**33,520**	**(7)**	**7,218**

Wahid Limited, a trust worthy customer, has requested the company to let out the space available for product Cee for one ear. He has proposed as follows:

- Wahid Limited will pay an agreed monthly rental which is to be determined by mutual consent. The space will be used to store newly imported machines worth Rs. 130,000 thousand.

- Wahid Limited can supply the annual requirement of Cee for the next five years at the rate of Rs. 2,100 per unit.

- Khalid Limited will be responsible to insure the machines.

Khlaid Limited is evaluating the offer and have worked out the following information:

(i) The existing plant and assets relating to Cee can be sold for Rs. 800 thousand. Gain on sale of machinery will be Rs. 50 thousand.

(ii) The cost of insuring the machines would be Rs. 650 thousand.

(iii) The space can also be used to produce Dee which will increase the production of Dee by 4%. However, it will require the following additional expenditures:

	Rupees in thousand
Cost of machines	3,500
Maintenance cost	12
Waste management cost	48
Power	160
Other costs	260

The machines will be depreciated in five years and will have a residual value of Rs. 700 thousand at the end of the fourth year.

(iv) The life of all existing plants and assets is five years with no residual value.

(v) The company uses discounted cash flow method to evaluate such offers. The discounting rate used by the company is 12%. The rate of income tax is 35%.

Required:
Calculate the minimum rent which may be acceptable to Khlaid Limited under each of the following options:
(a) Renting the premises for one year and thereafter continuing the production of Cee.
(b) Renting the premises for one year and thereafter start producing Dee. **(23)**

Q.6 Majid Limited having a share capital of 50 million shares of Rs. 10 each, is the distribution agent of many local and international products.

After tax profits and dividend for the last four years are shown below:

	2004	**2005**	**2006**	**2007**
	----------Rupees in thousands----------			
After tax profits	31,860	33,825	35,901	38,434
Dividend	27,000	29,160	31,493	34,012

The current cum dividend market price is Rs. 14.50. The risk fee rate is 8% and the market return is 15%. The company's overall beta, debt beta, and equity beta are 0.75, 0.20 and 0.80 respectively.

The company has recently invested Rs. 100,000 thousand to improve the warehousing structure and supply chain management. As a result, the directors expect the post tax profits ad dividend to increase by 20% for two years and then to revert to the company's existing growth rates.

The company estimates its cost of equity by using the Capital Assets Pricing Model.

Required:
(a) Estimate the value of the company's shares using the dividend growth model, under each of the following assumptions:
- the market is semi-strong form efficient.
- The market is strong form efficient.

(b) Would you advise the investors to buy the shares at the current price? **(15)**

(THE END)