

SUBJECT 16J



**CORPORATE FINANCIAL MANAGEMENT
MAY 2004**

The examination paper is divided into TWO sections. Section A is compulsory and carries 40 marks. Candidates should attempt THREE questions from Section B, all of which carry 20 marks each.

You should allow yourself approximately 70 minutes in total to answer the questions in Section A, and 35 minutes for each of the questions attempted in Section B.

Tuesday afternoon 25th May 2004

Time allowed: 3 hours

SECTION A

(Compulsory – all questions carry equal marks)

- 1.(a) Explain why the management of a company should know who their significant shareholders are, eg institutional investors.
- (b) The economic environment is part of the Operating environment affecting business decisions. Briefly explain four other types of “environment”
- (c) A stock exchange should have “depth and breadth” in the counters listed for trading. Briefly explain what is meant by “depth” and “breadth”.
- (d) List four situations that can lead to cash flow problems
- (e) Debt factoring is financially more costly, but generally a company has some advantages in factoring out its debts. List any four advantages regardless of whether a company is facing cash flow problems or otherwise.
- (f) What are the three elements that determine the quantum of a firm’s cost of capital and what are the respective difficulties faced?
- (g) List any four factors that may affect a company’s dividend policy.
- (h) Briefly explain how a company may defend itself against a hostile take-over bid.
- (i) Compare and contrast the use of the Net Present Value approach and Internal Rate of Return approach in Investment Appraisals.
- (j) Accounting Ratio Analysis is a method of evaluating a company’s performance. Discuss the value of using ratios.

(Total: 40 marks)

SECTION B

(Answer *THREE* questions from this Section)

2. Singa, a football club wants to maintain its premier club status and also ensure its profitability. It is contemplating to buy a famous striker, Mr Sharpshooter and also to build a new stadium with a capacity of 60,000 spectators. The current stadium has a capacity of 40,000 spectators which is fully filled up every match and a demand for at least 10,000 tickets unfulfilled each match.

It is expected that Mr Sharpshooter's presence should attract an additional crowd of 10,000 spectators per match. If he does not play in a match the additional crowd will not take place. During a typical football season (1 year), the club plays 30 local matches and 5 overseas matches; and it is expected that Mr Sharpshooter will stay with the club for 5 years at a monthly salary of \$60,000. At the end of 5 years it is expected that the club can sell him for \$3 million in the transfer market.

The average ticket price per spectator for its local match is \$10 each and the income the club currently receives from its overseas matches is assumed to be \$500,000 per match. Mr Sharpshooter's presence in a game is expected to bring the club an additional income of \$100,000 per overseas match.

The new stadium will be ready in 2 years' time and its financial viability is to be evaluated based on a lifespan of 6 years. The all-in cost of having the new stadium is expected to be \$60 million. Assume the amount is paid upon completion in 2 years' time. The current stadium will be sold upon completion of the new stadium.

The discount rate to be used for this evaluation is 10%.

Required:

- (a) Calculate the maximum price the club should be prepared to pay for Sharpshooter assuming the stadium is built and the club will break-even on his 5-year stay with the club. (6 marks)
- (b) Assuming that on average there is a 50% probability that Mr Sharpshooter will be injured and unable to play in 3 local matches and 1 overseas match per year; and that because of the injury his transfer value will be reduced by \$500,000, calculate the impact on the price calculated in (a). (4 marks)

- (c) On the basis that Mr Sharpshooter was bought for \$8,000,000 and has no injury throughout his 5 year stay; calculate the minimum price that the club should obtain from its sale of the current stadium once the new stadium is ready in order to break-even on the purchase of Mr Sharpshooter and the building of the new stadium at the end of Mr Sharpshooter's 5 year stay with the club. *[Ignore the benefits from the new stadium after the sale of Mr Sharpshooter]* (4 marks)
- (d) Assuming that the current stadium can be sold for \$53 million in (c) instead of a break even price, calculate the discount rate that would result in the club breaking even. (6 marks)
- (Total: 20 marks)

3. (a) Mr Bond holds shares in 3 companies with the following returns and market value per share when the expected rate of return is 15% and the risk free return is 10%

		Market value	Return
UOA	40% of total holdings	\$5.00	\$0.80
DBX	30% - " -	4.00	0.60
OCT	30% - " -	3.20	0.40

Calculate:

- (i) the beta factor for each of the shares above (7 marks)
- (ii) the expected return on the portfolio (2 marks)
- (b) Mr Warrant holds a portfolio of shares in the following companies when the expected rate of return is 12% and the risk free return is 8%

		Beta factor	Return per \$1 share p.a.
SIC	15% of total holdings	1.5	\$0.30
MSB	55% - " -	0.8	0.25
BAC	30% - " -	1.2	0.40

Calculate:

- (i) the market value per share for each company (7 marks)
- (ii) the beta factor of the portfolio as a whole (2 marks)
- (c) Explain briefly what does beta represent in portfolio theory and what is alpha value in the valuation of shares. (2 marks)
- (Total: 20 marks)

$$\text{CAPM formula - } R_E = R_f + (R_m - R_f) \beta$$

4. (a) Lucky Ltd has an annual turnover of \$60 million and its normal credit period granted is one month. However, its usual collection period is on average, 3 months. In order to improve its cashflow position, it is considering offering its debtors a 3% discount if they pay within one month. It is expected that 20% of its debtors would take up this offer and its average collection period is expected to fall to 2 months. The current cost of capital is 10%.

Required:

Advise Lucky Ltd whether the policy should be implemented. (4 marks)

- (b) Happy Ltd is considering a plan to increase its credit sales through granting of a longer credit period. Its gross profit margin is currently 40%. It is anticipated that this new plan will result in credit sales increasing from \$600,000 to \$800,000 and the average collection period increase from 2 months to 3 months. The cost of collection will also increase from the current 2% to 3% of credit sales. The current cost of capital is 8%.

Required:

Advise Happy Ltd whether the plan should be accepted. (6 marks)

- (c) Unhappy Ltd is considering the option of obtaining a loan with net proceeds of \$1 million with an interest rate of 8%, discounted and a requirement to maintain a balance of 10% with the bank or to factor its accounts receivable.

The factoring company will charge a 3% commission and an interest rate of 9%, all deducted upfront. The factoring will result in the company saving \$1,500 per month of accounting costs and avoidance of bad debts estimated at 2.5% of the gross amount factored to the factoring company.

Required:

Compute the effective interest rate for the bank loan and factoring and advise Unhappy Ltd whether the bank loan or factoring should be preferred.

(10 marks)

(Total : 20 marks)

5. Clickety Ltd is an importer of “cuckoo” clocks from Fairyland which uses a currency known as Uros. The company has contracted to purchase 3,000 clocks at a unit price of 180 Uros. Three months credit is allowed before payment is due.

(a) Clickety currently has no surplus cash, but can borrow short term at 2% above bank prime rate or invest short term at 2% below bank prime rate in either Singapore or Fairyland.

<i>Current Exchange Rates</i>	<i>Uros / \$</i>
Spot	2.97-2.99
1 month forward	2.5 c - 1.5 c premium
3 months forward	4.5 c - 3.5 c premium

<i>Current Bank Prime Rates</i>	
Fairyland	6% per year
Singapore	10% per year

- i) Explain and illustrate three policies that Clickety Ltd might adopt with respect to the foreign exchange exposure of this transaction. Recommend which policy the company should adopt. Calculations should be included wherever relevant. Assume that interest rates will not change during the next three months. (14 marks)
- ii) If the supplier were to offer 2.5% discount on the purchase price for payment within one month evaluate whether you would alter your recommendation in (i) above. (6 marks)
(Total: 20 marks)

6. Predator Ltd wishes to acquire Target Ltd. The directors of Predator are trying to justify the acquisition to the shareholders of both companies on the grounds that it will increase the wealth of all shareholders.

The supporting financial evidence produced by Predator's directors is summarised below:

	\$'000	
	<u>Predator</u>	<u>Target</u>
Operating profit	6,200	2,900
Interest payable	<u>2,215</u>	<u>1,000</u>
Profit before tax	3,985	1,900
Tax	<u>1,395</u>	<u>730</u>
Earnings available to ordinary shareholders	<u>2,590</u>	<u>1,170</u>

Earnings per share (pre-acquisition)	7.40 cents	14.60 cents
Market price per share (pre-acquisition)	111 cents	160.6 cents
Estimated market price (post-acquisition)	120 cents	
Estimated equivalent value of one old Target share (post-acquisition)		180 cents

Payment is to be made with Predator ordinary shares, at an exchange ratio of 3 Predator shares for every 2 Target shares

Required:

- (a) Calculate the pre-acquisition price/earnings ratio and number of shares in issue of both companies (4 marks)
 - (b) Demonstrate how the directors of Predator arrived at the estimated market value (post-acquisition) of one Predator share and one old Target share. (3 marks)
 - (c) Assuming that the market value of the combined entity is equal to the sum of the 2 companies' pre-acquisition market value, calculate the gain or loss in market value to the shareholders of Predator and Target. (5 marks)
 - (d) If Predator does not wish to dilute its shareholders' wealth, and Predator's estimate of its post-acquisition market price is correct, calculate the maximum price it should offer for each share in Target Ltd. (3 marks)
 - (e) If Target Ltd is prepared to accept the 2 for 1 share offer and its contribution to the group's after tax cash flow is \$1.4 million per year in perpetuity; advise the board of directors of Predator Ltd whether they should proceed with the offer, assuming the cost of capital is 14%. Assume no change in the market value of shares. (5 marks)
- (Total: 20 marks)

END