CIMA

Final Level

Management Accounting – Financial Strategy

13



23 November 2004 Tuesday afternoon

INSTRUCTIONS TO CANDIDATES

Read this page before you look at the questions

You are allowed three hours to answer this question paper.

Answer the ONE question in Section A.

Answer TWO questions ONLY from Section B.

Question One

Background

RGB is a computer technology business based in the UK. It was listed until 4 years ago but following disagreements between the Board and major shareholders, the directors and senior managers bought out the external shareholders, effectively re-privatising the company.

RGB sells its products and services worldwide, but its main market outside the UK is in North America. To date, all its manufacturing and administrative functions have been conducted from the UK.

Summary Financial Statements for last financial year

Turnover	£m 840
Earnings (post-tax)	76
Fixed assets	650
Net current assets	90
Less: Long term liabilities	
(8% Secured loan repayable 2010)	(<u>320</u>)
Total net assets	420
Shareholders' equity	420
(120 million £1 shares in issue)	

The average P/E ratio of listed companies in a similar industry is 10.53.

Company objectives

The company has three stated objectives. These are:

- Increase earnings per share by 5% per annum;
- Post-tax accounting rate of return on shareholders' funds of 20% per annum;
- Maintain a leading global presence in its operating markets.

New Capital Investment

The company is evaluating establishing a new manufacturing plant, marketing and administration facility in either the South of England or North America. Ideally, it would like to open the new UK facility as well as expanding into North America, but it does not believe it has the financial or management resources to do both at the same time.

RGB has a policy of limiting capital investment in any one financial year to £50 million. Last year the company did not spend up to this limit, however capital investments have already been approved in the current year that require total capital expenditure of £17 million. None of these can be postponed without loss of money spent on set up costs such as feasibility studies.

The estimated cost for the UK investment is £30 million. These initial investment costs will be written off over a period of 5 years. To establish operations in North America will cost an estimated US\$75 million. This US investment, combined with capital expenditure already committed, would exceed the company's capital investment limit if it were to be enforced.

Forecast pre-tax operating nominal cash flows for the first three years of operations are as follows:

Year		1	2	3
North America Investment	US\$m	22.25	24.25	26.25
UK	£m	6.30	9.00	10.50

- All operating cash flows may be assumed to occur at the end of each year. The initial capital investment will be made at the beginning of year 1 (year 0).
- Estimated cash flows beyond year 3 are highly uncertain, but for purposes of evaluation, the company assumes 5% per year growth on year 3's pre-tax operating sterling cash flows until the end of year 5. Cash flows beyond year 5 are ignored.

The investments this year will be financed by cash. The company has built up cash reserves of \pounds 50 million over the past 2 years and has also recently agreed the cash sale of some surplus assets.

Exchange rate information

	Forecast inflation rates
	per annum constant
USA	1.5%
UK	2.5%

The spot \$/£ exchange rate as at today is 1.70.

Taxation

Corporate tax rates in the two countries are as follows:

USA	25%
UK	30%

Assume for the purposes of evaluation:

- Both countries allow 100% first year allowance tax relief on capital investments of this type.
- There is a double taxation treaty in existence.
- Tax is payable (or refundable) at the end of the year in which the liability or refund arises.
- RGB pays tax at the national tax rates.

Cost of capital and adjustment for risk

For domestic investments RGB uses a risk-adjusted discount rate using the CAPM where possible. The expected nominal, post-tax risk free rate in the UK is 5% and the return on the market is 9%. The quoted equity beta of a suitable proxy company with similar capital structure to RGB is 1.3.

However, RGB's Finance Director recognises that the risks involved in the overseas proposal are different. Determining an appropriate discount rate to reflect risk is difficult in the circumstances. She has therefore recommended that the post-tax cash flows for the North American venture be adjusted using estimates of probability applied to sterling cash flows, discounted at the risk free rate. These estimates of probability are as follows:

Year:	1	2	3
Probability	0.9	0.87	0.82

Beyond year 3, a probability factor of 0.7 is estimated.

Methods of investment appraisal

RGB uses NPV analysis in the investment appraisal process, but the company also expects new investments to contribute to all the company's objectives.

Question One's requirements are on page 5, which is detachable for ease of reference.

TURN OVER

Assume you are the Capital Investment Analyst at RGB.

(a) Estimate the discount rate to be used in the evaluation of the UK investment and comment briefly on the limitations of using this rate in the investment being proposed here for RGB. Assume RGB's debt is trading at par and has a beta of zero.

(5 marks)

(b) Calculate the NPV, Profitability Index and estimated Accounting Rate of Return on Capital Employed (ROCE) for each investment. For the purposes of calculating the ROCE, assume that cumulative sterling post-tax cash flows at the end of year 5 equal cumulative post-tax profits before depreciation.

(20 marks)

- (C) Write a report to the board evaluating the proposed investments. Include the following sections in your report:
 - (i) An evaluation of how each of the two investments will contribute to the achievement of the company's stated objectives;

(10 marks)

 (ii) An analysis of the various types of risk involved in these investments and advice on a strategy for managing those risks. Include comments on the methods the Finance Director has recommended to adjust the cash flows for risk;

(8 marks)

(iii) A recommendation as to whether the company should invest in either or both projects. Include comments on the appropriateness of RGB limiting investment to £50 million in the current financial year.

(7 marks)

(Total for part (c) = 25 marks)

(Total = 50 marks)

Question Two

TLC Inc manufactures pharmaceutical products. The organisation exports through a worldwide network of affiliated organisations. Its headquarters are in the USA, but there is a large volume of inter-organisation sales, dividend flows and fee and royalty payments. These inter-organisational payments are made in US\$. An example of payment flows among four affiliates for the past 6 months is shown on the diagram below:



At present, each affiliate has control over its own cash management and foreign currency hedging decisions. The Corporate Treasurer is considering centralising cash and foreign currency management.

Required:

(a) Explain, briefly, the characteristics of a bi- or multi-lateral netting system and, using the information in the diagram, advise the Corporate Treasurer of the pattern of cash flows that would have been evident if such a system had been in operation in TLC Inc.

(12 marks)

(b) Discuss the advantages TLC Inc might obtain from centralising international cash management and foreign exchange management and advise on the potential disadvantages of such a change in policy.

> (13 marks) (Total = 25 marks)

A report format is not required for this question.

Question Three

AB and YZ both operate department stores in Europe. They operate in similar markets and are generally considered to be direct competitors. Both companies have had similar earnings records over the past ten years and have similar capital structures. The earnings and dividend record of the two companies over the past six years is as follows:

		AB			ΥZ	
Year to	EPS	DPS	Average	EPS	DPS	Average
31 March	cents	cents	share price	cents	cents	share price
			cents			cents
1999	230	60	2100	240	96	2200
2000	150	60	1500	160	64	1700
2001	100	60	1000	90	36	1400
2002	-125	60	800	-110	0	908
2003	100	60	1000	90	36	1250
2004	150	60	1400	145	58	1700

Note: EPS = Earnings per Share and DPS = Dividends per Share

AB has had 25 million shares in issue for the past six years. YZ currently has 25 million shares in issue. At the beginning of 2003 YZ had a 1 for 4 rights issue. The EPS and DPS have been adjusted in the above table.

The Chairman of AB is concerned that the share price of YZ is higher than his company's, despite the fact that AB has recently earned more per share than YZ and frequently during the past six years has paid a higher dividend.

Required:

- (a) Discuss:
 - the apparent dividend policy followed by each company over the past 6 years and comment on the possible relationship of these policies to the companies' market values and current share prices; and
 - (ii) whether there is an optimal dividend policy for AB that might increase shareholder value.

(12 marks)

(b) Forecast earnings for AB for the year to 31 March 2005 are €40 million. At present, it has excess cash of €2.5 million and is considering a share repurchase in addition to maintaining last year's dividend. The Chairman thinks this will have a number of benefits for the company, including a positive effect on the share price.

Advise the Chairman of AB of

- how a share repurchase may be arranged;
- the main reasons for a share repurchase;
- the potential problems of such an action, compared with a one-off extra dividend payment, and any possible effect on the share price of AB.

(13 marks) (Total = 25 marks)

A report format is not required for this question.

Question Four

GH Organisation is based in Germany. It has one subsidiary based in the UK, accounting for 35% of GH's total business. GH Organisation has borrowings of \in 15 million at a fixed rate of 6% per annum and £10 million sterling at a variable rate of LIBOR + 2%. LIBOR is currently 6% per annum. Interest is payable on both loans annually and is due to be paid in 6 months' time.

Interest and inflation rates (per annum)

	UK	European Common Currency Area (ECCA)	USA
Central bank base rates	5.0%	3.5%	3.0%
Inflation rates (Forecast by Central Bank)	2.5%	1.5%	1.0%
Exchange rates	€/£	€/US\$	
Current quoted spot rates	1.8100	1.0000	
3 month forward rates	1.8033		

The Chief Executive of GH Organisation has asked you as Assistant Treasurer to answer the following questions:

- 1 What are the real costs to us at present of borrowing, in both Euros and £ Sterling, in terms of annual interest rates?
- 2 As we are currently considering raising new capital should we look at borrowing in Euros (Eurobonds perhaps?) or Sterling, or a third currency such as the US\$?
- 3 What are the various methods available to us to manage our interest rate risk?
- 4 Interest is payable in 6 months' time. What amount are we likely to have to pay on our sterling loans, and should we consider hedging the amount, for example by using a forward contract?
- 5 Would it be more advantageous to borrow at fixed or floating rate given our present circumstances?

Required:

Write a memorandum to the Chief Executive replying to his queries, providing a full explanation of the issues he raises accompanied by relevant and appropriate calculations.

(Total = 25 marks)

Marks are split roughly equally between sections of this question.

Question Five

BST Motors plc (BST) is a long-established listed company. Its main business is the retailing of new and used motor cars and the provision of after-sales service. It has sales outlets in most of the major towns and cities in the UK. It also owns a substantial amount of land and property that it has acquired over the years, much of which it rents or leases on medium-long term agreements. Approximately 80% of its fixed asset value is land and buildings.

The company has grown organically for the last few years but is now considering expanding by acquisition. The Chief Executive is not in favour of hostile bids as he believes the bidder always pays too much to acquire the target. Any acquisition that BST makes will therefore need to be an agreed bid.

SM Limited (SM) owns a number of car showrooms in wealthy, semi-rural locations in the North of England. All of these showrooms operate the franchise of a well-known major motor manufacturer. SM is a long-established private company with the majority of shares owned by the founding family, many of whom still work for the company. The major shareholders are now considering selling the business if a suitable price can be agreed. The Managing Director of SM, who is a major shareholder, has approached BST to see if they would be interested in buying SM. He has implied that holders of up to 50% of SM's shares might be willing to accept BST shares as part of the deal.

The forecast earnings of BST for the next financial year are £35 million. According to the Managing Director of SM, his company's earnings are expected to be £4 million for the next financial year.

Financial statistics and other information on BST and SM are shown below:

	BST	SM
Shares in issue (millions)	25	1.5
Earnings per share (pence)	112.5	153
Dividend per share (pence)	50.6	100
Share price (pence)	1237	n/a
Net asset value attributable to equity (£m)	350	45
Debt ratio (outstanding debt as percentage of total market value of company)	20	0
Forecast growth rate percentage (constant, annualised)	4	5
Cost of equity	9%	n/a

SM does not calculate a cost of equity, but the industry average for similar companies is 10%

Required:

Assume you are a financial manager working with BST. Advise the BST Board on the following issues in connection with a possible bid for SM:

(i) Methods of valuation that might be appropriate and a range of valuations for SM within which BST should be prepared to negotiate;

(10 marks)

(ii) The financial factors relating to both companies that might affect the bid;

(5 marks)

(iii) The most appropriate form of funding the bid and the likely financial effects on BST;

(5 marks)

(iv) The advantages and disadvantages of growth by agreed acquisition as compared with growth by internal (or organic) investment.

(5 marks)

(Total = 25 marks)

A report format is not required for this question.

End of paper