CIMA

Final Level

Management Accounting – Financial Strategy

13 FLFS

18 November 2003

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. The scenario on which the question in section A is based is on pages 2 and 3. The question follows and is on a detachable page so that you can refer more easily to the information in the scenario at the same time as the question. Answer TWO questions ONLY from section B.
Maths Tables and Formulae were provided within the question paper and are available elsewhere on the website.
Write your examination number, your contact ID and your name on a double-sided card, which must be attached to your answer book. Write FLFS on the line marked "Subject" on the front of the answer book.
Do NOT write your name or your contact ID anywhere on your answer book.
Tick the appropriate boxes on the front of the answer book to indicate which questions you have answered.

SECTION A – 50 MARKS

READ THE SCENARIO, BELOW AND OPPOSITE, AND ANSWER THE QUESTION

Question One

C&C Airlines plc

Background to company

C&C Airlines plc operates a small fleet of aeroplanes from an airport in the United Kingdom. Its business is aimed at low-budget travellers on short-haul flights. The company was formed in 1990 by a group of private investors who continue to own the company. Two of these investors take an active role in the management of the company as executive directors.

The shareholders' objective is long-term capital growth. They have taken relatively low dividends out of the company since its incorporation. The strategy has been to accept low, or no, profits, and build the brand name and market share in its niche market. Their "exit strategy" is eventually to sell a majority holding in the company following either a stock market flotation or private sale of shares to another company.

Assets and turnover

C&C Airlines plc currently owns 12 planes, mainly Boeing 737s. It has bought all of them second-hand from the major airlines.

The company's total net assets are currently, and realistically, valued at £130 million. It is all-equity financed. The turnover in the last full financial year was £85 million. The forecast turnover for the current year is £98 million. Profits after tax are forecast as £18 million.

Proposed investment

The company's directors are examining a proposal for a strategic move into the long-haul market. The initial investment involves the purchase of a five-year-old Boeing 757, which will be used to fly to and from the Caribbean. Negotiations to buy this plane are already underway. C&C Airlines plc plans to operate the plane for three years and replace it at the end of this time with a newer model.

When fully loaded, this type of plane will carry 220 passengers. The company estimates an average return fare of £300 per passenger on this route. All income will be received in £ sterling. The company's estimates of average passenger loading are as follows:

	Probability of load being achieved	
Load	*Year 1*	*Years 2-3*
100% (all seats taken)	10%	15%
80% full	50%	60%
50% full	30%	20%
40% full	10%	5%

The plane is expected to make 6 return trips every week and be operational 48 weeks of the year.

The capital costs of the purchase of the plane are US$ 30 million. To date, C&C Airlines plc has spent £500,000 on market research and purchase negotiations. Other financial data associated with the venture are:

- Capital allowances are available at 25% on a reducing balance of the total capital cost.
- The estimated resale value of the plane 3 years after purchase, in nominal terms, is $16 million.

Cash operating costs (per annum)

Sterling-denominated costs such as maintenance, insurance, crew wages, salaries and training	£2·9 million
US$-denominated fuel costs	US$ 4·2 million

Overheads and other costs (per annum)

Administration and office space	£0·3 million
These costs include a £50,000 re-allocation of current head office costs.	
Advertising and promotion	£0·35 million

Estimates of increases in income and costs

The figures given above are all in nominal terms as at today. Because this is an increasingly competitive market, the company is unlikely to be able to increase fares in line with inflation. The best estimate is an annual increase of 2%. Operating costs (excluding fuel) are expected to increase by the annual UK rate of inflation (3%). Forecasting fuel costs is very difficult but best estimates are that they will rise by 5% each year over the next 3 years. Assume these inflationary increases commence in the first year of operations. Overheads and other costs are expected to be held constant in nominal terms.

Currency and inflation rates

- Current spot exchange rate is US$ 1·53 / £1
- Estimated per annum inflation rates are as follows:

UK	3%
USA	4%

Inflation rates in the UK and USA are expected to remain at these levels.

Allowing for risks

The company evaluates investments by discounting cash flows at 9% per annum nominal and applying certainty equivalents to net after-tax cash flows. The estimates for the proposed investment are shown below:

Year	*Certainty equivalent*
1	0·90
2	0·85
3	0·80

The company's new Finance Director would prefer to use a risk-adjusted discount rate. A competitor company to C&C Airlines plc has a quoted equity beta of 1·3 and a debt : equity ratio (based on market values) of 1 : 4. This is unlikely to change in the foreseeable future. The post-tax return on the market is expected to be 12% and the risk-free rate 5%. Assume a debt beta of 0·15.

Assumptions:

- Capital costs are paid immediately but all other cash flows occur at year-end.
- Taxation at 30% is paid or repaid at the end of the year in which the liability / repayment arises (that is, no time lag).
- The plane is acquired and becomes operational immediately.

This page is detachable, for ease of reference.
Finish reading the scenario on pages 2 and 3 before attempting the question below

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Question 1 (continued)

Required:

(a) Calculate the discount rate to be used in the investment decision using the CAPM and comment, briefly, on the limitations of using the CAPM in the circumstances here.

(5 marks)

(b) Calculate the £ sterling NPV of the proposed investment in the new plane using:

(i) the discount rate calculated in *(a)* above, rounded to the nearest 1%; and

(ii) a discount rate of 9% per annum nominal and adjusting for the company's estimated certainty equivalents,

and recommend, briefly, whether to proceed with the investment, based solely on your calculations above.

NPV should be calculated in sterling, converting US$ cash flows to sterling. Assume the theory of *purchasing power parity* applies when calculating exchange rates.

(Total for part (b) =20 marks)

(c) Assume you are the assistant to the Finance Director. On his behalf, draft a report to the board that critically evaluates the following:

(i) the major economic forces that might impact on, or influence, the success of the investment;

(ii) commercial aspects of the investment that involve the greatest uncertainty and risk;

(iii) strategies for managing the risks discussed in parts *(c)(i)* and *(c)(ii)*;

The report should conclude with a recommendation of a course of action.

(Total for part (c) =25 marks)

(Total = 50 marks)

SECTION B – 50 MARKS
ANSWER TWO QUESTIONS ONLY

Question Two

TDC Inc is a transport and distribution company listed on the New York Stock Exchange. On 14 November 2003, the directors made a bid for a competitor, UED plc that is based in the UK.

UED plc's directors are considering the bid but have indicated the terms are inadequate and would have to be improved if they were to feel able to recommend it to their shareholders.

The merger would create the fourth largest company in the industry worldwide, but it would still be substantially smaller than the three largest companies. TDC Inc has suffered from slow growth over the past few years and has long been rumoured by market professionals to be a likely target of a hostile bid from one of the three larger companies, or even a reverse takeover by a smaller company. The bid for UED plc is therefore being seen by the market as defensive.

	TDC Inc	*UED plc*
Market data:		
Common stock / share price as at today (18 November 2003)	US$ 11·36	425 pence
Common stock / share price on 18 October 2003	US$ 12·45	305 pence
Common stock / shares in issue	120 million	145 million
P/E ratio as at today	11	13·5
Accounting data	*US$ millions*	*£ millions*
Forecast profit after tax for the current financial year	98·5	45·5
Net asset values at last balance sheet date (30 June 2003)	825·2	230·5
Including cash balances of	125·5	65·2
Debt outstanding (market value)	250	75
[Repayable	*2007*	*2008]*

Other information:

- The average P/E for the industry is currently estimated as 10 in the UK and 13 in the USA.
- The average debt ratio for the industry internationally (long-term debt as proportion of total funding) is 15% based on market values.
- TDC Inc's cost of equity is 12% net of tax.
- The US$ / £ exchange rate is today 1·53.

Terms of the bid

TDC Inc's directors have made an opening bid of 1 TDC Inc common stock for 2 UED plc shares. No cash alternative has been offered so far.

Required:

Assume you are the Financial Manager with TDC Inc. Write an internal memorandum for the board that:

(i) discusses how the recent price movements of the two companies' shares might impact on the bid negotiations;

(6 marks)

(ii) recommends revised bid terms that might be acceptable to the directors and shareholders of UED plc and also to your own board. Your recommendation should be fully evaluated;

(12 marks)

(iii) evaluates the strategic implications of making a hostile bid compared with an aggressive investment programme of organic growth.

(7 marks)

(Total = 25 marks)

Question Three

(a) IOU Inc is a large company based in the USA that trades mainly within the USA and with the UK. It has a significant amount of borrowing in £ sterling. Debt interest of £725,000 is due to be paid on 31 October and a further £530,000 on 31 December. IOU Inc's policy is to hedge the risks involved in all foreign currency transactions.

Assume it is now 30 September. The company's bank quotes the following rates of exchange, US$ per £:

Spot	*1 month forward (mid-rate)*	*3 months forward (mid-rate)*
1·5584 – 1·5590	1·5601	1·5655

Prices for a £ / US$ option on a US Stock Exchange (cents per £, payable on purchase of the option, contract size £31,250) are:

Strike price	*Calls*		*Puts*	
(US$ / £)	*October*	*December*	*October*	*December*
1·56	2·02	3·00	1·00	2·16
1 57	1·32	n/a	n/a	n/a
1·58	0·84	2·12	2·18	3·14

The Treasurer is considering two methods of hedging the risk, fixed forward or option contracts. Market expectations, based on current published economic forecasts, are that sterling will appreciate against the US$ over the next three months. The Treasurer thinks it might weaken or at least remain stable against the $. He suggests that if options are to be used, one-month options should be bought at a strike price of 1·57 and three-month options at a strike price of 1·58.

Ignore transaction costs.

Required:

Recommend, with reasons, the most appropriate method for IOU Inc to hedge its foreign exchange risk on the two interest payments due in one and three months time. Your answer should include appropriate calculations, using the figures in the question, to support your recommendation and a discussion of the factors to consider when choosing between the two hedging mechanisms.

(15 marks)

(b) Assume you are a financial manager with the nationally-owned postal and tele-communications company in Zorro, a country in Asia. In organisations such as this, periodic settlements are made between local and foreign operators. Net receipts or payments are in US$.

Required:

Explain the main types of foreign exchange risk exposure that are likely to affect the organisation and advise the company on policies it could consider to reduce exposure to these risks.

(10 marks)

(Total = 25 marks)

Question Four

PDQ plc is a software company and Internet provider that was established in the dot-com boom of the late 1990s.

The three founding shareholders, who are still directors and managers of the company, own 30% of PDQ plc. Employees, friends and relatives of the founders own a further 15%. The majority 55% shareholding is owned by a venture capital company that bought a stake in PDQ plc four years ago for £12 million. The venture capital company now wishes to dispose of the holding. The 45% minority shareholders and non-shareholding employees are considering a management buyout.

PDQ plc has sustained losses for the past three years but believes it is now moving into profit. Because of these losses, no liability to tax will arise in 2004 but the company will begin to pay tax at 30% per annum from 2005. It has not declared or paid a dividend since the company was formed. A summary of forecast key financial information for the current year and for 2004 is as follows:

Profit and loss account for the year ended:	*31 December 2004*	*31 December 2003*
	£ million	*£ million*
Turnover	15·25	14·52
Direct costs and expenses	12·50	16·97
Profit / (loss) before tax	2·75	(2·45)

Balance sheet at	*31 December 2004*		*31 December 2003*	
	£ million	*£ million*	*£ million*	*£ million*
Fixed assets (NBV)		0·50		0·50
Current assets:				
Stock	1·25		1·25	
Debtors	4·25		3·25	
Cash and marketable securities	0·50		0·00	
		6·00		4·50
Less Current liabilities:				
Trade creditors	2·80		3·20	
Bank overdraft	0·00		0·85	
		2·80		4·05
Total net assets		3·70		0·95
Ordinary share capital (Ordinary shares of £1)		0·25		0·25
Total reserves		3·45		0·70
Equity shareholders' funds		3·70		0·95

The directors expect growth of 20% each year for the three years 2005 to 2007 inclusive, falling to 5% each year after that. The average P/E ratio for established listed companies in the industry is currently 28·4 but there is a wide range of between 7·5 and 51·5. The average post-tax cost of equity capital for the industry, according to a recent study, is 15%.

Required:

Assume today is 31 December 2003.

Advise the founders / employees on the following.

(a) The price they might have to offer the venture capitalist to succeed with a management buyout. You should include in your discussion the various methods of share valuation that might be suitable in the circumstances. Make and state whatever assumptions you feel are necessary and appropriate.

(18 marks)

(b) The advantages and disadvantages of pursuing a management buyout at the present time compared with the possibility of a sale of the venture capitalist's shareholding to another investor.

(7 marks)

Note: A report format is NOT required in answering this question.

(Total = 25 marks)

Question Five

UR is a privately-owned machine tool manufacturing company based in the Republic of Ireland. For the past five years, it has operated an aggressive policy in respect of the management of its working capital. The following information concerns the company's forecast end-of-year financial outcomes if it continues with this type of policy.

	€000
Debtors	5,200
Stock	2,150
Cash at bank	350
Total current assets	7,700
Fixed assets	14,500
Trade creditors	4,500
Sales	17,500
Operating costs	14,000
Operating profit	3,500
Earnings	2,625

There are 2·5 million shares in issue.

The company has been experiencing a series of problems because of the type of working capital management policy it has been following and is considering an alternative approach to working capital management.

The percentage figures shown below are changes to the above forecast. These changes are anticipated to occur if a more conservative policy is adopted.

Debtors	- 40%
Stock	+ 20%
Cash (figures in €000)	Increase to €1,000
Fixed assets	No change
Current liabilities	- 30%
Forecast sales	- 5%
Operating profit and earnings	+ 5%

Required:

Evaluate the two working capital management policies described above and recommend a proposed course of action. Include in your evaluation a discussion of the problems that might have arisen as a result of operating aggressive working capital management policies and the key elements to consider and actions to take before making a decision to change.

You should calculate *appropriate* and *relevant* ratios or performance measures to support your arguments. *[The calculations will earn up to 8 marks.]*

(25 marks)

End of paper