CIMA

Final Level

Management Accounting – Financial Strategy

13 FLFS

20 May 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. Answer TWO questions ONLY from section B.
Maths Tables and Formulae were provided at the end of the questions and are available elsewhere on the website.
Write your examination number in the boxes provided on the front of the answer book. Write FLFS on the line marked "Subject" on the front of the answer book.
Do NOT write your name or your student registration number 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 ON THE DETACHABLE PAGE 5

Question One

Background

Dobbs plc is an international publishing company based in the United Kingdom. It has recently sold a subsidiary that publishes technical journals, a field the company considered to be non-core business. The sale raised £30 million in cash. The directors are evaluating what they consider to be a very promising acquisition opportunity and the cash raised from the sale of the subsidiary would be used as part of the financing arrangement.

Potential investment in a new subsidiary

Alice Jain Inc is an American publisher that has two main divisions. One division publishes books, mainly "blockbuster" type fiction, and the other publishes "lifestyle" magazines. Both divisions have seen strong growth over the past five years as a result of changes in the public's magazine-buying habits and also because of two high-selling authors whom the company contracted before they became popular. These contracts have between three and five years to run before they are re-negotiated. Many industry observers think Alice Jain Inc has been successful because of good luck rather than good judgement and that with stronger management the company could become a major international publisher.

Alice Jain Inc is privately owned (that is, it does not have a listing on a stock market). There are approximately 50 shareholders although 60% of the shares are owned by the husband and wife partnership that started the business 25 years ago. Dobbs plc's directors have already made an informal approach to Alice Jain Inc's directors and believe they will be receptive to an offer if terms can be agreed. No announcement has yet been made to the press or to Dobbs plc's shareholders about their intentions.

On the basis of industry information and private sources, Dobbs plc's directors forecast the following cash flows from Alice Jain Inc:

Year	*1*	*2*	*3*	*4*
Net cash flows ($ millions)	35·5	43·5	46·5	52·5

NOTES:

(1) The spot $US / £ exchange rate is 1·45. Forecast economic data relevant to the USA and the UK is as follows:

	USA	*UK*
Risk-free rates for each year	3·5%	4·5%
Inflation rates for each year	2·5%	3·2%

Assume the theory of interest rate parity applies when forecasting exchange rates.

(2) The cash flows are in real terms. Dobbs plc evaluates all its investment decisions at its domestic, post-tax cost of capital, which is a nominal 11%. It evaluates international investments by converting the foreign currency cash flows to sterling and applying its domestic cost of capital of 11%. The cost of capital for Alice Jain Inc is not known. Dobbs plc's Finance Director has used the capital asset pricing model to assist in the calculation of a discount rate based on the published information about a quoted British company with a similar commercial and financial profile to Alice Jain Inc. He has calculated that the proxy company's nominal, post-tax cost of capital is 13%.

(3) When evaluating investments, Dobbs plc ignores cash flows beyond four years and terminal values.

Financing of the acquisition

Dobbs plc's directors are considering offering Alice Jain Inc's shareholders either shares in Dobbs plc or a cash alternative. The two majority shareholders are likely to take 50% shares, 50% cash as there are tax advantages to a share exchange. This will use up most of the cash from the sale of the subsidiary. The cash for the remaining shareholders will have to be raised by Dobbs plc increasing its borrowing. The "worst case" scenario is that the remaining shareholders (that is, those except the two major shareholders) will all opt for cash.

Finance Director's concerns

Dobbs plc's long-term debt to equity ratio is relatively high compared with other publishing companies of similar size. The Finance Director thinks some of the cash raised from the sale of the subsidiary should be used to purchase a small British publishing company at an approximate cost of £15 million. The remaining cash should then be used to repay some of Dobbs plc's outstanding debt.

The other directors disagree and believe the financial risk of investing in Alice Jain Inc will be justified by substantial value enhancement strategies that can be put in place following the acquisition.

Summary financial information on bidder and target companies

	Dobbs plc	*Alice Jain Inc*
	£ million	*$ million*
Profit and loss account for 12 months to 31 December 2002		
Turnover	251·5	75·8
Operating profit	65·6	20·9
Interest payable	12·0	2·0
Profit before tax	53·6	18·9
Taxation	15·0	7·0
Balance sheet at 31 December 2002		
Fixed assets	195·0	45·0
Net current assets	75·0	25·0
Total assets less current liabilities	270·0	70·0
Long-term debt	125·0	15·0
Net assets	145·0	55·0
Ordinary share capital:		
Ordinary shares of £1	45·0	
Common stock of $1		15·0
Total reserves	100·0	40·0
Equity shareholders' funds	145·0	55·0

Current share price for Dobbs plc is 885 pence. High and low share prices for the past 12 months were 925 pence and 755 pence respectively.

No share price is available for Alice Jain Inc.

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

Question 1 (continued)

Assume you are a financial manager with Dobbs plc.

Required:

(a) *(i)* Calculate the present value of the investment / acquisition's cash flows and explain your method of evaluation, including your choice of discount rate.

(ii) Calculate the number of shares Dobbs plc might need to issue and the amount of debt that might need to be raised in the "worst case" scenario. Include brief comments to explain your calculations.

(Total for part (a) = 16 marks)

(b) Write a report to the directors of Dobbs plc, evaluating the potential acquisition. You should include in your report:

(i) a recommendation, with reasons, of whether the investment should proceed and at what price;

(ii) advice on strategies for enhancing the value of the combined company following the acquisition;

(iii) discussion of the Finance Director's recommendation to acquire a smaller company and repay some debt;

(iv) advice on Dobbs plc's directors' responsibilities to ensure fair and equal treatment for all shareholders in accordance with current takeover regulation.

Use additional calculations to support your arguments wherever relevant and appropriate.

Note: Marks are distributed roughly equally between these four sections of the report.

(Total for part (b) = 34 marks)

(Total = 50 marks)

SECTION B – 50 MARKS

ANSWER TWO QUESTIONS ONLY

Question Two

(a) Assume you are the Treasurer of AB plc, a large engineering company. You have forecast that the company will need to borrow £2 million by the end of September 2003 for at least 6 months. The need for finance will arise because the company has extended its credit terms to selected customers over the summer period. The company's bank currently charges customers such as AB plc 7·5% per annum interest for short-term unsecured borrowing. However, you believe interest rates will rise by at least 1·5 percentage points over the next 6 months. You are considering using one of three alternative methods to hedge the risk:

(i) forward rate agreements; or

(ii) interest-rate futures; or

(iii) an interest rate guarantee (a short-term cap).

You can purchase an interest rate cap at 7% per annum for the duration of the loan to be guaranteed. You would have to pay a premium of 0·1% of the amount of the loan. As part of the arrangement, the company will agree to pay a "floor" rate of 6% per annum.

Required:

Discuss the features of each of the three alternative methods of hedging the interest rate risk and advise on how each might be useful to AB plc, taking all relevant and known information into account.

(12 marks)

(b) You are contacted by the company's bank and informed that another of the bank's clients, a smaller company in the same industry, is looking for a swap partner for a similar amount of borrowing for the same duration. This company, RO plc, would prefer variable rate finance whereas the bank knows that AB plc would prefer fixed rate. The borrowing rates applicable to AB plc and RO plc are as follows:

	Floating	*Fixed*
AB plc	LIBOR + 0·3%	7·5%
RO plc	LIBOR + 0·5%	8·5%

Required:

(i) Comment briefly on why swaps may be used and recommend how the two companies here could co-operate in a swap arrangement to their mutual benefit. Support your recommendation with appropriate calculations.

(ii) Discuss the advantages and disadvantages of arranging a swap through a bank rather than negotiating directly with a counter-party.

(13 marks)

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

(Total = 25 marks)

Question Three

YZ is a specialist food manufacturing company based in the south of England. It trades with companies within the European common currency area. The following receipts and payments are due within the next three months:

	Euros (€)
Due in 1 month:	
Payments to suppliers	600,000
Receipts from customers	400,000
Due in 3 months:	
Payments to suppliers	800,000
Receipts from customers	1,200,000

Exchange rates as at today:	*€ / £*
Spot	1·6186 – 1·6202
1 month forward	0·0002 – 0·0006 premium
3 months forward	0·0008 – 0·0013 premium

Interest rates (annual) (assumed to apply throughout the common currency area)	*Borrowing*	*Lending*
£ sterling	4·25	3·75
€ (Euro)	3·50	3·00

Required:

(a) Calculate the *net* Sterling currency receipts or payments that YZ might expect for *both* its one-month and three-month transactions if it:

(i) hedges the risk using the forward market;

(ii) hedges the risk using the money market;

(iii) does not hedge the risk and the € / £ spot exchange rates in one and three months' time are 1·6192 – 1·6208 and 1·6200 – 1·6220 respectively.

(12 marks)

(b) Discuss the advantages and disadvantages of the three courses of action being considered in *(a)* and recommend which you consider to be the most appropriate for YZ.

[Note: alternative *(iii)* is *not* to hedge. You would not of course know what the actual exchange rates will be when you offer this advice.]

(13 marks)

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

(Total = 25 marks)

Question Four

CD Limited is a private company in a computer-related industry. It is based in India and has been trading for 6 years. It is managed by its main shareholders, who are the original founders of the company. Most of the employees are also shareholders, having been given shares as bonuses in 1999. None of the shareholders has attempted to sell shares in the company so the problem of placing a value on them has not arisen.

Turnover last year, the 12 months to 31 December 2002, was 356 million Rupees.

The table below shows earnings and dividends for CD Limited since its creation:

Year	*Earnings after tax*		*Dividend declared*
	Million Rupees	*Rupees per share*	*Rupees per share*
1997	25	8·33	0
1998	120	40·00	20·0
1999	145	48·33	24·2
2000	185	52·86	26·4
2001	195	55·71	27·8
2002	203	58·00	26·3

Between 1997 and 1999 there were 3 million shares in issue. This was increased to 3·5 million by the issue of bonus shares at the end of 1999. The par value of the shares is 1 Rupee. The company is all-equity financed. The company pays tax at 30%. Dividends declared in one year are paid the following year.

In the current year (2003), earnings are likely to be slightly below 2002 at around 200 million Rupees. The company's directors have decided to pay a maintained dividend for 2003.

They are now evaluating investment opportunities that would require all the company's free cash flow for 2003 plus borrowings of 150 million Rupees of undated debt. If the company does not borrow to invest, growth in earnings and dividends will be zero for the foreseeable future. If the company does borrow and invest, then it expects growth in earnings and dividends of 5% in 2004 (from the 2003 base). The company's expected post-tax cost of equity capital is estimated at 14% per annum, assuming the borrowing takes place. Ignore the effects of inflation.

Required:

(a) Discuss the relationship between dividend policy, investment policy and financing policy in the context of the scenario and recommend a course of action for the directors of CD Limited.

(10 marks)

(b) Calculate an estimated company value, share price and P/E ratio for CD Limited using Modigliani and Miller's theory of capital structure, assuming the company does borrow and invest.

(6 marks)

(c) Discuss the relevance of the figures you have just calculated in answer to requirement *(b)* above in placing a value on *(i)* a small parcel of shares, for example the shareholding of one employee, and *(ii)* the entire company.

(9 marks)

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

(Total = 25 marks)

Question Five

(a) You are a newly-appointed Finance Manager of an Educational Institution that is mainly government-funded, having moved from a similar post in a service company in the private sector. The objective, or mission statement, of this Institution is shown in its publicity material as:

"To achieve recognised standards of excellence in the provision of teaching and research."

The only financial performance measure evaluated by the government is that the Institution has to remain within cash limits. The cash allocation each year is determined by a range of non-financial measures such as the number of research publications the Institution's staff have achieved and official ratings for teaching quality.

However, almost 20% of total cash generated by the Institution is now from the provision of courses and seminars to private sector companies, using either its own or its customers' facilities. These customers are largely unconcerned about research ratings and teaching quality as they relate more to academic awards such as degrees.

The Head of the Institution aims to increase the percentage of income coming from the private sector to 50% over the next five years. She has asked you to advise on how the management team can evaluate progress towards achieving this aim as well as meeting the objective set by government for the activities it funds.

Required:

Discuss the main issues that an institution such as this has to consider when setting objectives. Advise on

- whether a financial objective, or objectives, could or should be determined; and
- whether such objective(s) should be made public.

(9 marks)

(b) The following is a list of financial and non-financial performance measures that were in use in your *previous company:*

FINANCIAL	*NON-FINANCIAL*
Value added	Customer satisfaction
Profitability	Competitive position
Return on investment	Market share

Required:

Choose *two of each* type of measure, explain their purpose and advise on how they could be used by the Educational Institution over the next five years to assess how it is meeting the Head of the Institution's aims.

(16 marks)

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

(Total = 25 marks)

End of paper