Institute of Incorporated Public Accountants

Final Admitting Examination

Module 14: Financial Management

Thursday 29th. May 2014

02:00pm – 17:00pm

Instructions: **Answer five questions**

Section A

All three questions to be attempted

Section B

Two of the three questions to be attempted

Time Allowed: **3 Hours**

Section A: All three questions to be attempted

Section A (70 marks in Total)

Question 1 Part (a)

DebbieTrading Technologies PLC (DTT) wishes to estimate its cost of capital for use in analysing projects that are similar to its existing projects. The following figures have been extracted from their most recent accounts:

	€'000	€'000
Fixed assets		42,000
Investments		7,000
Current Assets	20,000	
Less - current liabilities	15,500	
		4,500
		53,500
Ordinary Share Capital:		
Issued - 500,000 @ €2		1,000
Reserves		29,250
Shareholders' funds		30,250
6% Irredeemable Debentures		12,000
7% Preference Shares		10,000
Deferred taxation		500
Corporation Tax		750
		53,500

The current market value of DTT plc's ordinary shares is €48.00 per share cum-dividend. DTT's beta is 1.2, the risk-free rate is 2 percent, and the return on the ISEC index (the market proxy) is 10 percent. An annual dividend of €3,000,000 is due for payment shortly. The 6% debentures are irredeemable and are trading at a current market value of €110.00, a €10 premium above their issue price of €100. Semi-annual interest of €3m has just been paid on the debentures.

The 7% preference shares are trading at a current market value of €12.50, a €2.50premium above their issue price of €10. Interest has just been paid on these preference shares. There have been no issues or redemptions of ordinary shares or debentures during the past five years. The corporation tax rate of 12.5% has pertained throughout the past five years without change. Assume that tax relief on the debenture interest arises at the same time as the interest payment.

Required

Ignoring the potential new investment, calculate the cost of capital that DTT should use as a discount rate when appraising new marginal investment opportunities.

(13 marks)

P.T.O.

Question 1 Part (b)

An unlevered company (i.e. a firm with no debt in its capital structure) operates in perfect markets and has net operating income (EBIT) of €3,000,000. Assume that the required return on assets for firms in this industry is 10%. The firm decides to issue €12 million worth of debt, with a required return of 5%, and uses the proceeds to repurchase outstanding shares. There are no corporate or personal taxes.

i) Calculate the market value and required return of this firm's shares before the repurchase transaction, according to M&M (Modigliani & Miller) Proposition 1.

(3 marks)

ii) Calculate and explain the market value and required return of this firm's remaining shares after the repurchase transaction, according to M&M.

(5 marks)

iii) Describe how M&M changed their conclusion regarding capital structure choice with the additional assumption of corporate taxes. In this context explain the difference in value between levered and unlevered firms.

(4 marks)
(25 marks in Total)

Note: M&M Proposition I:
$V_U = V_L$,

Where
V_U = the value of an unlevered firm and
V_L is the value of a levered firm

Note: M&M Proposition II (with risky debt):
$r_E = r_0 + D/E\ (r_0 – r_D)$

Where
r_E = is the required rate of return on equity, or cost of equity
r_0 = is the company unlevered cost of capital (i.e. assume no leverage)
r_D = is the required rate of return on borrowings, or cost of debt and
D/E = the Debt to Equity ratio.

Question 2

Middle-Air ltd provides software solutions for the airline industry. At present the shares of the company are all held by the senior management and a venture capitalist business. The company intends to seek a stock exchange listing and will make 75% of the ordinary shares available to the investing public.

The board of directors need to agree a dividend policy for when the company becomes listed. The Chairperson believes that the existing dividend policy need not be adjusted. The Managing Director argues that the policy should be changed to a fixed payout percentage. The Finance Director expresses the view that since dividend patterns have no impact on shareholders wealth the debate is irrelevant.

As a matter of policy the firm owns no fixed assets. All such assets are held on short term leases. As the chairperson says “our assets are our people and our software”. The Finance Director feels that given the risk of the firm, it would have a Beta of 1.5 and the appropriate discount rate to use for its cash flows is 12%. The Chairperson feels that as the business is doing so well the risk free rate of 2% should be used. The Managing Director feels that as the firm is soon to be on the stock market, the market return of 7% is appropriate.

Information relating to Middle-Air ltd over the past five years is set out below:

Year End 30th April	No. Ordinary Shares in Issue '000	Profit after Tax €'000	Ordinary Dividends paid €'000
2009	500	840	420
2010	500	1190	580
2011	800	1420	340
2012	1000	1940	450
2013	1000	2560	970

While the chairperson expects the firm to grow at similar rates in the future, the Managing Director feels that the long term industry growth rate of 5% is more likely. The Finance Director noted that a similar firm to Middle-Air ltd that is listed has a P:E ratio of 18.

Required:

a) Evaluate the dividend policy operated by Middle-Air ltd over the last 5 years. In your answer discuss the views of the Chairperson, Managing Director and the Financial Director on dividend policy from both a practical and theoretical viewpoint.

(15 Marks)

b) Given the differences of opinion of the three people BRIEFLY DISCUSS THREE (3) appropriate discount rates, growth rates and THREE methods Middle-Air ltd could use to estimate the likely valuations for the company when it goes public. Where you estimate actual valuations explain how you arrived at those estimates. **(10 Marks)**

(25 marks in Total)

Note: CAPM: $E(r_i) = rf + Bi(E(r_m) - r_f)$

Where: $E(r_i)$ = Expected return to firm i

Rf = Risk Free rate and

$E(r_m)$ = Expected return on the market

Question 3

Taybells plc based in South County Dublin expects to receive £15 million in six months' time. The financial controller has been head hunted away to a rival company. As this is quite a large sum for the company they have asked you to help them to choose the appropriate response from the three alternative views expressed by the remaining senior management.

John, the CEO feels that the euro has been falling against the £ sterling and believes that this trend will continue. John therefore recommends "using a forward".

Bernie, the Marketing manager believes that the euro is just as likely to strengthen against the £ sterling as it is to go down. Faced with this uncertainty, Bernie therefore recommends "using a currency option".

Tom, the head of manufacturing says he read a report about Stanley Fisher and theories such as the "expectations theory of exchange rates" and the "international interest rate parity" theory. So Tom says they should just "trust market prices and do nothing".

Given this level of differences among the board members they have gathered the following information on rates available to them:

	Spot Rates		6 Month Forward Rates	
Stg. £ / €	0.7412	0.7428	0.7522	0.7538

An over-the-counter Stg. £ / € currency option at an exercise price of £1 = €0·7400 at a premium cost of €1·10 per £100.

Required:

Write a briefing in a short <u>report format</u>. The report should briefly:

(i) Outline the main characteristics of forward exchange contracts and currency options and explain the main advantages and disadvantages of each and the relevance of the "expectations theory of exchange rates" to the decision to hedge or not.

(ii) Show the effect of each of the three options that are being considered, assuming that the exchange rate has moved in six months' time to:
(a) €1 = £0·7200
(b) €1 = £0·7600

(iii) Discuss the results from (ii) above.

(20 marks in Total)

P.T.O.

Section B: two (2) of the following three (3) questions to be attempted

Section B (30 marks in Total)

Question 4

a) From a (financial) risk management perspective explain the term "overtrading". In your answer show how one could diagnose (or misdiagnose) the main symptoms of this condition, the various possible causes of such symptoms and how firms could overcome this situation.

(8 marks)

b) From a (financial) risk management perspective explain the term "the operating cash cycle". In your answer explain why it is important, list ways to reduce the cycle and discuss the difficulties a firm could encounter in trying to reduce the cycle.

(7 marks)
(15 marks in Total)

Question 5

*"Some analysts have cautioned that a combined Charter-Time Warner Cable would be highly leveraged and leave little margin for error in integrating the two companies. Others said Charter should be careful given its 2009 bankruptcy, blamed on heavy debt and under-investment." "The deal includes cash worth $83 per share and Charter stock valued at about $49.50", Financial Times January 14, 2014, "*Time Warner Cable shoots down latest Charter offer*"*

a) With the aid of examples describe how managers of firms that have debt outstanding and face financial distress might jeopardise the investments of creditors with the "games" of asset substitution and under-investment**.** **(5 marks)**

b) With the aid of examples describe the important direct and indirect costs of bankruptcy? Which of these costs discourage very high levels of debt use by corporate managers?

(5 marks)

c) Critically discuss which factors will influence a company to finance a takeover by either a share for share offer or a cash offer financed by the issue of bonds or a combination of both.

(5 marks)
(15 marks in total)

Question 6

Write short notes on **three** (3) of the following **six** (6) topics:

a) Important factors that will affect the ability of an entrepreneur to raise capital for a new business from external sources of finance.

b) Invoice Factoring.

c) Invoice Discounting.

d) Advantages of budgeting and budgetary control.

e) Problems in budgeting.

f) Characteristics of a good budget.

(3 x 5 marks)
(15 marks in total)