



# Financial Management

## Module 14

### June 2009

Section A : All three questions to be attempted – 70 Marks  
Section B : Two of the Three questions to be attempted.

## Section A - Question 1

Clubs'nPubs plc., (CNP), 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		19,500
Investments		3,250
Current Assets	9,500	
Less – Current Liabilities	<u>8,450</u>	
		<u>1,050</u>
		<u>23,800</u>
Ordinary Share Capital:		
Issued – 500,000 @ €1		500
Reserves		<u>4,500</u>
Shareholders' funds		5,000
8% Irredeemable Debentures		10,000
6% Preference Shares		8,000
Deferred taxation		300
Corporation Tax		<u>500</u>
		<u>23,800</u>

The current market value of CNP plc's ordinary shares is €24.50 per share cum-dividend. CNP's beta is 1.4, the risk free rate is 5 percent, and the return on the ISEC index (the market proxy) is 13 percent. An annual dividend of €900,000 is due for payment shortly. The 8% debentures are irredeemable and are trading at a current market value of €111.11, a €11.11 premium above their issue price of €100. Semi-annual interest of €4m has just been paid on the debentures.

The 6 % preference shares are trading at a current market value of €12.50, a €2.50 premium 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.

CNP is considering a major investment that is expected to increase its operating and financial leverage. Were to go ahead with the investment its new capital structure will contain, in market value terms, 25 percent ordinary equity, 45 percent debt and 30 percent preference shares. As a result of the proposed investment, the firm's 8% irredeemable debentures debt is expected to trade at its par value of €100, the market value of the preference shares are also expected to fall to their €10 per value, and CNP's beta is expected to rise to 2.

Required:

- (a) Ignoring the potential new investment, calculate the cost of capital that CNP should use a discount rate when appraising new marginal investment opportunities. **[13 Marks]**
- (b) If CNP do go ahead with the investment what effect will this investment have on CNP's Weighted Average Cost of Capital, (WACC)? Explain your findings and in particular the (after tax) cost of each of the different sources of finance before and after the new investment. **[6 Marks]**
- (c) Explain when the firms should discount projects using the cost of equity. When should they use the WACC instead? When should the use neither? You should use the information and your results in parts (a) and (b) as examples. **[6 Marks]**

**Total Marks 25**

## Question 2

You are representing the board of MicroTech Plc. MicroTech is a firm in the hi-tech medical supplies market that has completed a number of successful R & D projects in nano technology area. MicroTech are considering the following two potential strategic investments:

### Investment A

NanoTech Plc. Has offered you the following deal:

In return for allowing them to use some of your patents to make “Nano Probes” they will pay you €1m each year in return for 10 years starting next year. In addition they are proposing a joint R&D and marketing effort that will result in a “quantum change effect” in the perception of all MicroTech products in the market. You will forecast that in three years time when the effort occurs, your profits after tax will increase by €2.5m, rising by 5% each year forever thereafter.

All you have to do is pay 30% now towards the cost of setting up a €10 manufacturing plant. Also you must pay NanoTech Plc. For their expertise in running such a plant. However they would agree to only being paid when the plant is up and running, which would not be for two years from today. Then they want €3.5m per annum until the of the plants useful working life, ownership of the plant would revert to them at that stage. This would be 22 years from today, thus requiring 20 annual contributions of €3.5m, the first arising in the three years time.

### Investment B

Alternatively the Department of Health has offered you the following:

In return for asking you to manufacture the “Nano Probes” which would involve an outlay of €10m now, they will pay you €1m each year for 20 years starting next year. They will then buy out all your rights to the plant and the product for the final payout of €80m in 20 years time.

A firm similar to MicroTech, with similar growth expectations of around 10% per annum, has just paid a dividend of €0.45 and is currently priced at €9.00.

Required:

- (a) Calculate the NPV of both investments and approximate the IRR of investment B, correct to two places of decimal. (Initially, use the company's cost of capital and an interest rate of 20% to start your calculation of the internal rate of return). Advise the company whether either Investment A or B or neither investment should be undertaken, showing all your workings. **[13 Marks]**
- (b) State in general terms which method of investment appraisal NPV or IRR; you consider to be the most appropriate for evaluating investment projects and discuss the reasons why you picked this method of investment appraisal. **[6 Marks]**
- (c) Briefly outline general techniques that could be used by companies to assess the consequences of their financial forecasts being inaccurate due to uncertainty about the future. **[6 Marks]**

**Total Marks 25**

### Question 3

Warmcover Ltd. distribute wooden radiator covers in a variety of colours and finishes from central warehouse in Athlone. On average 25,000 radiator covers are imported by Warmcover each quarter, equalling 100,000 of each per year. An order takes two weeks to arrive on average. For the 50 weeks of the year the company is open there is little seasonal variation in demand for its products. While day-to-day demand is unpredictable it does not vary greatly from week to week.

The wholesale cost to Warmcover per radiator is €10. Administrative charges, including a fixed delivery and transport charge is €25,000 per order, irrespective of size. In addition there is an annual inventory holding charge, this is equivalent to 30% of the cost of a radiator cover.

A local supplier of similar items has now offered to supply Warmcover but at 5% higher wholesale prices, i.e. €10.50 per radiator cover. However as they are local, the administrative charges per order would fall to just €5,000 per order, and they could fulfil an order in just one week. The annual inventory holding charge would remain unchanged.

Having appraised your current suppliers of this offer, they have responded with the following suggestions, to outsource the ordering process to them. T their own cost they would fully integrate their order processing I.T. system with yours, such as to follow for a “Just In Time” delivery system. As such there would be no ordering or holding costs for you. However they would require a wholesale price increase of 10% to pay for this, i.e. €11 per radiator cover.

Mr Smith, the managing director of Warmcover has decided to use this new development to reassess the current inventory ordering system. He has heard Economic Order Quantity, (EOQ), “Just In Time”, (JIT) and “Outsourcing” and asked you as the Finance director to prepare a report on the current inventory ordering system and any proposals for change.

Required:

This report should include:

1. Arguments for and against adopting EOQ over the current system.
2. Arguments for and against using the new local supplier over the current supplier.
3. Arguments for and against adopting EOQ over JIT system involving outsourcing.
4. Describe some of the issues that might arise in the changeover to a new supplier or a new inventory control system or to outsourcing it.
5. Finally, make recommendations as to the appropriateness of using the EOQ model here and whether to change suppliers and/or the inventory control system.

All discussions should be supported by appropriate calculations.

Note: please use the following notion (or, if you use an alternative, please explain all components clearly):

$$\text{The Economic Qorder Quantity, } Q^* = \sqrt{\frac{2SD}{IV}}$$

Annual Ordering Costs =  $SD/Q$

Annual Holding Costs =  $IVQ/2$

Where : S = Forecast annual usage

D = Ordering cost per order

I = Annual Inventory holding charge as proportion of V

V = Cost per unit in stock

**Total Marks 20**

## Section B – Question 4

“In a free enterprise, private property system, a corporate executive is an employee of the owners of the business. He has a direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to the basic rules of society, both those embodied in law and those embodied in ethical custom ..... “They key point is that, in his capacity as a corporate executive, the manager is the agent of the individuals who own the corporation .....and his primary responsibility is to them.” (Friedman, M (1970) ‘The Social Responsibility of Business is to increase its Profits’; cited in Chryssides and Kaler (1993) ).

Discuss this statement in the light of the dramatic rise before summer 2007 and subsequent fall in the value of shares in the Irish and International financial institutions and the exit of most of the main directors in the context of :

- (a) A principal-agent perspective **[5 Marks]**
- (b) The Efficient Market Hypothesis (EMH) **[5 Marks]**
- (c) Corporate social responsibility (CSR) **[5 Marks]**

**Total marks 15**

## Question 5

- (a) Having been hit particularly hard by the recession and aving failed to sell some of its non-core assets, the board of Independent News and Media Plc, (INM), declared recently that they could not make payments on subordinated debts that were due as they had neither the cash nor, in the current climate, the ability to raise the necessary amounts.

Discuss the importance of cash management (cash flow forecasts) with regard to the survival of a business in the current economic climate. **[7 Marks]**

- (b) Recently many companies have suspended paying dividends. If, as some say, dividends are irrelevant, why have share prices plunged in most of these companies? In your answer outline both dividend policy theory and relevant examples. **[8 Marks]**

**Total Marks 15**

## Question 6

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

- (i). Why the combining of the roles of the Chairman and the Chief Executive is considered undesirable.
- (ii). The difference between transaction and translation risk in international trade.
- (iii). Standard deviation and beta and when each ia as an appropriate measure of risk in a portfolio.
- (iv). Setting the level of directors’ remuneration.
- (v). The Equivalent Annual Cost approach to asset replacement.
- (vi). The co- efficient of correlation as it relates to the two stock portfolio. **[3 x 5 Marks]**

**Total Marks 15**