



Financial Management

Module 14

June 2010

Section A: All three questions to be attempted.

Section B: Two of the following three questions to be attempted

Section A: All three questions to be attempted, (70 marks in Total).

Question 1

Secureylocks Ltd. are a regional locksmith supplier based in the South East of Ireland. With the downturn in the economy there is a fear of crime increasing and hence business has been increasing. They wish to expand their business.

They plan to invest an additional €180,000 in non current assets. As a result they estimate:

- the profit before interest and tax will increase by 30%
- the volume of stocks, debtors and creditors will increase by 20%

They also note that:

- the profits before interest and tax for year end 31/12/2009 was €60,000
- the corporation tax on profits is 12.5%
- dividends recently paid amount to €15,000 and it is expected that the same dividend per share will be paid next year.

Secureylocks Ltd.: Balance Sheet as at 31 December 2009

	€ '000	€ '000
<u>Fixed Assets</u>		
Tangible		300
		300
<u>Current Assets</u>		
Stocks	80	
Debtors	60	
	140	
<u>Creditors: amount payable within one year</u>		
Creditors	90	
	90	
Net current assets		50
Total Assets less current liabilities		350
<u>Creditors: amount payable after one year</u>		
Debentures		0
		0
<u>Financed By:</u>		
Ordinary shares of 50 cent		200
Share Premium		1.0
Retained profits		150
		350

The directors of Secureylocks Ltd. have estimated that the total amount of new funds to be raised should amount to €200,000. This could be done in one of the following ways:

- (i) A rights issue of 2 for 5 at €1.25.
- (ii) By issuing €200,000 convertible debentures at a rate of 8.00% with €1,000 of debentures convertible into 600 ordinary shares in 5 years' time.
- (iii) An issue of €200,000 of debentures with warrants attached. The rate of interest on the debentures would be 9% and each €1,000 debentures would give the holder the right to subscribe for 500 shares at €2.00 in 4 years time.

P.T.O

You may assume that debentures or rights issue were made on the 01/01/2010 and any funds raised will be kept in the form of non interest bearing cash.

The Managing Director of Secureylocks Ltd. has noticed that the current ratio is decreasing and would prefer a more conservative or as she calls it a “prudential” approach to working capital. The Finance Director has argued that as a growing company this is quite appropriate and is quite happy to take a matching or “hedging” approach. The Sales Director says that he would prefer Secureylocks Ltd. to take an “aggressive” approach!

Required:

- (a) Given the above information, estimate the value per share of LHW Ltd. using:
- (i) Discuss the advantages and disadvantages of these three methods of raising long term finance
 - (ii) Calculate the effects on future earnings per share of existing shareholders
 - (iii) Calculate the effects on the balance sheet of the company.

[18 Marks]

- (b) In addition the directors would like you to outline the three approaches advocated by the Managing Director, the Finance Director and the Sales Director to short term finance and in particular working capital. They would also like you to explain the trade off that must be made between maintaining liquidity and remaining profitable in the context of the three approaches.

[7 Marks]

Total Marks 25

Question 2

Helios Heating Industries Ltd. is based in the country of Siang and operates solar energy plants in less developed countries. It is considering the following investment in the country of Paysan. Build a solar energy plant in Paysan and operate it for three years after which the plant would be turned over for free to the government of Paysan.

The project would require an immediate outlay of P£3 million Paysan pounds. In addition maintenance and other variable costs for the plant would cost P£0.5 million this year, rising by 12% p.a. thereafter. Revenue would start at P£5 million in year 1. The energy regulator in Paysan has agreed to allow energy prices to rise by the rate of inflation in Paysan less 15% p.a.

The Paysan Tax authorities will allow investors in energy plants to write off their investment over three years on a straight line basis. In Paysan the general rate of inflation is expected to be 20% p.a. and the corporate tax rate to stay at 30% over the life of the project.

To discourage short term destabilising speculative investments, only 60% of after-tax funds can be repatriated in the first four years of a projects life. Therefore 40% of any positive cash flows during this period must be invested in Paysan Government bonds which pay a real rate of interest of 2%.

As the project life is three years, Helios Heating intends to repatriate back to Siang any remaining funds, including the proceeds of the sale of the bonds, in year three. In its home country of Siang the general rate of inflation is expected to be 8% p.a. over the life of the project. The Government of Siang levies corporate tax rate at 35% on all profits, wherever they are earned. However as Siang and Paysan have a double taxation agreement, any taxes paid on profits in Paysan can be set aside on taxes due in Siang. Currently 0.5 Siang Shillings equals one Paysan pound.

The Siang Government bonds pay a real rate of interest of 2%. However a risky project of this type will require an appropriate discount rate of 7%, in real terms, in Siang Shillings.

Requirements:

Calculate the Net Present Value of the project to Helios Heating Industries Ltd. and recommend whether they should accept the project or not. Clearly show and explain where necessary your workings and state any assumptions you have made.

Total marks 25

Formulas: P.T.O.

Formulas:

Fisher's (closed) proposition: Real rate of interest in country Z = $\left(\frac{(1+rZ)}{(1+iZ)}\right)^{-1}$

Interest Rate Parity: $F(A:1B)^t = S(A:1B) \times \left(\frac{(1+rA)}{(1+rB)}\right)^t$

Purchasing Power Parity: $F(A:1B)^t = S(A:1B) \times \left(\frac{(1+iA)}{(1+iB)}\right)^t$

Where: $F(A:1B)^t$ = Expected Future exchange rate, (units of A for 1 unit of B) at time t

$S(A:1B)$ = Current Spot Rate, (units of A for 1 unit of B)

rA = Nominal rate of interest in Country A

rB = Nominal rate of interest in Country B

rZ = Nominal rate of interest in Country Z

iA = Expected rate of inflation in Country A

iB = Expected rate of inflation in Country B

iZ = Expected rate of inflation in Country Z

Question 3

DeeLux Fashions Ltd., (DeeLux Fashions) have experienced a dramatic drop in sales in recent times. They wish to determine the impact of selling off one of their high street stores and using the proceeds to reduce its debt. The following represents the latest financial data for DeeLux Fashions:

DeeLux Fashions Ltd. Income Statement as at 31 December 2009

	€
Sales	7,500,000
- Costs and expenses @ 95%	<u>7,125,000</u>
Earnings before interest and taxes	375,000
- Interest (6% x €4,500,000)	<u>270,000</u>
Earnings before taxes	105,000
Taxes	<u>13,125</u>
Net Income	<u><u>91,875</u></u>

DeeLux Fashions Ltd. Balance Sheet as at 31 December 2009

	€	€
<u>Fixed Assets</u>		
Tangible		<u>8,500,000</u>
		8,500,000
<u>Current Assets</u>	0	
<u>Current Liabilities</u>	<u>0</u>	
	0	
<u>Creditors: amount payable within one year</u>		
Creditors	<u>0</u>	
	0	
Net current assets		<u>0</u>
Total Assets less current liabilities		8,500,000
<u>Creditors: amount payable after one year</u>		
10% Debentures		<u>4,500,000</u>
		<u>4,000,000</u>
<u>Financed By:</u>		
Ordinary shares of €1.00 each		3,850,000
Share Premium		0
Retained profits		<u>150,000</u>
		<u><u>4,000,000</u></u>

Assume DeeLux Fashions can sell the premises for €1 million and uses the proceeds to paydown its debt by that amount. Assume that with its least productive store now sold the costs and expenses drop to 90 percent of sales, the interest on its remaining debt stays at 6 percent p.a. and the tax rate remains at 12.5 percent.

Required:

P.T.O.

Required:

- (a) Calculate the latest (2009):
- i) Net profit margin,
 - ii) Total asset turnover,
 - iii) Return on total assets, and
 - iv) Return on equity
- for DeeLux Fashions before the sale of the premises.

Note: For each of the four ratios, explicitly write out the formula and the numbers that correspond to each part of that formula.

[10 Marks]

- (b) Now, assuming no other changes, determine the impact of Lux Fashions if the disposed of premises results in a drop of €0.7 million in sales. What is the effect on the ratios calculated in part (a)? Is the sale of this asset justified on the basis of the return on common equity?

[6 Marks]

- (c) What circumstances would need to change for a company to be able to refinance its debt such that it would be able to reduce its overall cost of borrowing?

[4 Marks]

Total Marks 20

**Section B: Two (2) of the following three (3) questions to be attempted,
(30 marks in Total)**

Question 4

Writing about Anglo Irish Bank, Claire Curtin, Primary Credit Analyst with the Standard and Poor bond ratings agency said “We have revised our opinion regarding economic and industry risk in Ireland and revised our expectations regarding future credit losses. As a result, we have re-assessed our expectations regarding the potential credit strength on Anglo Irish Bank Corp. Ltd. (Anglo). As a result, we have lowered our long-term counterparty credit rating of Anglo by one notch to 'BBB' from 'BBB+'.”

https://www.angloirishbank.com/Investors/Credit_Ratings/S_P_downgrade_Anglo_Irish_Bank.pdf January 26, 2010

Discuss this statement in the context of:

- (a) A principal–agent perspective of the relationship between (i) bond rating agencies and (ii) the financial institutions who pay the bond rating agencies to rate them. **[7 marks]**

- (b) The Efficient Market Hypothesis (EMH), bond rating agencies and the value of bonds in Irish financial institutions after the end of the Irish government guarantee in September 2010. **[8 marks]**

Total Marks 15

Question 5

“In the first dividend payment since the company went public in 1997, Ryanair will pay out €500 million, or 34 cents per share, in October, and said it may return another €500 million to shareholders through either a one-time dividend or share buyback by the end of 2013.” Wall Street Journal, JUNE 1, 2010.

- (a) If, as some say, dividends are irrelevant, why do analysts fret over dividend changes? In your answer choose a recent example, (Ryanair if you wish), of a company that changed its dividend policy and / or engaged in share repurchasing. Discuss the reasons for the change and comment on the effects the policy had on the company’s share price. **[8 marks]**

- (b) Considering Ryanair are only now paying their first dividend, discuss and compare the relative merits of each of the following approaches to company valuations:
 - i) the net asset (liquidation) basis
 - ii) the P/E basis.
 - iii) the dividend yield basis

[7 Marks]

**Total marks 15
P.T.O.**

Question 6

Write short notes on three of the following six topics:

- i) Standard deviation and beta and when each is as an appropriate measure of risk in a portfolio.
- ii) Financial future contracts and how they are used to hedge a position.
- iii) Interest rate and currency swaps and how they are used to hedge a position.
- iv) Net Present Value and the disadvantages of using NPV as an investment criterion.
- v) The components of the risk premium for international investments.
- vi) A bond selling at a premium is a good investment.

[3 x 5 Marks]

Total Marks 15