UNIVERSITY OF BOLTON

Institute of Management

MSC ACCOUNTANCY AND FINANCIAL MANAGEMENT

SEMESTER ONE EXAMINATION 2018/19

ADVANCED FINANCIAL MANAGEMENT (AFM)

MODULE NO. ACC 7504

Date: Wednesday 16 January 2019 **Time: 2.00 – 5.00**

INSTRUCTIONS TO CANDIDATES:

There are THREE questions on this paper in two sections.

Answer all questions.

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Advanced Financial Management
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Section A – This ONE question is compulsory and must be attempted

1 Bairstow Co provides industrial and commercial cleaning services to organisations throughout a country in the European Union. Its shares have been listed for 15 years and, until two years ago, the entity followed a policy of aggressive growth, mainly by acquisition.

However, in the last two years, there have been few suitable take-over opportunities and, as a consequence, growth has slowed. The market has downgraded Bairstow's shares and they are currently trading at €3.57, the lowest price for five years. The market as a whole has declined in value, but not to the same extent as Bairstow's shares.

Bairstow's bank has recently informed Bairstow's directors of a possible take-over opportunity of another of its clients, Billery.

This is a large private entity in the same industry as Bairstow's. Billery's directors have indicated to the bank that, if the price is right they may be prepared to recommend the sale to the shareholders. Billery's directors have made their financial forecasts and other strategic documentation available to the bank on a strictly confidential basis, requesting that this information only be released to a serious potential bidder. After much discussion between the bank and the two companies, Billery agrees that Bairstow should have the information.

Billery's results for the past three years and the directors' estimates for the current year
are as follows:

Year to 30 June	*Revenue*	*Earnings*	*Free Cash Flow to Equity (before Capital Investment)*	*Capital Expenditure*
	€ (million)	*€ (million)*	*€ (million)*	*€ (million)*
20X3	925	55.5	52.6	17.1
20X4	1,020	62.7	60.1	18.5
20X5	1,150	71.5	72.1	22.4
20X6 (forecast)	1,350	88.9	84.4	29.6

For 20X7 onwards, growth in earnings and dividends is likely to fall to 4% per annum, according to Billery's directors.

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Summary statements of financial position as at 30 June 20X5 for both Bairstow and Billery are as follows:

	Bairstow € (million)	*Billery* € (million)
Total assets		
Non-current assets	1,944	1,040
Current assets *	796	375
	2,740	1,415
* Includes cash of	250	65
Equity and liabilities		
Share capital (shares of €1)	420	
(shares of 50 cents)		220
Retained earnings	1,080	680
	1,500	900
Non-current liabilities		
(Secured bonds, 4% 20Y5)	750	
(Unsecured bonds, 5% 20Y0)		300
Current liabilities	490	215
	2,740	1,415

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Bairstow's revenues and earnings for the year ended 30 June 20X5 were €2,250 million and €128.5 million respectively.

After thoroughly examining the information on Billery, financial managers in Bairstow have identified a number of savings and potential synergies that would arise if the takeover were to go ahead. These synergies are estimated to have a net present value of €200 million. However, the Bairstow directors believe Billery's forecast earnings are overoptimistic and think earnings growth for 20X7 onwards is likely to be much lower than the 4% estimated by Billery's directors. The bank advisers disagree, but they are in a delicate situation trying to balance the interests of two clients.

Bairstow's cost of equity is 8.5%. Billery has not provided information on its cost of capital, but the two entities' asset betas are likely to be the same. Bairstow's equity beta is quoted as 1.1. The expected risk-free rate of return, based on the returns from government stock, is 3% and the expected equity risk premium is 5%. Assume that the debt beta for both companies is 0.2 and that Bairstow's debt is trading at par. The corporation tax rate is 30%.

Required:

(a) **Estimate the cost of equity capital and the weighted average cost of capital for Billery, using the book values of equity and debt as the weightings. Explain the circumstances where each of these two rates would be used in the business valuation process.**
(9 marks)

(b) **Estimate the likely long run growth rate of Billery, using the current rate of retention of free cash flow to equity, and your estimate (from part (a)) of the required rate of return on equity.**
(7 marks)

(c) **Prepare a report to the directors of Bairstow Co, advising them on:**

(i) **a bidding strategy; that is the initial price to be offered and the maximum Bairstow should be prepared to offer for the shares in Billery.**

In this part of your report, you should present calculations of the value of the equity in Billery (both with and without incorporating the likely synergy) using the net assets method, the P/E method, and the discounted value of free cash flow to equity. For each method, give brief comments on their suitability in the circumstances here. (20 marks)

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Question continued

(ii) the most appropriate form of consideration to use in the circumstances. Assume the choice is either a share exchange or cash (9 marks)

Your report should consider the interests of both groups of shareholders Professional marks for format, structure and presentation of the report for part (4 marks)

(d) During the past three years, one of Bairstow Co's competitors, SGV Co, has been adversely affected by a series of unforeseen incidents. These incidents resulted in major losses being incurred and brought the company to the brink of collapse.

Although the threat of company failure now appears to have receded, the shareholders, who have seen their investment in SGV Co decrease dramatically, recently replaced the board of directors. The new board is determined to ensure that the company avoids any such problem in the future and believes that this can be done by adopting a more systematic approach to risk management. It has decided to appoint a chief risk officer, who will become a senior member of the management team and who will be charged with implementing risk management processes throughout the business.

Required:

(i) Identify and discuss the key factors that the chief risk officer should take into account to ensure the successful implementation of risk management processes within the company. (7 marks)

(ii) Explain how the implementation of risk management processes may help to increase shareholder value (4 marks)

(Total: 60 marks)

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Section B – BOTH questions are compulsory and MUST be attempted

2 Old Links Co is a small publisher and is considering a project to publish a new book. The subject matter of the book is recipes that follow a currently fashionable diet trend and the anticipated sales life of the book is three years.

As Old Links Co's printing presses are currently at full capacity, the company will have to purchase another press to print the book at a cost of $50,000, payable immediately (the start of Old Links financial year). As the press will only be printing one book it should maintain its value very well and it is anticipated that it could be sold for $35,000 in three years' time.

Old Links Co would like to set a price at which it can sell 150,000 copies of the book in the first year, 75,000 in the second year and 30,000 in the third year. The price at which these volumes will be achieved will depend on the book's popularity. Past experience has led the sales team to predict a 25% chance of having to sell the book at $1.99 to generate these volumes, a 40% chance of being able to charge $2.99 and a 35% chance of being able to achieve $3.99. No inflationary price rises will be applied over the book's life.

Variable costs are anticipated to be $1.45 per book in the first year, rising at 3% per year after that. Fixed costs will be $95,000 in the first year, rising at the same rate as variable costs in the second year but reducing to $25,000 in the third year.

Taxation is charged at 30% and is paid one year in arrears. Tax-allowable depreciation will be available for the printing press at a rate of 25% reducing balance, with a balancing allowance or charge being given in the year of disposal of the press.

Working capital of $20,000 will be needed to cover the first year's sales, but this will reduce in line with sales volumes and will be released completely at the end of the project.

Old Links's real cost of capital is 10% and its money cost of capital is 13%.

Required:

(a) **Calculate the expected NPV of launching the book and recommend whether**
Old Links Co should go ahead with the project. (12 marks)

(b) **Calculate the sensitivity to a change the sales price of the NPV calculated in part (a**
(3 marks)

(c) **Explain the limitations of relying on expected values for this decision and discuss whether the sensitivity analysis calculated in part (b) represents a cause for concern.**
(5 marks)

(Total: 20 marks)

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3 Cahill Co has been operating for many years and has developed a very efficient credit control team who have been able to keep receivables days at a level of 35, only 5 days longer than the 30 days offered as standard terms to customers. However, the managing director has recently stated "as the industry becomes more competitive, businesses are finding that having a more relaxed attitude to managing customer credit has enabled them to gain ground on their competitors. We are lagging behind with regard to this trend and need to address it".

As a result, you have been asked to investigate the impact on the company's finances of allowing the average credit period to be extended to either 45 or 60 days. Cahill finances receivables with funding costing 7% per annum.

Current credit sales are $15.6 million. Within the receivables balance is an amount of $250,000 owed from a major customer who has an ongoing long-term contract with Cahill Co for a regular fixed monthly supply of goods, which contains a clause of payment in 30 days which they always stick to. This is not anticipated to change even if the overall policy for other receivables management changes.

To try and mitigate the effect of the increased financing cost if the receivables policy is amended, the company is also looking to change its inventory management policy. It currently pays $10.2 million per year for purchases on items costing $34 each. Every time an order is made, 10,000 units are ordered with the supplier and it costs $25 to make the order. Holding costs excluding inventory funding costs are $1.50 per unit per year.
Inventory is funded at the same rate as receivables, 7%.

Assume 365 days in a year.

Required:

(a) **Assuming that the major customer continues to pay to 30 days, calculate the extra funding cost that would be incurred under both circumstances if Cahill Co relaxes its credit terms to 45 days and to 60 days. Critically evaluate why this change may help with competitive advantage. (9 marks)**

(b) **Calculate the savings in inventory costs that would be made from moving to a system of ordering using the economic order quantity. (6 marks)**

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Questions continued

(c) Evaluate:

- **the difference between short- and long-term working capital and the difference between short- and long-term finance**
- **the three different strategies that can be adopted when determining the type(s) of finance (short- or long-term) to use to fund working capital. (5 marks)**

(Total: 20 marks)

END OF PAPER

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