LEEDS BECKETT UNIVERSITY
LEEDS BUSINESS SCHOOL

2021/22 SEMESTER [2]

MODULE TITLE:	**Financial Analysis (FINA)**
TITLE OF ASSESSMENT:	**Assessment 2 (First sit): Coursework**
LEVEL:	**H7**
COURSE(S):	**MBA (Full Time), MBA (Executive)**
DEADLINE DATE FOR SUBMISSION BY STUDENT:	**Thursday 12th May 2022 by 3:00 pm (UK)**
MARKS:	**60%**
SUBMISSION LOCATION:	**Online (via Mybeckett)**
EXAMINER(S):	**Lillian Lee, Dr Peter Djabang and Dr Anup Chowdhury**

Notes for candidates:

This is an individual assessment that students should hand in via MyBeckett as an MS word document via Turnitin (**till 15:00 pm UK time**) on **12th May 2022 (Thursday).**

Your report will be assessed as a whole in the following areas:

Coverage of theoretical underpinnings involved
Demonstration of a critical understanding of the theoretical aspects involved
Practical application of the theoretical aspects of the case study
Application of mathematical knowledge
Evidence of additional and relevant research
Coherence and quality of the report

Introduction

Put yourself in the following situation as a member of the Financial Services Team of XYZ plc, which is a UK conglomerate. It owns companies across different industries, such as – car manufacturing, consumer goods, leisure etc.

You have been requested to provide meaningful financial analysis and information for decision making concerning financing, performance, capital investment, constrain in production, budgeting, and sensitivity analysis. Accordingly, you are required to write a report (3,000 words in total) providing information about these areas.

You must submit the report online via the **Turnitin** link **by 15:00 pm (UK time) on 12th May 2022 (Thursday)**. Please use the Harvard referencing where relevant, do not use lecture slides or any *Pedia* (such as *Wikipedia or Investopedia*) as reference. You should report your calculations and supplementary information in Appendix. Don't forget to mention your assumptions and the limitations of your analysis.

Financial analysis related to Investment Strategy:

Because of the climate change target of the UK (the road to net-zero target), the company's newly appointed investment manager Ms Madison came up with a new investment strategy – closing five of the company's existing brand and focusing more on the company's most popular electronic vehicle brand in the UK. According to her assessment, this closing decision will generate around £100 million free cash flow, which the company could reinvest to expand its popular brand – 'eXi Drive'. Madison suggests that the market survey indicates this is one of the most popular brands in England, and demand is increasing. The year-to-year sales of the 'eXi Drive' brand have gone up by 25% (5,000 units in 2021 compared to 2020), which was higher than all of those five brands together.

Moreover, she has indicated that the expansion decision will reduce the overall cost while improving quality. This cost-quality dynamic will help the company face competition and achieve a larger market share. However, this expansion will cost £150 million for the company, which require rigorous strategic assessment, including financial viability. Now, she has approached you to evaluate this possible restructuring decision, whether it is a financially viable strategy or not. She also has suggested that this expansion project will run for the next five years, and after that, the company will enter into a new strategic cycle.

You have collected the following information from her to do the financial analysis for meaningful decisions.

The expansion is expected to increase the sales of 'eXi Drive' by the following units.

8,000 units in 2022
8,000 units in 2023
10,000 units in 2024
11,000 units in 2025
12,000 units in 2026

In 2021 the market price of this brand was £45,000, but the company wants to reduce it by £5,000 in 2022 and then will increase/decrease with the pace of the economy and purchasing power of the consumers. KPMG has projected that the Bank of England's bank rate will remain 0.50 per cent for the next couple of years, which will allow the post-Brexit-and-Covid expansion of the economy. In line with this economic assessment, your company has decided not to increase the price for the next three years (i.e., till 2024), but from the fourth year, a contingency plan is in place to increase the unit price by £2,000.

The production cost is £20,000 per unit, which will increase in the line of inflation and other materials cost over the project's life at a rate of 10% each year starting from year two. The production involves fixed overhead expenditure of £20 million in 2022 and 2023, £15 million in 2024 and £10 million in 2025 and 2026. The project requires a working capital investment of £850,000 at the beginning, 50 per cent of which the company will recover at the end of project life. The cost of promotion and R&D will be £5 million, respectively, over the five years. Assume that there is no other cost involved in this investment. The company is currently following the straight-line depreciation method, and historically 10% of the cost price of such investment is recovered in the final year.

<u>Financing choices: (the Board of Directors have agreed)</u>

The Board of Directors disapproved reinvesting the £100 million free cash flow from closing the existing five brands. Instead, they want to keep this fund reserve for future uncertainty. For this expansion project recommended by Ms Madison, the Board has recommended raising capital from alternatives financing from external sources.

The company has three choices for financing this expansion: issuing new equity, issuing a bond, or issuing preference shares.

The equity of XYZ plc is currently trading in London Stock Exchange (LSE) with a face value of £10. The market price of each share is as follows:

Date	Closing Price
04.11.20	£34.50
03.12.20	£36.20
06.01.21	£33.55
03.02.21	£35.10
To date	£ 34.80

In the last fiscal year, the company had declared a £1.2 per share dividend (DPS). The company's investment banker KPMG always charges an issuing (i.e. flotation) cost of 20% on the face value to issue new common stock in the market. Historically, the company's earnings per share are as follows:

Year	EPS (Earning Per Share
2017	22p
2018	26p
2019	17p
2020	22p
2021	25p

The company has also assessed the possibility of issuing a bond in the market. Currently, bonds of similar companies are selling at £110, slightly over the face value (i.e. £100) with a coupon rate of 10% and maturity of 5 years. The company's third financing option is to issue preferred stock in the LSE. The industry average preferred dividend and the current market price of preference shares of similar companies are £10 and £108, respectively.

You have also collected additional data on the UK financial market and the company. Currently, the yield of the 3-month UK Gilt is 3.0%, the FTSE 100 index has an average yearly return of 10%, and the average corporate tax rate in the UK is 30%. In addition, the beta of XYZ plc is 1.5, which is slightly higher than the market beta of 1.

The company wants to maintain its existing capital structure policy of 50% debt, 10% preferred equity and 40% common equity for this new investment.

Ms Madison has requested you to make a report based on the following queries so that she can present it at the next board meeting.

1. What will be the cost for each source of financing? Consider both DDM (i.e. Dividend Discount Model) and CAPM (i.e. Capital Asset Pricing Model) method for common equity. Please provide your comments on the assumptions of each approach and their merits and limitations.

2. Determine the optimum cost of capital using the Weighted Average Cost of Capital (WACC) approach for target capital structure. *(Hints: Ms Madison would prefer to use CAPM over DDM).*

3. Evaluate the total value addition (i.e. total NPV) and breakeven rate (i.e. IRR) of this possible restructuring decision. *(Hints: Use the WACC as your discount rate to evaluate the investment projects)*

4. Assume that the product lifecycle of five years is viewed as a safe bet, but the scale of demand for the product is highly uncertain, mainly due to possible BREXIT and COVID-19. Analyse the sensitivity of the projected NPV to the unit sales and the cost of capital.

5. Explain how the BREXIT could affect the UK automobile manufacturing sector and the possible strategic changes required in this industry to cope with the risk?

(Total 30 marks)

[Following profit statement is just for your reference to calculate the net cash benefit given by your investment manager Ms Madison]

Income Statement					
	2017	**2018**	**2019**	**2020**	**2021**
	£m	**£m**	**£m**	**£m**	**£m**
Sales	1,622	1,800	2,730	2,654	2,703
Cost of Sales	(908)	(1,056)	(1,855)	(1,897)	(1,754)
Gross Profit (Loss)	**714**	**744**	**875**	**757**	**949**
Overheads					
Fixed Overheads	120	156	165	154	146
Stock Upkeep Cost	0	1	0	17	31
Promotion	50	60	149	149	409
Research and Development	0	194	20	27	16
Market Research	15	15	15	15	15
Depreciation	68	80	78	72	65
	(253)	**(506)**	**(427)**	**(433)**	**(682)**
Operating Profit (Loss)	**461**	**238**	**448**	**323**	**267**
Investment Disposal Income	0	8	11	0	0
Interest on Current Account	0	7	8	8	10
Interest on Loans	(34)	(45)	(33)	(11)	(12)
	(34)	**(30)**	**(14)**	**(3)**	**(2)**
Pre-Tax Profit (Loss)	**427**	**208**	**434**	**320**	**265**
Tax	(85)	(27)	(126)	(137)	(78)
Post Tax Profit (Loss)	**342**	**181**	**308**	**183**	**187**
Cost of Dividends	(20)	(40)	(36)	(40)	(28)
Year Retained Profit (Loss)	**322**	**141**	**272**	**143**	**159**

Financial Analysis for internal management:

The management accounting team of XYZ plc also came up with some questions and requested you to explain/answer them for the upcoming board meeting:

1. A chain of XYZ plc, BHealthy Ltd is a wholesale manufacturer of healthy foodstuffs. Because of a series of machine-related accidents at one of its factories, working practices have been revised and altered. It has resulted in a reduction in the number of labour hours available next period to 60,000. Four ready-made meals are produced in this factory and estimated data for the next accounting period are as follows:

Product	S1	S2	S3	S4
Maximum Demand (units)	8,000	6,500	4,800	3,200

Selling and costing information (per unit)

	£	£	£	£
Selling price	80	110	145	170
Direct materials	12	30	35	40
Direct labours (Labour rate = £5/hr)	16	20	15	20
Variable overhead	8	10	14	16
Selling overhead	4	4	4	4

The team wants to know about the limiting factor and requested you to help calculate the maximum profit which can be achieved in the period?

They also asked to provide TWO alternatives BHealthy Ltd has to overcome the limiting factor?

(10 marks)

2. Another chain, Phase3 Sports Club, is opening an exquisite new gym with a luxury spa within the city centre of Leeds as part of its growth strategy, but it needs to attract new members to make sure it survives. Over the last few years, demand for sports facilities has been rising as more and more consumers become health conscious, resulting in a significant increase in the number of sports clubs within the city of Leeds. Phase3 club has to come up with the right pricing strategy to attract and retain customers to achieve their financial objectives.

   The budgeted fixed costs (for the rental of the building and sports equipment) for the first month are £7,500, and they are expected to be 27.27% of the total overheads at breakeven. The managers estimate that each member will use about £200 in resources over a year. In addition, each club member will be charged a £275 annual membership fee.

The management accounting team has the following questions for you:

a. **How many members will the club need to have to break even?**

b. **Calculate the margin of safety percentage if Phase3 attracts 200 or 300 members in the first month.**

c. **If Phase3 wishes to make a profit of £2,400, how many members should it target?**

d. **The managers decide that a £275 fee is too high. What would happen if they reduced the membership fee to £245? Make the adjustment and recalculate the contribution, breakeven point, and margin of safety percentages at output levels stated in b) and advise management of the feasibility of a price reduction.**

e. **Explain the limitations of Cost Volume Profit (CVP) analysis.**

(15marks)

3. Budget planning is an essential process for an organisation, with many advantages. However, there can be negative aspects to the budgeting process. The management accounting team of XYZ plc wants you to discuss and provide examples of both of these aspects of budgeting.

(5 marks)

Thank you and best of luck.

ASSESSMENT CRITERIA

Report format used, introduction clear and concise with appropriate business language.

Marks will be awarded for good supporting evidence of either academic sources or examples.

Marks will be awarded for clear conclusions drawn from the preceding analyses.

More specific illustrative assessment criteria are set out below:

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Assessment Criteria	**70%+**	**60%+**	**50%+**	**40%+**	**<40%**
Financial analysis related to Investment Strategy (indicative weighting 50%) **(Total marks 30)**	Correctly identify all the costs of capital and WACC. Excellent description of merits and demerits of each method. Excellent analysis of the investment appraisal. Excellent and well-supported recommendations. Insightful understanding and evaluation of the NPV and IRR techniques, including their limitations. Excellent evaluation of sensitivity analysis.	Correctly identify some of the costs of capital and WACC. A very good description of merits and demerits of each method. Very good analysis of the investment appraisal. Very good and supported recommendations. Very good understanding and evaluation of the NPV and IRR techniques, including their limitations. Very good assessment of sensitivity analysis.	Reasonably identify the cost of capital and WACC. A reasonable description of the merits and demerits of each method. Reasonable analysis of the investment appraisal. Reasonably supported recommendations. Reasonable understanding and evaluation of the NPV and IRR techniques, including their limitations. Reasonable evaluation of	Limited analysis on the cost of capital and WACC. Limited description of merits and demerits of each method. Limited analysis of the investment appraisal. Limited supported recommendations. Limited understanding and evaluation of the NPV and IRR techniques, including their limitations. Limited evaluation of sensitivity analysis. Limited discussion	Little or no analysis on the cost of capital and WACC. Little or no description of merits and demerits of each method. Little or no analysis of the investment appraisal. Little or no supported recommendations. Little or no understanding and evaluation of the NPV and IRR techniques, including their limitations. Little or no evaluation of sensitivity analysis. Little or no

	Excellent discussion on the impact of BREXIT on the UK market.	Very good discussion on the impact of BREXIT on the UK market.	sensitivity analysis. Reasonable discussion on the impact of BREXIT on the UK market.	on the impact of BREXIT on the UK market.	discussion on the impact of BREXIT on the UK market.
Financial analysis for internal management (Indicative weighting 50%) **(Total marks 30)**	Thorough and excellent knowledge, explanation, and evaluation of the limiting factors, Excellent identification of alternatives to overcome the limiting factor. Excellent evaluation of breakeven, the margin of safety, target profit. An insightful discussion of limitations of CVP. Excellent	Very good knowledge, explanation, and evaluation of the limiting factors, very good identification of alternatives to overcome the limiting factor. Very good evaluation of breakeven, the margin of safety, target profit. Very good discussion of limitations of CVP. Very good underpinning from	Reasonable knowledge, explanation, and evaluation of the limiting factors, reasonable identification of alternatives to overcome the limiting factor. Reasonable evaluation of breakeven, the margin of safety, target profit. Reasonable discussion of limitations of CVP. Reasonable underpinning from	Limited knowledge, explanation, and evaluation of the limiting factors, limited identification of alternatives to overcome the limiting factor. Limited evaluation of breakeven, the margin of safety, target profit. Limited discussion of limitations of CVP. Limited underpinning from budgeting and its examples.	Little knowledge, explanation, and evaluation of the limiting factors, little or no identification of alternatives to overcome the limiting factor. Little or no evaluation of breakeven, the margin of safety, target profit. Little or no discussion of limitations of CVP. Little or no underpinning from

	underpinning from budgeting and its examples.	budgeting and its examples.	budgeting and its examples.		budgeting and its examples.

Feedback:

Date generic feedback will be available:	Within four weeks of the assessment period, subject to the date set for the release of results
Date provisional marks will be available	Within four weeks of the assessment period, subject to the date set for the release of results
How provisional marks will be returned to you:	Posted on the module on MyBeckett.
Date individual feedback will available	Following the Examination Committee and the return of all scripts from the External Examiner
How individual feedback will be returned to you:	By collection of assessments as directed by your Admin Team