

InterActive	
Module	Accounting and Managerial Finance
Assignment Title	AMF Written Coursework Assignment
Assignment Type	Individual Assignment
Word Limit	3500 (+ 500 words maximum allowed)
Weighting	100%
Student Cohort	
Issue Date	16th October 2017
Submission Date	20th November 2017
Issued by (Assessor)	
Internal Verifier	
Plagiarism	<p>When submitting work for assessment, students should be aware of the InterActive guidance and regulations in concerning plagiarism. All submissions should be your own, original work.</p> <p>You must submit an electronic copy of your work. Your submission will be electronically checked.</p>
Harvard Referencing	<p>The Harvard Referencing System must be used. The Wikipedia website must not be referenced in your work.</p>
Learning Outcomes	<p>On successful completion of this assignment you will be able to:</p> <ol style="list-style-type: none">1. Summarise key principles, trends and tools in accounting and corporate finance.2. Demonstrate effective approaches to the analysis of corporate finance structure and analysis of corporate financial statements.3. Assess the value of practical value of models and theories on making decisions on corporate financing in context.4. Critically evaluate the benefits of various types of financing for different kinds of organisations.5. Utilise internal and external financial information to appraise business performance.
Grading Criteria	<p>Postgraduate Grading Criteria for this assignment is available at the end of this document.</p>

Your Task

**Question 1 – Working Capital Management
(Total: 40 Marks)**

Suppose that Dynamic Sofa (a subsidiary of Dynamic Mattress) has a line of credit with a stated interest rate of 10 percent and a compensating balance of 25 percent. The compensating balance earns no interest.

- a) If the firm needs \$10,000, how much will it need to borrow?

(10 Marks)

- b) Suppose that Dynamic's bank offers to forget about the compensating balance requirement if the firm pays interest at a rate of 12 percent. Should the firm accept this offer? Why or why not?

(15 Marks)

- c) Redo part (b) if the compensating balance pays interest of 4 percent. Warning: You cannot use the formula in the material for the effective interest rate when the compensating balance pays interest. Think about how to measure the effective interest rate on this loan.

(15 Marks)

Question 2 – Capital Budgeting and Net Present Value (Essay work)

(Total: 60 Marks)

Maxine Peru, the CEO of Peru Resources, hardly noticed the plate of savory quenelles de brochet and the glass of Corton Charlemagne '94 on the table before her. She was absorbed by the engineering report handed to her just as she entered the executive dining room.

The report described a proposed new mine on the North Ridge of Mt. Zircon. A vein of transcendental zirconium ore had been discovered there on land owned by Ms. Peru's company. Test borings indicated sufficient reserves to produce 340 tons per year of transcendental zirconium over a 7-year period. The vein probably also contained hydrated zircon gemstones. The amount and quality of these zircons were hard to predict, since they tended to occur in "pockets." The new mine might come across one, two, or dozens of

pockets. The mining engineer guessed that 150 pounds per year might be found. The current price for high-quality hydrated zircon gemstones was \$3,300 per pound.

Peru Resources was a family-owned business with total assets of \$45 million, including cash reserves of \$4 million. The outlay required for the new mine would be a major commitment. Fortunately, Peru Resources was conservatively financed, and Ms. Peru believed that the company could borrow up to \$9 million at an interest rate of about 8 percent.

The mine's operating costs were projected at \$900,000 per year, including \$400,000 of fixed costs and \$500,000 of variable costs. Ms. Peru thought these forecasts were accurate. The big question marks seemed to be the initial cost of the mine and the selling price of transcendental zirconium.

Opening the mine, and providing the necessary machinery and ore crunching facilities, was supposed to cost \$10 million, but cost overruns of 10 percent or 15 percent were common in the mining business. In addition, new environmental regulations, if enacted, could increase the cost of the mine by \$1.5 million. There was a cheaper design for the mine, which would reduce its cost by \$1.7 million and eliminate much of the uncertainty about cost overruns. Unfortunately, this design would require much higher fixed operating costs. Fixed costs would increase to \$850,000 per year at planned production levels.

The current price of transcendental zirconium was \$10,000 per ton, but there was no consensus about future prices.¹ Some experts were projecting rapid price increases to as much as \$14,000 per ton. On the other hand, there were pessimists saying that prices could be as low as \$7,500 per ton. Ms. Peru did not have strong views either way: her best guess was that price would just increase with inflation at about 3.5 percent per year. (Mine operating costs would also increase with inflation.) Ms. Peru had wide experience in the mining business, and she knew that investors in similar projects usually wanted a forecasted nominal rate of return of at least 14 percent.

You have been asked to assist Ms. Peru by writing an essay to evaluate this project. The major direction of the report should be able to assist Ms. Peru to lay out the base-case NPV analysis and

¹ There were no traded forward or futures contracts on transcendental zirconium.

undertake sensitivity, scenario, or break-even analyses as appropriate. Assume that Peru Resources pays tax at a 35 percent rate. Every section should be clearly defined in introduction, and the calculations should be discussed in the framework that has been stated in introduction. For simplicity, also assume that the investment in the mine could be depreciated for tax purposes straight-line over 7 years. What forecasts or scenarios should worry Ms. Peru the most? Where would additional information be most helpful? Is there a case for delaying construction of the new mine?

Guidelines

Please read all questions and information provided carefully. Answer should be made in appropriate length keeping in view the requirement of each question and total word counts allowed.

In addition, your assignment should demonstrate the following qualities:

A critical appreciation of relevant literature and its use to support argument, substantiate calculations and other aspects of the assignment.

Taking ownership of the content, being prepared to debate and argue a personal position, and providing evidence of evaluative skills. A submission made up of extracts from published sources which is descriptive or simply just theoretical regurgitation is not acceptable. Your submission must have interpretation and consideration of the challenges and issues of taking theory into practice.

Logical flow of ideas and treatment; appropriate selection of real world factors related to the companies under scrutiny.

Evidence of additional personal research, and the ability to analyse material from a variety of appropriate relevant perspectives.

Presentation, structure, appropriateness of methodology, breaking into section headings/subheadings, tidiness.

Marks will be awarded for proper referencing and originality of work. Also note that plagiarism is a serious offence and your submission will be electronically checked.

Your report must be handed in electronically no later than given date of submission.

Grading Criteria

Grading Criteria	70%+100	60-69%	50-59%	0 -49% Fail
Generic skills: communication and presentation.	Comprehensive and correctly structured assessment. Style of writing is very fluent and develops a coherent and logical argument. Excellent referencing.	Well structured report which follows appropriate format but some aspects of layout and referencing could be improved. Style of writing is fairly fluent. Good referencing.	Good report in most aspects but suffers from variations in quality and the layout contains some inadequacies. Style of writing is satisfactory. Referencing needs improving.	Very poor report which is incorrectly structured and contains major errors and omissions. Style of writing is descriptive, lacks coherence and fluency. Poor referencing.
Knowledge & Understanding	Demonstrates excellent knowledge of theory and provides critical theoretical underpinning. Very good interpretations and summarising of main themes.	Wide range of knowledge demonstrated and evidence of good understanding of the topic. Ability to interpret and summarise succinctly.	Good range of knowledge demonstrated but with some room for improvement. Some understanding displayed of the topic. Summary and interpretation are satisfactory.	Very poor range of knowledge, research and interpretation of information that is subjective and lacks conceptual coherence. There is no clear identification, understanding or interpretation of main themes.
Analysis	Excellent use of theoretical and conceptual models to guide analysis linked with a critical discussion of main themes. Has demonstrated an ability to discriminate in the use of more abstract concepts and techniques.	Very good use of the theoretical and conceptual models with good critical discussion. Has applied a range of analytical skills with greater independence and understanding of more abstract data or concepts.	Use of theory and concepts limited in scope and depth but relevant. Application could be improved and there is a tendency towards description rather than application of concepts.	Very poor use of theory and very little application of core concepts. Very little or limited analysis and evaluation in relation to fundamental principles and concepts.
Synthesis/ Creativity/ Application	Logical presentation of themes with appropriate examples being demonstrated. Very good demonstration of synthesis. Models have been clearly applied to the argument.	Very good account of main themes with sound application. Good attempt at applying models to the argument. Fairly good attempt at synthesising the salient points.	Good account of main themes with some attempt at application. Limited evidence of synthesis.	Very poor account of main themes with little or no application. No links between models and argument.
Evaluation	Shows clear evidence of in-depth critical reflection and evaluation of the argument by providing a robust defence of the opinions presented in the assessment.	Shows evidence of critical reflection and evaluation and a fairly cohesive defence of the argument	Shows some evidence of critical reflection but could have been developed.	Shows little or no evidence of critical reflection and needs to be much more developed. There is no defence of the opinions presented.