



STRATHMORE UNIVERSITY BUSINESS SCHOOL

MASTER OF SCIENCE IN DEVELOPMENT FINANCE

End of Semester Examination

MDF 8202: INTERNATIONAL FINANCE FOR DEVELOPMENT

Date: Wednesday, 20th January 2021

Time: 3 hours

Instructions:

1. QUESTION ONE IS COMPULSORY

2. ANSWER ANY TWO QUESTIONS BETWEEN QUESTION TWO AND FOUR

QUESTION 1 (Compulsory) (50 Marks)

(a) Assume that you are a consultant with the World Bank and have recently completed an assignment in a developing country experiencing immobile capital. Carry out a monetary policy analysis under fixed exchange rate regime and floating exchange rate regime and advise the country's best policy strategies **(20 Marks - 4 cases at 5 marks each)**.

(b) With regards to the international monetary system, briefly discuss the following:

- (i) The Bimetallism period **(4 Marks)**
- (ii) The Gold Standard **(4 Marks)**
- (iii) The Bretton Woods System **(7 Marks)**

(c) Donegal plc, a UK Company is considering whether to establish a subsidiary in Ruritania, at a cost of Ruritanian \$2,400,000. This would be represented by machinery assets of \$2,000,000 and working capital of \$400,000. The subsidiary would produce a product which would achieve annual sale of \$1,600,000 and incur cash expenditures of \$1,000,000 a year.

The company has a planning horizon of four years, at the end of which it expects the realisable value of the subsidiary's fixed assets to be \$800,000. It expects also to be able to sell the rights to make the product for \$500,000 at the end of four years. It is the company's policy to remit the maximum funds possible to the parent company at the end of each year.

Tax is payable at the rate of 35% in Ruritania and is payable one year in arrears. Tax allowable depreciation is at a rate of 25% on a straight-line basis on all fixed assets. The UK taxation rate on taxable profits made in Ruritania and remitted to UK, and on UK income and expenditure is 30%, payable one year in arrears.

Administration costs of £100,000 per annum will be incurred each year in the UK over the expected life of the project.

The Ruritanian \$:£ exchange rate is 5:1. The company's cost of capital for the project is 10%.

Required

Calculate the NPV of the project and advice whether it should be implemented **(15 Marks)**

QUESTION 2 (25 Marks)

(a) Discuss briefly the three functions of the forex markets **(6 Marks)**

(b) You are given the following exchange rate between Swiss Francs and Dollars:

	Kenya Commercial Bank	Co-operative Bank
Bid price of Swiss francs	\$0.401	\$0.398
Ask price of Swiss francs	\$0.404	\$0.400

(i) Establish if arbitrage is possible? **(2 Marks)**

(ii) Demonstrate how you would execute the arbitrage with \$1 million **(4 Marks)**

(iii) What market forces would occur to eliminate any further possibilities of the arbitrage?
(2 Marks)

(c) The treasurer of a multinational company has prepared the following schedule of intercompany balances that is made up of the parent in Kenya and three subsidiaries in Uganda, Tanzania and Rwanda. The figures have been presented in millions of shillings.

		Due from			
		Kenya	Uganda	Tanzania	Rwanda
Due to...	Kenya	-	10	8	20
	Uganda	5	-	3	12
	Tanzania	3	15	-	1
	Rwanda	6	20	4	-

(i) Prepare a revised schedule showing the remaining balances after netting off intercompany balances. **(4 Marks)**.

(ii) The treasurer is evaluating various techniques to optimize cash flows across the entire business, albeit some challenges. Highlight 4 techniques to optimize the cash flows the manager can use **(4 marks)** and three challenges the manager will likely face **(3 Marks)**

QUESTION 3 (25 Marks)

(a) Explain the following sources of International Finance **(8 Marks)**

(i) Euro Bond **(2 Marks)**

(ii) Euro Notes **(2 Marks)**

(iii) Syndicated Credit **(2 Marks)**

(iv) Syndicated Loan **(2 Marks)**

(b) Agrico is a US multinational corporation financing its operation using international sources of equity and debt. The debt equity ratio is 40% to 60%. Currently the US treasury bond rate is 8%.

Most of the equity of Agrico is held by foreign investors and the main market index of the shares is the Morgan Stanley Capital International global Index (MSCI global). Currently the MSCI has a return of 18%.

Agrico has estimated its beta i.e., systematic risk relative to MSCI at 1.2. The cost of debt before tax for Agrico is 10% and the tax rates are 30%.

Required

Compute the International Weighted Average Cost of Capital for Agrico **(4 Marks)**

(c) Despite the debate on the relevance of a capital structure in a company, company characteristics and country characteristics influence the capital structure of a Multinational corporation.

Required

(i) Provide a summary of MM's capital structure theories **(8 Marks)**

(ii) Highlight THREE country factors and TWO company factors that influence the capital structure of a Multinational corporation. **(5 Marks)**

QUESTION 4 (25 Marks)

(a) Distinguish between Economic risk and Translation risk, highlighting strategies that an organization can undertake to manage each type of risk **(6 Marks)**

(b) Crystal, a Dutch based developmental agency, has just been informed that it will receive \$30 million funding from the Bill and Melinda Gates Foundation in six months. Crystal is concerned with the euro proceeds from the funding and would like to manage exchange risk. The current spot exchange rate is \$1.05/€ and six-month forward exchange rate is \$1.10/€. Crystal can buy a six-month put option on U.S. dollars with a strike price of €0.95/\$ for a premium of €0.02 per U.S. dollar. Currently, six-month interest rate is 2.5% in the euro zone and 3.0% in the U.S.

Required

(i) Compute the guaranteed euro proceeds if Crystal decides to hedge using a forward contract **(3 Marks)**

(ii) If Crystal decides to hedge using money market instruments, what action does Crystal need to take?

What would be the guaranteed euro proceeds in this case? **(6 Marks)**

(iii) If Crystal decides to hedge using put options on U.S. dollars, what would be the 'expected' euro proceeds? Assume that Crystal regards the current forward exchange rate as an unbiased predictor of the future spot exchange rate. **(6 Marks)**

(iv) Crystal is considering borrowing the present value of the \$30 million now and use the proceeds from the funding to pay for the loan in six months. What is the name of this type of strategy and comment on its effectiveness **(4 Marks)**.