



STRATHMORE BUSINESS SCHOOL

MASTER OF SCIENCE IN DEVELOPMENT FINANCE

END-OF-SEMESTER EXAMINATION

MDF 8202: INTERNATIONAL FINANCE FOR DEVELOPMENT

Date: Friday 8th December 2023

Time: 3 Hours

Instructions: Answer question One and ANY OTHER TWO

Question 1 (50 Marks)

(a) It is not clear whether international finance has led to the growth of international business or international business has led to the growth of international finance. Briefly discuss SIX levels of international business that maybe supported by international finance **(12 Marks)**

(b) Distinguish between Monetary policies and Fiscal policies and provide an example of TWO strategies in each that the government can use to promote economic growth **(6 Marks)**

(c) Motel Limited (A Kenyan Company) plans to invest in Rwanda to manufacture and sell its major product “Softa” beginning 2024. The currency of Motel is the Kenyan Shilling (Ksh.) and of Rwanda is the Rwandan Franc (RFRs).

Motel plans to invest mainly in new plant and machinery to meet the expected demand for product Softa. This machine will cost RFR 250 million and last for five years, at the end of which it will be sold for RFR 50 million. Working capital of RFR 30 million will be required in January 2024 of the project and will be recovered on 31 December 2028. This will not increase with inflation.

Motel expects demand for Softa to be as follows:

Year	2024	2025	2026	2027	2028
Demand(units)	35,000	40,000	50,000	25,000	20,000

The selling price for Softa is RFR 15,000.00 per unit and the variable cost of production is estimated at RFR 10,000.00 per unit. Incremental annual fixed production overheads of RFR 25 million per year will be incurred.

Selling price and costs (Variable and Fixed) are all in current price terms (End of year 2023) and are expected to increase with general inflation in Rwanda.

Other information:

1. In Kenya and Rwanda tax is paid at a rate of 30% one year in the same year. Capital allowances on the machine are on a 25% reducing balance basis. Tax will be paid or saved on the sale of the plant and machine. There is a double tax treaty between Kenya and Rwanda, so no tax is paid in Kenya on foreign income arising from Rwanda.
2. General inflation is expected to be 6% in Rwanda and 3% in Kenya over the next five years. The real weighted average cost of capital for Motel is 17%.
3. Motel plans to finance the project using the current funds and hence the project will not change the current debt equity structure.
4. Currently (End of 2023) Exchange rate between Kenya and Rwanda is Ksh.1 = RFr 8.

Required

- (i) Determine the projects cash flow in Rwanda Francs over the five years **(22 Marks)**
- (ii) Compute the Net Present Value of the Project in Kenya Shillings and advise whether the project should be undertaken **(6 Marks)**
- (iii) Motel is worried about the exchange risk arising from undertaking the project. It is evaluating whether it is worthwhile to hedge the risk. Provide TWO reasons for and TWO reasons against hedging foreign exchange rate risk **(4 Marks)**.

Question 2 (25 Marks)

- (a) Bimetallism was the main international monetary system up to 1875.
 - (i) Describe Bimetallism **(3 Marks)**
 - (ii) Explain THREE main limitations of Bimetallism as an international monetary system **(6 Marks)**
- (b) David Makau is the treasury manager of Host Limited, a Kenyan company with international business associates and clients. He is evaluating various issues in relation to foreign currency.
 - (i) The company has just bought some goods from a US supplier and is required to pay \$10,000 in a few days. In addition, one of the company's customers in Tanzania has just paid Tsh.150 million for a credit sale that was done a month ago. Given the following exchange rates, what amounts will David transact in Kenya shillings? **(4 Marks)**

	Bid Price	Ask Price
Kenya – US (KSh./US\$)	150	153
Kenya – Tanzania (Tzsh./Ksh.)	20	25

(ii) David is now looking at additional exchange rates and she observes the following:

US \$ = Kenya sh.150

Kenya Sh. = Uganda sh.26

US \$=Uganda sh. 3,700.

David suspects that he can make an arbitrage profit from the cross rate. He wants to use the \$10,000 before he pays the US supplier.

Required

Explain how David can carry out the arbitrage and how much profit he will make in dollars.

(6 Marks)

(iii) David is now evaluating other exchange rates to identify potential for interest rate arbitrage. She finds out that, the annual interest rate in the AUS (currency is \$) and in the UK (Currency is £) are 5% and 8% respectively. The current spot rate is \$1.9/£ and the 1-year forward rate is \$1.88/£.

Required

Assume that David can borrow AU\$ 50,000. Compute the potential profit that he can make from interest rate parity (IRP) arbitrage

(6 Marks)

Question 3 (25 Marks)

(a) (i) With the aid of a well-labelled diagram, distinguish between the IS Curve and LM curve

(6 Marks)

(ii) Explain why the IS-LM equilibrium curve is important in economics **(2 Marks)**

(b) Glovo is a US multinational corporation financing its operation using international sources of equity and debt. Glovo is not sure if the current capital structure of debt equity ratio of 40% to 60% is optimal. Currently the US treasury bond rate is 8%. Most of the equity of Glovo 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 20%.

Glovo has estimated its beta i.e. systematic risk relative to MSCI at 1.15. The cost of debt for Glovo before tax is 10% and the tax rate is 30%.

Required

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

(ii) Discuss the MM's theory of capital structure in the context of an organization like Glovo **(8 Marks)**

(iii) Highlight FIVE country characteristics that influence the capital structure of an organization
(5 Marks)

Question 4 (25 Marks)

(a) Discuss briefly the following financial crises:

- (i) The Asian Crisis of 1997 (4 Marks)
- (ii) The Global Financial Crisis of 2007 (4 Marks)

(b) 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	-

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

(c) Zesta Limited (a UK company), expects to receive \$4,000,000 in 3 months. The Finance Director is considering Four Hedging Strategies.

1. A money market hedge

Exchange rate now: \$1.2361:£
 Deposit rates (3 months) UK 4.5% p.a. US 4.2% p.a.
 Borrowing rates (3 months) UK 5.75% p.a. US 5.1% p.a.

2. Forward contract

A forward contract with the bank at a forward rate of £=\$1.2516.

3.Futures contract

A dollar futures currency contract. The currency dollar futures currency contract is standardized at \$250,000 per contract. The company can only buy one full contract and not partial. The Futures Price for settlement in three months is £=\$1.2556

4.Option Contract

A put option contract with a total premium of £1,000. The exercise price is given at £=\$1.2510.

Required

Evaluate the effectiveness of each strategy and suggest an optimal one assuming that the spot rate in three months turns out to be £=\$1.2425. Indicate one benefit and one limitation of each strategy.

(13 Marks)