UNIVERSITY OF BRADFORD

INTERNATIONAL FINANCIAL MANAGEMENT- MBA

MAN4061M

Main

This is a **CLOSED BOOK** examination

Answer **TWO** out of four questions
All parts of a question should be attempted

QUESTION 1

a) Ryanair is an Irish low-cost airline, with headquarters located in Dublin, which is reputed to be Europe's largest airline serving at least 28 countries. Its sales of tickets to passengers are denominated in euros (€). If a sale occurs outside the euro-zone, the local currency price is determined as the € price converted to the local currency using the prevailing spot exchange rate, and sales denominated in the local currency are immediately converted to € at the prevailing spot exchange rate. All debt can be assumed to be denominated in €. Discuss the foreign exchange exposure facing the company.

[30 marks]

b)

    i. Describe the main features of triangular arbitrage when applied to foreign exchange spot rates.

[10 marks]

    ii. Using the following simultaneously recorded information, show that a triangular arbitrage opportunity exists.

Location	Spot Exchange Rate
New York	¥101.8400 / $
Frankfurt	¥142.1000 / €
Frankfurt	$1.3757 / €

[5 marks]

    iii. Demonstrate the transactions a trader would have to make in order to profit from this triangular arbitrage opportunity. What is the profit rate?

[10 marks]

c)

    i. When applied to foreign exchange spot rates, explain the differences between the "Law of One Price" (LOP) and "Relative Purchasing Power Parity (RPPP).

[10 marks]

    ii. Discuss the reasons for RPPP to be an imprecise predictor of future spot foreign exchange rates.

[10 marks]

d) During the 1990s, the Argentine peso (P) was fixed by its central bank at the rate P 1.00 /$. In January 2002, the Argentine peso was permitted by the central bank to float freely, initially at P 1.00 / $. One year later, during January 2003, the Argentine peso was trading around P 3.20 /$. During that one year period, the annualized inflation rates in Argentina and USA were 20.0% and 2.2%, respectively.

    i. What should the exchange rate have been in January 2003 if purchasing power parity held?

[10 marks]

    ii. What were the probable causes of the undervaluation?

[15 marks]

QUESTION 2

a)

    i.   Describe the main characteristics of a forward currency contract.

            [10 marks]

    ii.   Define the gain (loss) on both a long and short forward currency contract.

            [10 marks]

b)

    i.   Describe the main characteristics of a currency option contract.

            [10 marks]

    ii.   Define the gain (loss) on both the call and put currency contract from the perspective of the option buyer.

            [10 marks]

c) A German firm is facing a known USD ($) exposure in 6 months, and intends to cover it using an appropriate $/€ instrument to be acquired from a major international bank. The firm strongly believes that the € is going to depreciate. Using your answers in parts (a) and (b) above, explain whether or not the firm should cover the exposure using a currency forward or a currency option contract.

            [10 marks]

d) A Swiss machine tool manufacturer is bidding to supply customized designed machine tool for a buyer located in Russia. The bid price submitted by the Swiss firm is USD 100 million. All the costs for the Swiss firm are denominated in CHF (Swiss Francs). The bid document supplied by the Russian buyer states that (1) all bidders have to submit on December 1st 2009 a price denominated in USD ($), (2) the decision to select the sole supplier is to be announced on December 1st 2010 when a prepayment for the total amount is paid by the buyer to the selected seller, and (3) the machine tool is to be supplied as specified on December 1st 2011. On the day for submitting the bid, the following currency rates are recorded:

        12-month forward CHF/USD rate is 0.9000

        12-month CHF/USD option prices

Strike	Call	Put
0.890	0.0191	0.0094
0.900	0.0138	0.0138
0.910	0.0096	0.0192

Treat the option premiums as if they are 12-month future values.

The spot CHF/USD rate on December 1st 2010 is CHF0.9100/USD.

    i.   When a 12-month forward currency contract is used to manage the USD exposure, determine the outcomes expressed in CHF if (1) the bid is successful, and (2) the bid is not successful.

            [10 marks]

ii. When a 12-month currency option contract with a CHF 0.890/USD strike price is used to manage the USD exposure, determine the outcomes expressed in CHF if (1) the bid is successful, and (2) the bid is not successful.

[10 marks]

iii. When a 12-month currency option contract with a CHF 0.910/USD strike price is used to manage the USD exposure, determine the outcomes expressed in CHF if (1) the bid is successful, and (2) the bid is not successful.

[10 marks]

iv. Which of the three contracts described in parts (i), (ii) and (iii) should be used?

[10 marks]

v. Does the result in part (iv) still hold if the CHF/USD spot exchange rate on December 1st 2010 is CHF0.9100/USD?

[10 marks]

Question 3

a) In 2010, a Japanese investor had purchased a property in London, UK for the price of £100.0 million. Exactly one year later, the price for the property had increased to £110.0 million. Relevant market data on exchange rates and annualized borrowing interest rates are shown in the following table.

Spot exchange rates	Year	¥/£
	2010	150.0
Annualized one-year borrowing rates	Currency	Rate
	¥	2.0%
	£	8.0%

   i. Describe three risks that the Japanese investor faced at the time of making the one-year property investment.

   [10 marks]

   ii. Explain whether or not any of these risks could be hedged, and if so, how?

   [10 marks}

   iii. The Japanese investor decides to totally finance the London property investment using £ borrowing. What is the net ¥ return to the Japanese investor if the 2011 spot exchange rate is ¥140.0/£? Ignore taxation.

   [15 marks]

   iv. The Japanese investor decides to totally finance the London property investment using ¥ borrowing. What is the net ¥ return to the Japanese investor if the 2011 spot exchange rate is ¥140.0/£? Ignore taxation.

   [15 marks]

   v. Between the two financing choices, which is the better? Explain why the preferred choice is better.

   [10 marks]

b) A major European hotel multinational company (EHE) is considering, together with Kenyan business partners, the construction of a beach hotel situated on the shore of the Indian Ocean, 50 kms north of Mombasa. The hotel is principally designed for the global tourist market. The investment cost for EHE is €20.0 million, or Kshs 240 million (Kshs = Kenyan shilling) at the current spot rate of Kshs 120.0/€. All profits for the first 10 years are to be re-invested in making refurbishments and other improvements to the hotel. Based on projected earnings, EHE share of this beach hotel is expected to be worth Kshs 750.0 in 10 years time. Discuss the critical factors that EHE has to take into account in evaluating this investment.

   [40 marks]

QUESTION 4

a) Shortened versions of the Balance of Payments statistics for two countries, Alphaland and Betaland, for identical years and expressed in USD, are presented in the following table.

	Alphaland	Betaland
Current Account	-80.0	100.0
Capital and Financial Account	60.0	-40.0
Official Reserve Account	20.0	-60.0

Discuss the comparative meaning for these statistics. Based on these statistics, do you expect a currency appreciation for one country but a depreciation for the other?

[25 marks]

b) A multinational firm produces, distributes and markets a range of consumer lifestyle products to more than 25 countries in the world. Explain how this firm can effectively manage its economic exposure through the use of an appropriate marketing strategy.

[25 marks]

c) An international mobile telephony company is considering a foreign country market entry through establishing a wholly owned subsidiary. In the targeted country, the extent of mobile telephony coverage is currently quite limited. To develop a significant presence, the company would have to establish its own suitable mobile telephony infrastructure and market handset to prospective customers. Discuss the advantages and limitations of this entry method.

[25 marks]

d) Explain the main features of cross-listing. Discuss the advantages and limitations for an international firm in obtaining a cross-listing.

[25 marks]