A. M. E. C. E. A<br>MAIN EXAMINATION

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AUGUST - DECEMBER 2015 TRIMESTER
FACULTY OF COMMERCE

MBA PROGRAMME
CFI 612: INTERNATIONAL FINANCE AND DERIVATIVE SECURITIES
Date: DECEMBER 2015 Duration: 3 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER THREE Questions
Q1. a) Briefly discuss the main players in the international financial markets.
(8 marks)
b) Discuss the types of exposures in the foreign exchange markets.
(6 marks)
i Explain the condition under covered interest arbitrage in which arbitrage will exist.
(2 marks)
ii The annual interest rate in Australia and the United Kingdom are $5 \%$ and $8 \%$ respectively. The current spot rate is $\$ 1.50 / £$ and the one - year forward rate is $\$ 1.48 / £$.

Required:
Determine which currency is overvalued forward and using one million units of the appropriate currency illustrate the arbitrage process between the dollar and the sterling pound.
(9 marks)
Q2. a) Discuss the issues to be analyzed in international project appraisal.
(10 marks)
b) A U.S.A multinational company is considering a European opportunity. The size and timing of the after - tax cashflows are as follows;

| Year | 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cash inflows $(€)$ | 1200 | 800 | 600 | 500 | 900 | 800 |

The following additional information is also given
Inflation in Eurozone $=4 \%$
Inflation in USA = 5\%
Interest rates in USA = 15\%
Current exchange rate S0 (\$/€) = \$1.28/€
Required:
Appraisal the project and advise the USA shareholders accordingly using the net present value method.
(15 marks)

Q3. a) Discuss the reasons behind the growth in international banking.
(10 marks)
b) Briefly discuss the Basel accords developments on international banking supervision in relation to risk management.
(15 marks)
Q4. a) Briefly explain the specifications in financial futures contracts. (5 marks)
b) Compare a forward contract with a futures contract.
(6 marks)
c) A US investor is attracted by high yield on GBP bonds but worried about a GBP depreciation. The current market rates are as follows;

|  | US | UK |
| :--- | :--- | :--- |
| Bond yield (\%) | 7 | 8 |
| Three month interest rate | 6 | 10 |
| Exchange rate $=\$ 1.70$ / GBP |  |  |

A bond dealer has repeatedly suggested that the investor invest in hedged foreign bonds. This strategy can be described as the purchase of foreign currency bonds (ie GBP bonds) with simultaneous hedging in the short-term forward futures currency markets. The currency hedge is rolled over when the forward or futures contract expires.

Required:
i The current three- month forward exchange rate (\$ / GBP)
ii Assuming a GBP 2 million investment in British bonds how would you determine the exact ratio necessary to minimize the currency influence.
(5 marks)
iii When will this strategy be successful (compared to a direct investment in US dollars?

Q5. a) Write short explanatory notes on the following

| i | Eurocurrency | (2 marks) |
| :--- | :--- | :---: |
| ii | Euro commercial paper | (2 marks) |
| iii | Euro notes | (2 marks) |
| iv | Long position n a hedge | (2 marks) |
| v | Short position in a hedge | $\mathbf{( 2 ) ~ m a r k s ) ~}$ |

b) Briefly discuss the risks that face a swap dealer.
(6 marks)
c) The following information is given

Price of asset in the cash market $=$ sh 100
Cash yield on asset = 12\% p.a
Financing cost $=2 \%$ for 3 months
Required:
Calculate the theoretical price of the future.
(3 marks)
d) Grerious Ltd enters into a two year 10 million notional principal with swap ventures limited. Grerious Limited pays a fixed rate while swap ventures pays floating rate based on the local banks interbank offered rate. The payments are exchanged every six months based on 30 day calendar month and 360 days a year. The term structure of the interbank offered rates are as follows.

| Term | Rate $(\%)$ |
| :--- | :--- |
| 180 | 10,000 |
| 360 | 10.80 |
| 540 | 11.00 |
| 720 | 11.60 |

Required:
Calculate the value of the swap.

