

UNIVERSITY OF BRADFORD
INTERNATIONAL FINANCE (MSc)
MAN4271M

8th May 2014

16:00 – 17:30 hours

Main

This is a **CLOSED BOOK** examination

Answer any two questions.
All questions carry equal marks

Answer any two questions

Question 1

- a) Discuss carefully the meaning of the term “impossible trinity”. Support your answer with examples of your choice. [4 marks]
- b) Discuss the advantages and disadvantages of fixed exchange rate regimes. [4 marks]
- c) Fixed exchange rate regimes are sometimes implemented through a currency board (Hong Kong) or Dollarization (Ecuador). Explain the difference between the two approaches. [2 marks]

[Total 10 marks]

Question 2

- a) A project in South Korea requires an initial investment of 2 billion South Korean won. The project is expected to generate net cash flows to the subsidiary of 3 billion and 4 billion won in the two years of operation, respectively. The project has no salvage value. The current value of the won is 1,800 won per pound, and the value of the won is expected to remain constant over the next two years.
- i. What is the *NPV* of this project if the required rate of return is 13 percent? [3 marks]
- ii. Repeat the question, except assume that the value of the won is expected to be 2,000 won per pound after two years. Further assume that the funds are blocked and that the parent company will only be able to remit them back to the United Kingdom in two years. How does this affect the *NPV* of the project? [3 marks]
- b) Pimlico Ltd is a UK firm with a Chinese subsidiary that produces cell phones in China and sells them in Japan. This subsidiary pays its wages and its rent in Chinese yuan, which is presently tied to the dollar. The cell phones sold to Japan are denominated in Japanese yen. Assume that Pimlico Ltd expects that the Chinese yuan will continue to stay fixed against the dollar. The subsidiary’s main goal is to generate profits for itself and reinvest the profits. It does not plan to remit any funds to the UK parent.
- i. Assume that the Japanese yen strengthens against the US dollar over time. How would this be expected to affect the profits earned by the Chinese subsidiary? [1 mark]
- ii. If Pimlico Ltd had established its subsidiary in Tokyo, Japan instead of China, would its subsidiary’s profits be more exposed or less exposed to exchange rate risk? [1 mark]
- iii. Why do you think that Pimlico Ltd established the subsidiary in China instead of Japan? Assume no major country risk barriers. [1 mark]
- iv. If the Chinese subsidiary needs to borrow money to finance its expansion and wants to reduce its exchange rate risk, should it borrow US dollars, Chinese yuan, or Japanese yen? [1 mark]

[Total 10 marks]

Question 3

a) Assume the following information:

90- day UK interest rate	4%
90- day Malaysian interest rate	3%
90-day forward rate of Malaysian ringgit	£0.25
Spot rate of Malaysian ringgit	£0.2525

Assume that Saint Barnabus plc in the UK will need 300,000 ringgit in 90 days. It wishes to hedge this payables position. Would it be better off using a forward hedge or a money market hedge? Substantiate your answer with estimated costs for each type of hedge.

[4 marks]

b) Evar Imports Ltd buys chocolate from Switzerland and resells it in the United Kingdom. It just purchased chocolate invoiced at SFr62,500. Payment for the invoice is due in 30 days. Assume that the current exchange rate of the Swiss franc is £0.49. Also assume that three call options for the franc are available. The first option has a strike price of £0.49 and a premium of £0.02; the second option has a strike price of £0.51 and a premium of £0.005; the third option has a strike price of £0.53 and a premium of £0.004. Evar Imports is concerned about a modest appreciation in the Swiss franc.

i. Describe how Evar Imports could construct a bull spread using the first two options. What is the cost of this hedge? When is this hedge most effective? When is it least effective?

[2 marks]

ii. Describe how Evar Imports could construct a bull spread using the first option and the third option. What is the cost of this hedge? When is this hedge most effective? When is it least effective?

[2 marks]

iii. Given your answers to parts (a) and (b), what is the tradeoff involved in constructing a bull spread using call options with a higher exercise price?

[2 marks]

[Total 10 marks]

Question 4

Distinguish between transaction risk, translation risk and economic risk and discuss various internal hedging techniques for managing these risks.

[Total 10 marks]

Question 5

a. Discuss the various arguments for and against hedging foreign exchange exposure.

[5 marks]

b. Explain carefully how inflation rates, interest rates and levels of income affect currency prices.

[5 marks]

[Total 10 marks]