

UNIVERSITI SAINS MALAYSIA

Second Semester Examination
Academic Session 2000/2001

February/March 2001

AFP 365 - International Finance

Time : 3 hours

INSTRUCTION

Please make sure that this examination paper contains **FIVE** printed pages before you begin the examination.

Answer **FIVE** question.

Question 1

(a) Why are forward spreads on short-maturity currencies larger than on highly liquid currencies? [3 marks]

(b) What is the difference between the immediate effect and the long-run effect of direct investment by foreigners on a country's balance of payments when the direct investment is in newly established activities such as exploration and development? Would it make any difference if the activities are which direct investment occurred were involved in the production of a good the country had previously been importing? [10 marks]

Question 1

- (a) Some countries choose to use fixed exchange rate system. Discuss why they do so, and what are the implications. [6 marks]
- (b) In July 1944, representatives of 44 nations gathered at Bretton Woods, New Hampshire, to discuss and design the postwar international monetary system which will replace the gold standard. Describe how Bretton Wood system works, and briefly give the advantages and disadvantages of the system. [6 marks]
- (c) On September 25, 1999, Jurong Chemical, a Singaporean-based company, sold SG\$2,500,000 of agricultural pesticide to Pakistani AgriChem, payable in three months at Overseas Chinese Banking Corp. in Singapore. The sale was denominated in Pakistani rupees at a time when the rupee traded at 36.56 rupees per Singapore dollar. On October 22, 1999, due to an action by the Pakistani's Central Bank, the rupee devalued to 40.22 per Singapore dollar.
- What was the percentage amount of devaluation of rupee against Singapore dollar?
 - What was the Singapore dollar loss experienced by Jurong Chemical? When was it experienced?
 - Was the loss in (ii) above, of a transaction, translation, or operating nature? Explain. [8 marks]

Question 2

- (a) Why are forward spreads on less-traded currencies larger than on heavily traded currencies? [3 marks]
- (b) What is the difference between the immediate effect and the long-term effect of direct investment by foreigners on a country's balance of payments, when the direct investment is in heavily export-oriented activity such as oil exploration and development? Would it make any difference if the industry into which direct investment occurred were involved in the production of a good the country had previously been importing? [10 marks]

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- (c) Both Malaysia and Thailand produce D4 durian. A kilogram of that fruit sells in Malaysia for RM18. The same durian sells in Thailand for B100.
- i. According to purchasing power parity, what should be the Malaysian ringgit/Thailand baht spot exchange rate?
 - ii. Suppose the price of D4 durian in Malaysia is expected to rise to RM20 over the next year, while the price of the fruit in Thailand is expected to rise to B118. If this is the case, what should be the one-year forward ringgit/baht exchange rate?
 - iii. Based on your answers in i and ii above, and the assumption that the current interest rate in Malaysia is 6% for notes of a one-year maturity, what would you expect current Thai interest rates to be?

[7 marks]

Question 3

- (a) In the early 1990s, many Taiwanese manufacturers, especially in the semiconductor and consumer electronics industries, have set up manufacturing facilities in South-east Asia especially Malaysia and Thailand, as a way to hedge against the operating exposure of continuing to manufacture in Taiwan.
- i. What has led to this trend and how does the South-east Asian manufacturing base work in principle?
 - ii. What assumptions are critical to this strategy working effectively as a hedge?
 - iii. How dependable are these assumptions over the long run?

[10 marks]

- (b) The current spot rate for Dutch Guilder and US dollar is NGL1.9200/\$. The three-month forward quote is NGL1.9000/\$. You believe in three months the spot rate will be NGL1.8800/\$, and you have \$100,000 with which to speculate. Any bank with which you conduct a forward market transaction will want 100% initial margin; that is, you will be required to deposit the amount of any transaction in a certificate of deposit.

Illustrate two different ways of speculating, and calculate the dollar profit to be made by each method. Assume the three-month rate of interest for deposits or lending in guilders is 4% per annum and in U.S. dollars is 8% per annum. For each way of speculating, explain the risks involved.

[10 marks]

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Question 4

- (a) Why might there be departures from purchasing power parity even if the law of one price holds for every commodity? [6 marks]
- (b) An investor hold an 8.5 percent Swiss franc/US dollar dual-currency bonds that pay \$666.67 at maturity per SF1,000 of par value. What is the implicit SF/\$ exchange rate at maturity? Will the investor be better or worse off at maturity if the actual SF/\$ exchange rate is SF1.35/\$1.00? [7 marks]
- (c) Guanabara Cerveja, S.A., a Brazilian soft drink company, was acquired by Coca Cola of U.S. Its balance sheet, in Brazilian reais (R\$), for January 1, 1999, is shown below. The exchange rate on that date was R\$1.0546/US\$.

Assets		Liabilities and Owner's Equities	
Cash	R\$120,000	Current liabilities	R\$100,000
Accounts receivables	240,000	Long-term debt	180,000
Inventory	180,000	Common equities	580,000
Fixed assets	320,000		
	<u>R\$860,000</u>		<u>R\$860,000</u>

- i. What is Guanabara's contribution to the translation exposure of its parents on January 1, 1999, using the current rate method? (Give your answer in both currencies)
- ii. Calculate the translation loss its parent would experience if the exchange rate on Dec 31, 1999 were R\$1.2500/US\$. Assume all real accounts remain as they were at the beginning of the year.

[7 marks]

[4 marks]

Question 5

- (a) Dealers are an important party in a swap transaction. In doing their job, they are exposed to some kinds of risks. Discuss five types of risk faced by these dealers in the swap market.

[6 marks]

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- (b) A newly-wed couple from Singapore, Mr. and Mrs. Lee, plan to honeymoon in Penang in three months. After calculating meals, accomodation and transportation, they expects the total costs of the honeymoon to be RM5,000. They knows that the exchange rate between Malaysian ringgit and Singapore dollars has not been stable recently, so they needs to hedge against any change in the S\$/RM. After doing some information search, they gather the followings; the spot exchange rate is S\$0.60/RM, 3-month forward rate is S\$0.63/RM, 3-month call option on RM has an exercise rate of S\$0.64/RM for a premium of S\$0.05 per RM, the 3-month interest rate is 6 percent in Singapore and 4 percent in Malaysia. They expect future spot rate to be the same as the forward rate.
- i. Calculate expected Singapore dollar cost of buying RM5,000 if they choose to hedge by a call option on RM.
 - ii. Calculate the expected Singapore dollar cost of buying the same amount of ringgit if you decide to hedge using forward contract.
 - iii. At what future spot exchange rate will they be indifferent between the forward and option market hedges?

[8 marks]

Question 6

- (a) Why do you think that futures markets were developed when banks already offered forward contract? What might currency futures offer which forward contracts do not? As a hedger, which of the two would you prefer and why?
[6 marks]
- (b) What is the payoff if you (i) buy and (ii)write a call option, assuming there is no transaction costs? Draw and label the profiles.
[4 marks]
- (c) Malaysia has pegged its ringgit against the U.S. dollar since September 1998. Discuss the pros and cons with regards to such action. In your opinion, have the country's policy makers made the right decision to peg the ringgit? Give your assessment on the achievements of the policy so far by giving some examples or evidence you know.
[10 marks]

