



**THE UNIVERSITY OF THE WEST INDIES
CAVE HILL**

EXAMINATIONS OF APRIL/MAY 2012.

CODE AND NAME OF COURSE: MGMT3053 - INTERNATIONAL FINANCIAL MANAGEMENT

DATE AND TIME:

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES: This paper has 9 pages and 4 questions.

***Section one is compulsory and has one question worth 20 marks.
Section two has three questions from which candidates may answer
any two question. Each question is worth 25 marks.***

SECTION 1

1. Which of the following theories identifies specialization as a reason for international business?
 - a. theory of comparative advantage.
 - b. imperfect markets theory.
 - c. product cycle theory.
 - d. none of these.

2. An increase in the current account deficit will place _____ pressure on the home currency value, other things equal.
 - a. upward
 - b. downward
 - c. no
 - d. upward or downward (depending on the size of the deficit)

3. If a U.S. firm desires to avoid the risk from exchange rate fluctuations, and it is receiving 100,000 in 90 days, it could:
 - a. obtain a 90-day forward purchase contract on euros.
 - b. obtain a 90-day forward sale contract on euros.
 - c. purchase euros 90 days from now at the spot rate.
 - d. sell euros 90 days from now at the spot rate.

TURN OVER

4. Which of the following is *not* true with respect to spot market liquidity?
- The more willing buyers and sellers there are, the more liquid a market is.
 - The spot markets for heavily traded currencies such as the Japanese yen are very liquid.
 - A currency's liquidity affects the ease with which an MNC can obtain or sell that currency.
 - If a currency is illiquid, an MNC is typically able to quickly purchase that currency at a reasonable exchange rate.
5. When the "real" interest rate is relatively low in a given country, then the currency of that country is typically expected to be:
- weak, since the country's quoted interest rate would be high relative to the inflation rate.
 - strong, since the country's quoted interest rate would be low relative to the inflation rate.
 - strong, since the country's quoted interest rate would be high relative to the inflation rate.
 - weak, since the country's quoted interest rate would be low relative to the inflation rate.

6. Baylor Bank believes the New Zealand dollar will appreciate over the next five days from \$.48 to \$.50. The following annual interest rates apply:

<u>Currency</u>	<u>Lending Rate</u>	<u>Borrowing Rate</u>
Dollars	7.10%	7.50%
New Zealand dollar (NZ\$)	6.80%	7.25%

Baylor Bank has the capacity to borrow either NZ\$10 million or \$5 million. If Baylor Bank's forecast is correct, what will its dollar profit be from speculation over the five-day period (assuming it does not use any of its existing consumer deposits to capitalize on its expectations)?

- \$521,325.
 - \$500,520.
 - \$104,262.
 - \$208,044.
7. If inflation in New Zealand suddenly increased while U.S. inflation stayed the same, There would be:
- an inward shift in the demand schedule for NZ\$ and an outward shift in the supply schedule for NZ\$.
 - an outward shift in the demand schedule for NZ\$ and an inward shift in the supply schedule for NZ\$.
 - an outward shift in the demand schedule for NZ\$ and an outward shift in the supply schedule for NZ\$.
 - an inward shift in the demand schedule for NZ\$ and an inward shift in the supply schedule for NZ\$.

8. Assume that a speculator purchases a put option on British pounds (with a strike price of \$1.50) for \$.05 per unit. A pound option represents 31,250 units. Assume that at the time of the purchase, the spot rate of the pound is \$1.51 and continually rises to \$1.62 by the expiration date. The highest net profit possible for the speculator based on the information above is:
- \$1,562.50.
 - \$1,562.50.
 - \$1,250.00.
 - \$625.00.
9. Which of the following is correct?
- The longer the time to maturity, the less the value of a currency call option, other things equal.
 - The longer the time to maturity, the less the value of a currency put option, other things equal.
 - The higher the spot rate relative to the exercise price, the greater the value of a currency put option, other things equal.
 - The lower the exercise price relative to the spot rate, the greater the value of a currency call option, other things equal.
10. The phrase "the dollar was mixed in trading" means that:
- the dollar was strong in some periods and weak in other periods over the last month.
 - the volume of trading was very high in some periods and low in other periods.
 - the dollar was involved in some currency transactions, but not others.
 - the dollar strengthened against some currencies and weakened against others.
11. If the Fed desires to weaken the dollar without affecting the dollar money supply, it should:
- exchange dollars for foreign currencies, and sell some of its existing Treasury security holdings for dollars.
 - exchange foreign currencies for dollars, and sell some of its existing Treasury security holdings for dollars.
 - exchange dollars for foreign currencies, and buy existing Treasury securities with dollars.
 - exchange foreign currencies for dollars, and buy existing Treasury securities with dollars.

TURN OVER

12. Assume that the interest rate in the home country of Currency X is a much higher interest rate than the U.S. interest rate. According to interest rate parity, the forward rate of Currency X:
- should exhibit a discount.
 - should exhibit a premium.
 - should be zero (i.e., it should equal its spot rate).
 - should exhibit a premium or should be zero.

13. Assume the following information:

You have \$1,000,000 to invest

Current spot rate of pound	=	\$1.30
90-day forward rate of pound	=	\$1.28
3-month deposit rate in U.S.	=	3%
3-month deposit rate in Great Britain	=	4%

If you use covered interest arbitrage for a 90-day investment, what will be the amount of U.S. dollars you will have after 90 days?

- \$1,024,000.
 - \$1,030,000.
 - \$1,040,000.
 - \$1,034,000.
14. Assume that the U.S. interest rate is 10%, while the British interest rate is 15%. If interest rate parity exists, then:
- British investors who invest in the United Kingdom will achieve the same return as U.S. investors who invest in the U.S.
 - U.S. investors will earn a higher rate of return when using covered interest arbitrage than what they would earn in the U.S.
 - U.S. investors will earn 15% whether they use covered interest arbitrage or invest in the U.S.
 - U.S. investors will earn 10% whether they use covered interest arbitrage or invest in the U.S.

TURN OVER

15. Assume the following bid and ask rates of the pound for two banks as shown below:

	<u>Bid</u>	<u>Ask</u>
Bank A	\$1.41	\$1.42
Bank B	\$1.39	\$1.40

As locational arbitrage occurs:

- the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will increase.
 - the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will decrease.
 - the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will decrease.
 - the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will increase.
16. The international Fisher effect (IFE) suggests that:
- a home currency will depreciate if the current home interest rate exceeds the current foreign interest rate.
 - a home currency will appreciate if the current home interest rate exceeds the current foreign interest rate.
 - a home currency will appreciate if the current home inflation rate exceeds the current foreign inflation rate.
 - a home currency will depreciate if the current home inflation rate exceeds the current foreign inflation rate.
17. Assume that interest rate parity holds. The U.S. five-year interest rate is 5% annualized, and the Mexican five-year interest rate is 8% annualized. Today's spot rate of the Mexican peso is \$.20. What is the approximate five-year forecast of the peso's spot rate if the five-year forward rate is used as a forecast?
- \$.131.
 - \$.226.
 - \$.262.
 - \$.174.
18. Transaction exposure reflects:
- the exposure of a firm's ongoing international transactions to exchange rate fluctuations.
 - the exposure of a firm's local currency value to transactions between foreign exchange traders.
 - the exposure of a firm's financial statements to exchange rate fluctuations.
 - the exposure of a firm's cash flows to exchange rate fluctuations.

TURN OVER

19. Assume the following information:

U.S. deposit rate for 1 year	=	11%
U.S. borrowing rate for 1 year	=	12%
New Zealand deposit rate for 1 year	=	8%
New Zealand borrowing rate for 1 year	=	10%
New Zealand dollar forward rate for 1 year	=	\$.40
New Zealand dollar spot rate	=	\$.39

Also assume that a U.S. exporter denominates its New Zealand exports in NZ\$ and expects to receive NZ\$600,000 in 1 year. You are a consultant for this firm.

Using the information above, what will be the approximate value of these exports in 1 year in U.S. dollars given that the firm executes a money market hedge?

- a. \$238,584.
 - b. \$240,000.
 - c. \$234,000.
 - d. \$236,127.
20. Which of the following is an example of economic exposure but *not* an example of transaction exposure?
- a. an increase in the dollar's value hurts a U.S. firm's domestic sales because foreign competitors are able to increase their sales to U.S. customers.
 - b. an increase in the pound's value increases the U.S. firm's cost of British pound payables.
 - c. a decrease in the peso's value decreases a U.S. firm's dollar value of peso receivables.
 - d. a decrease in the Swiss franc's value decreases the dollar value of interest payments on a Swiss deposit sent to a U.S. firm by a Swiss bank.

TURN OVER

SECTION 2**Answer any two questions.****Question 1**

Chicago Company expects to receive 5 million euros in one year from exports. It can use any one of the following strategies to deal with the exchange rate risk. Estimate the dollar cash flows received as a result of using the following strategies:

- a. unhedged strategy
- b. money market hedge
- c. option hedge

The spot rate of the euro as of today is \$1.10. Interest rate parity exists. Chicago uses the forward rate as a predictor of the future spot rate. The annual interest rate in the U.S. is 8% versus an annual interest rate of 5% in the eurozone. Put options on euros are available with an exercise price of \$1.11, an expiration date of one year from today, and a premium of \$.06 per unit.

Required:

- i) Estimate the dollar cash flows it will receive as a result of using each strategy and determine which strategy is optimal. **(12 marks)**
- ii) Calculate the effective exchange rate that Chicago would lock in on its receivables position if it used a money market hedge. **(2 marks)**
- iii) Compare and contrast the theories of Interest Rate parity, Purchasing Power parity, and the International Fisher effect. **(11 marks)**

Question 2

St. Paul Co. does business in the United States and New Zealand. In attempting to assess its economic exposure, it compiled the following information.

- a. St. Paul's U.S. sales are somewhat affected by the value of the New Zealand dollar (NZ\$), because it faces competition from New Zealand exporters. It forecasts the U.S. sales based on the following three exchange rate scenarios:

<u>Exchange Rate of NZ\$</u>	<u>Revenue from U.S. Business (in millions)</u>
NZ\$ = \$.48	\$100
NZ\$ = .50	105
NZ\$ = .54	110

TURN OVER

Question 2 (cont'd)

- b. Its New Zealand dollar revenues on sales to New Zealand invoiced in New Zealand dollars are expected to be NZ\$600 million.
- c. Its anticipated cost of materials is estimated at \$200 million from the purchase of U.S. materials and NZ\$100 million from the purchase of New Zealand materials.
- d. Fixed operating expenses are estimated at \$30 million.
- e. Variable operating expenses are estimated at 20 percent of total sales (after including New Zealand sales, translated to a dollar amount).
- f. Interest expense is estimated at \$20 million on existing U.S. loans, and the company has no existing New Zealand loans.

Required:

- i) Forecast net cash flows for St. Paul Co. under each of the three exchange rate scenarios. **(10 marks)**
- ii) Explain how St. Paul's projected net cash flows are affected by possible exchange rate movements and how it can restructure its operations to reduce the sensitivity of its net cash flows to exchange rate movements without reducing its volume of business in New Zealand. **(8 marks)**
- iii) Identify and explain four factors should be considered in multinational capital budgeting as opposed to domestic capital budgeting. **(7 marks)**

TURN OVER

Question 3

A call option on British pounds (£) exists with a strike price of \$1.56 and a premium of \$.08 per unit. Another call option on British pounds has a strike price of \$1.59 and a premium of \$.06 per unit.

Required:

- A.
- i) Compute the break-even point for this bullspread. (2 marks)
 - ii) Compute the maximum profit of this bullspread. (2 marks)
 - iii) Compute the maximum loss of this bullspread. (2 marks)
 - iv) If the British pound spot rate is \$1.58 at option expiration, compute the total profit or loss for the bullspread. (3 marks)
 - v) If the British pound spot rate is \$1.55 at option expiration, compute the total profit or loss for a bearspread. (3 marks)
 - vi) Construct a contingency graph for the above bearspread. (5 marks)
- B. Compare and contrast the following hedging techniques used by MNC's:
- Leading and Lagging
 - Cross hedging
 - Currency diversification
- (8 marks)

END OF QUESTION PAPER