BUS421 INTERNATIONAL FINANCE I

Chapter 7: Foreign Currency Derivatives and Swaps

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Financial derivatives are powerful tools that can be used by management for purposes of: 1) ______

A) hedging. B) speculation.
C) human resource management. D) A and B above

2) A foreign currency ________ contract calls for the future delivery of a standard amount of foreign exchange at a fixed time, place, and price. 2) ______

A) option B) swap C) futures D) forward

3) Which of the following is NOT a contract specification for currency futures trading on an organized exchange? 3) ______

A) maturity date B) last trading day
C) size of the contract D) All of the above are specified.

4) About ________ of all futures contracts are settled by physical delivery of foreign exchange between buyer and seller. 4) ______

A) 95% B) 5% C) 50% D) 0%

5) Futures contracts require that the purchaser deposit an initial sum as collateral. This deposit is called a: 5) ______

A) margin. B) marked market sum.
C) settlement. D) collateralized deposit.

6) A speculator in the futures market wishing to lock in a price at which they could ________ a foreign currency will ________ a futures contract. 6) ______

A) sell; buy B) buy; buy
C) buy; sell D) none of the above

7) A speculator that has ________ a futures contract has taken a ________ position. 7) ______

A) sold; long B) purchased; short
C) purchased; sold D) sold; short

8) Peter Simpson thinks that the U.K. pound will cost $1.43/£ in six months. A 6-month currency futures contract is available today at a rate of $1.44/£. If Peter was to speculate in the currency futures market, and his expectations are correct, which of the following strategies would earn him a profit? 8) ______

A) Sell a pound currency futures contract. B) Sell pounds today.
C) Buy a pound currency futures contract. D) Sell pounds in six months.

9) Jack Hemmings bought a 3-month British pound futures contract for $1.4400/£ only to see the dollar appreciate to a value of $1.4250 at which time he sold the pound futures. If each pound futures contract is for an amount of £62,500, how much money did Jack gain or lose from his speculation with pound futures? 9) ______

A) £937.50 loss B) $937.50 gain C) $937.50 loss D) £937.50 gain

10) Which of the following statements regarding currency futures contracts and forward contracts is NOT true? 10) ______

A) A futures contract is a standardized amount per currency whereas the forward contact is for any size desired.
B) Futures contracts trade on organized exchanges whereas forwards take place between individuals and banks with other banks via telecom linkages.
C) A futures contract is for a fixed maturity whereas the forward contract is for any maturity you like up to one year.
D) All of the above are true.

11) Which of the following is NOT a difference between a currency futures contract and a forward contract? 11) ______

A) A single sales commission covers both the purchase and sale of a futures contract, whereas there is no specific sales commission with a forward contract because banks earn a profit through the bid-ask spread.
B) The counterparty to the futures participant is unknown with the clearinghouse stepping into each transaction, whereas the forward contract participants are in direct contact setting the forward specifications.
C) The futures contract is marked to market daily, whereas the forward contract is only due to be settled at maturity.
D) All of the above are true.

12) A foreign currency ________ gives the purchaser the right, not the obligation, to buy a given amount of foreign exchange at a fixed price per unit for a specified period. 12) ______

A) option B) future C) forward D) swap

13) A foreign currency ________ option gives the holder the right to ________ a foreign currency, whereas a foreign currency ________ option gives the holder the right to ________ an option. 13) ______

A) put, hold, call, release B) call, buy, put, sell
C) call, sell, put, buy D) none of the above

14) The price at which an option can be exercised is called the: 14) ______

A) strike price. B) premium. C) spot rate. D) commission.

15) An ________ option can be exercised only on its expiration date, whereas a/an ________ option can be exercised anytime between the date of writing up to and including the exercise date. 15) ______

A) Asian; American B) American; European
C) American; British D) European; American

16) A/An ________ option can be exercised only on its expiration date, whereas a/an ________ option can be exercised anytime between the date of writing up to and including the exercise date.

A) American; European
B) European; American
C) Asian; American
D) American; British

16) ______

17) A call option whose exercise price exceeds the spot price is said to be:

A) at-the-money.
B) in-the-money.
C) over-the-spot.
D) out-of-the-money.

17) ______

18) A call option whose exercise price is less than the spot price is said to be:

A) in-the-money.
B) out-of-the-money.
C) at-the-money.
D) under-the-spot.

18) ______

19) An option whose exercise price is equal to the spot rate is said to be:

A) on-the-spot.
B) out-of-the-money.
C) in-the-money.
D) at-the-money.

19) ______

20) The main advantage(s) of over-the-counter foreign currency options over exchange traded options is (are):

A) client desired expiration dates.
B) expiration dates tailored to the needs of the client.
C) amounts that are tailor made.
D) all of the above

20) ______

21) As a general statement, it is safe to say that businesses generally use the ________ for foreign currency option contracts, and individuals and financial institutions typically use the ________.

A) government sponsored; private
B) private; government sponsored
C) exchange markets; over-the-counter
D) over-the-counter; exchange markets

21) ______

TABLE 8.1
Use the table to answer following question(s).

April 19, 2009, British Pound Option Prices (cents per pound, 62,500 pound contracts).

Option &	Strike	Calls-Last			Puts-Last		
Underlying	Price	May	June	July	May	June	July
1448	1440	0.881.421.420.521.06		-			
1448	1450	0.421.02	-	-	-	-	
1448	1460	0.200.680.72	-	2.32	-		

22) Refer to Table 8.1. What was the closing price of the British pound on April 18, 2009?

A) $1.448/£
B) $14.48/£
C) £1.448/$
D) none of the above

22) ______

23) Refer to Table 8.1. The exercise price of ________ giving the purchaser the right to sell pounds in June has a cost per pound of ________ for a total price of ________.

A) 1460; 0.68 cents; $425.00
B) 1450; 1.02 cents; $637.50
C) 1440; 1.42 cents; $887.50
D) 1440; 1.06 cents; $662.50

23) ______

24) Refer to Table 8.1. The May call option on pounds with a strike price of 1440 mean:

A) $0.88/£.
B) $88/£ per contract.
C) $0.0088/£.
D) none of the above

24) ______

25) Dash Brevenshure works for the currency trading unit of ING Bank in London. He speculates that in the coming months the dollar will rise sharply vs. the pound. What should Dash do to act on his speculation?

A) Buy a call on the pound.
B) Sell a put on the pound.
C) Sell a call on the pound.
D) Buy a put on the pound.

25) ______

26) A put option on yen is written with a strike price of ¥105.00/$. Which spot price maximizes your profit if you choose to exercise the option before maturity?

A) ¥115/$
B) ¥100/$
C) ¥105/$
D) ¥110/$

26) ______

27) A call option on euros is written with a strike price of $1.30/euro. Which spot price maximizes your profit if you choose to exercise the option before maturity?

A) $1.25/euro
B) $1.35/euro
C) $1.20/euro
D) $1.30/euro

27) ______

28) A call option on UK pounds has a strike price of $2.05/£ and a cost of $0.02. What is the break-even price for the option?

A) $2.07/£
B) $2.05/£
C) $2.03/£
D) The answer depends upon if this is a long or a short call option.

28) ______

29) Your U.S firm has an accounts payable denominated in UK pounds due in 6 months. To protect yourself against unexpected changes in the dollar/pound exchange rate you should:

A) sell a pound put option.
B) buy a pound put option.
C) buy a pound call option.
D) sell a pound call option.

29) ______

30) Jasper Pernik is a currency speculator who enjoys "betting" on changes in the foreign currency exchange market. Currently the spot price for the Japanese yen is ¥129.87/$ and the 6-month forward rate is ¥128.53/$. Jasper thinks the yen will move to ¥128.00/$ in the next six months. Jasper should ________ at ________ to profit from changing currency values.

A) buy dollars; the forward rate
B) sell yen; the forward rate
C) buy yen; the forward rate
D) There is not enough information to answer this question.

30) ______

31) Jasper Pernik is a currency speculator who enjoys "betting" on changes in the foreign currency exchange market. Currently the spot price for the Japanese yen is ¥129.87/$ and the 6-month forward rate is ¥128.53/$. Jasper thinks the yen will move to ¥128.00/$ in the next six months. If Jasper buys $100,000 worth of yen at today's spot price and sells within the next six months at ¥128/$, he will earn a profit of: 31) ______

A) $101,460.94
B) $1460.94
C) $146.09
D) nothing; he will lose money

32) Jasper Pernik is a currency speculator who enjoys "betting" on changes in the foreign currency exchange market. Currently the spot price for the Japanese yen is ¥129.87/$ and the 6-month forward rate is ¥128.53/$. Jasper thinks the yen will move to ¥128.00/$ in the next six months. If Jasper buys $100,000 worth of yen at today's spot price her potential gain is ________ and her potential loss is ________. 32) ______

A) unlimited; $100,000
B) unlimited; unlimited
C) $100,000; $100,000
D) $100,000; unlimited

33) Jasper Pernik is a currency speculator who enjoys "betting" on changes in the foreign currency exchange market. Currently the spot price for the Japanese yen is ¥129.87/$ and the 6-month forward rate is ¥128.53/$. Jasper thinks the yen will move to ¥128.00/$ in the next six months. If Jasper's expectations are correct, then he could profit in the forward market by ________ and then ________. 33) ______

A) buying yen for ¥128.53/$; selling yen at ¥128.00/$
B) buying yen for ¥128.00/$; selling yen at ¥128.53/$
C) There is not enough information to answer this question
D) He could not profit in the forward market.

34) The maximum gain for the purchaser of a call option contract is ________ while the maximum loss is ________. 34) ______

A) unlimited; the value of the underlying asset.
B) unlimited; unlimited.
C) the premium paid; unlimited.
D) unlimited; the premium paid.

35) The buyer of a long call option: 35) ______

A) has a gain equal to but opposite in sign to the writer of the option.
B) has an unlimited maximum gain potential.
C) has a maximum loss equal to the premium paid.
D) all of the above

36) Which of the following is NOT true for the writer of a call option? 36) ______

A) The gain or loss is equal to but of the opposite sign of the buyer of a call option.
B) The maximum loss is unlimited.
C) The maximum gain is unlimited.
D) All of the above are true.

37) Which of the following is NOT true for the writer of a put option? 37) ______

A) The maximum loss is limited to the strike price of the underlying asset less the premium.
B) The maximum gain is the amount of the premium.
C) The gain or loss is equal to but of the opposite sign of the buyer of a put option.
D) All of the above are true.

38) The buyer of a long put option: 38) ______

A) has maximum gain potential limited to the difference between the strike price and the premium paid.
B) has a gain equal to but opposite in sign to the writer of the option.
C) has a maximum loss equal to the premium paid.
D) all of the above

39) The value of a European style call option is the sum of two components: 39) ______

A) the intrinsic value plus the standard deviation.
B) the time value plus the present value.
C) the present value plus the intrinsic value.
D) the intrinsic value plus the time value.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

40) Currency futures contracts have become standard fare and trade readily in the world money centers. 40) ______

41) The major difference between currency futures and forward contracts is that futures contracts are standardized for ease of trading on an exchange market whereas forward contracts are specialized and tailored to meet the needs of clients. 41) ______

42) The writer of the option is referred to as the seller, and the buyer of the option is referred to as the holder. 42) ______

43) Foreign currency options are available both over-the-counter and on organized exchanges. 43) ______

44) Jasper Pernik is a currency speculator who enjoys "betting" on changes in the foreign currency exchange market. Currently the spot price for the Japanese yen is ¥129.87/$ and the 6-month forward rate is ¥128.53/$. Jasper would earn a higher rate of return by buying yen and a forward contract than if he had invested her money in 6-month US Treasury securities at an annual rate of 2.50%. 44) ______

45) Most option profits and losses are realized through taking actual delivery of the currency rather than offsetting contracts. 45) ______

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

46) Why are foreign currency futures contracts more popular with individuals and banks while foreign currency forwards are more popular with businesses?

47) Compare and contrast foreign currency options and futures. Identify situations when you may prefer one vs. the other when speculating on foreign exchange.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

48) Which of the following is NOT a factor in determining the premium price of a currency option? 48) ______

A) the present spot rate
B) the time to maturity
C) the standard deviation of the daily spot price movement
D) All of the above are factors in determining the premium price.

49) The ________ of an option is the value if the option were to be exercised immediately. It is the option's ________ value. 49) ______

A) time value; minimum
B) intrinsic value; minimum
C) intrinsic value; maximum
D) time value; maximum

50) Assume that a call option has an exercise price of $1.50/£. At a spot price of $1.45/£, the call option has: 50) ______

A) a time value of $0.04.
B) a time value of $0.00.
C) an intrinsic value of -$0.04.
D) an intrinsic value of $0.00.

51) The single largest interest rate risk of a firm is: 51) ______

A) debt service.
B) interest sensitive securities.
C) dividend payments.
D) accounts payable.

52) ________ is the possibility that the borrower's creditworthiness is reclassified by the lender at the time of renewing credit. ________ is the risk of changes in interest rates charged at the time a financial contract rate is set. 52) ______

A) Interest rate risk; Credit risk
B) Credit risk; Repricing risk
C) Repricing risk; Credit risk
D) Credit risk; Interest rate risk

Instruction 8.1:
For the following problem(s), consider these debt strategies being considered by a corporate borrower. Each is intended to pro
$1,000,000 in financing for a three-year period.

- Strategy #1: Borrow $1,000,000 for three years at a fixed rate of interest of 7%.
- Strategy #2: Borrow $1,000,000 for three years at a floating rate of LIBOR + 2% to be reset annually. The current LIBOR rate is 3.50%
- Strategy #3: Borrow $1,000,000 for one year at a fixed rate, and then renew the credit annually. The current one-year rate is 5%.

53) Refer to Instruction 8.1. Choosing strategy #1 will: 53) ______

A) eliminate credit risk but retain repricing risk.
B) guarantee the lowest average annual rate over the next three years.
C) maintain the possibility of lower interest costs, but maximizes the combined credit and repricing risks.
D) preclude the possibility of sharing in lower interest rates over the three-year period.

54) Refer to Instruction 8.1. Choosing strategy #2 will: 54) ______

A) maintain the possibility of lower interest costs, but maximizes the combined credit and repricing risks.
B) guarantee the lowest average annual rate over the next three years.
C) preclude the possibility of sharing in lower interest rates over the three-year period.
D) eliminate credit risk but retain repricing risk.

55) Refer to Instruction 8.1. Choosing strategy #3 will: 55) ______

A) preclude the possibility of sharing in lower interest rates over the three-year period.
B) guarantee the lowest average annual rate over the next three years.
C) eliminate credit risk but retain repricing risk.
D) maintain the possibility of lower interest costs, but maximizes the combined credit and repricing risks.

56) Refer to Instruction 8.1. Which strategy (strategies) will eliminate credit risk? 56) ______

A) Strategies #1 and #2
B) Strategy #2
C) Strategy #1
D) Strategy #3

57) Refer to Instruction 8.1. If your firm felt very confident that interest rates would fall or, at worst, remain at current levels, and were very confident about the firm's credit rating for the next 10 years, which strategy would you likely choose? (Assume your firm is borrowing money.) 57) ______

A) Strategy #3
B) Strategy #1
C) Strategy #2
D) Strategy #1, #2, or #3; you are indifferent among the choices.

58) Refer to Instruction 8.1. The risk of strategy #1 is that interest rates might go down or that your credit rating might improve. The risk of strategy #2 is: (Assume your firm is borrowing money.) 58) ______

A) that interest rates might go up or that your credit rating might improve.
B) that interest rates might go down or that your credit rating might improve.
C) that interest rates might go up or that your credit rating might get worse.
D) none of the above

59) Refer to Instruction 8.1. The risk of strategy #1 is that interest rates might go down or that your credit rating might improve. The risk of strategy #3 is: (Assume your firm is borrowing money.) 59) ______

A) that interest rates might go down or that your credit rating might improve.
B) that interest rates might go up or that your credit rating might get worse.
C) that interest rates might go up or that your credit rating might improve.
D) none of the above

60) Refer to Instruction 8.1. After the fact, under which set of circumstances would you prefer strategy #1? (Assume your firm is borrowing money.) 60) ______

A) Your credit rating improved and interest rates went down.
B) Your credit rating stayed the same and interest rates went down.
C) Your credit rating stayed the same and interest rates went up.
D) Not enough information to make a judgment.

61) Refer to Instruction 8.1. After the fact, under which set of circumstances would you prefer strategy #2? (Assume your firm is borrowing money.) 61) ______

A) Your credit rating improved and interest rates went down.
B) Your credit rating stayed the same and interest rates went up.
C) Your credit rating stayed the same and interest rates went down.
D) Not enough information to make a judgment.

62) Refer to Instruction 8.1. After the fact, under which set of circumstances would you prefer strategy #3? (Assume your firm is borrowing money.) 62) ______

A) Your credit rating stayed the same and interest rates went down.
B) Your credit rating improved and interest rates went down.
C) Your credit rating stayed the same and interest rates went up.
D) Not enough information to make a judgment.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

63) The time value is asymmetric in value as you move away from the strike price (i.e., the time value at two cents above the strike price is not necessarily the same as the time value two cents below the strike price). 63) ______

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

64) An interbank-traded contract to buy or sell interest rate payments on a notional principal is called a/an: 64) ______

A) interest rate swap.
B) forward rate agreement.
C) interest rate future.
D) none of the above

65) A/an ________ is a contract to lock in today interest rates over a given period of time. 65) ______

A) interest rate future
B) forward rate agreement
C) interest rate swap
D) none of the above

66) An agreement to exchange interest payments based on a fixed payment for those based on a variable rate (or vice versa) is known as a/an: 66) ______

A) interest rate swap.
B) interest rate future.
C) forward rate agreement.
D) none of the above

67) The financial manager of a firm has a variable rate loan outstanding. If she wishes to protect the firm against an unfavorable increase in interest rates she could: 67) ______

A) swap the adjustable rate loan for another of a different maturity.
B) sell an interest rate futures contract of a similar maturity to the loan.
C) buy an interest rate futures contract of a similar maturity to the loan.
D) none of the above

68) An agreement to swap a fixed interest payment for a floating interest payment would be considered a/an: 68) ______

A) currency swap.
B) interest rate swap.
C) forward swap.
D) none of the above

69) An agreement to swap the currencies of a debt service obligation would be termed a/an: 69) ______

A) forward swap.
B) currency swap.
C) interest rate swap.
D) none of the above

70) Which of the following would be considered an example of a currency swap? 70) ______

A) exchanging a eurodollar interest obligation for a British pound obligation
B) exchanging a eurodollar interest obligation for a dollar obligation
C) exchanging a dollar interest obligation for a British pound obligation
D) All of the above are examples of a currency swap.

71) A firm with fixed-rate debt that expects interest rates to fall may engage in a swap agreement to: 71) ______

A) pay floating rate and receive floating rate.
B) pay floating rate and receive fixed rate.
C) pay fixed-rate interest and receive floating rate interest.
D) pay fixed rate and receive fixed rate.

72) A firm with variable-rate debt that expects interest rates to rise may engage in a swap agreement to: 72) ______

A) pay fixed rate and receive fixed rate.
B) pay floating rate and receive floating rate.
C) pay floating rate and receive fixed rate.
D) pay fixed-rate interest and receive floating rate interest.

73) The interest rate swap strategy of a firm with fixed rate debt and that expects rates to go up is to: 73) ______

A) pay floating and receive fixed.
B) receive floating and pay fixed.
C) do nothing.
D) none of the above

74) The potential exposure that any individual firm bears that the second party to any financial contract will be unable to fulfill its obligations under the contract is called: 74) ______

A) interest rate risk.
B) credit risk.
C) clearinghouse risk.
D) counterparty risk.

75) Which of the following is an unlikely reason for firms to participate in the swap market? 75) ______

A) Firms may raise capital in one currency but desire to repay it in another currency.
B) To replace cash flows scheduled in an undesired currency with cash flows in a desired currency.
C) Firms desire to swap fixed and variable payment or receipt of funds.
D) All of the above are likely reasons for a firm to enter the swap market.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

76) Historically, interest rate movements have shown less variability and greater stability than exchange rate movements. 76) ______

77) Unlike the situation with exchange rate risk, there is no uncertainty on the part of management for shareholder preferences regarding interest rate risk. Shareholders prefer that managers hedge interest rate risk rather than having shareholders diversify away such risk through portfolio diversification. 77) ______

78) Interest rate futures are relatively unpopular among financial managers because of their relative illiquidity and their difficulty of use. 78) ______

79) A basis point is one-tenth of one percent. 79) ______

80) A swap agreement may involve currencies or interest rates, but never both. 80) ______

81) Some of the world's largest and most financially sound firms may borrow at variable rates less than LIBOR. 81) ______

82) Counterparty risk is greater for exchange-traded derivatives than for over-the-counter derivatives. 82) ______

83) Swap rates are derived from the yield curves in each major currency. 83) ______

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

84) Your firm is faced with paying a variable rate debt obligation with the expectation that interest rates are likely to go up. Identify two strategies using interest rate futures and interest rate swaps that could reduce the risk to the firm.

85) How does counterparty risk influence a firm's decision to trade exchange-traded derivatives rather than over-the-counter derivatives?

Answer Key
Testname: UNTITLED3

1) D
2) C
3) D
4) B
5) A
6) B
7) D
8) A
9) C
10) D
11) D
12) A
13) B
14) A
15) D
16) B
17) D
18) A
19) D
20) D
21) D
22) A
23) D
24) C
25) D
26) A
27) B
28) A
29) C
30) C
31) B
32) A
33) A
34) D
35) D
36) C
37) D
38) D
39) D
40) TRUE
41) TRUE
42) TRUE

43) TRUE
44) FALSE
45) FALSE
46) Foreign currency futures are standardized contracts that lend themselves well to speculation purposes but less so for hedging purposes. The standardized nature of the futures contract makes it easy to trade futures and to make bets about general changes in the value of currencies. Forward contracts are better for hedging in that they are tailored to meet the specific needs of the client, typically a business, and can be quite useful in reducing exchange rate risk. Banks are involved in the foreign currency futures market in part to offset positions that they may have taken in the forward markets as dealers.
47) Foreign currency futures are derivative securities that allow the holder to lock in a price today for another currency at some point in the future. The foreign currency future contract is an obligation on the part of the parties to fulfill the terms of the contract. Even if prices change in an unanticipated way, the parties are obligated to fulfill the terms of the contract. The foreign currency option contract on the other hand is a right not an obligation to purchase/sell a currency at some point in the future at a price agreed upon today. If prices change in an unexpected manner, the buyer of the contract is under no obligation to exercise the contract. Option contracts are better suited to situations where price changes are anticipated, but the direction of the change is highly uncertain.
48) D
49) B
50) D
51) A
52) B
53) D
54) D
55) D
56) A
57) A
58) A
59) B
60) C
61) C
62) B
63) FALSE
64) B
65) A
66) A
67) B
68) B
69) B
70) D
71) B
72) D
73) C
74) D
75) D

76) TRUE
77) FALSE
78) FALSE
79) FALSE
80) FALSE
81) TRUE
82) FALSE
83) TRUE
84) Sell a futures position. If rates change the payoff from the futures position offsets the gain or loss on the variable rate debt obligation. Swap a variable rate debt obligation for a fixed futures payable contract.
85) With exchange-traded derivatives, the exchange is the clearinghouse. Thus, firms do not need to worry about the other party making good on its obligations and it is easier to trade the derivative products.