TB6 - International Arbitrage and Interest Rate Parity

International Financial Management (Đại học Tôn Đức Thắng)

Chapter 6—International Arbitrage and Interest Rate Parity

1. Due to ____, market forces should realign the relationship between the interest rate differential of two currencies and the forward premium (or discount) on the forward exchange rate between the two currencies.
   a. forward realignment arbitrage
   b. triangular arbitrage
   c. covered interest arbitrage
   d. locational arbitrage

   ANS: C PTS: 1

2. Due to ____, market forces should realign the spot rate of a currency among banks.
   a. forward realignment arbitrage
   b. triangular arbitrage
   c. covered interest arbitrage
   d. locational arbitrage

   ANS: D PTS: 1

3. Due to ____, market forces should realign the cross exchange rate between two foreign currencies based on the spot exchange rates of the two currencies against the U.S. dollar.
   a. forward realignment arbitrage
   b. triangular arbitrage
   c. covered interest arbitrage
   d. locational arbitrage

   ANS: B PTS: 1

4. If interest rate parity exists, then ____ is not feasible.
   a. forward realignment arbitrage
   b. triangular arbitrage
   c. covered interest arbitrage
   d. locational arbitrage

   ANS: C PTS: 1

5. In which case will locational arbitrage most likely be feasible?
   a. One bank's ask price for a currency is greater than another bank's bid price for the currency.
   b. One bank's bid price for a currency is greater than another bank's ask price for the currency.
   c. One bank's ask price for a currency is less than another bank's ask price for the currency.
   d. One bank's bid price for a currency is less than another bank's bid price for the currency.

   ANS: B PTS: 1

6. When using ____, funds are not tied up for any length of time.
   a. covered interest arbitrage
   b. locational arbitrage
   c. triangular arbitrage
   d. B and C

   ANS: D PTS: 1

7. When using ____, funds are typically tied up for a significant period of time.
   a. covered interest arbitrage
   b. locational arbitrage
   c. triangular arbitrage
   d. B and C

   ANS: A PTS: 1

8. 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:
   a. should exhibit a discount.
   b. should exhibit a premium.
   c. should be zero (i.e., it should equal its spot rate).
   d. B or C

   ANS: A PTS: 1

9. If the interest rate is higher in the U.S. than in the United Kingdom, and if the forward rate of the British pound (in U.S. dollars) is the same as the pound's spot rate, then:
   a. U.S. investors could possibly benefit from covered interest arbitrage.
   b. British investors could possibly benefit from covered interest arbitrage.
   c. neither U.S. nor British investors could benefit from covered interest arbitrage.
   d. A and B

   ANS: B PTS: 1

10. If the interest rate is lower in the U.S. than in the United Kingdom, and if the forward rate of the British pound is the same as its spot rate:
   a. U.S. investors could possibly benefit from covered interest arbitrage.
   b. British investors could possibly benefit from covered interest arbitrage.
   c. neither U.S. nor British investors could benefit from covered interest arbitrage.
   d. A and B

   ANS: A PTS: 1

11. Assume that the U.S. investors are benefiting from covered interest arbitrage due to high interest rates on euros. Which of the following forces should result from the act of this covered interest arbitrage?
   a. downward pressure on the euro's spot rate.
   b. downward pressure on the euro's forward rate.
   c. downward pressure on the U.S. interest rate.
   d. upward pressure on the euro's interest rate.

   ANS: B PTS: 1

12. Assume that Swiss investors are benefiting from covered interest arbitrage due to a high U.S. interest rate. Which of the following forces results from the act of this covered interest arbitrage?
   a. upward pressure on the Swiss franc's spot rate.
   b. upward pressure on the U.S. interest rate.
   c. downward pressure on the Swiss interest rate.
   d. upward pressure on the Swiss franc's forward rate.

   ANS: D PTS: 1

13. Assume that a U.S. firm can invest funds for one year in the U.S. at 12% or invest funds in Mexico at 14%. The spot rate of the peso is $.10 while the one-year forward rate of the peso is $.10. If U.S. firms attempt to use covered interest arbitrage, what forces should occur?

a. spot rate of peso increases; forward rate of peso decreases.
b. spot rate of peso decreases; forward rate of peso increases.
c. spot rate of peso decreases; forward rate of peso decreases.
d. spot rate of peso increases; forward rate of peso increases.

ANS: A PTS: 1

14. Assume the bid rate of a New Zealand dollar is $.33 while the ask rate is $.335 at Bank X. Assume the bid rate of the New Zealand dollar is $.32 while the ask rate is $.325 at Bank Y. Given this information, what would be your gain if you use $1,000,000 and execute locational arbitrage? That is, how much will you end up with over and above the $1,000,000 you started with?
a. $15,385.
b. $15,625.
c. $22,136.
d. $31,250.

ANS: A
SOLUTION: $1,000,000/$.325 = NZ$3,076,923 × $.33 = $1,015,385. Thus, the profit is $15,385.

PTS: 1

15. Based on interest rate parity, the larger the degree by which the foreign interest rate exceeds the U.S. interest rate, the:
a. larger will be the forward discount of the foreign currency.
b. larger will be the forward premium of the foreign currency.
c. smaller will be the forward premium of the foreign currency.
d. smaller will be the forward discount of the foreign currency.

ANS: A PTS: 1

16. 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?
a. $1,024,000.
b. $1,030,000.
c. $1,040,000.
d. $1,034,000.
e. none of the above

ANS: A
SOLUTION: $1,000,000/$1.30 = 769,231 pounds × (1.04) = 800,000 pounds × 1.28 = $1,024,000

PTS: 1

17. Assume that the U.S. interest rate is 10%, while the British interest rate is 15%. If interest rate parity exists, then:

a. British investors who invest in the United Kingdom will achieve the same return as U.S. investors who invest in the U.S.
b. U.S. investors will earn a higher rate of return when using covered interest arbitrage than what they would earn in the U.S.
c. U.S. investors will earn 15% whether they use covered interest arbitrage or invest in the U.S.
d. U.S. investors will earn 10% whether they use covered interest arbitrage or invest in the U.S.

ANS: D PTS: 1

18. Assume the following information:

U.S. investors have $1,000,000 to invest:		
1-year deposit rate offered on U.S. dollars	=	12%
1-year deposit rate offered on Singapore dollars	=	10%
1-year forward rate of Singapore dollars	=	$.412
Spot rate of Singapore dollar	=	$.400

Given this information:
a. interest rate parity exists and covered interest arbitrage by U.S. investors results in the same yield as investing domestically.
b. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
c. interest rate parity exists and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
d. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield below what is possible domestically.

ANS: B
SOLUTION: $1,000,000/$.400 = S$2,500,000 × (1.1)
= S$2,750,000 × $.412 = $1,133,000
Yield = ($1,133,000 - $1,000,000)/$1,000,000 = 13.3%
This yield exceeds what is possible domestically.

PTS: 1

19. Assume the following information:

Current spot rate of New Zealand dollar	=	$.41
Forecasted spot rate of New Zealand dollar 1 year from now	=	$.43
One-year forward rate of the New Zealand dollar	=	$.42
Annual interest rate on New Zealand dollars	=	8%
Annual interest rate on U.S. dollars	=	9%

Given the information in this question, the return from covered interest arbitrage by U.S. investors with $500,000 to invest is ____%.
a. about 11.97
b. about 9.63
c. about 11.12
d. about 11.64
e. about 10.63

ANS: E
SOLUTION: $500,000/$.41 = NZ$1,219,512 × (1.08)

= NZ$1,317,073 × .42 = $553,171
Yield = ($553,171 - $500,000)/$500,000 = 10.63%

PTS: 1

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

	Bid	**Ask**
Bank A	$1.41	$1.42
Bank B	$1.39	$1.40

As locational arbitrage occurs:
a. the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will increase.
b. the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will decrease.
c. the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will decrease.
d. the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will increase.

ANS: D PTS: 1

21. Assume the bid rate of a Singapore dollar is $.40 while the ask rate is $.41 at Bank X. Assume the bid rate of a Singapore dollar is $.42 while the ask rate is $.425 at Bank Z. Given this information, what would be your gain if you use $1,000,000 and execute locational arbitrage? That is, how much will you end up with over and above the $1,000,000 you started with?
a. $11,764.
b. -$11,964.
c. $36,585.
d. $24,390.
e. $18,219.

ANS: D
SOLUTION: $1,000,000/$.41 = S2,439,024 × $.42 = $1,024,390

PTS: 1

22. Based on interest rate parity, the larger the degree by which the U.S. interest rate exceeds the foreign interest rate, the:
a. larger will be the forward discount of the foreign currency.
b. larger will be the forward premium of the foreign currency.
c. smaller will be the forward premium of the foreign currency.
d. smaller will be the forward discount of the foreign currency.

ANS: B PTS: 1

23. Assume the following exchange rates: $1 = NZ$3, NZ$1 = MXP2, and $1 = MXP5. Given this information, as you and others perform triangular arbitrage, the exchange rate of the New Zealand dollar (NZ) with respect to the U.S. dollar should ____, and the exchange rate of the Mexican peso (MXP) with respect to the U.S. dollar should ____.
a. appreciate; depreciate
b. depreciate; appreciate
c. depreciate; depreciate

d. appreciate; appreciate
e. remain stable; appreciate

ANS: A PTS: 1

24. Assume the following information:

Spot rate today of Swiss franc	=	$.60
1-year forward rate as of today for Swiss franc	=	$.63
Expected spot rate 1 year from now	=	$.64
Rate on 1-year deposits denominated in Swiss francs	=	7%
Rate on 1-year deposits denominated in U.S. dollars	=	9%

From the perspective of U.S. investors with $1,000,000, covered interest arbitrage would yield a rate of return of ____%.
a. 5.00
b. 12.35
c. 15.50
d. 14.13
e. 11.22

ANS: B
SOLUTION: $1,000,000/$.60 = SF1,666,667 × (1.07)
= SF1,783,333 × $.63 = $1,123,500
Yield = ($1,123,500 - $1,000,000)/$1,000,000 = 12.35%

PTS: 1

25. Assume the following information for a bank quoting on spot exchange rates:

Exchange rate of Singapore dollar in U.S. $	=	$.32
Exchange rate of pound in U.S. $	=	$1.50
Exchange rate of pound in Singapore dollars	=	S$4.50

Based on the information given, as you and others perform triangular arbitrage, what should logically happen to the spot exchange rates?
a. The Singapore dollar value in U.S. dollars should appreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should depreciate.
b. The Singapore dollar value in U.S. dollars should depreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should depreciate.
c. The Singapore dollar value in U.S. dollars should depreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should appreciate.
d. The Singapore dollar value in U.S. dollars should appreciate, the pound value in U.S. dollars should depreciate, and the pound value in Singapore dollars should appreciate.

ANS: D PTS: 1

26. Assume the British pound is worth $1.60, and the Canadian dollar is worth $.80. What is the value of the Canadian dollar in pounds?
a. 2.0.
b. 2.40.
c. .80.
d. .50.
e. none of the above

ANS: D
SOLUTION: $.80/$1.60 = 0.50

PTS: 1

27. Assume that the euro's interest rates are higher than U.S. interest rates, and that interest rate parity exists. Which of the following is true?
    a. Americans using covered interest arbitrage earn the same rate of return as Germans who attempt covered interest arbitrage.
    b. Americans who invest in the U.S. earn the same rate of return as Germans who attempt covered interest arbitrage.
    c. Americans who invest in the U.S. earn the same rate of return as Germans who invest in Germany
    d. A and B
    e. None of the above

    ANS: E PTS: 1

28. Assume the U.S. interest rate is 2% higher than the Swiss rate, and the forward rate of the Swiss franc has a 4% premium. Given this information:
    a. Swiss investors who attempt covered interest arbitrage earn the same rate of return as if they invested in Switzerland.
    b. U.S. investors who attempt covered interest arbitrage earn a higher rate of return than if they invested in the U.S.
    c. A and B
    d. none of the above

    ANS: B PTS: 1

29. Assume that British interest rates are higher than U.S. rates, and that the spot rate equals the forward rate. Covered interest arbitrage puts ____ pressure on the pound's spot rate, and ____ pressure on the pound's forward rate.
    a. downward; downward
    b. downward; upward
    c. upward; downward
    d. upward; upward

    ANS: C PTS: 1

30. Assume that interest rate parity holds, and the euro's interest rate is 9% while the U.S. interest rate is 12%. Then the euro's interest rate increases to 11% while the U.S. interest rate remains the same. As a result of the increase in the interest rate on euros, the euro's forward ____ will ____ in order to maintain interest rate parity.
    a. discount; increase
    b. discount; decrease
    c. premium; increase
    d. premium; decrease

    ANS: D PTS: 1

31. Assume the bid rate of a Swiss franc is $.57 while the ask rate is $.579 at Bank X. Assume the bid rate of the Swiss franc is $.560 while the ask rate is $.566 at Bank Y. Given this information, what would be your gain if you use $1,000,000 and execute locational arbitrage? That is, how much will you end up with over and above the $1,000,000 you started with?
    a. $7,067.

b. $8,556.
c. $10,114.
d. $12,238.

ANS: A
SOLUTION: $1,000,000/$.566 = SF1,766,784 × $.57 = $1,007,067. Thus, the profit is $7,067.

PTS: 1

32. Assume the following information:

You have $1,000,000 to invest:

Current spot rate of pound	=	$1.60
90-day forward rate of pound	=	$1.57
3-month deposit rate in U.S.	=	3%
3-month deposit rate in U.K.	=	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?

a. $1,020,500.
b. $1,045,600.
c. $1,073,330.
d. $1,094,230.
e. $1,116,250.

ANS: A
SOLUTION: $1,000,000/$1.60 = 625,000 pounds × (1.04) = 650,000 pounds × 1.57 = $1,020,500

PTS: 1

33. Assume the following information:

U.S. investors have $1,000,000 to invest:

1-year deposit rate offered by U.S. banks	=	12%
1-year deposit rate offered on Swiss francs	=	10%
1-year forward rate of Swiss francs	=	$.62
Spot rate of Swiss franc	=	$.60

Given this information:

a. interest rate parity exists and covered interest arbitrage by U.S. investors results in the same yield as investing domestically.
b. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
c. interest rate parity exists and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
d. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield below what is possible domestically.

ANS: B
SOLUTION: $1,000,000/$.60 = SF1,666,667 × (1.1) = SF1,833,333 × $.62 = $1,136,667
Yield = ($1,136,667 - $1,000,000)/$1,000,000 = 13.7%
This yield exceeds what is possible domestically.

PTS: 1

34. Assume the following information:

Current spot rate of Australian dollar	=	$.64
Forecasted spot rate of Australian dollar 1 year from now	=	$.59
1-year forward rate of Australian dollar	=	$.62
Annual interest rate for Australian dollar deposit	=	9%
Annual interest rate in the U.S.	=	6%

Given the information in this question, the return from covered interest arbitrage by U.S. investors with $500,000 to invest is ____%.

a. about 6.00
b. about 9.00
c. about 7.33
d. about 8.14
e. about 5.59

ANS: E

SOLUTION: $500,000/$.64 = A$781,250 × (1.09)
= A$851,563 × $.62 = $527,969
Yield = ($527,969 - $500,000)/$500,000 = 5.59%

PTS: 1

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

	Bid	**Ask**
Bank C	$1.61	$1.63
Bank D	$1.58	$1.60

As locational arbitrage occurs:

a. the bid rate for pounds at Bank C will increase; the ask rate for pounds at Bank D will increase.
b. the bid rate for pounds at Bank C will increase; the ask rate for pounds at Bank D will decrease.
c. the bid rate for pounds at Bank C will decrease; the ask rate for pounds at Bank D will decrease.
d. the bid rate for pounds at Bank C will decrease; the ask rate for pounds at Bank D will increase.

ANS: D PTS: 1

36. Assume the bid rate of an Australian dollar is $.60 while the ask rate is $.61 at Bank Q. Assume the bid rate of an Australian dollar is $.62 while the ask rate is $.625 at Bank V. Given this information, what would be your gain if you use $1,000,000 and execute locational arbitrage? That is, how much will you end up with over and above the $1,000,000 you started with?

a. $10,003.
b. $12,063.
c. $14,441.
d. $16,393.
e. $18,219.

ANS: D

SOLUTION: $1,000,000/$.61 = A$1,639,344 × $.62 = $1,016,393. Thus, the profit is $16,393.

PTS: 1

37. Assume the following information for a bank quoting on spot exchange rates:

Exchange rate of Singapore dollar in U.S. $	=	$.60
Exchange rate of pound in U.S. $	=	$1.50
Exchange rate of pound in Singapore dollars	=	S$2.6

Based on the information given, as you and others perform triangular arbitrage, what should logically happen to the spot exchange rates?

a. The Singapore dollar value in U.S. dollars should appreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should depreciate.
b. The Singapore dollar value in U.S. dollars should depreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should depreciate.
c. The Singapore dollar value in U.S. dollars should depreciate, the pound value in U.S. dollars should appreciate, and the pound value in Singapore dollars should appreciate.
d. The Singapore dollar value in U.S. dollars should appreciate, the pound value in U.S. dollars should depreciate, and the pound value in Singapore dollars should appreciate.

ANS: B PTS: 1

38. Bank A quotes a bid rate of $.300 and an ask rate of $.305 for the Malaysian ringgit (MYR). Bank B quotes a bid rate of $.306 and an ask rate of $.310 for the ringgit. What will be the profit for an investor who has $500,000 available to conduct locational arbitrage?

a. $2,041,667.
b. $9,804.
c. $500.
d. $1,639.

ANS: D
SOLUTION: $500,000/$.305 = MYR1,639,344 × $.306 = $501,639. Thus, the profit is $1,639.

PTS: 1

39. Which of the following is an example of triangular arbitrage initiation?

a. buying a currency at one bank's ask and selling at another bank's bid, which is higher than the former bank's ask.
b. buying Singapore dollars from a bank (quoted at $.55) that has quoted the South African rand (SAR)/Singapore dollar (S$) exchange rate at SAR2.50 when the spot rate for the rand is $.20.
c. buying Singapore dollars from a bank (quoted at $.55) that has quoted the South African rand/Singapore dollar exchange rate at SAR3.00 when the spot rate for the rand is $.20.
d. converting funds to a foreign currency and investing the funds overseas.

ANS: C PTS: 1

40. You just received a gift from a friend consisting of 1,000 Thai baht, which you would like to exchange for Australian dollars (A$). You observe that exchange rate quotes for the baht are currently $.023, while quotes for the Australian dollar are $.576. How many Australian dollars should you expect to receive for your baht?

a. A$39.93.
b. A$25,043.48.
c. A$553.00.
d. none of the above

ANS: A
SOLUTION: $.023/$.576 × THB1,000 = A$39.93.

PTS: 1

41. National Bank quotes the following for the British pound and the New Zealand dollar:

	Quoted Bid Price	Quoted Ask Price
Value of a British pound (£) in $	$1.61	$1.62
Value of a New Zealand dollar (NZ$) in $	$.55	$.56
Value of a British pound in New Zealand dollars	NZ$2.95	NZ$2.96

Assume you have $10,000 to conduct triangular arbitrage. What is your profit from implementing this strategy?
a. $77.64.
b. $197.53.
c. $15.43.
d. $111.80.

ANS: C
SOLUTION: $10,000/$1.62 = £6,172.84 × 2.95
= NZ$18,209.88 × $.55
= $10,015.43.
Thus, the profit is $15.43.

PTS: 1

42. Assume the following information:

You have $900,000 to invest:

Current spot rate of Australian dollar (A$)	=	$.62
180-day forward rate of the Australian dollar	=	$.64
180-day interest rate in the U.S.	=	3.5%
180-day interest rate in Australia	=	3.0%

If you conduct covered interest arbitrage, what is the dollar profit you will have realized after 180 days?
a. $56,903.
b. $61,548.
c. $27,000.
d. $31,500.

ANS: A
SOLUTION: $900,000/$.62 = A$1,451,612 × (1.03) = A$1,495,161 × $.64 = $956,903.
Thus, the profit is $56,903.

PTS: 1

43. Assume the following information:

You have $400,000 to invest:

Current spot rate of Sudanese dinar (SDD)	=	$.00570
90-day forward rate of the dinar	=	$.00569
90-day interest rate in the U.S.	=	4.0%
90-day interest rate in Sudan	=	4.2%

If you conduct covered interest arbitrage, what amount will you have after 90 days?

a. $416,000.00.
b. $416,800.00.
c. $424,242.86.
d. $416,068.77.
e. none of the above

ANS: D

SOLUTION: $400,000/$.0057 = SDD70,175,438.60 × (1.042)
= SDD73,122,807.02 × $.00569
= $416,068.77

PTS: 1

Exhibit 7-1

Assume the following information:

You have $300,000 to invest:
The spot bid rate for the euro (€) is $1.08
The spot ask quote for the euro is $1.10
The 180-day forward rate (bid) of the euro is $1.08
The 180-day forward rate (ask) of the euro is $1.10
The 180-day interest rate in the U.S. is 6%
The 180-day interest rate in Europe is 8%

44. Refer to Exhibit 7-1. If you conduct covered interest arbitrage, what amount will you have after 180 days?

a. $318,109.10.
b. $330,000.00.
c. $312,218.20.
d. $323,888.90.
e. none of the above

ANS: A

SOLUTION: $300,000/$1.10 = €277,777.80 × (1.08)
= €294,444.40 × $1.08
= $318,109.10

PTS: 1

45. Refer to Exhibit 7-1. If you conduct covered interest arbitrage, what is your percentage return after 180 days? Is covered interest arbitrage feasible in this situation?

a. 7.96%; feasible
b. 6.04%; feasible
c. 6.04%; not feasible
d. 4.07%; not feasible
e. 10.00%; feasible

ANS: B

SOLUTION: $318,109.10/$300,000 - 1 = 6.04%. Since this rate is slightly higher than the U.S. interest rate of 6%, covered interest arbitrage is feasible.

PTS: 1

46. According to interest rate parity (IRP):
    a. the forward rate differs from the spot rate by a sufficient amount to offset the inflation differential between two currencies.
    b. the future spot rate differs from the current spot rate by a sufficient amount to offset the interest rate differential between two currencies.
    c. the future spot rate differs from the current spot rate by a sufficient amount to offset the inflation differential between two currencies.
    d. the forward rate differs from the spot rate by a sufficient amount to offset the interest rate differential between two currencies.

    ANS: D PTS: 1

47. Assume that interest rate parity holds. The Mexican interest rate is 50%, and the U.S. interest rate is 8%. Subsequently, the U.S. interest rate decreases to 7%. According to interest rate parity, the peso's forward ____ will ____.
    a. premium; increase
    b. discount; decrease
    c. discount; increase
    d. premium; decrease

    ANS: C PTS: 1

48. If the cross exchange rate of two nondollar currencies implied by their individual spot rates with respect to the dollar is less than the cross exchange rate quoted by a bank, locational arbitrage is possible.
    a. True
    b. False

    ANS: F PTS: 1

49. For locational arbitrage to be possible, one bank's ask rate must be higher than another bank's bid rate for a currency.
    a. True
    b. False

    ANS: F PTS: 1

50. Assume locational arbitrage is possible and involves two different banks. The realignment that would occur due to market forces would increase one bank's ask rate and would decrease the other bank's bid rate.
    a. True
    b. False

    ANS: T PTS: 1

51. Triangular arbitrage tends to force a relationship between the interest rates of two countries and their forward exchange rate premium or discount.
    a. True

b. False

ANS: F PTS: 1

52. The interest rate on euros is 8%. The interest rate in the U.S. is 5%. The euro's forward rate should exhibit a premium of about 3%.
a. True
b. False

ANS: F PTS: 1

53. Capitalizing on discrepancies in quoted prices involving no risk and no investment of funds is referred to as interest rate parity.
a. True
b. False

ANS: F PTS: 1

54. Realignment in the exchange rates of banks will eliminate locational arbitrage. More specifically, market forces will increase the ask rate of the bank from which the currency was bought to conduct locational arbitrage and will decrease the bid rate of the bank to which the currency was sold to conduct locational arbitrage.
a. True
b. False

ANS: T PTS: 1

55. Locational arbitrage involves investing in a foreign country and covering against exchange rate risk by engaging in forward contracts.
a. True
b. False

ANS: F PTS: 1

56. To capitalize on high foreign interest rates using covered interest arbitrage, a U.S. investor would convert dollars to the foreign currency, invest in the foreign country, and simultaneously sell the foreign currency forward.
a. True
b. False

ANS: T PTS: 1

57. If interest rate parity (IRP) exists, then the rate of return achieved from covered interest arbitrage should be equal to the rate available in the foreign country.
a. True
b. False

ANS: F PTS: 1

58. If interest rate parity (IRP) exists, then triangular arbitrage will not be possible.
a. True
b. False

ANS: F PTS: 1

59. Forward rates are driven by the government rather than market forces.
a. True
b. False

ANS: F PTS: 1

60. The foreign exchange market is an over-the-counter market.
a. True
b. False

ANS: F PTS: 1

61. The yield curve of every country has its own unique shape.
a. True
b. False

ANS: T PTS: 1

62. Assume the following information:

U.S. investors have $1,000,000 to invest:		
1-year deposit rate offered by U.S. banks	=	10%
1-year deposit rate offered on British pounds	=	13.5%
1-year forward rate of Swiss francs	=	$1.26
Spot rate of Swiss franc	=	$1.30

Given this information:
a. interest rate parity exists and covered interest arbitrage by U.S. investors results in the same yield as investing domestically.
b. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
c. interest rate parity exists and covered interest arbitrage by U.S. investors results in a yield above what is possible domestically.
d. interest rate parity doesn't exist and covered interest arbitrage by U.S. investors results in a yield below what is possible domestically.

ANS: A
SOLUTION: $1,000,000/$1.30 = 793,651 pounds × (1.135) = 900,794 × $1.26 = $1,100,076.
Yield: ($1,100,076 - $1,000,000)/($1,000,000) = 10%.

PTS: 1

63. If quoted exchange rates are the same across different locations, then ____ is not feasible.
a. triangular arbitrage
b. covered interest arbitrage
c. locational arbitrage
d. A and C

ANS: D PTS: 1

64. Points above the IRP line represent situations where:
a. covered interest arbitrage is feasible from the perspective of domestic investors and results

in the same yield as investing domestically.
b. covered interest arbitrage is feasible from the perspective of domestic investors and results in a yield above what is possible domestically.
c. covered interest arbitrage is feasible from the perspective of foreign investors and results in a yield above what is possible in their local markets.
d. covered interest arbitrage is not feasible for neither domestic nor foreign investors.

ANS: C PTS: 1

65. Points below the IRP line represent situations where:
a. covered interest arbitrage is feasible from the perspective of domestic investors and results in the same yield as investing domestically.
b. covered interest arbitrage is feasible from the perspective of domestic investors and results in a yield above what is possible domestically.
c. covered interest arbitrage is feasible from the perspective of foreign investors and results in a yield above what is possible in their local markets.
d. covered interest arbitrage is not feasible for neither domestic nor foreign investors.

ANS: B PTS: 1

66. Which of the following might discourage covered interest arbitrage even if interest rate parity does not exist?
a. transaction costs.
b. political risk.
c. differential tax laws.
d. all of the above.

ANS: D PTS: 1

67. Assume that interest rate parity holds. U.S. interest rate is 13% and British interest rate is 10%. The forward rate on British pounds exhibits a ____ of ____ percent.
a. discount; 2.73
b. premium; 2.73
c. discount; 3.65
d. premium; 3.65

ANS: B PTS: 1

68. Assume the following information:

Exchange rate of Japanese yen in U.S. $	=	$.011
Exchange rate of euro in U.S. $	=	$1.40
Exchange rate of euro in Japanese yen	=	140 yen

What will be the yield for an investor who has $1,000,000 available to conduct triangular arbitrage?
a. $100,000
b. -$90,909
c. 10%
d. -9.09%

ANS: C
SOLUTION: Exchange dollars for pounds = $1,000,000/$1.4 = 714.286; exchange pounds for yen = 714,286 × 140 = 100,000,000 yen. Exchange yen for dollars = 100,000,000 yen × $.011 = $1,100,000. Yield = ($1,100,000 - $1,000,000)/ $1,000,000 = 10%

PTS: 1

69. Assume the following information:

	Quoted Bid Price	Quoted Ask Price
Value of an Australian dollar (A$) in $	$0.67	$0.69
Value of Mexican peso in $	$.074	$.077
Value of an Australian dollar in Mexican pesos	8.2	8.5

Assume you have $100,000 to conduct triangular arbitrage. What will be your profit from implementing this strategy?

a. $6,133
b. $2,368
c. $6,518
d. $13,711

ANS: B

SOLUTION: $100,000/$.077 = 1,298,701 pesos/8.5 = A$152,788 × $0.67 = $102,368
Profit = $102,368 - $100,000

PTS: 1

70. The interest rate on yen is 7%. The interest rate in the U.S. is 9%. The yen's forward rate should exhibit a premium of about 2%.

a. True
b. False

ANS: T PTS: 1

71. The interest rate on pounds in the U.K. is 8%. The interest rate in the U.S. is 5%. Interest rate parity exists. U.S. investors will earn a lower return domestically than British investors earn domestically.

a. True
b. False

ANS: T PTS: 1

72. Assume that the real interest rate in the U.S. and in the U.K. is 3%. The expected annual inflation in the U.S. is 3%, while in the U.K. it is 4%. The forward rate on the pound should exhibit a premium of about 1%.

a. True
b. False

ANS: F PTS: 1

73. If the cross exchange rate of two nondollar currencies implied by their individual spot rates with respect to the dollar is less than the cross exchange rate quoted by a bank, locational arbitrage is possible.

a. True
b. False

ANS: F PTS: 1

74. For locational arbitrage to be possible, one bank's ask rate must be higher than another bank's bid rate for a currency.
a. True
b. False

ANS: F PTS: 1

75. Technology enables more consistent prices among banks and reduces the likelihood of significant discrepancies in foreign exchange quotations among locations.
a. True
b. False

ANS: T PTS: 1

76. Assume locational arbitrage is possible and involves two different banks. The realignment that would occur due to market forces would increase one bank's ask rate and would decrease the other bank's bid rate.
a. True
b. False

ANS: T PTS: 1

77. Locational arbitrage explains why prices among banks at different locations will not normally differ by a significant amount.
a. True
b. False

ANS: T PTS: 1

78. Cross exchange rates are used to determine the relationship between the dollar and two nondollar currencies.
a. True
b. False

ANS: F PTS: 1

79. Triangular arbitrage tends to force a relationship between the interest rates of two countries and their forward exchange rate premium or discount.
a. True
b. False

ANS: F PTS: 1

80. The equilibrium state in which covered interest arbitrage is no longer possible is called interest rate parity (IRP).
a. True
b. False

ANS: T PTS: 1

81. If interest rate parity exists, then the rate of return achieved from covered interest arbitrage should be equal to the interest rate available in the foreign country.
a. True
b. False

ANS: F PTS: 1

82. Interest rate parity (IRP) states that the foreign currency's forward rate premium or discount is roughly equal to the interest rate differential between the U.S. and the foreign country.
a. True
b. False

ANS: T PTS: 1

83. The interest rate in South Africa is 8%. The interest rate in the U.S. is 5%. The South African forward rate should exhibit a premium of about 3%.
a. True
b. False

ANS: F PTS: 1

84. The larger the degree by which the foreign interest rate exceeds the home interest rate, the larger will be the forward discount of the foreign currency specified by the interest rate parity (IRP) formula.
a. True
b. False

ANS: T PTS: 1

85. For points lying to the left of the interest rate parity (IRP) line, covered interest arbitrage is not possible from a U.S. investor's perspective, but is possible from a foreign investor's perspective.
a. True
b. False

ANS: T PTS: 1

86. If interest rate parity (IRP) exists, then foreign investors will earn the same returns as U.S. investors.
a. True
b. False

ANS: F PTS: 1

87. If interest rate parity (IRP) does not hold, there is still the possibility that covered interest arbitrage is not worthwhile because of such factors as transaction costs, currency restrictions, and differential tax laws.
a. True
b. False

ANS: T PTS: 1

88. Which of the following is not mentioned in the text as a form of international arbitrage?
a. Locational arbitrage
b. Triangular arbitrage
c. Transactional arbitrage
d. Covered interest arbitrage
e. All of the above are mentioned in the text as forms of international arbitrage.

ANS: C PTS: 1

89. Bank A quotes a bid rate of $0.300 and an ask rate of $0.305 for the Malaysian ringgit (MYR). Bank B quotes a bid rate of $0.306 and an ask rate of $0.310 for the ringgit. What will be the profit for an investor that has $500,000 available to conduct locational arbitrage?
    a. $2,041,667
    b. $9,804
    c. $500
    d. $1,639

    ANS: D PTS: 1

90. American Bank quotes a bid rate of $0.026 and an ask rate of $0.028 for the Indian rupee (INR); National Bank quotes a bid rate of $0.024 and an ask rate for $0.025. Locational arbitrage would involve:
    a. buying rupees from American Bank at the bid rate and selling them to National Bank at the ask rate.
    b. buying rupees from National Bank at the ask rate and selling them to American Bank at the bid rate.
    c. buying rupees from American Bank at the ask rate and selling to National Bank at the bid rate.
    d. buying rupees from National Bank at the bid rate and selling them to American Bank at the ask rate.
    e. Locational arbitrage is not possible in this case.

    ANS: B PTS: 1

91. Assume you discovered an opportunity for locational arbitrage involving two banks and have taken advantage of it. Because of your and other arbitrageurs' actions, the following adjustments must take place.
    a. One bank's ask price will rise and the other bank's bid price will fall.
    b. One bank's ask price will fall and the other bank's bid price will rise.
    c. One bank's bid/ask spread will widen and the other bank's bid/ask spread will fall.
    d. A and C

    ANS: D PTS: 1

92. Which of the following is an example of triangular arbitrage initiation?
    a. Buying a currency at one bank's ask and selling at another bank's bid, which is higher than the former bank's ask.
    b. Buying Singapore dollars from a bank (quoted at $0.55) that has quoted the South African rand (ZAR)/Singapore dollar (S$) exchange rate at ZAR2.50 when the spot rate for the South African rand is $0.20.
    c. Buying Singapore dollars from a bank (quoted at $0.55) that has quoted the South African rand/Singapore dollar exchange rate at ZAR3.00 when the spot rate for the South African rand is $0.20.
    d. Converting funds to a foreign currency and investing the funds overseas.

    ANS: C PTS: 1

93. Hewitt Bank quotes a value for the Japanese yen (¥) of $0.007, and a value for the Canadian Dollar (C$) of $0.821. The cross exchange rate quoted by the bank for the Canadian dollar is ¥118.00. You have $5,000 to conduct triangular arbitrage. How much will you end up with if you conduct triangular arbitrage?
    a. $6,053.27
    b. $5,030.45
    c. $6,090.13

d. Triangular arbitrage is not possible in this case.

ANS: B PTS: 1

94. National Bank quotes the following for the British pound and the New Zealand dollar:

	Quoted Bid Price	Quoted Ask Price
Value of a British pound (£) in $	$1.61	$1.62
Value of a New Zealand dollar (NZ$) in $	$0.55	$0.56
Value of a British pound in New Zealand dollars	NZ$2.95	NZ$2.96

Assume you have $10,000 to conduct triangular arbitrage. What is your profit from implementing this strategy?

a. $77.64
b. $197.53
c. $15.43
d. $111.80

ANS: C PTS: 1

95. Which of the following is not true regarding covered interest arbitrage?
a. Covered interest arbitrage tends to force a relationship between the interest rates of two countries and their forward exchange rate premium or discount.
b. Covered interest arbitrage involves investing in a foreign country and covering against exchange rate risk.
c. Covered interest arbitrage opportunities only exist when the foreign interest rate is higher than the interest rate in the home country.
d. If covered interest arbitrage is possible, you can guarantee a return on your funds that exceeds the returns you could achieve domestically.
e. All of the above are true regarding covered interest arbitrage.

ANS: C PTS: 1

96. Which of the following is not true regarding covered interest arbitrage?
a. Covered interest arbitrage is a reason for observing interest rate parity (IRP).
b. If the forward rate is equal to the spot rate, conducting covered interest arbitrage will yield a return that is exactly equal to the interest rate in the foreign country.
c. When interest rate parity holds, covered interest arbitrage is not possible.
d. When interest rate disparity exists, covered interest arbitrage may not be profitable.
e. All of the above are true.

ANS: E PTS: 1

97. Which of the following is not true regarding interest rate parity (IRP)?
a. When interest rate parity holds, covered interest arbitrage is not possible.
b. When the interest rate in the foreign country is higher than that in the home country, the forward rate of that country's currency should exhibit a discount.
c. When the interest rate in the foreign country is lower than that in the home country, the forward rate of that country's currency should exhibit a premium.
d. When covered interest arbitrage is not feasible, interest rate parity must hold.
e. All of the above are true.

ANS: D PTS: 1