

CHAPTER 12
CHAPTER 12

FOREIGN EXCHANGE

CHAPTER OVERVIEW

This chapter discusses the nature and operation of the foreign exchange market. The chapter begins by describing the foreign exchange market and the types of foreign exchange transactions. Emphasis is placed on the interbank market for foreign exchange.

Next we consider the forward market and futures market and also the market for foreign currency options. The role of the International Monetary Market of the Chicago Mercantile Exchange is emphasized in this section.

The chapter introduces the determination of the equilibrium rate of exchange in a free market. The sources of the demand for foreign exchange and the supply of foreign exchange are identified. A distinction is made between the exchange rate of one currency in terms of another currency and the trade-weighted value (effective exchange rate) of a currency.

Next we examine the nature and operation of uncovered interest arbitrage and covered interest arbitrage. The chapter concludes by examining foreign exchange market speculation.

After completing this chapter, the student should be able to:

- Discuss the operation of the foreign exchange market.
- Understand the foreign exchange quotations of *The Wall Street Journal*.
- Explain how traders benefit from the forward exchange market.
- Describe how exchange rates are determined in a free market.
- Discuss the nature and operation of currency arbitrage.
- Explain the strategy of exchange-rate speculation.

BRIEF ANSWERS TO STUDY QUESTIONS

1. The foreign exchange market refers to the organizational setting within which individuals, firms, and banks buy and sell foreign currencies. The two largest foreign exchange markets are located in New York and London.
2. The spot market permits the buying and selling of foreign exchange for immediate delivery. Future contracts are made by those who will make or receive foreign exchange payments in the weeks or months ahead.
3. The supply and demand for foreign exchange is derived from the credit (debit) items on the balance of payments, such as exports or investment flows.

4. Exchange-rate quotations throughout the world are brought into harmony via exchange arbitrage.
5. Traders and investors often participate in the forward market to protect their expected profits from the risk of exchange rate fluctuations. Speculators also participate in the forward market.
6. The relation between the spot rate and the forward rate is maintained via the process of covered interest arbitrage.
7. Exchange market speculators deliberately assume foreign exchange risk with the hope of profiting from exchange rate fluctuations over time. Most speculation is conducted in the forward market.
8. Stabilizing speculation refers to the purchase of a foreign currency with the domestic currency when there occurs a fall in the foreign exchange rate. The anticipation is that the exchange rate will soon rise and thus generate a profit. Stabilizing speculation moderates a fall (rise) in the exchange rate. Destabilizing speculation reinforces fluctuations in exchange rates.
9. The dollar appreciates against the pound; the pound depreciates against the dollar. The dollar depreciates against the pound; the pound appreciates against the dollar.
10. Arbitragers will buy pounds in New York, at \$1.69 per pound, and sell pounds in London, at \$1.71 per pound, thus making a profit of 2 cents on each pound. As pounds are bought in New York, their prices rises; as pounds are sold in London, their price falls. When the dollar price of the pound equalizes in the financial centers, the profitability of arbitrage ceases and the practice stops.
11.
 - a. \$1.50 per pound. 30 pounds are purchased at a cost of \$45.
 - b. Excess supply, 20 pounds. Dollar price of the pound decreases, decrease, increase.
 - c. Excess demand, 20 pounds. Dollar price of the pound increases, increase, decrease.
12.
 - a. The U.S. importer can cover her foreign exchange risk by purchasing 20,000 pounds for three-month delivery at today's three-month forward rate of \$1.75 per pound. The importer is willing to pay 5 cents more per pound (or \$1000 more for the 20,000 pounds) than today's spot rate to guard against the possibility that the spot rate in three months will exceed \$1.70 per pound. In three months, when her payments are due, the importer will pay \$35,000 and get the 20,000 pounds needed for payment, irrespective of what the pound's spot rate is at that time.
 - b. If the spot rate of the pound in three months is \$1.80 per pound, and the U.S. importer does not obtain forward cover, she must pay \$36,000 for the 20,000 pounds; this amount exceeds by \$1000 the cost of the pounds she incurs by hedging.
13.
 - a. The U.S. investor would purchase pounds on the spot market at \$2 per pound, and use the pounds to buy U.K. treasury bills in London; he would earn 4 percent per annum (1 percent per three months) more than he would if he had purchased U.S. treasury bills in New York.
 - b. Yes, by 0.5 percent.
14.
 - a. 1.7090, 1.7105, 1.7084, 1.7099, 1.7081, 1.7096, 1.7090, 1.7103.
 - b. \$0.5851 per franc, \$1.7090 francs per dollar.
 - c. Depreciated, appreciated.
 - d. \$58.51, 170.9 francs.
 - e. The 30-day forward franc was at a premium of \$.0002 which equals 0.4 percent on an annual basis. The 90-day forward franc was at a premium of \$.0003 which equals 0.2 percent on an annual basis.

15. a. The U.S. speculator should sell francs today for delivery in 6 months at today's forward rate of the franc, which equals \$0.50.
- b. After 6 months, if the franc's spot rate is \$0.40, the speculator can purchase francs at the price of \$0.40 each and deliver them for the previously contracted rate of \$0.50 per franc; the speculator realizes a profit of \$0.10 on each franc which the forward contract specifies. If the franc's spot rate after 6 months is \$0.60, the speculator must purchase francs at a price of \$0.60 per franc and resell them at a price of \$0.50 per franc; the speculator would suffer losses of \$0.10 on each franc specified in the forward contract. If the franc's spot rate after 6 months is \$0.50, the speculator realizes neither a profit nor a loss on the transaction.
16. An arbitrageur could purchase 3 francs for \$1, purchase 6 schilling with 3 francs, and sell 6 schilling for \$1.50. Ignoring transaction costs, the arbitrageur realizes a \$0.50 profit on the transactions.

MULTIPLE-CHOICE QUESTIONS

- Assume you are an American exporter and expect to receive 50 pounds sterling at the end of 60 days. You can remove the risk of loss due to a devaluation of the pound sterling by:
 - Selling sterling in the forward market for 60-day delivery
 - Buying sterling now and selling it at the end of 60 days
 - Selling the dollar equivalent in the forward market for 60-day delivery
 - Keeping the sterling in Britain after it is delivered to you
- Which of the following tends to cause the U.S. dollar to *appreciate* in value?
 - An increase in U.S. prices above foreign prices
 - Rapid economic growth in foreign countries
 - A fall in U.S. interest rates below foreign levels
 - An increase in the level of U.S. income
- Concerning the covering of exchange market risks—assuming that a *depreciation* of the domestic currency is anticipated, one can say that there is an incentive for:
 - Exporters to rush to cover their future needs
 - Importers to rush to cover their future needs
 - Both exporters and importers to rush to cover their future needs
 - Neither exporters nor importers to rush to cover their future needs
- When short-term interest rates become *lower* in Tokyo than in New York, interest arbitrage operations will most likely result in a (an):
 - Increase in the spot price of the yen
 - Increase in the forward price of the dollar
 - Sale of dollars in the forward market
 - Purchase of yen in the spot market
- An *appreciation* in the value of the U.S. dollar against the British pound would tend to:
 - Discourage the British from buying American goods
 - Discourage Americans from buying British goods
 - Increase the number of dollars that could be bought with a pound
 - Discourage U.S. tourists from traveling to Britain

6. Concerning the foreign exchange market, one can *best* say that:
 - a. There is a spot market for virtually every currency in the world
 - b. The market is highly centralized like the stock exchange
 - c. Most foreign exchange payments are made with bank notes
 - d. The values of the forward and spot rates are always in agreement
7. Suppose researchers discover that Swiss beer causes cancer when given in large amounts to British mice. This finding would likely result in a (an):
 - a. Increase in the demand for Swiss francs
 - b. Decrease in the demand for Swiss francs
 - c. Increase in the supply of Swiss francs
 - d. Decrease in the supply of Swiss francs
8. Suppose that real incomes increase more rapidly in the United States than in Mexico. In the United States, this situation would likely result in a (an):
 - a. Increase in the demand for pesos
 - b. Decrease in the demand for pesos
 - c. Increase in the supply of pesos
 - d. Decrease in the supply of pesos
9. A *depreciation* of the dollar refers to a (an):
 - a. Fall in the dollar price of foreign currency
 - b. Increase in the dollar price of foreign currency
 - c. Loss of foreign-exchange reserves for the U.S.
 - d. Intervention in the international money market
10. If Canadian speculators believed the Swiss franc was going to *appreciate* against the U.S. dollar, they would:
 - a. Purchase Canadian dollars
 - b. Purchase U.S. dollars
 - c. Purchase Swiss francs
 - d. Sell Swiss francs
11. A major *difference* between the spot market and the forward market is that the spot market deals with:
 - a. The immediate delivery of currencies
 - b. The merchandise trade account
 - c. Currencies traded for future delivery
 - d. Hedging of international currency risks
12. The exchange rate is kept the same in all parts of the market by:
 - a. Forward cover
 - b. Hedging
 - c. Exchange speculation
 - d. Exchange arbitrage

13. If you have a commitment to pay a friend in Britain 1,000 pounds in 30 days, you could remove the risk of loss due to the appreciation of the pound by:
 - a. Buying dollars in the forward market for delivery in 30 days
 - b. Selling dollars in the forward market for delivery in 30 days
 - c. Buying the pounds in the forward market for delivery in 30 days
 - d. Selling the pounds in the forward market for delivery in 30 days
14. An *increase* in the dollar price of other currencies tends to cause:
 - a. U.S. goods to be cheaper than foreign goods
 - b. U.S. goods to be more expensive than foreign goods
 - c. Foreign goods to be more expensive to residents of foreign nations
 - d. Foreign goods to be cheaper to residents of the United States
15. The balance on merchandise trade:
 - a. Must be negative
 - b. Must be positive
 - c. Must be zero
 - d. May be negative, positive, or zero
16. Which of the following would *not* induce the U.S. demand curve for foreign exchange to shift backward to the left?
 - a. Worsening American tastes for goods produced overseas
 - b. Decreasing interest rates in the U.S. compared to those overseas
 - c. A fall in the level of U.S. income
 - d. A depreciation in the U.S. dollar against foreign currencies
17. A U.S. export company scheduled to receive 1 million pounds six months from today can hedge its foreign exchange risk by:
 - a. Buying today 1 million pounds in the forward market for delivery in six months
 - b. Buying 1 million pounds in the spot market for delivery in six months
 - c. Selling 1 million pounds in the spot market for delivery in six months
 - d. Selling today 1 million pounds in the forward market for delivery in six months
18. Over time, a *depreciation* in the value of a nation's currency in the foreign exchange market will result in:
 - a. Exports rising and imports falling
 - b. Imports rising and exports falling
 - c. Both imports and exports rising
 - d. Both imports and exports falling
19. Grain shortages in countries that buy large amounts of grain from the United States would increase the demand for American grain and:
 - a. Reduce the demand for dollars
 - b. Increase the demand for dollars
 - c. Reduce the supply of dollars
 - d. Increase the supply of dollars

20. Suppose the exchange rate between the Japanese yen and the U.S. dollar is 100 yen per dollar. A Japanese stereo with a price of 60,000 yen will cost:
 - a. \$60
 - b. \$600
 - c. \$6,000
 - d. None of the above
21. The supply of foreign currency may be:
 - a. Upward-sloping
 - b. Backward-sloping
 - c. Vertical
 - d. None of the above
22. Suppose that a Swiss watch that costs 400 francs in Switzerland costs \$200 in the United States. The exchange rate between the franc and the dollar is:
 - a. 2 francs per dollar
 - b. 1 franc per dollar
 - c. \$2 per franc
 - d. \$3 per franc
23. In the early 1980s, the Federal Reserve pursued a tight monetary policy. All else being equal, the impact of that policy was to _____ interest rates in the United States relative to those in Europe and cause the dollar to _____ against European currencies.
 - a. Decrease, depreciate
 - b. Decrease, appreciate
 - c. Increase, depreciate
 - d. Increase, appreciate
24. Under a system of floating exchange rates, the Swiss franc would depreciate in value if which of the following occurs?
 - a. Price inflation in France
 - b. An increase in U.S. real income
 - c. A decrease in the Swiss money supply
 - d. Falling interest rates in Switzerland
25. A depreciation of the dollar will have its most pronounced impact on imports if the demand for imports is:
 - a. Constant
 - b. Inelastic
 - c. Elastic
 - d. Unitary elastic
26. During the era of dollar appreciation, from 1981 to 1985, a main reason why the dollar did *not* fall in value was:
 - a. Flows of foreign investment into the United States
 - b. Rising price inflation in the United States
 - c. A substantial decrease in U.S. imports
 - d. A substantial increase in U.S. exports

27. Which financial instrument provides a buyer the right to purchase or sell a fixed amount of currency at a prearranged price, within a few days to a couple of years?
- Letter of credit
 - Foreign currency option
 - Cable transfer
 - Bill of exchange
28. Given the foreign currency market for the Swiss franc, the *supply* of francs slopes upward, because as the dollar price of the franc rises:
- America's demand for Swiss merchandise rises
 - America's demand for Swiss merchandise falls
 - Switzerland's demand for American merchandise rises
 - Switzerland's demand for American merchandise falls
29. In a supply-and-demand diagram for Japanese yen, with the exchange rate in dollars per yen on the vertical axis, the demand schedule for yen is drawn sloping:
- Upward
 - Vertical
 - Downward
 - Horizontal
30. Suppose there occurs an increase in the Canadian demand for Japanese computers. This results in:
- An increase in the demand for yen
 - A decrease in the demand for yen
 - An increase in the supply of yen to Canada
 - A decrease in the supply of yen to Canada

Table 12.1 gives the exchange rate quotations for the U.S. dollar and the British pound. Answer the next *four* questions on the basis of this information.

Table 12.1. *Foreign Exchange Quotations*

	<u>U.S. Dollar Equivalent</u>		<u>Currency per U.S. Dollar</u>	
	<u>Tuesday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Monday</u>
Britain (Pound)	1.4270	1.4390	.7008	.6949
30-day Forward	1.4211	1.4333	.7037	.6977
60-day Forward	1.4090	1.4220	.7097	.7032
180-day Forward	1.3930	1.4070	.7179	.7107

31. Consider Table 12.1. If one were to buy pounds for immediate delivery, on Tuesday the dollar cost of each pound would be:
- \$0.7008
 - \$0.7037
 - \$1.4211
 - \$1.4270

32. Consider Table 12.1. If one were to sell dollars for immediate delivery, on Tuesday the pound cost of each dollar would be:
 - a. .7008 pounds per dollar
 - b. .7037 pounds per dollar
 - c. 1.4270 pounds per dollar
 - d. 1.4211 pounds per dollar

33. Consider Table 12.1. Comparing Tuesday to the previous Monday, by Tuesday the dollar had:
 - a. Depreciated against the pound
 - b. Appreciated against the pound
 - c. Not changed against the pound
 - d. None of the above

34. Consider Table 12.1. Concerning the Tuesday quotations: compared to the cost of buying 100 pounds on the spot market, if 100 pounds were bought for future delivery in 180 days the dollar cost of the pounds would be:
 - a. \$3.40 higher
 - b. \$3.40 lower
 - c. \$6.80 higher
 - d. \$6.80 lower

35. Which method of trading currencies involves the conversion of one currency into another at one point in time with an agreement to reconvert it back to the original currency at some point in the future?
 - a. Forward transaction
 - b. Futures transaction
 - c. Spot transaction
 - d. Swap transaction

36. Most foreign exchange trading occurs between banks and:
 - a. National governments
 - b. Other banks
 - c. Corporations
 - d. Household investors

37. The most important (in terms of dollar value) type of foreign exchange transaction by U.S. banks is the:
 - a. Spot transaction
 - b. Forward transaction
 - c. Swap transaction
 - d. Option transaction

38. In the interbank market for foreign exchange, the _____ refers to the price that a bank is willing to pay for a unit of foreign currency.
 - a. Offer rate
 - b. Bid rate
 - c. Spread rate
 - d. Transaction rate

39. In the interbank market for foreign exchange, the _____ refers to the price for which a bank is willing to sell a unit of foreign currency.
- Offer rate
 - Option rate
 - Futures rate
 - Bid rate
40. In the interbank market for foreign exchange, the _____ refers to the difference between the offer rate and the bid rate.
- Cross rate
 - Option
 - Arbitrage
 - Spread
41. A corporation dealing in foreign exchange may desire to obtain an exchange quote between the pound and franc, whose values are both expressed relative to the dollar. _____ are used to determine such a relationship.
- Spot exchange rates
 - Forward exchange rates
 - Cross exchange rates
 - Option exchange rates
42. Suppose the exchange value of the British pound is \$2 per pound while the exchange value of the Swiss franc is 50 cents per pound. The cross exchange rate between the pound and the franc is:
- 1 franc per pound
 - 2 francs per pound
 - 3 francs per pound
 - 4 francs per pound

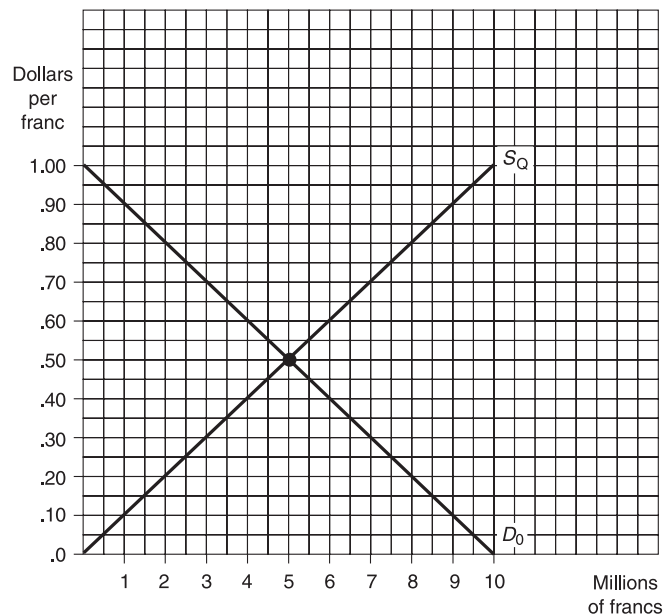
Assume the following: (1) the interest rate on 6-month treasury bills is 8 percent per annum in the United Kingdom and 4 percent per annum in the United States; (2) today's spot price of the pound is \$1.50 while the 6-month forward price of the pound is \$1.485. Answer the next *three* questions on the basis of this information.

43. By investing in U.K. treasury bills rather than U.S. treasury bills, and not covering exchange rate risk, U.S. investors earn an extra return of:
- 4 percent per year, 1 percent for the 6 months
 - 4 percent per year, 2 percent for the 6 months
 - 2 percent per year, 0.5 percent for the 6 months
 - 2 percent per year, 1 percent for the 6 months
44. If U.S. investors cover their exchange rate risk, the extra return for the 6 months on the U.K. treasury bills is:
- 1.0 percent
 - 1.5 percent
 - 2.0 percent
 - 2.5 percent

45. If the price of the 6-month forward pound were to _____, U.S. investors would no longer earn an extra return by shifting funds to the United Kingdom.
- Rise to \$1.52
 - Rise to \$1.53
 - Fall to \$1.48
 - Fall to \$1.47
46. Assume that you are the Chase Manhattan Bank of the United States, and you have 1 million Swiss francs in your vault that you will need to use in 30 days. Moreover, you need 500,000 British pounds for the next 30 days. You arrange to loan your francs to Barclays Bank of London for 30 days in exchange for 500,000 pounds today, and reverse the transaction at the end of 30 days. You have just arranged a:
- Forward contract
 - Futures contract
 - Spot contract
 - Currency swap

Figure 12.1 illustrates the supply and demand schedules for the Swiss franc. Assume that exchange rates are flexible. Refer to this figure when answering the next *five* questions.

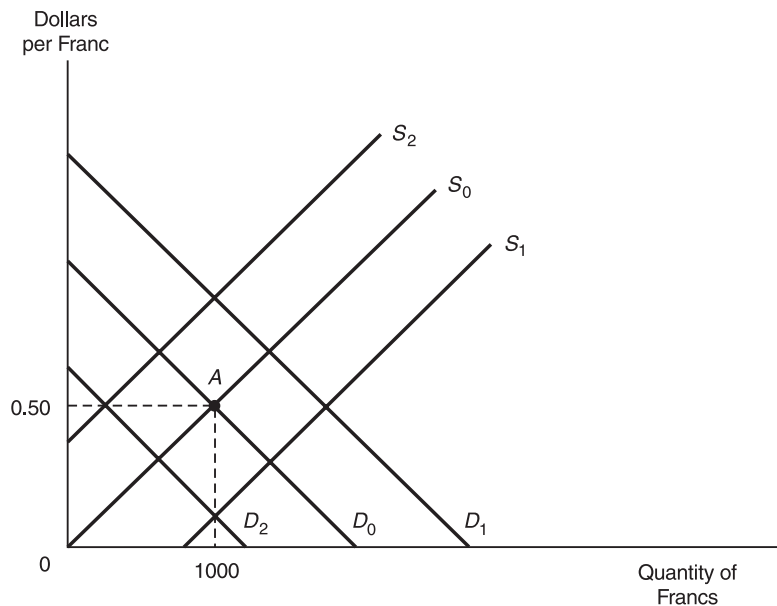
Figure 12.1. *Supply and Demand Schedules of Francs*



47. Refer to Figure 12.1. At the equilibrium exchange rate of _____ per franc, _____ francs will be purchased at a total dollar cost of _____.
- \$.50, 5 million, \$2.5 million
 - \$.50, 5 million, \$1.5 million
 - \$.70, 3 million, \$2.1 million
 - \$.70, 7 million, \$4.9 million
48. Refer to Figure 12.1. Suppose the exchange rate is \$.70 per franc. At this exchange rate there is an _____ of francs which leads to a _____ in the dollar price of the franc, a (an) _____ in the quantity of francs supplied, and a (an) _____ in the quantity of francs demanded.
- Excess demand, rise, increase, decrease
 - Excess demand, rise, decrease, increase
 - Excess supply, fall, decrease, increase
 - Excess supply, fall, increase, decrease
49. Refer to Figure 12.1. Suppose the exchange rate is \$.30 per franc. At this exchange rate there is an _____ of francs which leads to a _____ in the dollar price of the franc, a (an) _____ in the quantity of francs supplied, and a (an) _____ in the quantity of francs demanded.
- Excess demand, rise, increase, decrease
 - Excess demand, rise, decrease, increase
 - Excess supply, fall, decrease, increase
 - Excess supply, fall, increase, decrease
50. Refer to Figure 12.1. Suppose the exchange rate is \$.70 per franc. Free-market forces would lead to a (an) _____ of the dollar against the franc and a (an) _____ in U.S. international competitiveness.
- Depreciation, improvement
 - Depreciation, worsening
 - Appreciation, improvement
 - Appreciation, worsening
51. Refer to Figure 12.1. Suppose the exchange rate is \$.30 per franc. Free-market forces would lead to a (an) _____ of the dollar against the franc and a (an) _____ in U.S. international competitiveness.
- Depreciation, improvement
 - Depreciation, worsening
 - Appreciation, improvement
 - Appreciation, worsening

Figure 12.2 illustrates the market for Swiss francs in a world of market-determined exchange rates. Assume the equilibrium exchange rate is \$0.5 per franc, given by the intersection of schedules S_0 and D_0 . Answer the next two questions on the basis of this information.

Figure 12.2. Market for Francs



52. Refer to Figure 12.2. A shift in the demand for francs from D_0 to D_1 or a shift in the supply of francs from S_0 to S_2 , would result in a (an):
- Depreciation in the dollar against the franc
 - Appreciation in the dollar against the franc
 - Unchanged dollar/franc exchange rate
 - None of the above
53. Refer to Figure 12.2. A shift in the demand for francs from D_0 to D_2 , or a shift in the supply of francs from S_0 to S_1 , would result in a (an):
- Depreciation in the dollar against the franc
 - Appreciation in the dollar against the franc
 - No change in the dollar/franc exchange rate
 - None of the above
54. A (an) _____ is an arrangement by which two parties exchange one currency for another and agree that the exchange will be reversed at a stipulated date in the future.
- Arbitrage
 - Swap
 - Option
 - Hedge

Answer the next *three* questions on the basis of the information in Table 12.2.

Table 12.2. *Supply and Demand of British Pounds*

<u>Quantity of Pounds Supplied</u>	<u>Dollars per Pound</u>	<u>Quantity of Pounds Demanded</u>
1,000	2.00	200
800	1.80	400
600	1.60	600
400	1.40	800
200	1.20	1,000

55. Refer to Table 12.2. The equilibrium exchange rate equals:
- \$1.20 per pound
 - \$1.40 per pound
 - \$1.60 per pound
 - \$1.80 per pound
56. Refer to Table 12.2. At the exchange rate of \$1.40 per pound, there is an _____ for pounds. This imbalance causes a (an) _____ in the price of the pound, which leads to a (an) _____ in the quantity of pounds supplied and a (an) _____ in the quantity of pounds demanded.
- Excess supply, decrease, increase, decrease
 - Excess supply, increase, decrease, increase
 - Excess demand, increase, increase, decrease
 - Excess demand, increase, decrease, increase
57. Refer to Table 12.2. At the exchange rate of \$1.80 per pound, there is an _____ for pounds. This imbalance causes a (an) _____ in the price of the pound, which leads to a (an) _____ in the quantity of pounds supplied and a (an) _____ in the quantity of pounds demanded.
- Excess supply, decrease, decrease, increase
 - Excess supply, increase, decrease, increase
 - Excess demand, increase, increase, decrease
 - Excess demand, increase, decrease, increase

Using the data of Table 12.3, answer Questions 58 and 59.

Table 12.3. Key Currency Cross Rates

	<u>Dollar</u>	<u>Euro</u>	<u>Pound</u>	<u>Swiss Franc</u>
Canada	1.5326	1.4400	2.2362	0.9790
Japan	124.48	116.96	181.63	79.515
Mexico	9.7410	9.1526	14.213	6.2223
Switzerland	1.5655	1.4709	2.2842	—
U.K.	.68540	.6440	—	.4378
Euro	1.06430	—	1.5529	.67984
U.S.	—	.9396	1.4591	.63877

58. Refer to Table 12.3. The cross exchange rate between the euro and Swiss franc is approximately:
- .68 euros per franc
 - .68 francs per euro
 - .64 euros per franc
 - .64 francs per euro
59. Refer to Table 12.3. The yen cost of purchasing 100 British pounds is roughly:
- 18,000 yen
 - 19,000 yen
 - 20,000 yen
 - 21,000 yen

Using the data of Table 12.4, answer Questions 60 through 63.

Table 12.4. Forward Exchange Rates

	<u>U.S. Dollar Equivalent</u>	
	<u>Wednesday</u>	<u>Tuesday</u>
Switzerland (Franc)	.6598	.6590
30-day Forward	.6592	.6585
90-day Forward	.6585	.6578
180-day Forward	.6577	.6572

60. Refer to Table 12.4. On Wednesday, the 30-day forward franc was selling at a:
- 1 percent premium per annum against the dollar
 - 2 percent premium per annum against the dollar
 - 1 percent discount per annum against the dollar
 - 2 percent discount per annum against the dollar

61. Refer to Table 12.4. On Wednesday, the 90-day forward franc was selling at a:
- 0.8 percent premium per annum against the dollar
 - 1.6 percent premium per annum against the dollar
 - 0.8 percent discount per annum against the dollar
 - 1.6 percent discount per annum against the dollar
62. Refer to Table 12.4. On Wednesday, the 180-day forward franc was selling at a:
- 0.6 percent premium per annum against the dollar
 - 1.6 percent premium per annum against the dollar
 - 0.6 percent discount per annum against the dollar
 - 1.6 percent discount per annum against the dollar
63. Refer to Table 12.4. Comparing the franc's forward rates against the franc's spot rate, the exchange market's consensus is that over the period of a forward contract, the franc's spot rate will:
- Depreciate against the dollar
 - Appreciate against the dollar
 - Remain constant against the dollar
 - None of the above

TRUE-FALSE QUESTIONS

- T F 1. Similar to stock and commodity exchanges, the foreign exchange market is an organized structure with a central meeting place and formal licensing requirements.
- T F 2. Most foreign exchange transactions are conducted between commercial banks and household customers.
- T F 3. Foreign-exchange brokers help commercial banks carry out foreign exchange trading and maintain desired balances of foreign exchange.
- T F 4. A person needing foreign exchange immediately would purchase it on the spot market.
- T F 5. Most foreign exchange trading is carried out in the forward market.
- T F 6. Swap transactions among commercial banks involve the conversion of one currency to another at one point with an agreement to reconvert it back into the original currency at some point in the future.
- T F 7. The bid rate refers to the price at which a bank is willing to sell a unit of foreign currency; the offer rate is the price at which a bank is willing to buy a unit of foreign currency.
- T F 8. A commercial bank profits from foreign-exchange trading when its bid rate exceeds its offer rate.

- T F 9. The “spread” is a bank’s profit margin on foreign exchange trading and equals the difference between the bid rate and the offer rate.
- T F 10. If Citibank quoted bid and offer rates for the Swiss franc at \$.4850/\$.4854, the bank would be prepared to buy, say, 1 million francs for \$485,000 and sell them for \$485,400.
- T F 11. If Chase Manhattan Bank quotes bid and offer rates for the Swiss franc at \$.5250/\$.5260, the bank would realize profits of \$1,000 on the purchase and sale of 1 million francs.
- T F 12. If a Citibank dealer expects the Swiss franc to appreciate against the U.S. dollar, she will attempt to lower both bid and offer rates for the franc, attempting to persuade other dealers to buy francs from Citibank and dissuade other dealers from selling francs to Citibank.
- T F 13. If a Citibank dealer expects the Swiss franc to depreciate in the future, he will lower bid and offer rates for the franc in order to discourage other dealers from selling francs to Citibank and persuade other dealers to buy francs from Citibank.
- T F 14. If it takes \$0.18544 to purchase 1 French franc, it takes 5.3926 francs to purchase \$1.
- T F 15. If it takes 113.28 yen to buy \$1, it takes \$.009624 to buy 1 yen.
- T F 16. If it takes \$1.5515 to buy 1 pound and \$0.6845 to buy 1 franc, it takes 2.27 francs to buy 1 pound.
- T F 17. “Futures” currency contracts are issued by commercial banks and are tailored in size to the needs of the exporter or importer, while “forward” currency contracts are issued by the International Monetary Market in standardized round lots.
- T F 18. A foreign currency option is an agreement between a holder (corporation) and a writer (commercial bank) giving the holder the right to buy or sell a certain amount of foreign currency at any time through some specified date.
- T F 19. A “call” option gives General Motors the right to sell pounds at a specified price, while a put option gives General Motors the right to buy pounds at a specified price.
- T F 20. The demand for foreign exchange is derived from credit transactions on the balance of payments.
- T F 21. The U.S. demand for pounds is derived from U.S. exports to the United Kingdom, U.K. investments in the United States, and U.K. tourist expenditures in the United States.
- T F 22. As the dollar’s exchange value appreciates against the pound, U.S. residents tend to import more British goods and thus demand more pounds.
- T F 23. As the dollar depreciates against the peso, U.S. residents tend to import more Mexican goods and thus demand more pesos.

- T F 24. The supply of francs is derived from the desire of the Swiss to purchase German goods, make investments in Germany, repay debts to German lenders, and extend transfer payments to German residents.
- T F 25. The demand schedule for Swiss francs is always downsloping while the supply schedule of francs is always upsloping.
- T F 26. The supply schedule of yen has a positive-sloping region which corresponds to the inelastic region on the Japanese demand schedule for foreign currency.
- T F 27. The supply schedule of pesos has a negative-sloping region corresponding to the inelastic region on the Mexican demand schedule for foreign currency.
- T F 28. If the Swiss demand for dollars is elastic, a depreciation of the dollar against the franc will lead to a greater quantity of francs being supplied to the foreign exchange market to obtain dollars.
- T F 29. If the Swiss demand for dollars is inelastic, an appreciation of the dollar against the franc will lead to a greater quantity of francs being supplied to the foreign exchange market to obtain dollars.
- T F 30. If the Swiss demand for dollars is elastic, an appreciation of the dollar against the franc will lead to a greater quantity of francs being supplied to the foreign exchange market to obtain dollars.
- T F 31. If the Swiss demand for dollars is inelastic, a depreciation of the dollar against the franc will lead to a greater quantity of francs being supplied to the foreign exchange market to obtain dollars.
- T F 32. Movements along the demand schedule for pounds are caused by changes in the pound's exchange rate.
- T F 33. Given an upward-sloping supply schedule of pounds and a downward-sloping demand schedule for pounds, an increase in the demand schedule causes an appreciation of the dollar against the pound.
- T F 34. Given an upward-sloping supply schedule of pounds and a downward-sloping demand schedule for pounds, a decrease in the demand schedule causes an appreciation of the dollar against the pound.
- T F 35. Given an upward-sloping supply schedule of pounds and a downward-sloping demand schedule for pounds, an increase in the supply schedule causes an appreciation of the dollar against the pound.
- T F 36. Given an upward-sloping supply schedule of pounds and a downward-sloping demand schedule for pounds, a decrease in the supply schedule causes an appreciation of the dollar against the pound.

- T F 37. The trade-weighted dollar is the weighted average of the exchange rates between the dollar and the most important industrial-country trading partners of the United States.
- T F 38. If the trade-weighted dollar moves from an index value to 100 to 110, the dollar depreciates by 10 percent against the trade-weighted averages of the exchange rates of the major trading partners of the United States.
- T F 39. An increase in the trade-weighted value of the dollar indicates a dollar appreciation relative to the currencies of its major trading partners and a worsening of U.S. international competitiveness.
- T F 40. With arbitrage, a trader attempts to purchase a foreign currency at a low price and, at a later date, resell the currency at a higher price in order to make a profit.
- T F 41. Arbitrage results in a riskless profit since a trader purchases a currency at a low price and simultaneously resells it at a higher price.
- T F 42. If the exchange rate is \$0.01 per yen in New York and \$0.015 per yen in Tokyo, an arbitrageur could profit by buying yen in Tokyo and simultaneously sell them in New York.
- T F 43. Currency arbitrage tends to result in identical yen/dollar exchange rates in New York and in Tokyo.
- T F 44. In the forward market, the exchange rate is agreed on at the time of the currency contract, but payment is not made until the future delivery of the currency actually takes place.
- T F 45. If the spot price of the Swiss franc is \$0.4020 and the 90-day forward franc sells for \$0.4026, the franc is at a 90-day forward discount of \$0.0006, or at a 0.2 percent forward discount per annum against the dollar.
- T F 46. Suppose that Sears owes 1 million yen to a Japanese electronics manufacturer in 3 months. It could hedge against the risk of a depreciation of the dollar against the yen by contracting to purchase 1 million yen in the forward market, at today's forward rate, for delivery in 3 months.
- T F 47. Assume that Boeing anticipates receiving 20 million yen in 3 months from exports of jumbo jets to a Japanese airline. The firm could hedge against the risk of a depreciation of the dollar against the yen by contracting to sell its expected yen proceeds for dollars in the forward market at today's forward rate.
- T F 48. A U.S. investor's extra rate of return on an investment in France, as compared to the United States, equals the interest-rate differential adjusted for any change in the dollar/franc exchange rate.
- T F 49. A currency speculator's goal is to buy a currency at a low price and immediately resell it at a higher price, thus realizing a riskless profit.
- T F 50. Stabilizing speculation reinforces market forces by intensifying an appreciation or a depreciation in a currency's exchange value.

ANSWERS**Answers to Multiple-Choice Questions**

1. a	14. a	27. b	40. d	53. b
2. b	15. d	28. c	41. c	54. b
3. b	16. d	29. c	42. d	55. c
4. c	17. d	30. a	43. b	56. c
5. a	18. a	31. d	44. a	57. a
6. a	19. b	32. a	45. d	58. a
7. b	20. b	33. b	46. d	59. a
8. a	21. d	34. b	47. a	60. c
9. b	22. a	35. d	48. c	61. c
10. c	23. d	36. b	49. a	62. c
11. a	24. d	37. a	50. d	63. a
12. d	25. c	38. b	51. a	
13. c	26. a	39. a	52. a	

Answers to True-False Questions

1. F	11. T	21. F	31. F	41. T
2. F	12. F	22. T	32. F	42. F
3. T	13. T	23. F	33. F	43. T
4. T	14. T	24. T	34. T	44. T
5. F	15. F	25. F	35. T	45. F
6. T	16. T	26. F	36. F	46. T
7. F	17. F	27. T	37. T	47. F
8. F	18. T	28. T	38. F	48. T
9. T	19. F	29. F	39. T	49. F
10. T	20. F	30. T	40. F	50. F