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International Financial Management (Đại học Tôn Đức Thắng)



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Chapter 1—Multinational Financial
Management: An Overview

1. The commonly accepted goal of the MNC is to:
 - a. maximize short-term earnings.
 - b. **maximize shareholder wealth.**
 - c. minimize risk.
 - d. A and C.
 - e. maximize international sales.
2. With regard to corporate goals, an MNC is mostly concerned with maximizing _____, and a purely domestic firm is mostly concerned with maximizing _____.
 - a. shareholder wealth; short-term earnings
 - b. **shareholder wealth; shareholder wealth**
 - c. short-term earnings; sales volume
 - d. short-term earnings; shareholder wealth
3. For the MNC, agency costs are typically:
 - a. non-existent.
 - b. **larger than agency costs of a small purely domestic firm.**
 - c. smaller than agency costs of a small purely domestic firm.
 - d. the same as agency costs of a small purely domestic firm.
4. Which of the following could reduce agency problems for an MNC?
 - a. stock options as managerial compensation.
 - b. hostile takeover threat.
 - c. investor monitoring.
 - d. **all of the above are forms of corporate control that could reduce agency problems for an MNC.**
5. The valuation of an MNC should rise when an event causes the expected cash flows from foreign to _____ and when foreign currencies denominating these cash flows are expected to _____.
 - a. decrease; appreciate
 - b. **increase; appreciate**
 - c. decrease; depreciate
 - d. increase; depreciate
6. Which of the following theories identifies specialization as a reason for international business?
 - a. **theory of comparative advantage.**
 - b. imperfect markets theory.
 - c. product cycle theory.
 - d. none of the above
7. Which of the following theories identifies the non-transferability of resources as a reason for international business?
 - a. theory of comparative advantage.
 - b. **imperfect markets theory.**
 - c. product cycle theory.
 - d. none of the above
8. Which of the following theories suggests that firms seek to penetrate new markets over time?
 - a. theory of comparative advantage.
 - b. imperfect markets theory.
 - c. **product cycle theory.**
 - d. none of the above
9. Which of the following industries would most likely take advantage of lower costs in some less developed foreign countries?
 - a. **assembly line production.**
 - b. specialized professional services.
 - c. nuclear missile planning.
 - d. planning for more sophisticated computer technology.
10. Due to the risks involved in international business, firms should:
 - a. only consider international business in major countries.
 - b. maintain international business to no more than 20% of total business.
 - c. maintain international business to no more than 35% of total business.
 - d. **none of the above**
13. The agency costs of an MNC are likely to be lower if it:
 - a. scatters its subsidiaries across many foreign countries.
 - b. increases its volume of international business.
 - c. **uses a centralized management style.**
 - d. A and B.
14. An MNC may be more exposed to agency problems if most of its shares are held by:
 - a. a few mutual funds
 - b. **a widely dispersed set of individual investors**
 - c. a few pension funds
 - d. all of the above would prevent agency problems
15. The Sarbanes-Oxley Act improves corporate governance of MNCs because it:

- verifying financial statements**
- b. eliminates stock options as a form of compensation
 - c. ties executive compensation to firm performance
 - d. places a limit on the amount of funds that managers can spend
16. **MNCs can improve their internal control process by all of the following, except:**
- a. establishing a centralized data base of information
 - b. ensuring that all data are reported consistently among subsidiaries
 - c. ensuring that the MNC always borrows from countries where interest rates are lowest**
 - d. using a system that checks internal data for unusual discrepancies
22. **Which of the following is an example of direct foreign investment?**
- a. exporting to a country.
 - b. establishing licensing arrangements in a country.
 - c. purchasing existing companies in a country.**
 - d. investing directly (without brokers) in foreign stocks.
23. **According to the text, a disadvantage of licensing is that:**
- a. it prevents a firm from importing.
 - b. it is difficult to ensure quality control of the production process.**
 - c. it prevents a firm from exporting.
 - d. none of the above
24. **_____ are most commonly classified as a direct foreign investment.**
- a. Foreign acquisitions**
 - b. Purchases of international stocks
 - c. Licensing agreements
 - d. Exporting transactions
29. **Which of the following is not mentioned in the text as an additional risk resulting from international business?**
- a. exchange rate fluctuations.
 - b. political risk.
 - c. interest rate risk.**
 - d. exposure to foreign economies.
30. **Licensing obligates a firm to provide , while franchising obligates a firm to provide .**
- a. a specialized sales or service strategy; its technology
 - b. its technology; a specialized sales or service strategy**
 - c. its technology; its technology
 - d. a specialized sales or service strategy; a specialized sales or service strategy
- e. its technology; an initial investment
31. **Which of the following is not a way in which agency problems can be reduced through corporate control?**
- a. executive compensation.
 - b. threat of hostile takeover.
 - c. acquisition of a foreign subsidiary.**
 - d. monitoring by large shareholders.
43. **International trade:**
- a. is a relatively conservative approach to foreign market penetration.
 - b. entails minimal risk.
 - c. does not require large amount of investment.
 - d. all of the above.**
44. **Assume that an American firm wants to engage in international business without major investment in the foreign country. Which method is least appropriate in this situation?**
- a. International Trade
 - b. Licensing
 - c. Franchising
 - d. Direct foreign investment**
46. **The MNC's value depends on all of the following, except:**
- a. MNC's required rate of return
 - b. Amount of MNC's cash flows in particular currency
 - c. The exchange rate at which cash flows are converted to dollars
 - d. The value of MNC depends on all of the above factors**
47. **Which of the following is not an example of political risk?**
- a. Government may impose taxes on subsidiary
 - b. Government may impose barriers on subsidiary
 - c. Consumers may boycott the MNC
 - d. Consumers' income levels will decrease, thus decreasing consumption.**
50. **International trade generally results in exposure to international political risk and exposure to international economic conditions, when compared to other methods of international business.**
- a. higher; lower
 - b. higher; higher
 - c. lower; higher
 - d. lower; lower**

51. Assume that Boca Co. wants to expand its business to Japan, and wants complete control over the operations in Japan. Which method of international business is most appropriate for Boca Co?
- Joint venture
 - Licensing**
 - Partial acquisition of existing Japanese firm
 - Establishment of Japanese subsidiary
54. Assume that Live Co. has expected cash flows of \$200,000 from domestic operations, SF200,000 from Swiss operations, and 150,000 euros from Italian operations at the end of the year. The Swiss franc's value and euro's value are expected to be \$.83 and \$1.29 respectively, at the end this year. What are the expected dollar cash flows of Live Co?
- \$200,000
 - \$559,500** $200,000 + 200,000 \times 0.83 + 150,000 \times 1.29$
 - \$582,500
 - \$393,500
55. Saller Co. has a subsidiary in Mexico. The expected cash flows in pesos to be received in the future from this subsidiary have not changed since last month, but the valuation of Saller Co. has declined since last month. What could've caused this decline in value?
- A weaker Mexican economy
 - Lower Mexican interest rates
 - Depreciation of the Mexican peso**
 - Appreciation of the Mexican peso.
56. Jensen Co. wants to establish a new subsidiary in Mexico that will sell computers to Mexican customers and remit earnings back to the U.S. parent. The value of this project will be favorably affected if the value of the peso_ while it establishes the new subsidiary and when the subsidiary starts operations.
- depreciates; appreciates**
 - appreciates; appreciates
 - appreciates; depreciates
 - depreciates; depreciates
59. Livingston Co. has a subsidiary in Korea. The subsidiary reinvests half of its net cash flows into operations and remits half to the parent. Livingston's expected cash flows from domestic business are \$100,000 and the Korean subsidiary is expected to generate 100 million Korean won at the end of the year. The expected value of won is \$.0012. What are the expected dollar cash flows of Livingston Co.?
- \$100,000
 - \$200,000
 - \$160,000** $100,000 + ((100 \text{tr} \times 0.0012) / 2)$
 - \$60,000
73. The goal of a multinational corporation (MNC) is
- The minimization of taxes remitted from foreign subsidiaries.
 - The establishment of subsidiaries in any country where operations would provide a return over and above the cost of capital, even if better projects are available domestically.
 - The maximization of shareholder wealth.**
 - The maximization of social benefits resulting from actions such as the employment of foreign managers.
74. Agency costs faced by multinational corporations (MNCs) may be larger than those faced by purely domestic firms because
- Monitoring of managers located in foreign countries is more difficult.
 - Foreign subsidiary managers raised in different cultures may not follow uniform goals.
 - MNCs are relatively large.
 - All of the above**
75. Which of the following is not one of the more common methods used by MNCs to improve their internal control process?
- Establishing a centralized database of information
 - Ensuring that all data are reported consistently among subsidiaries
 - Speeding the process by which all departments and all subsidiaries have access to the data that they need
 - Making executives more accountable for financial statements by personally verifying their accuracy
 - All of the above are common methods used by MNCs to improve their internal control process.**
76. Which of the following is not mentioned in the text as a theory of international business?
- Theory of Comparative Advantage
 - Globalization of Business Theory**
 - Imperfect Markets Theory

77. The most risky method(s) by which firms conduct international business is (are):
- Franchising.
 - The acquisitions of existing operations.
 - The establishment of new subsidiaries.
 - All of the above
 - B and C only**
78. The least risky method by which firms conduct international business is:
- Franchising.
 - The acquisitions of existing operations.
 - International Trade.**
 - The establishment of new subsidiaries.
 - Licensing
79. Which of the following does not constitute a form of direct foreign investment?
- Franchising
 - International trade**
 - Joint ventures
 - Acquisitions of existing operations
 - Establishment of new foreign subsidiaries

Chapter 2—International Flow of Funds

- Recently, the U.S. experienced an annual balance of trade representing a .

 - large surplus (exceeding \$100 billion)
 - small surplus
 - level of zero
 - deficit**

- A high home inflation rate relative to other countries would the home country's current account balance, other things equal. A high growth in the home income level relative to other countries would the home country's current account balance, other things equal.

 - increase; increase
 - increase; decrease
 - decrease; decrease**
 - decrease; increase

- If a country's government imposes a tariff on imported goods, that country's current account balance will likely (assuming no retaliation by other governments).

 - decrease
 - increase**
 - remain unaffected
 - either A or C are possible

- _____ purchases more U.S. exports than the other countries listed here.

 - Italy
 - Spain
 - Mexico
 - Canada**

- An increase in the current account deficit will place _____ pressure on the home currency value, other things equal.

 - upward
 - downward**
 - no
 - upward or downward (depending on the size of the deficit)

- If the home currency begins to appreciate against other currencies, this should__ the current account balance, other things equal (assume that substitutes are readily available in the countries, and that the prices charged by firms remain the same).

 - increase
 - have no impact on
 - reduce**
 - all of the above are equally possible

- The International Financial Corporation was established to:

 - enhance development solely in Asia through grants.
 - enhance economic development through non-subsidized loans (at market interest rates).
 - enhance economic development through low-interest rate loans (below-market rates).
 - enhance economic development of the private sector through investment in stock of corporations.**

- The World Bank was established to:

 - enhance development solely in Asia through grants.
 - enhance economic development through non-subsidized loans (at market interest rates).**
 - enhance economic development through low-interest rate loans (below-market rates).
 - enhance economic development of the private sector through investment in stock of corporations.

- The International Development Association was established to:

 - enhance development solely in Asia through grants.
 - enhance economic development through non-subsidized loans (at market interest rates).

- c. **enhance economic development through low-interest rate loans (below-market rates).**
d. enhance economic development of the private sector through investment in stock of corporations.
10. Which of the following would likely have the least direct influence on a country's current account?
a. inflation.
b. national income.
c. exchange rates.
d. tariffs.
e. **a tax on income earned from foreign stocks.**
11. The "J curve" effect describes:
a. the continuous long-term inverse relationship between a country's current account balance and the country's growth in gross national product.
b. **the short-run tendency for a country's balance of trade to deteriorate even while its currency is depreciating.**
c. the tendency for exporters to initially reduce the price of goods when their own currency appreciates.
d. the reaction of a country's currency to initially depreciate after the country's inflation rate declines.
12. An increase in the use of quotas is expected to:
a. reduce the country's current account balance, if other governments do not retaliate.
b. **increase the country's current account balance, if other governments do not retaliate.**
c. have no impact on the country's current account balance unless other governments retaliate.
d. increase the volume of a country's trade with other countries.
13. The U.S. typically has a balance-of-trade surplus in its trade with _____.
a. China
b. Japan
c. A and B
d. **none of the above**
14. The North American Free Trade Agreement (NAFTA) increased restrictions on:
a. trade between Canada and Mexico.
b. trade between Canada and the U.S.
c. direct foreign investment in Mexico by U.S. firms.
d. **none of the above.**
15. According to the text, international trade (exports plus imports combined) as a percentage of GDP is:
a. higher in the U.S. than in European countries.
b. **lower in the U.S. than in European countries.**
- c. higher in the U.S. than in about half the European countries, and lower in the U.S. than the others.
d. about the same in the U.S. as in European countries.
16. The direct foreign investment positions by U.S. firms have generally _____ over time; the direct foreign investment positions in the U.S. by non-U.S. firms have generally _____ over time.
a. **increased; increased**
b. increased; decreased
c. decreased; decreased
d. decreased; increased
17. Which of the following is the biggest target of direct foreign investment by U.S. firms?
a. Mexico.
b. Japan.
c. United Kingdom.
d. Germany.
18. The primary component of the current account is the:
a. **balance of trade.**
b. balance of money market flows.
c. balance of capital market flows.
d. unilateral transfers.
19. As a result of the European Union, restrictions on exports between _____ were reduced or eliminated.
a. member countries and the U.S.
b. **member countries**
c. member countries and European non-members
d. none of the above
20. Over the last several years, international trade (exports plus imports) as a percentage of GDP has generally:
a. **increased for most major countries.**
b. decreased for most major countries.
c. stayed about constant for most major countries.
d. increased for about half the major countries and decreased for the others.
21. Which is not a concern about the North American Free Trade Agreement (NAFTA)?
a. **its impact on U.S. inflation.**
b. its impact on U.S. unemployment.
c. lower environmental standards in Mexico.
d. different health laws for workers in Mexico.
22. A General Agreement on Tariffs and Trade (GATT) accord in 1993 called for:
a. **lower trade restrictions around the world.**

- b. increased trade restrictions outside of North America.
 - c. uniform environmental standards around the world.
 - d. uniform worker health laws.
23. Which of the following is mentioned in the text as a possible means by which the government may attempt to improve its balance of trade position (increase its exports or reduce its imports).
- a. It could attempt to strengthen its local currency value.
 - b. Firms based in a country receive subsidies from their government, produce products, and then export those products at a cheap price.
 - c. Firms based in one country are allowed by their government to offer bribes to large customers when pursuing business deals in a particular industry.
 - d. All of the above are mentioned.
24. The demand for U.S. exports tends to increase when:
- a. economic growth in foreign countries decreases.
 - b. the currencies of foreign countries strengthen against the dollar.
 - c. U.S. inflation rises.
 - d. none of the above.
25. "Dumping" is used in the text to represent the:
- a. exporting of goods that do not meet quality standards.
 - b. sales of junk bonds to foreign countries.
 - c. removal of foreign subsidiaries by the host government.
 - d. exporting of goods at prices below cost.
26. _____ is (are) income received by investors on foreign investments in financial assets (securities).
- a. Portfolio income
 - b. Direct foreign income
 - c. Unilateral transfers
 - d. Factor income
27. A weak home currency may not be a perfect solution to correct a balance of trade deficit because:
- a. it reduces the prices of imports paid by local companies.
 - b. it increases the prices of exports by local companies.
 - c. it prevents international trade transactions from being prearranged.
 - d. foreign companies may reduce the prices of their products to stay competitive.
28. Intracompany trade makes up approximately _____ percent of all international trade.
- a. 50
 - b. 70
 - c. 25
 - d. 13
29. Like the International Monetary Fund (IMF), the _____ is composed of a collection of nations as members. However, unlike the IMF, it uses the private rather than the government sector to achieve its objectives.
- a. World Bank
 - b. International Financial Corporation (IFC)
 - c. World Trade Organization (WTO)
 - d. International Development Association (IDA)
 - e. Bank for International Settlements (BIS)
30. The World Bank's Multilateral Investment Guarantee Agency (MIGA):
- a. offers various forms of export insurance.
 - b. offers various forms of import insurance.
 - c. offers various forms of exchange rate risk insurance.
 - d. provides loans to developing countries.
 - e. offers various forms of political risk insurance.
31. Also known as the "central banks' central bank," the attempts to facilitate cooperation among countries with regard to international transactions and provides assistance to countries experiencing a financial crisis.
- a. World Bank
 - b. International Financial Corporation (IFC)
 - c. World Trade Organization
 - d. International Development Association (IDA)
 - e. Bank for International Settlements (BIS)
32. Direct foreign investment into the U.S. represents a _____.
- a. capital inflow
 - b. trade inflow
 - c. capital outflow
 - d. trade outflow
47. A country's net outflow of funds affect its interest rates, and _____ affect its economic conditions.
- a. does; does
 - b. does; does not
 - c. does not; does not
 - d. does not; does

51. In recent years, the U.S. has had a relatively (compared to other countries)___ balance of trade with China.
- small; surplus
 - large; surplus
 - small; deficit
 - large; deficit**
55. Assume the U.S. has a balance of trade surplus with the Country of Thor. When individuals in Thor manufacture CDs and DVDs that look almost exactly like the original product produced in the U.S. and other countries, they_____the U.S. balance of trade surplus with Thor. This activity is called_.
- reduce; flipping
 - reduce; pirating**
 - increase; pirating
 - increase; flipping
56. Japan's annual interest rate has been relatively _____compared to other countries for several years, because the supply of funds in its credit market has been very_.
- low; small
 - high; small
 - low; large**
 - high; large
57. Without the international capital flows, there would be_____ funding available in the U.S. across all risk levels, and the cost of funding would be _____ regardless of the firm's risk level.
- more; lower
 - more; higher
 - less; lower
 - less; higher**
66. The _____ is the difference between exports and imports.
- balance of trade**
 - balance on goods and services
 - balance of payments
 - current account
67. Which of the following will probably not result in an increase in a country's current account balance (assuming everything else constant)?
- A decrease in the country's rate of inflation
 - A decrease in the country's national income level
 - An increase in government restrictions in the form of tariffs or quotas
 - An appreciation of the country's currency**
68. Which of the following factors probably does not directly affect a country's capital account and its components?
- Inflation**
 - Interest rates
 - Withholding taxes on foreign income
 - Exchange rate movements
69. The _____, an accord among 117 nations, called for lower tariffs around the world.
- General Agreement on Tariffs and Trade (GATT)**
 - North American Free Trade Agreement (NAFTA)
 - Single European Act of 1987
 - European Union Accord
70. Which of the following is not a "subtle" trade restriction Country X may use against Country Y?
- The government of Country X eliminates environmental restrictions.
 - The government of Country X subsidizes firms in its country to facilitate dumping.
 - The government of Country X provides tax breaks to firms in specific industries.
 - The government of Country X imposes a tariff on goods imported from Country Y.**
71. Which of the following statements is not true?
- Exporters may complain that they are being mistreated because the currency of their country is too weak.**
 - Outsourcing affects the balance of trade because it means that a service is purchased in another country.
 - Sometimes, trade policies are used to punish countries for various actions.
 - Tariffs imposed by the EU have caused some friction between EU countries that commonly import products and other EU countries.
72. Which of the following would increase the current account of Country X? Country Y is Country X's sole trading partner.
- Inflation increases in countries X and Y by comparable amounts.
 - Country X's and Country Y's currencies depreciate by the same amount.
 - Country X imposes tariffs on imports from Country Y, and Country Y retaliates by imposing an identical tax on X's exports.
 - The central banks of Country X and Country Y reduce the money supply to increase interest rates.**

73. _____ represent aid, grants, and gifts from one country to another.
- Transfer payments
 - Factor income
 - The balance of trade
 - The balance of payments
74. Which of the following is not a goal of the International Monetary Fund (IMF)?
- To promote cooperation among countries on international monetary issues
 - To promote stability in exchange rates
 - To enhance a country's long-term economic growth via the extension of structural adjustment loans
 - To promote free trade
75. According to the "J curve effect," a weakening of the U.S. dollar relative to its trading partners' currencies would result in an initial _____ in the current account balance, followed by a subsequent _____ in the current account balance.
- decrease; increase
 - increase; decrease
 - decrease; decrease
 - increase; increase

Chapter 3—International Financial Markets

1. Assume that a bank's bid rate on Swiss francs is \$.45 and its ask rate is \$.47. Its bid-ask percentage spread is:
- about 4.44%.
 - about 4.26%.**
 - about 4.03%.
 - about 4.17%.

SOLUTION: Bid-ask percentage spread = $(\$.47 - \$.45) / \$.47 = 4.26\%$

2. Assume that a bank's bid rate on Japanese yen is \$.0041 and its ask rate is \$.0043. Its bid-ask percentage spread is:
- about 4.99%.
 - about 4.88%.
 - about 4.65%.**
 - about 4.43%.

SOLUTION: Bid-ask percentage spread = $(\$.0043 - \$.0041) / \$.0043 = 4.65\%$

3. The bid/ask spread for small retail transactions is commonly in the range of _____ percent.
- 3 to 7**
 - .01 to .03
 - 10 to 15
 - .5 to 1
4. _____ is not a factor that affects the bid/ask spread.
- Order costs
 - Inventory costs
 - Volume
 - All of the above factors affect the bid/ask spread**
7. According to the text, the forward rate is commonly used for:
- hedging.**
 - immediate transactions.
 - previous transactions.
 - bond transactions.
8. If a U.S. firm desires to avoid the risk from exchange rate fluctuations, and it is receiving 100,000 in 90 days, it could:
- obtain a 90-day forward purchase contract on euros.
 - obtain a 90-day forward sale contract on euros.**
 - purchase euros 90 days from now at the spot rate.
 - sell euros 90 days from now at the spot rate.
9. If a U.S. firm desires to avoid the risk from exchange rate fluctuations, and it will need C\$200,000 in 90 days to make payment on imports from Canada, it could:
- obtain a 90-day forward purchase contract on Canadian dollars.**
 - obtain a 90-day forward sale contract on Canadian dollars.
 - purchase Canadian dollars 90 days from now at the spot rate.
 - sell Canadian dollars 90 days from now at the spot rate.
10. Assume the Canadian dollar is equal to \$.88 and the Peruvian Sol is equal to \$.35. The value of the Peruvian Sol in Canadian dollars is:
- about .3621 Canadian dollars.
 - about .3977 Canadian dollars.**
 - about 2.36 Canadian dollars.
 - about 2.51 Canadian dollars.

SOLUTION: $\$.35 / \$.88 = .3977$

11. Which of the following is not true with respect to spot market liquidity?
- The more willing buyers and sellers there are, the more liquid a market is.
 - The spot markets for heavily traded currencies such as the Japanese yen are very liquid.
 - A currency's liquidity affects the ease with which an MNC can obtain or sell that currency.
 - If a currency is illiquid, an MNC is typically able to quickly purchase that currency at a reasonable exchange rate.**
12. Forward markets for currencies of developing countries are:
- prohibited.
 - less liquid than markets for developed countries.**
 - more liquid than markets for developed countries.
 - only available for use by government agencies.
13. A forward contract can be used to lock in the _____ of a specified currency for a future point in time.
- purchase price
 - sale price
 - A or B**
 - none of the above
14. The forward market:
- for euros is very illiquid.
 - for Eastern European countries is very liquid.
 - does not exist for some currencies.**
 - none of the above
15. _____ is not a bank characteristic important to customers in need of foreign exchange.
- Quote competitiveness
 - Speed of execution
 - Forecasting advice
 - Advice about current market conditions
 - All of the above are important bank characteristics to customers in need of foreign exchange.**
16. The Basel II accord is focused on eliminating inconsistencies in _____ across countries.
- capital requirements**
 - deposit rates
 - deposit insurance
 - bank failure policies
17. The international money market primarily concentrates on:
- short-term lending (one year or less).**
 - medium-term lending.
 - long-term lending.
 - placing bonds with investors.
18. The international credit market primarily concentrates on:
- short-term lending (less than one year).
 - medium-term lending.**
 - long-term lending.
 - providing an exchange of foreign currencies for firms who need them.
19. The main participants in the international money market are:
- consumers.
 - small firms.
 - large corporations.**
 - small European firms needing European currencies for international trade.
20. LIBOR is:
- the interest rate commonly charged for loans between banks.**
 - the average inflation rate in European countries.
 - the maximum loan rate ceiling on loans in the international money market.
 - the maximum deposit rate ceiling on deposits in the international money market.
21. A syndicated loan:
- represents a loan by a single bank to a syndicate of corporations.
 - represents a loan by a single bank to a syndicate of country governments.
 - represents a direct loan by a syndicate of oil-producing exporters to a less developed country.
 - represents a loan by a group of banks to a borrower.**
22. The international money market is primarily served by:
- the governments of European countries, which directly intervene in foreign currency markets.
 - government agencies such as the International Monetary Fund that enhance development of countries.
 - several large banks that accept deposits and provide loans in various currencies.**
 - small banks that convert foreign currency for tourists and business visitors.

23. **International money market transactions normally represent:**
- the equivalent of \$1 million or more.**
 - the equivalent of \$1,000 to \$10,000.
 - the equivalent of between \$10,000 and \$100,000.
 - the equivalent of between \$100,000 and \$200,000.
25. **From 1944 to 1971, the exchange rate between any two currencies was typically:**
- fixed within narrow boundaries.**
 - floating, but subject to central bank intervention.
 - floating, and not subject to central bank intervention.
 - nonexistent; that is currencies were not exchanged, but gold was used to pay for all foreign transactions.
26. **As a result of the Smithsonian Agreement, the U.S. dollar was:**
- the currency to be used by all countries as a medium of exchange for international trade.
 - forced to be freely floating relative to all currencies without any boundaries.
 - devalued relative to major currencies.**
 - revalued (upward) relative to major currencies.
27. **According to the text, the average foreign exchange trading around the world _____ per day.**
- equals about \$200 billion
 - equals about \$400 billion
 - equals about \$700 billion
 - exceeds \$1 trillion**
28. **Assume a Japanese firm invoices exports to the U.S. in U.S. dollars. Assume that the forward rate and spot rate of the Japanese yen are equal. If the Japanese firm expects the U.S. dollar to against the yen, it would likely wish to hedge. It could hedge by dollars forward.**
- depreciate; buying
 - depreciate; selling**
 - appreciate; selling
 - appreciate; buying
29. **The bid-ask spread on an exchange rate can be used to directly determine:**
- how an exchange rate will change.
 - the transaction cost of foreign exchange.**
 - the forward premium.
 - the currency option premium.
30. **Futures contracts are typically _____; forward contracts are typically _____.**
- sold on an exchange; sold on an exchange
 - offered by commercial banks; sold on an exchange
 - sold on an exchange; offered by commercial banks**
 - offered by commercial banks; offered by commercial banks
31. **Eurobonds:**
- are usually issued in bearer form.**
 - typically carry several protective covenants.
 - cannot contain call provisions.
 - A and B
32. **Which of the following is true?**
- Non-U.S. firms may desire to issue bonds in the U.S. due to less regulations in the U.S.
 - U.S. firms may desire to issue bonds in the U.S. due to less regulations in the U.S.
 - U.S. firms may desire to issue bonds in the non-U.S. markets due to less regulations in non-U.S. countries.**
 - A and B
33. **Eurobonds:**
- can be issued only by European firms.
 - can be sold only to European investors.
 - A and B
 - none of the above**
34. **Which currency is used the most to denominate Eurobonds?**
- the British pound.
 - the Japanese yen.
 - the U.S. dollar.**
 - the Swiss franc.
35. **When the foreign exchange market opens in the U.S. each morning, the opening exchange rate quotations will be based on the:**
- closing prices in the U.S. during the previous day.
 - closing prices in Canada during the previous day.
 - prevailing prices in locations where the foreign exchange markets have been open.**
 - officially set by central banks before the U.S. market opens.
36. **The U.S. dollar is not ever used as a medium of exchange in:**
- industrialized countries outside the U.S.
 - in any Latin American countries.
 - in Eastern European countries where foreign exchange restrictions exist.

d. none of the above

37. Which of the following is not true regarding the Bretton Woods Agreement?

- a. It called for fixed exchange rates between currencies.
- b. Governments intervened to prevent exchange rates from moving more than 1 percent above or below their initially established levels.
- c. The agreement lasted from 1944 until 1971.
- d. Each country used gold to back its currency.

38. A Japanese yen is worth \$.0080, and a Fijian dollar (F\$) is worth \$.5900. What is the value of the yen in Fijian dollars (i.e., how many Fijian dollars do you need to buy a yen)?

- a. 73.75.
- b. 125.
- c. 1.69.
- d. 0.014.

SOLUTION: $(\$0.008/\$.59) = \text{F}\$.014/\text{¥}$

51. A share of the ADR of a Dutch firm represents one share of that firm's stock that is traded on a Dutch stock exchange. The share price of the firm was 15 euros when the Dutch market closed. As the U.S. market opens, the euro is worth \$1.10. Thus, the price of the ADR should be .

- a. \$13.64
- b. \$15.00
- c. \$16.50
- d. 16.50 euros

SOLUTION: $15 \times \$1.10 = \16.50

52. The ADR of a British firm is convertible into 3 shares of stock. The share price of the firm was 30 pounds when the British market closed. When the U.S. market opens, the pound is worth \$1.63. The price of this ADR should be \$.

- a. 48.90
- b. 146.70
- c. 55.21
- d. none of the above

SOLUTION: $3 \times 30 \times \$1.63 = \146.70

69. In general, stock markets allow for more price efficiency and attract more investors when they have all of the following except:

- a. more voting rights for shareholders.
- b. more legal protection.
- c. more enforcement of the laws.
- d. less stringent accounting requirements.

71. If companies can rely on stock markets to obtain funds, they will have to rely more heavily on the _____ market to raise long-term funds.

- a. derivative
- b. long-term credit
- c. money
- d. foreign exchange

73. Assume that the bank's bid quote of Mexican peso is \$.126 and ask price is \$.129. If you have Mexican pesos, what is the amount of pesos that you need to purchase \$100,000?

- a. 12,600
- b. 775,194
- c. 793,651
- d. 12,900

$100,000/0.126$

75. An obligation to purchase a specific amount of currency at a future point in time is called a:

- a. call option
- b. spot contract
- c. put option
- d. forward contract

76. Which of the following is not a method that can be used to invest internationally?

- a. Investment in MNC stocks
- b. American depository receipts (ADRs)
- c. World Equity benchmark Shares (WEBS)
- d. International mutual funds
- e. All of the above are methods that can be used to invest internationally.

78. Assume that \$1 is equal to .85 Euros and 98 yen. The value of yen in euros is

- a. .01
- b. 118
- c. 1.18
- d. .0087

$0.85/98$

79. When obtaining a loan, the risk premium paid above LIBOR depends on the:

- a. risk-free interest rate of the borrower.
- b. credit risk of the borrower.
- c. borrower's stock price.
- d. lender's stock price.

80. The largest global exchange is:
- NASDAQ
 - Tokyo Stock Exchange
 - NYSE Euronext**
 - London Stock Exchange
81. Which of the following is not true about syndicated loans?
- A borrower that receives a syndicated loan incurs various fees besides the interest rate.
 - The loans are only denominated in U.S. dollars.**
 - The loans are provided by a group of banks to a borrower.
 - The loans are usually formed in 6 weeks or less.
82. The interest rate on the syndicated loan depends on the:
- currency denominating the loan.
 - maturity of the loan.
 - creditworthiness of the borrower.
 - interbank lending rate.
 - all of the above.**
83. Assume a U.S. firm has to pay for Korean imports in 60 days. It expects that Korean won will depreciate, but it still wants to hedge its risk. What type of hedging is more appropriate in this situation:
- Buy dollars forward
 - Sell dollars forward
 - Purchase call option**
 - Purchase put option
84. Certificates representing bundles of stock of non-U.S. firms are called:
- Eurobonds
 - ADRs**
 - FRNs
 - Eurobor
85. Assume that the spot rate of the Singapore dollar is \$.664. The ADR of a Singapore firm is convertible into 3 shares of stock. The price of an ADR is \$20. What is the share price of the firm in Singapore dollars?
- 10**
 - 13.28
 - 30.12
 - 39.84
- $1S = \$0.664$
 $1 \text{ ADR} = 3 \text{ shares} = \20
 $\Rightarrow 1 \text{ share} = \$20/3$
 $1S = \$0.664$
 $?S = \$20/3$
86. Which of the following is not true regarding ADRs?
- ADRs are denominated in the currency of the
 - stock's home country.**
 - ADRs enable U.S. investors to avoid cross-border transactions
 - ADRs allow non-U.S. firms to tap into U.S. market for funds.
 - ADRs sometimes allow for arbitrage opportunities.
94. Which of the following is not a possible bid/ask quotation for the Barbados dollar?
- \$.50/\$.51
 - \$.49/\$.50
 - \$.52/\$.51**
 - \$.51/\$.52
95. Your company expects to receive 5,000,000 Japanese yen 60 days from now. You decide to hedge your position by selling Japanese yen forward. The current spot rate of the yen is \$.0089, while the forward rate is \$.0095. You expect the spot rate in 60 days to be \$.0090. How many dollars will you receive for the 5,000,000 yen 60 days from now if you sell yen forward?
- \$44,500
 - \$45,000
 - \$526 million
 - \$47,500**
- $5,000,000 \times 0.0095$
96. Which of the following is probably not an example of the use of forward contracts by an MNC?
- Hedging pound payables by selling pounds forward**
 - Hedging peso receivables by selling pesos forward
 - Hedging yen payables by purchasing yen forward
 - Hedging peso payables by purchasing pesos forward
97. A quotation representing the value of a foreign currency in dollars is referred to as a(n) quotation; a quotation representing the number of units of a foreign currency per dollar is referred to as a(n) quotation.
- direct; indirect**
 - indirect; direct
 - direct; direct
 - indirect; indirect
98. You observe a quotation of the Japanese yen (¥) of \$0.007. You are, however, interested in the number of yen per dollar. Thus, you calculate the quotation of ¥/\$.
- direct; 142.86
 - indirect; 142.86**
 - indirect; 150

99. Which of the following is not true regarding electronic communications networks (ECNs)?
- They have a visible trading floor.
 - Trades are executed by a computer network.
 - They have been created in many countries to match orders between buyers and sellers.
 - They allow investors to place orders on their computers.
100. Which of the following is probably not appropriate for an MNC wishing to reduce its exposure to British pound payables?
- Purchase pounds forward
 - Buy a pound futures contract
 - Buy a pound put option
 - Buy a pound call option
101. Futures contracts are sold on exchanges and are consequently___ than forward contracts, which can be to satisfy an MNC's needs.
- more standardized; standardized
 - more standardized; custom-tailored
 - more custom-tailored; standardized
 - more custom-tailored; custom-tailored
102. An MNC's short-term financing decisions are satisfied in the market, while its medium debt financing decisions are satisfied in the market.
- international money; international credit
 - international money; international bond
 - international credit; international money
 - international bond; international credit

Chapter 4—Exchange Rate Determination

1. The value of the Australian dollar (A\$) today is \$0.73. Yesterday, the value of the Australian dollar was \$0.69. The Australian dollar _____ by _____ %.
- depreciated; 5.80
 - depreciated; 4.00
 - appreciated; 5.80
 - appreciated; 4.00

SOLUTION: $(\$0.73 - \$0.69)/\$0.69 = 5.80\%$

2. If a currency's spot rate market is_ , its exchange rate is likely to be to a single large purchase or sale transaction.
- liquid; highly sensitive
 - illiquid; insensitive
 - illiquid; highly sensitive
 - none of the above.

3. _____ is not a factor that causes currency supply and demand schedules to change.
- Relative inflation rates
 - Relative interest rates
 - Relative income levels
 - Expectations
 - All of the above are factors that cause currency supply and demand schedules to change.
4. A large increase in the income level in Mexico along with no growth in the U.S. income level is normally expected to cause (assuming no change in interest rates or other factors) a(n)_____ in Mexican demand for U.S. goods, and the Mexican peso should_____.
- increase; appreciate
 - increase; depreciate
 - decrease; depreciate
 - decrease; appreciate
5. An increase in U.S. interest rates relative to German interest rates would likely the U.S. demand for euros and__ the supply of euros for sale.
- reduce; increase
 - increase; reduce
 - reduce; reduce
 - increase; increase
6. Investors from Germany, the United States, and the U.K. frequently invest in each other based on prevailing interest rates. If British interest rates increase, German investors are likely to buy dollar-denominated securities, and the euro is likely to relative to the dollar.
- fewer; depreciate
 - fewer; appreciate
 - more; depreciate
 - more; appreciate
7. When the "real" interest rate is relatively low in a given country, then the currency of that country is typically expected to be:
- weak, since the country's quoted interest rate would be low relative to the inflation rate.
 - strong, since the country's quoted interest rate would be low relative to the inflation rate.
 - strong, since the country's quoted interest rate would be high relative to the inflation rate.

8. Assume that the inflation rate becomes much higher in the U.K. relative to the U.S. This will place pressure on the value of the British pound. Also, assume that interest rates in the U.K. begin to rise relative to interest rates in the U.S. The change in interest rates will place pressure on the value of the British pound.
- upward; downward
 - upward; upward
 - downward; upward**
 - downward; downward

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

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

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

- \$521,325.
- \$500,520.
- \$104,262.
- \$208,044.**

SOLUTION:

- Borrow \$5 million.
- Convert to NZ\$: $\$5,000,000 / \$.48 = \text{NZ}\$10,416,667$.
- Invest the NZ\$ at an annualized rate of 6.80% over five days.

$$\text{NZ}\$10,416,667 \times [1 + 6.80\% (5/360)] = \text{NZ}\$10,426,505$$
- Convert the NZ\$ back to dollars:

$$\text{NZ}\$10,426,505 \times \$.50 = \$5,213,252$$
- Repay the dollars borrowed. The repayment amount is:

$$\begin{aligned} &\$5,000,000 \times [1 + 7.5\% (5/360)] \\ &= \$5,000,000 \times [1.00104] \\ &= \$5,005,208 \end{aligned}$$
- After repaying the loan, the remaining dollar profit is:

$$\$5,213,252 - \$5,005,208 = \$208,044$$

11. Assume the following information regarding U.S. and European annualized interest rates:

<u>Currency</u>	<u>Lending Rate</u>	<u>Borrowing Rate</u>
U.S. Dollar (\$)	6.73%	7.20%

Euro (€) 6.80% 7.28%

Tensor Bank can borrow either \$20 million or €20 million. The current spot rate of the euro is \$1.13. Furthermore, Tensor Bank expects the spot rate of the euro to be \$1.10 in 90 days. What is Tensor Bank's dollar profit from speculating if the spot rate of the euro is indeed \$1.10 in 90 days?

- \$579,845.**
- \$583,800.
- \$588,200.
- \$584,245.

SOLUTION:

- Borrow €20 million.
- Convert the €20 million to $\text{€}20,000,000 \times \$1.13 = \$22,600,000$.
- Invest the \$22,600,000 at an annualized rate of 6.73% for 90 days.

$$\begin{aligned} &\$22,600,000 \times [1 + 6.73\% (90/360)] \\ &= \$22,980,245 \end{aligned}$$
- Determine euros owed: $\text{€}20,000,000 \times [1 + 7.28\% (90/360)] = \text{€}20,364,000$.
- Determine dollars needed to repay euro loan:

$$\text{€}20,364,000 \times \$1.10 = \$22,400,400$$
- The dollar profit is $\$22,980,245 - \$22,400,400 = \$579,845$.

12. The equilibrium exchange rate of pounds is \$1.70. At an exchange rate of \$1.72 per pound:

- U.S. demand for pounds would exceed the supply of pounds for sale and there would be a shortage of pounds in the foreign exchange market.
- U.S. demand for pounds would be less than the supply of pounds for sale and there would be a shortage of pounds in the foreign exchange market.
- U.S. demand for pounds would exceed the supply of pounds for sale and there would be a surplus of pounds in the foreign exchange market.
- U.S. demand for pounds would be less than the supply of pounds for sale and there would be a surplus of pounds in the foreign exchange market.**

13. Assume that Swiss investors have francs available to invest in securities, and they initially view U.S. and British interest rates as equally attractive. Now assume that U.S. interest rates increase while British interest rates stay the same. This would likely cause:

- the Swiss demand for dollars to decrease and the dollar will depreciate against the pound.
- the Swiss demand for dollars to increase and the dollar will depreciate against the Swiss franc.
- the Swiss demand for dollars to increase and the dollar will appreciate against the Swiss**

- franc.
- d. the Swiss demand for dollars to decrease and the dollar will appreciate against the pound.
14. **The real interest rate adjusts the nominal interest rate for:**
- exchange rate movements.
 - income growth.
 - inflation.**
 - government controls.
15. **If U.S. inflation suddenly increased while European inflation stayed the same, there would be:**
- an increased U.S. demand for euros and an increased supply of euros for sale.
 - a decreased U.S. demand for euros and an increased supply of euros for sale.
 - a decreased U.S. demand for euros and a decreased supply of euros for sale.
 - an increased U.S. demand for euros and a decreased supply of euros for sale.**
16. **If inflation in New Zealand suddenly increased while U.S. inflation stayed the same, there would be:**
- an inward shift in the demand schedule for NZ\$ and an outward shift in the supply schedule for NZ\$.**
 - an outward shift in the demand schedule for NZ\$ and an inward shift in the supply schedule for NZ\$.
 - an outward shift in the demand schedule for NZ\$ and an outward shift in the supply schedule for NZ\$.
 - an inward shift in the demand schedule for NZ\$ and an inward shift in the supply schedule for NZ\$.
17. **If the U.S. and Japan engage in substantial financial flows but little trade, _____ directly influences their exchange rate the most. If the U.S. and Switzerland engage in much trade but little financial flows, _____ directly influences their exchange rate the most.**
- interest rate differentials; interest rate differentials
 - inflation and interest rate differentials; interest rate differentials
 - income and interest rate differentials; inflation differentials
 - interest rate differentials; inflation and income differentials**
18. **If inflation increases substantially in Australia while U.S. inflation remains unchanged, this is expected to place pressure on the value of the Australian dollar with respect to the U.S. dollar.**
- upward
 - downward**
 - either upward or downward (depending on the degree of the increase in Australian inflation)
 - none of the above; there will be no impact
19. **Assume that British corporations begin to purchase more supplies from the U.S. as a result of several labor strikes by British suppliers. This action reflects:**
- an increased demand for British pounds.
 - a decrease in the demand for British pounds.
 - an increase in the supply of British pounds for sale.**
 - a decrease in the supply of British pounds for sale.
21. **The phrase "the dollar was mixed in trading" means that:**
- the dollar was strong in some periods and weak in other periods over the last month.
 - the volume of trading was very high in some periods and low in other periods.
 - the dollar was involved in some currency transactions, but not others.
 - the dollar strengthened against some currencies and weakened against others.**
22. **Assume that the U.S. places a strict quota on goods imported from Chile and that Chile does not retaliate. Holding other factors constant, this event should immediately cause the U.S. demand for Chilean pesos to _____ and the value of the peso to _____.**
- increase; increase
 - increase; decline
 - decline; decline**
 - decline; increase
23. **Any event that increases the U.S. demand for euros should result in a(n) _____ in the value of the euro with respect to _____, other things being equal.**
- increase; U.S. dollar**
 - increase; nondollar currencies
 - decrease; nondollar currencies
 - decrease; U.S. dollar

24. Any event that reduces the U.S. demand for Japanese yen should result in a(n) _____ in the value of the Japanese yen with respect to _____, other things being equal.
- increase; U.S. dollar
 - increase; nondollar currencies
 - decrease; nondollar currencies
 - decrease; U.S. dollar**
25. Any event that increases the supply of British pounds to be exchanged for U.S. dollars should result in a(n) _____ in the value of the British pound with respect to _____, other things being equal.
- increase; U.S. dollar
 - increase; nondollar currencies
 - decrease; nondollar currencies
 - decrease; U.S. dollar**
26. Any event that reduces the supply of Swiss francs to be exchanged for U.S. dollars should result in a(n) _____ in the value of the Swiss franc with respect to _____, other things being equal.
- increase; U.S. dollar**
 - increase; nondollar currencies
 - decrease; nondollar currencies
 - decrease; U.S. dollar
27. Assume that the U.S. experiences a significant decline in income, while Japan's income remains steady. This event should place _____ pressure on the value of the Japanese yen, other things being equal. (Assume that interest rates and other factors are not affected.)
- upward
 - downward**
 - no
 - upward and downward (offsetting)
28. News of a potential surge in U.S. inflation and zero Chilean inflation places _____ pressure on the value of the Chilean peso. The pressure will occur _____.
- upward; only after the U.S. inflation surges
 - downward; only after the U.S. inflation surges
 - upward; immediately**
 - downward; immediately
29. Assume that Canada places a strict quota on goods imported from the U.S. and that the U.S. does not retaliate. Holding other factors constant, this event should immediately cause the supply of Canadian dollars to be exchanged for U.S. dollars to _____ and the value of the Canadian dollar to _____.
- increase; increase
 - increase; decline
 - decline; decline
 - decline; increase**
30. Assume that Japan places a strict quota on goods imported from the U.S. and the U.S. places a strict quota on goods imported from Japan. This event should immediately cause the U.S. demand for Japanese yen to _____, and the supply of Japanese yen to be exchanged for U.S. dollars to _____.
- increase; increase
 - increase; decline
 - decline; decline**
 - decline; increase
31. Which of the following is not mentioned in the text as a factor affecting exchange rates?
- relative interest rates.
 - relative inflation rates.
 - government controls.
 - expectations.
 - all of the above are mentioned in the text as factors affecting exchange rates.**
32. If a country experiences high inflation relative to the U.S., its exports to the U.S. should _____, its imports should _____, and there is _____ pressure on its currency's equilibrium value.
- decrease; increase; upward
 - decrease; decrease; upward
 - increase; decrease; downward
 - decrease; increase; downward**
33. If a country experiences an increase in interest rates relative to U.S. interest rates, the inflow of U.S. funds to purchase its securities should _____, the outflow of its funds to purchase U.S. securities should _____, and there is _____ pressure on its currency's equilibrium value.
- increase; decrease; downward
 - decrease; increase; upward
 - increase; decrease; upward**
 - decrease; increase; downward
48. If a currency's spot market is _____, its exchange rate is likely to be _____ to a single large purchase or sale transaction.
- liquid; highly sensitive
 - illiquid; insensitive
 - liquid; insensitive**
 - none of the above
49. The value of euro was \$1.30 last week. During last week the euro depreciated by 5%. What is the value of euro today?
- \$1.365
 - \$1.235 = $1.3 \times (1 - .05)$**

52. Assume that the income levels in U.K. start to rise, while U.S. income levels remain unchanged. This will place pressure on the value of British pound. Also, assume that U.S. interest rates rise, while the British pound remains unchanged. This will place pressure on the value of British pound.
- downward; downward
 - upward; downward
 - upward; upward
 - downward; upward**
53. If the Fed announces that it will decrease the U.S. interest rates, and European Central Bank takes no action, then the value of euro will_ against the value of U.S. dollar. The Fed's action is called intervention.
- appreciate; direct
 - depreciate; direct
 - appreciate; indirect**
 - depreciate; indirect
54. Assume that the total value of investment transactions between U.S. and Mexico is minimal. Also assume that total dollar value of trade transactions between these two countries is very large. Now assume that Mexico's inflation has suddenly increased, and Mexican interest rates have suddenly increased. Overall, this would put _____ pressure on the value of Mexican peso. The inflation effect should be_ pronounced than the interest rate effect.
- downward; more**
 - upward; more
 - downward; less
 - upward; less
55. If U.S. experiences a sudden surge in inflation and surge in interest rates while Japanese inflation and interest rates remain unchanged, the value of Japanese yen will against the U.S. dollar.
- appreciate
 - depreciate
 - remain unchanged
 - cannot be determined from the information provided.**
56. If the Japanese yen is expected to appreciate against the U.S. dollar and interest rates in the U.S. and Japan are similar, banks may try speculating on this anticipated exchange rate movement by borrowing and investing in .
- yen; dollars
 - yen; yen
 - dollars; yen**
 - dollars; dollars
57. British investors frequently invest in the U.S. or Italy, depending on the prevailing interest rates. If Italian interest rates suddenly rise high above U.S. rates, the investors will_____ the supply of pounds to be exchanged for dollars and thus put pressure on the value of the pound against the U.S. dollar.
- increase; downward
 - decrease; upward**
 - increase; upward
 - decrease; downward
58. The equilibrium exchange rate of the Swiss franc is \$0.90. At an exchange rate \$.83:
- U.S. demand for Swiss francs would exceed the supply of francs for sale and there would be a shortage of francs in the foreign exchange market.**
 - U.S. demand for Swiss francs would be less than the supply of francs for sale and there would be a shortage of francs in the foreign exchange market.
 - U.S. demand for Swiss francs would exceed the supply of francs for sale and there would be a surplus of francs in the foreign exchange market.
 - U.S. demand for Swiss francs would be less than the supply of francs for sale and there would be a surplus of Swiss francs in the foreign exchange market.
60. Assume that the British government eliminates all controls on imports by British companies. Other things being equal, the U.S. demand for pounds would , the supply of pounds for sale would _____, and the equilibrium value of the pound would_.
- increase; increase; increase
 - decrease; increase; decrease
 - remain unchanged; increase; decrease**
 - remain unchanged; increase; increase
62. Assume that U.S. inflation is expected to surge in the near future. The expectation of surge in inflation will most likely place pressure on U.S. dollar immediately.
- upward**
 - downward
 - no
 - cannot be determined

69. Illiquid currencies tend to exhibit volatile exchange rate movements, as the equilibrium prices of their currencies adjust to changes in supply and demand conditions.
- less; even minor
 - less; only large
 - more; even minor**
 - more; only large
70. Which of the following is not mentioned in the text as a factor affecting exchange rates?
- Relative interest rates
 - Relative inflation rates
 - Government controls
 - Expectations
 - All of the above are mentioned in the text as factors affecting exchange rates.**
71. Which of the following events would most likely result in an appreciation of the U.S. dollar?
- U.S. inflation is very high.
 - The Fed indicates that it will raise U.S. interest rates.**
 - Future U.S. interest rates are expected to decline.
 - Japan is expected to increase interest rates in the near future.
72. Which of the following interactions will likely have the least effect on the dollar's value? Assume everything else is held constant.
- A reduction in U.S. inflation accompanied by an increase in real U.S. interest rates
 - A reduction in U.S. inflation accompanied by an increase in nominal U.S. interest rates
 - An increase in U.S. inflation accompanied by an increase in nominal, but not real, U.S. interest rates**
 - An increase in Singapore's inflation accompanied by an increase in real U.S. interest rates
73. If a country experiences high inflation relative to the U.S., its exports to the U.S. should___, its imports should___, and there is___ pressure on its currency's equilibrium value.
- decrease; increase; upward
 - decrease; decrease; upward
 - increase; decrease; downward
 - decrease; increase; downward**
74. If a country experiences an increase in interest rates relative to U.S. interest rates, the inflow of U.S. funds to purchase its securities should___, the outflow of its funds to purchase U.S. securities should___, and there is___ pressure on its currency's equilibrium value.

- increase; decrease; downward
- decrease; increase; upward
- increase; decrease; upward**
- decrease; increase; downward

Chapter 5—Currency Derivatives

- Kalons, Inc. is a U.S.-based MNC that frequently imports raw materials from Canada. Kalons is typically invoiced for these goods in Canadian dollars and is concerned that the Canadian dollar will appreciate in the near future. Which of the following is not an appropriate hedging technique under these circumstances?

 - purchase Canadian dollars forward.
 - purchase Canadian dollar futures contracts.
 - purchase Canadian dollar put options.**
 - purchase Canadian dollar call options.

- Graylon, Inc., based in Washington, exports products to a German firm and will receive payment of €200,000 in three months. On June 1, the spot rate of the euro was \$1.12, and the 3-month forward rate was \$1.10. On June 1, Graylon negotiated a forward contract with a bank to sell €200,000 forward in three months. The spot rate of the euro on September 1 is \$1.15. Graylon will receive \$_____ for the euros.

 - 224,000
 - $220,000 = €200,000 \times \1.10**
 - 200,000
 - 230,000

- The one-year forward rate of the British pound is quoted at \$1.60, and the spot rate of the British pound is quoted at \$1.63. The forward_____ is percent.

 - discount; 1.9
 - discount; $1.8 = (F/S) - 1 = (\$1.60/\$1.63) - 1 = -1.8$ percent.**
 - premium; 1.9
 - premium; 1.8

- The 90-day forward rate for the euro is \$1.07, while the current spot rate of the euro is \$1.05. What is the annualized forward premium or discount of the euro?

 - 1.9 percent discount.
 - 1.9 percent premium.
 - $7.6 \text{ percent premium.} = [(F/S) - 1] \times 360/90$**
 - 7.6 percent discount.

5. **Thornton, Inc. needs to invest five million Nepalese rupees in its Nepalese subsidiary to support local operations. Thornton would like its subsidiary to repay the rupees in one year. Thornton would like to engage in a swap transaction. Thus, Thornton would:**
 - a. convert the rupees to dollars in the spot market today and convert rupees to dollars in one year at today's forward rate.
 - b. convert the dollars to rupees in the spot market today and convert dollars to rupees in one year at the prevailing spot rate.
 - c. **convert the dollars to rupees in the spot market today and convert rupees to dollars in one year at today's forward rate.**
 - d. convert the dollars to rupees in the spot market today and convert rupees to dollars in one year at the prevailing spot rate.
6. **In the U.S., the typical currency futures contract is based on a currency value in terms of:**
 - a. euros.
 - b. **U.S. dollars.**
 - c. British pounds.
 - d. Canadian dollars.
7. **Currency futures contracts sold on an exchange:**
 - a. **contain a commitment to the owner, and are standardized.**
 - b. contain a commitment to the owner, and can be tailored to the desire of the owner.
 - c. contain a right but not a commitment to the owner, and can be tailored to the desire of the owner.
 - d. contain a right but not a commitment to the owner, and are standardized.
8. **Currency options sold through an options exchange:**
 - a. contain a commitment to the owner, and are standardized.
 - b. contain a commitment to the owner, and can be tailored to the desire of the owner.
 - c. contain a right but not a commitment to the owner, and can be tailored to the desire of the owner.
 - d. **contain a right but not a commitment to the owner, and are standardized.**
9. **Currency options are commonly traded through the system.**
 - a. robot
 - b. Euro
 - c. **GLOBEX**
 - d. Scope
10. **Forward contracts:**
 - a. contain a commitment to the owner, and are standardized.
 - b. **contain a commitment to the owner, and can be tailored to the desire of the owner.**
 - c. contain a right but not a commitment to the owner, and can be tailored to the desire of the owner.
 - d. contain a right but not a commitment to the owner, and are standardized.
11. **Which of the following is the most likely strategy for a U.S. firm that will be receiving Swiss francs in the future and desires to avoid exchange rate risk (assume the firm has no offsetting position in francs)?**
 - a. purchase a call option on francs.
 - b. **sell a futures contract on francs.**
 - c. obtain a forward contract to purchase francs forward.
 - d. all of the above are appropriate strategies for the scenario described.
12. **Which of the following is the most unlikely strategy for a U.S. firm that will be purchasing Swiss francs in the future and desires to avoid exchange rate risk (assume the firm has no offsetting position in francs)?**
 - a. purchase a call option on francs.
 - b. obtain a forward contract to purchase francs forward.
 - c. **sell a futures contract on francs.**
 - d. all of the above are appropriate strategies for the scenario described.
13. **If your firm expects the euro to substantially depreciate, it could speculate by_ euro call options or euros forward in the forward exchange market.**
 - a. **selling; selling**
 - b. selling; purchasing
 - c. purchasing; purchasing
 - d. purchasing; selling
14. **When you own , there is no obligation on your part; however, when you own , there is an obligation on your part.**
 - a. call options; put options
 - b. futures contracts; call options
 - c. forward contracts; futures contracts
 - d. **put options; forward contracts**

15. The greater the variability of a currency, the will be the premium of a call option on this currency, and the ____ will be the premium of a put option on this currency, other things equal.

- a. greater; lower
- b. greater; greater**
- c. lower; greater
- d. lower; lower

16. When currency options are not standardized and traded over-the-counter, there is ____ liquidity and a bid/ask spread.

- a. less; narrower
- b. more; narrower
- c. more; wider
- d. less; wider**

17. The shorter the time to the expiration date for a currency, the ____ will be the premium of a call option, and the ____ will be the premium of a put option, other things equal.

- a. greater; greater
- b. greater; lower
- c. lower; lower**
- d. lower; greater

18. Assume that a speculator purchases a put option on British pounds (with a strike price of \$1.50) for \$.05 per unit. A pound option represents 31,250 units. Assume that at the time of the purchase, the spot rate of the pound is \$1.51 and continually rises to \$1.62 by the expiration date. The highest net profit possible for the speculator based on the information above is:

- a. \$1,562.50.
- b. -\$1,562.50.**
- c. -\$1,250.00.
- d. -\$625.00.

STL: The premium of the option is $\$.05 \times (31,250 \text{ units}) = \$1,562.50$. Since the option will not be exercised, the net profit is $-\$1,562.50$.

19. Which of the following is true?

- a. The futures market is primarily used by speculators while the forward market is primarily used for hedging.**
- b. The futures market is primarily used for hedging while the forward market is primarily used for speculating.
- c. The futures market and the forward market are

primarily used for speculating.

- d. The futures market and the forward market are primarily used for hedging.

20. Which of the following is true?

- a. Most forward contracts between firms and banks are for speculative purposes.
- b. Most future contracts represent a conservative approach by firms to hedge foreign trade.
- c. The forward contracts offered by banks have maturities for only four possible dates in the future.
- d. none of the above**

21. If you expect the euro to depreciate, it would be appropriate to for speculative purposes.

- a. buy a euro call and buy a euro put
- b. buy a euro call and sell a euro put
- c. sell a euro call and sell a euro put
- d. sell a euro call and buy a euro put**

22. If you expect the British pound to appreciate, you could speculate by _____ pound call options or pound put options.

- a. purchasing; selling**
- b. purchasing; purchasing
- c. selling; selling
- d. selling; purchasing

23. Which of the following is correct?

- a. The longer the time to maturity, the less the value of a currency call option, other things equal.
- b. The longer the time to maturity, the less the value of a currency put option, other things equal.
- c. The higher the spot rate relative to the exercise price, the greater the value of a currency put option, other things equal.
- d. The lower the exercise price relative to the spot rate, the greater the value of a currency call option, other things equal.**

24. Research has found that the options market is:

- a. efficient before controlling for transaction costs.
- b. efficient after controlling for transaction costs.**
- c. highly inefficient.
- d. none of the above

25. Assume no transactions costs exist for any futures or forward contracts. The price of British pound futures with a settlement date 180 days from now will:
- definitely be above the 180-day forward rate.
 - definitely be below the 180-day forward rate.
 - be about the same as the 180-day forward rate.**
 - none of the above; there is no relation between the futures and forward prices.
26. Assume that a currency's spot and future prices are the same, and the currency's interest rate is higher than the U.S. rate. The actions of U.S. investors to lock in this higher foreign return would__ the currency's spot rate and__ the currency's futures price.
- put upward pressure on; put upward pressure on
 - put downward pressure on; put upward pressure on
 - put upward pressure on; put downward pressure on**
 - put downward pressure on; put downward pressure on
27. A firm sells a currency futures contract, and then decides before the settlement date that it no longer wants to maintain such a position. It can close out its position by:
- buying an identical futures contract.**
 - selling an identical futures contract.
 - buying a futures contract with a different settlement date.
 - selling a futures contract for a different amount of currency.
28. If the spot rate of the euro increased substantially over a one-month period, the futures price on euros would likely over that same period.
- increase slightly
 - decrease substantially
 - increase substantially**
 - stay the same
29. A U.S. firm is bidding for a project needed by the Swiss government. The firm will not know if the bid is accepted until three months from now. The firm will need Swiss francs to cover expenses but will be paid by the Swiss government in dollars if it is hired for the project. The firm can best insulate itself against exchange rate exposure by:
- selling futures in francs.
 - buying futures in francs.
 - buying franc put options.
 - buying franc call options.**

30. A firm wants to use an option to hedge 12.5 million in receivables from New Zealand firms. The premium is \$.03. The exercise price is \$.55. If the option is exercised, what is the total amount of dollars received (after accounting for the premium paid)?
- \$6,875,000.
 - \$7,250,000.
 - \$7,000,000.
 - \$6,500,000.**

SLT Dollars received from exercising option =
 $\text{NZ\$12.5 million} \times \$0.55 = \$6,875,000$.
 Premium paid for options = $\text{NZ\$12.5 million} \times \$0.03 = \$375,000$. Amount of dollars received minus premium = $\$6,875,000 - \$375,000 = \$6,500,000$.

31. If you purchase a straddle on euros, this implies that you:
- finance the purchase of a call option by selling a put option in the euros.
 - finance the purchase of a call option by selling a call option in the euros.
 - finance the purchase of a put option by selling a put option in the euros.
 - finance the purchase of a put option by selling a call option in the euros.
 - none of the above**
32. The premium on a pound put option is \$.03 per unit. The exercise price is \$1.60. The break-even point is___ for the buyer of the put, and___ for the seller of the put. (Assume zero transactions costs and that the buyer and seller of the put option are speculators.)
- \$1.63; \$1.63
 - \$1.63; \$1.60
 - \$1.63; \$1.57
 - \$1.57; \$1.63
 - none of the above**

SLT Break-even point on put option to both the buyer and seller is $\$1.60 - \$0.03 = \$1.57$.

33. The existing spot rate of the Canadian dollar is \$.82. The premium on a Canadian dollar call option is \$.04. The exercise price is \$.81. The option will be exercised on the expiration date if at all. If the spot rate on the expiration date is \$.87, the profit as a percent of the initial investment (the premium paid) is:
- 0 percent.

- b. 25 percent.
- c. **50 percent.**
- d. 150 percent.

STL: The net profit per unit is: $\$.87 - \$.81 - \$.04 = \$.02$. The net profit per unit as a percent of the initial investment per unit is: $\$.02/\$.04 = 50\%$.

34. You purchase a call option on pounds for a premium of \$.03 per unit, with an exercise price of \$1.64; the option will not be exercised until the expiration date, if at all. If the spot rate on the expiration date is \$1.65, your net profit per unit is:
- a. $-\$.03$.
 - b. $-\$.02. = \$1.65 - \$1.64 - \$.03$
 - c. $-\$.01$.
 - d. $\$.02$.
35. You purchase a put option on Swiss francs for a premium of \$.02, with an exercise price of \$.61. The option will not be exercised until the expiration date, if at all. If the spot rate on the expiration date is \$.58, your net profit per unit is:
- a. $-\$.03$.
 - b. $-\$.02$.
 - c. $-\$.01$.
 - d. $\$.02$.
 - e. none of the above $= \$.61 - \$.58 - \$.02 = \$.01$.
36. You are a speculator who sells a call option on Swiss francs for a premium of \$.06, with an exercise price of \$.64. The option will not be exercised until the expiration date, if at all. If the spot rate of the Swiss franc is \$.69 on the expiration date, your net profit per unit, assuming that you have to buy Swiss francs in the market to fulfill your obligation, is:
- a. $-\$.02$.
 - b. $-\$.01$.
 - c. $\$.01. = \$.64 + \$.06 - \$.69$
 - d. $\$.02$.
37. You are a speculator who sells a put option on Canadian dollars for a premium of \$.03 per unit, with an exercise price of \$.86. The option will not be exercised until the expiration date, if at all. If the spot rate of the Canadian dollar is \$.78 on the expiration date, your net profit per unit is:
- a. $-\$.08$.
 - b. $-\$.03$.
 - c. $\$.05$.
 - d. $\$.08$.
 - e. none of the above

SOLUTION: Net profit $= \$.78 + \$.03 - \$.86 = -\$.05$.

38. European currency options can be exercised ; American currency options can be exercised .
- a. any time up to the expiration date; any time up to the expiration date
 - b. any time up to the expiration date; only on the expiration date
 - c. only on the expiration date; only on the expiration date
 - d. **only on the expiration date; any time up to the expiration date**
39. Macomb Corporation is a U.S. firm that invoices some of its exports in Japanese yen. If it expects the yen to weaken, it could _ to hedge the exchange rate risk on those exports.
- a. sell yen put options
 - b. buy yen call options
 - c. buy futures contracts on yen
 - d. **sell futures contracts on yen**
40. A call option on Australian dollars has a strike (exercise) price of \$.56. The present exchange rate is \$.59. This call option can be referred to as:
- a. **in the money.**
 - b. out of the money.
 - c. at the money.
 - d. at a discount.
41. A put option on British pounds has a strike (exercise) price of \$1.48. The present exchange rate is \$1.55. This put option can be referred to as:
- a. in the money.
 - b. **out of the money.**
 - c. at the money.
 - d. at a discount.
42. Which of the following is not an instrument used by U.S.-based MNCs to cover their foreign currency positions?
- a. forward contracts.
 - b. futures contracts.
 - c. non-deliverable forward contracts.
 - d. options.
 - e. **all of the above are instruments used to cover foreign currency positions.**

43. When the futures price on euros is below the forward rate on euros for the same settlement date, astute investors may attempt to simultaneously _____ euros forward and _____ euro futures.

- a. sell; sell
- b. buy; sell
- c. sell; buy
- d. buy; buy

44. When the futures price is equal to the spot rate of a given currency, and the foreign country exhibits a higher interest rate than the U.S. interest rate, astute investors may attempt to simultaneously _____ the foreign currency, invest it in the foreign country, and _____ futures in the foreign currency.

- a. buy; buy
- b. sell; buy
- c. buy; sell
- d. buy; buy

45. Which of the following would result in a profit of a euro futures contract when the euro depreciates?

- a. buy a euro futures contract; sell a futures contract after the euro has depreciated.
- b. sell a euro futures contract; buy a futures contract after the euro has depreciated.
- c. buy a euro futures contract; buy an additional futures contract after the euro has depreciated.
- d. none of the above would result in a profit when the euro depreciates.

46. Which of the following is not true regarding options?

- a. Options are traded on exchanges, never over-the-counter.
- b. Similar to futures contracts, margin requirements are normally imposed on option traders.
- c. Although commissions for options are fixed per transaction, multiple contracts may be involved in a transaction, thus lowering the commission per contract.
- d. Currency options can be classified as either put or call options.

47. A U.S. corporation has purchased currency put options to hedge a 100,000 Canadian dollar (C\$) receivable. The premium is \$.01 and the exercise price of the option is \$.75. If the spot rate at the time of maturity is \$.85, what is the net amount received by the corporation if it acts rationally?

- a. \$74,000.
- b. \$84,000.
- c. \$75,000.

d. \$85,000.

STL Dollars received from selling Canadian dollars in the spot market = $C\$100,000 \times \$.85 = \$85,000$. Premium paid for options = $C\$100,000 \times \$.01 = \$1,000$. Amount of dollars received less premium = $\$84,000$.

48. A U.S. corporation has purchased currency call options to hedge a 70,000 pound payable. The premium is \$.02 and the exercise price of the option is \$.50. If the spot rate at the time of maturity is \$.65, what is the total amount paid by the corporation if it acts rationally?

- a. \$33,600.
- b. \$46,900.
- c. \$44,100.
- d. \$36,400.

STL Dollars paid when exercising the option = $\text{£}70,000 \times \$.50 = \$35,000$. Premium paid for options = $\text{£}70,000 \times \$.02 = \$1,400$. Amount of dollars paid = $\$35,000 + \$1,400 = \$36,400$.

49. Frank is an option speculator. He anticipates the Danish kroner to appreciate from its current level of \$.19 to \$.21. Currently, kroner call options are available with an exercise price of \$.18 and a premium of \$.02. Should Frank attempt to buy this option? If the future spot rate of the Danish kroner is indeed \$.21, what is his profit or loss per unit?

- a. no; $-\$0.01$.
- b. yes; $\$0.01 = \$.21 - \$.18 - \$.02$
- c. yes; $-\$0.01$.
- d. yes; $\$0.03$.

50. Carl is an option writer. In anticipation of a depreciation of the British pound from its current level of \$1.50 to \$1.45, he has written a call option with an exercise price of \$1.51 and a premium of \$.02. If the spot rate at the option's maturity turns out to be \$1.54, what is Carl's profit or loss per unit (assuming the buyer of the option acts rationally)?

- a. $-\$0.01 = \$1.51 + \$.02 - \1.54
- b. $\$0.01$.
- c. $-\$0.04$.
- d. $\$0.04$.

51. Johnson, Inc., a U.S.-based MNC, will need 10 million Thai baht on August 1. It is now May 1. Johnson has negotiated a non-deliverable forward contract with its bank. The reference rate is the baht's closing exchange rate (in \$) quoted by Thailand's central bank in 90 days. The baht's spot rate today is \$.02. If the rate quoted by Thailand's central bank on August 1 is \$.022, Johnson will _____\$_____.
- pay; 20,000
 - be paid; 20,000**
 - pay; 2,000
 - be paid; 2,000
 - none of the above

STL Amount received per unit = \$.022 – \$.02 =
\$.002 × THB10,000,000 = \$20,000.

52. If the observed put option premium is less than what is suggested by the put-call parity equation, astute arbitrageurs could make a profit by_____ the put option,_____ the call option, and_____ the underlying currency.
- selling; buying; buying
 - buying; selling; buying**
 - selling; buying; selling
 - buying; buying; buying
53. A put option premium has a lower bound that is equal to the greater of zero and the difference between the underlying_____ prices. The upper bound of a call option premium is the price.
- spot and exercise; exercise
 - spot and exercise; spot
 - exercise and spot; exercise**
 - exercise and spot; spot
54. A call option premium has a lower bound that is equal to the greater of zero and the difference between the underlying_____ prices. The upper bound of a call option premium is the price.
- spot and exercise; exercise
 - spot and exercise; spot**
 - exercise and spot; exercise
 - exercise and spot; spot
55. Assume the spot rate of the Swiss franc is \$.62 and the one-year forward rate is \$.66. The forward rate exhibits a of _____.
- premium; about 6%
 - discount; about 6%
 - discount; about 6.45%

- premium; about 6.45%**

STL: Premium = (Forward rate – Spot rate)/Spot rate
= (\$.66 – \$.62)/\$.62 = 6.45%

56. Assume the spot rate of a currency is \$.37 and the 90-day forward rate is \$.36. The forward rate of this currency exhibits a_____ of_____ on an annualized basis.
- discount; 11.11%
 - premium; 11.11%
 - premium; 10.81%
 - discount; 10.81%**

STL = [(FR – SR)/SR] × (360/90) = [(\$.36 – \$.37)/\$.37] × (360/90)
= –10.81% (Discount)

57. Which of the following are most commonly traded on an exchange?
- forward contracts.
 - futures contracts.**
 - currencies
 - none of the above
58. Conditional currency options are:
- options that do not require premiums.
 - options where the premiums are canceled if a trigger level is reached.**
 - options that allow the buyer to decide what currency the option will be settled in.
 - none of the above
59. Which of the following is true regarding the options markets?
- Hedgers and speculators both attempt to lower risk.
 - Hedgers attempt to lower risk, while speculators attempt to make riskless profits.
 - Hedgers and speculators are both necessary in order for the market to be liquid.**
 - all of the above
60. The premium of a currency put option will increase if:
- the volatility of the underlying asset goes up.
 - the time to maturity goes up.
 - the spot rate declines.
 - none of the above**

61. Which of the following is true of options?
- The writer decides whether the option will be exercised.
 - The writer pays the buyer the option premium.
 - The buyer decides if the option will be exercised.**
 - More than one of these.
62. The purchase of a currency put option would be appropriate for which of the following?
- Investors who expect to buy a foreign bond in one month.
 - Corporations who expect to buy foreign currency to finance foreign subsidiaries.**
 - Corporations who expect to collect on a foreign account receivable in one month.
 - all of the above
63. If you have bought the right to sell, you are a:
- call writer.
 - put buyer.**
 - futures buyer.
 - put writer.
64. If you have a position where you might be obligated to buy Euros, you are:
- a call writer.
 - a put writer.
 - a put buyer.**
 - a futures seller.
65. Which of the following is true for futures, but not for forwards?
- actual delivery.
 - no transactions costs.
 - self regulation.
 - none of the above**
66. Your company expects to receive 5,000,000 Japanese yen 60 days from now. You decide to hedge your position by selling Japanese yen forward. The current spot rate of the yen is \$.0089, while the forward rate is \$.0095. You expect the spot rate in 60 days to be \$.0090. How many dollars will you receive for the 5,000,000 yen 60 days from now?
- \$44,500.
 - \$45,000.
 - \$526 million.
 - \$47,500 = ¥5,000,000 × \$.0095/¥**
67. The spot rate for the Singapore dollar is \$.588. The 30-day forward rate is \$.590. The forward rate contains an annualized of %.
- discount; -4.07
 - premium; 4.07
 - discount; -4.08
 - premium; 4.08 = (\$.59 - \$.588)/\$.588 × (360/30)**
 - premium; 3.40
103. As mentioned in the text, the most common maturities for forward rates are:
- one, three, six, and twelve months.**
 - one, three, six, and twelve years.
 - two, three, and five years.
 - two, three, and five weeks.
105. The 180-day forward rate for the euro is \$1.34, while the current spot rate of the euro is \$1.29. What is the annualized forward premium or discount of the euro?
- 7.46% premium
 - 7.46% discount
 - 7.75% premium**
 - 7.75% discount
- SOLUTION:**
$$\left[\frac{(F/S) - 1}{1} \right] \times \frac{360}{180} = \left[\frac{(\$1.34/\$1.29) - 1}{1} \right] \times \frac{360}{180} = 7.75\%$$
106. The annualized forward premium on the euro is 7%. What is the 90-day forward rate on the euro if the spot rate today is \$1.25?
- \$1.27 = \$1.25 × [1 + 7%/(360/90)]**
 - \$1.34
 - \$1.16
 - \$1.23
107. The one-year forward rate of the Japanese yen is quoted at \$.013, and the spot rate of Japanese yen is quoted at \$.011. The forward ____ is percent.
- discount; 18.18
 - premium; 18.18 = (F/S) - 1 = (\$.013/\$.011) - 1**
 - discount; 15.38
 - premium; 15.38
108. The spot rate of British pound is quoted at \$1.49. The 90-day forward rate exhibits a 2% discount. What is the 90-day forward rate of the pound?
- \$1.52
 - \$1.61**

- c. \$1.37
- d. $\$1.46 = \$1.49 \times (1 - .02)$

109. The spot rate of euro is quoted at \$1.29. The annualized forward premium on the euro is 10%. What is the 30-day forward rate of the euro?

- a. \$1.28
- b. $\$1.30 = \$1.29 \times [1 + 0.10/(360/30)]$
- c. \$1.42
- d. \$1.16

110. The premium on a euro call option is \$.02. The exercise price is \$1.32. The break-even point is ____ for the buyer of the call, and ____ for the seller of the call. (Assume zero transactions costs and that the buyer and seller of the put option are speculators.)

- a. \$1.30; \$1.30
- b. \$1.34; \$1.30
- c. \$1.30; \$1.34
- d. \$1.34; \$1.34

STL Break-even point on call option to both the buyer and seller is $\$1.32 + \$.02 = \$1.34$.

111. If you have a position where you might be obligated to sell pounds, you are:

- a. a call writer.
- b. a call buyer.
- c. a put writer.
- d. a put buyer.

112. If you have bought a right to buy foreign currency, you are:

- a. a call writer.
- b. a call buyer.
- c. a put writer.
- d. a put buyer.

113. The premium on a pound put option is \$.04. The spot rate and the exercise price is \$1.52. The spot rate at the time of this option expiration is expected to be \$1.51. The speculators could profit by:

- a. writing a put option.
- b. buying a put option.
- c. buying a call option
- d. writing a call option and buying a call option simultaneously.

114. A call option on Japanese yen has a strike (exercise) price of \$.012. The present exchange rate is \$.011. This call option can be referred to as:

- a. in the money.

b. out of the money.

- c. at the money.
- d. at a discount.

115. A put option on Swiss franc has a strike (exercise) price of \$.92. The present exchange rate is \$.89. This put option can be referred to as:

- a. in the money.
- b. out of the money.
- c. at the money.
- d. at a discount.

116. Crown Co. is expecting to receive 100,000 British pounds in one year. Crown expects the spot rate of British pound to be \$1.49 in a year, so it decides to avoid exchange rate risk by hedging its receivables. The spot rate of the pound is quoted at \$1.51. The strike price of put and call options are \$1.54 and \$1.53 respectively. The premium on both options is \$.03. The one-year forward rate exhibits a 2.65% premium. Assume there are no transaction costs. What is the best possible hedging strategy and how many U.S. dollars Crown Co. will receive under this strategy?

- a. buy a put option and receive \$150,000.
- b. sell pounds forward and receive \$155,000.
- c. sell a call option and receive \$156,000.
- d. sell a put option and receive \$157,000.

STL There are only two feasible choices for hedging in these circumstances: selling pounds forward or buying a put option.

Sell pounds forward:

$$\text{One-year forward rate} = \$1.51 \times (1 + .0265) = \$1.55$$

$$\text{Dollars received} = 100,000 \times \$1.55 = \$155,000$$

Buy put option:

$$\text{Amount received per unit} = \$1.54 - \$.03 = \$1.51$$

$$\text{Total amount of receivables in U.S.} = 100,000 \times \$1.51 = \$151,000$$

117. J&L Co. is a U.S.-based MNC that frequently exports computers to Italy. J&L typically invoices these goods in euros and is concerned that the euro will depreciate in the near future. Which of the following is not an appropriate technique under these circumstances?

- a. purchase euro put options.
- b. sell euros forward.
- c. sell euro futures contracts.
- d. sell euro put options.

118. The_ the existing spot price relative to the strike price, the___ valuable the call options will be.
 a. higher; less
b. higher; more
 c. lower; less
 d. lower; more
119. The_ the existing spot price relative to the strike price, the___ valuable the put options will be.
 a. higher; less
 b. higher; more
 c. lower; less
d. lower; more
120. On January 1st, Madison Co. ordered raw material from Japan and agreed to pay 100 million yen for this order on April 1st. It negotiated a 3-month forward contract to obtain 100 million Japanese yen on that date at \$.009. On February 1st, the Japanese firm informed Madison Co. that it won't be able to fulfill that order. The Japanese yen spot rate on February 1st is \$.0087 and 2-month forward rate exhibits 3% discount. To offset its existing contract Madison Co. will negotiate a forward contract to for the date of April 1st and the profit/loss generated from this transaction is a ____ U.S. dollars.
 a. sell yen; gain of \$60,000
 b. sell yen; loss of \$60,000
 c. buy yen; gain of \$30,000
 d. to buy yen; loss of \$30,000

STL 2-month forward rate = $$.0087 \times (1 - .03) = $.0084$
 Profit/loss from transaction = $(100,000,000 \times $.0084) - (100,000,000 \times .009) = \$60,000 \text{ loss.}$

121. Assume that a speculator received news that makes her believe that the yen will appreciate or depreciate substantially in the near future, but she is not certain of the direction. Also assume that exercise price of call and put options are the same. The most appropriate method for speculation is ___ and it may be achieved by_.
 a. straddle; purchase put option and purchase call option.
 b. strangle; purchase put option and sell call option.
 c. strangle; sell put option and sell put option.
 d. straddle; sell put option and buy call option.

122. Which of the following does not represent the risk from using forward contracts?
 a. if a forward contract is used to hedge receivables, and the spot exchange rate at the expiration of contract exceeds the contract price.
b. if a forward contract is used to hedge receivables, and the spot exchange rate at the time of expiration of contract is lower than the contract price.
 c. if a forward contract is used to hedge payables, and the spot exchange rate at the time of expiration of contract is lower than the contract price.
 d. if a forward contract is used to hedge payables or receivables and the amount to be received or paid is cancelled.
150. A forward rate for a currency is said to exhibit a discount if
 a. the forward rate exceeds the existing spot rate.
b. the forward rate is less than the existing spot rate.
 c. the forward rate exceeds the expected future spot rate.
 d. the forward rate is less than the expected future spot rate.
151. If the spot rate of the British pound is \$1.50, and the one-year forward rate has a discount of 3 percent, the one-year forward rate is \$.
 a. 1.50
 b. 1.47
 c. 1.55
d. 1.46
152. Which of the following is not true regarding futures contracts?
 a. Unlike forward contracts, they are generally traded on an exchange.
 b. Futures contracts are standardized with respect to delivery date and size of the contract.
c. There is an active over-the-counter market for currency futures contracts.
 d. Currency futures can be used by speculators who attempt to profit from exchange rate movements.
153. When the futures price is above the forward rate, astute investors may attempt to simultaneously buy a currency forward and sell futures in that currency. These actions would place___ pressure on the forward rate and_ pressure on the futures rate.
 a. upward; downward

- b. upward; upward
- c. downward; upward
- d. downward; downward

154. Assume that the British pound (£) futures price for September is \$1.60. Given that 62,500 units are in a British pound futures contract, the seller of British pound futures will receive \$_ on the delivery date.

- a. 39,062.50
- b. 100,000**
- c. 48,000
- d. 87,062.50

155. Which of the following would result in a profit of a futures contract when the underlying currency depreciates?

- a. Buy a futures contract; sell a futures contract after the currency has depreciated
- b. Sell a futures contract; buy a futures contract after the currency has depreciated**
- c. Buy a futures contract; buy an additional futures contract after the currency has depreciated

156. Currency futures can be used by MNCs to hedge payables. That is, an MNC would_ futures to hedge a foreign payable position. Also, currency futures can be used for speculation. For example, a speculator expecting a currency to appreciate would futures.

- a. buy; buy**
- b. sell; sell
- c. buy; sell
- d. sell; buy

157. Which of the following is not true regarding options?

- a. Options are traded on exchanges, never over-the-counter.**
- b. Similar to futures contracts, margin requirements are normally imposed on option traders.
- c. Currency options can be classified as either put or call options.

158. When the existing spot rate exceeds the exercise price, a call option is , and a put option is .

- a. out of the money; in the money
- b. out of the money; out of the money
- c. in the money; in the money
- d. in the money; out of the money**

159. When a currency call option is classified as "in the money," this indicates that

- a. the spot rate of the currency is less than the exercise price of the option.
- b. the spot rate of the currency is greater than the exercise price of the option.**
- c. the buyer of the option would generate a profit; that is, the spot rate would exceed the sum of the exercise price and the premium paid.

160. A U.S. corporation has purchased currency call options to hedge a 70,000 pound (£) payable. The premium is \$0.02 and the exercise price of the option is \$0.50. If the spot rate at the time of maturity is \$0.65, what is the total amount paid by the corporation if it acts rationally?

- a. \$33,600
- b. \$46,900
- c. \$44,100
- d. \$36,400**

161. Andrea is an option speculator. She anticipates the Canadian dollar to depreciate from its current level of \$0.90 to \$0.85. Currently, Canadian dollar call options are available with an exercise price of \$0.91 and a premium of \$0.02. Also, Canadian dollar put options are available with an exercise price of \$0.88 and a premium of \$0.02. If the future spot rate of the Canadian dollar is \$0.85, what is Andrea's profit or loss per unit?

- a. \$0.03
- b. \$0.05
- c. \$0.01**
- d. \$0.04

162. Which of the following is not true regarding options?

- a. The buyer of a call option has the right to buy the currency at the strike price.
- b. The writer of a call option has the obligation to sell the currency to the buyer if the option is exercised.
- c. The buyer of a put option has the right to sell the currency at the strike price.
- d. The writer of a put option has the obligation to sell the currency to the buyer if the option is exercised.**

163. If the observed put option premium is less than what is suggested by the put-call parity equation, astute arbitrageurs could make a profit by_ the put option,_ the call option, and_ the underlying currency.

- a. selling; buying; buying
- b. buying; selling; buying**
- d. buying; buying; buy

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

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**

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

4. If interest rate parity exists, then is not feasible.

- a. forward realignment arbitrage
- b. triangular arbitrage
- c. **covered interest arbitrage**
- d. locational arbitrage

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.

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**

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**

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

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

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

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.

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.**

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?

- spot rate of peso increases; forward rate of peso decreases.
- spot rate of peso decreases; forward rate of peso increases.
- spot rate of peso decreases; forward rate of peso decreases.
- spot rate of peso increases; forward rate of peso increases.

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?

SOLUTION: $\$1,000,000 / \$.325 = \text{NZ}\$3,076,923$ \square
 $\$.33 = \$1,015,385$. Thus, the profit is \$15,385.

15. Based on interest rate parity, the larger the degree by which the foreign interest rate exceeds the U.S. interest rate, the:

- larger will be the forward discount of the foreign currency.
- larger will be the forward premium of the foreign currency.
- smaller will be the forward premium of the foreign currency.
- smaller will be the forward discount of the foreign currency.

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?

SOLUTION: $\$1,000,000 / \$1.30 = 769,231$ pounds \square
 $(1.04) = 800,000$ pounds \square $1.28 =$
\$1,024,000

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

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

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:

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

SOLUTION: $\$1,000,000 / \$.400 = \text{S}\$2,500,000$ \square
 (1.1)
 $= \text{S}\$2,750,000$ \square
 $\$.412 = \$1,133,000$
Yield = $(\$1,133,000 -$
 $\$1,000,000) / \$1,000,000 = 13.3\%$
This yield exceeds what is possible domestically.

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 ____%.

SOLUTION: $\$500,000 / \$1.41 = \text{NZ\$}1,219,512 \quad \square$
 (1.08)
 $= \text{NZ\$}1,317,073 \quad \square$
 $= \$553,171$
Yield $= \frac{(\$553,171 - \$500,000) / \$500,000}{1} = 10.63\%$

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

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

As locational arbitrage occurs:

- the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will increase.
- the bid rate for pounds at Bank A will increase; the ask rate for pounds at Bank B will decrease.
- the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will decrease.
- the bid rate for pounds at Bank A will decrease; the ask rate for pounds at Bank B will increase.

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?

SOLUTION: $\$1,000,000 / \$1.41 = \text{S\$}2,439,024 \quad \square$
 $\text{S\$}2,439,024 \times \$1.42 = \$1,024,390$

22. Based on interest rate parity, the larger the degree by which the U.S. interest rate exceeds the foreign interest rate, the:

- larger will be the forward discount of the foreign currency.
- larger will be the forward premium of the foreign currency.
- smaller will be the forward premium of the foreign currency.
- smaller will be the forward discount of the foreign currency.

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 .

- appreciate; depreciate
- depreciate; appreciate
- depreciate; depreciate
- appreciate; appreciate

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 _%.

SOLUTION: $\$1,000,000 / \$1.60 = \text{SF}1,666,667 \quad \square$
 (1.07)
 $= \text{SF}1,783,333 \quad \square$
 $= \$1,123,500$
Yield $= \frac{(\$1,123,500 - \$1,000,000) / \$1,000,000}{1} = 12.35\%$

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?

- 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.
- 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.
- 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.
- 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.

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?

SOLUTION: $$.80/\$1.60 = 0.50$

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?

- Americans using covered interest arbitrage earn the same rate of return as Germans who attempt covered interest arbitrage.
- Americans who invest in the U.S. earn the same rate of return as Germans who attempt covered interest arbitrage.
- Americans who invest in the U.S. earn the same rate of return as Germans who invest in Germany
- None of the above

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:

- Swiss investors who attempt covered interest arbitrage earn the same rate of return as if they invested in Switzerland.
- U.S. investors who attempt covered interest arbitrage earn a higher rate of return than if they invested in the U.S.

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.

- downward; downward
- downward; upward
- upward; downward**
- upward; upward

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.

- discount; increase
- discount; decrease
- premium; increase
- premium; decrease**

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?

SOLUTION: $\$1,000,000/\$.566 = \text{SF}1,766,784 \times \$.57 = \$1,007,067$. Thus, the profit is **\$7,067**.

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?

SOLUTION: $\$1,000,000/\$1.60 = 625,000 \text{ pounds} \times (1.04) = 650,000 \text{ pounds} \times 1.57 = \$1,020,500$

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:

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

SOLUTION: $\$1,000,000/\$.60 = \text{SF}1,666,667 \times (1.1) = \text{SF}1,833,333 \times \$.62 = \$1,136,667$
Yield = $(\$1,136,667 - \$1,000,000)/\$1,000,000 = 13.7\%$
This yield exceeds what is possible domestically.

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 ____%.

$$\begin{aligned} \text{SOLUTION: } \$500,000 / \$.64 &= \text{A\$}781,250 \times (1.09) \\ &= \text{A\$}851,563 \times \$.62 = \\ &\quad \$527,969 \\ \text{Yield} &= (\$527,969 - \\ &\quad \$500,000) / \$500,000 = 5.59\% \end{aligned}$$

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

	<u>Bid</u>	<u>Ask</u>
Bank C	\$1.61	\$1.63
Bank D	\$1.58	\$1.60

As locational arbitrage occurs:

- the bid rate for pounds at Bank C will increase; the ask rate for pounds at Bank D will increase.
- the bid rate for pounds at Bank C will increase; the ask rate for pounds at Bank D will decrease.
- the bid rate for pounds at Bank C will decrease; the ask rate for pounds at Bank D will decrease.
- the bid rate for pounds at Bank C will decrease; the ask rate for pounds at Bank D will increase.

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?

$$\begin{aligned} \text{SOLUTION: } \$1,000,000 / \$.61 &= \text{A\$}1,639,344 \times \$.62 \\ &= \$1,016,393. \text{ Thus, the profit is } \\ &\quad \$16,393. \end{aligned}$$

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?

- 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.
- 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.
- 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.
- 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.

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?

$$\begin{aligned} \text{SOLUTION: } \$500,000 / \$.305 &= \text{MYR}1,639,344 \times \\ &\quad \$.306 = \$501,639. \text{ Thus, the profit is } \\ &\quad \$1,639. \end{aligned}$$

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

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

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?

$$\text{SOLUTION: } \$.023 / \$.576 \times \text{THB}1,000 = \text{A\$}39.93.$$

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

	<u>Quoted Price</u>	<u>Bid</u>	<u>Quoted Price</u>	<u>Ask</u>
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?

SOLUTION: $\$10,000 / \$1.62 = \text{£}6,172.84 \times 2.95 = \text{NZ\$}18,209.88 \times \$0.55 = \$10,015.43$.

Thus, the profit is **\$15.43**.

42. Assume the following information:

You have \$900,000 to invest:

Current spot rate of Australian dollar (A\$)	=	\$0.62
180-day forward rate of the Australian dollar	=	\$0.64
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?

SOLUTION: $\$900,000 / \$0.62 = \text{A\$}1,451,612 \times (1.03) = \text{A\$}1,495,161 \times \$0.64 = \$956,903$.
Thus, the profit is **\$56,903**.

43. Assume the following information:

You have \$400,000 to invest:

Current spot rate of Sudanese dinar (SDD)	=	\$0.00570
90-day forward rate of the dinar	=	\$0.00569
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?

SOLUTION: $\$400,000 / \$0.0057 = \text{SDD}70,175,438.60 \times (1.042) = \text{SDD}73,122,807.02 \times \$0.00569 = \$416,068.77$

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?

SOLUTION: $\$300,000 / \$1.10 = \text{€}272,727.27 \times (1.08) = \text{€}294,545.45 \times \$1.08 = \$316,109.10$

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?

- 7.96%; feasible
- 6.04%; feasible**
- 6.04%; not feasible
- 4.07%; not feasible

SOLUTION: $\$316,109.10 / \$300,000 - 1 = 6.04\%$.
Since this rate is slightly higher than the U.S. interest rate of 6%, covered interest arbitrage is feasible.

46. According to interest rate parity (IRP):

- the forward rate differs from the spot rate by a sufficient amount to offset the inflation differential between two currencies.
- the future spot rate differs from the current spot rate by a sufficient amount to offset the interest rate differential between two currencies.
- the future spot rate differs from the current spot rate by a sufficient amount to offset the inflation differential between two currencies.
- the forward rate differs from the spot rate by a sufficient amount to offset the interest rate differential between two currencies.**

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 .

- premium; increase
- discount; decrease
- discount; increase**
- premium; decrease

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:

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

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

63. If quoted exchange rates are the same across different locations, then _____ is not feasible.

- triangular arbitrage
- covered interest arbitrage
- locational arbitrage
- A and C

64. Points above the IRP line represent situations where:

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

65. Points below the IRP line represent situations where:

- covered interest arbitrage is feasible from the perspective of domestic investors and results in the same yield as investing domestically.
- covered interest arbitrage is feasible from the perspective of domestic investors and results in a yield above what is possible domestically.
- covered interest arbitrage is feasible from the perspective of foreign investors and results in a yield

above what is possible in their local markets.

- covered interest arbitrage is not feasible for neither domestic nor foreign investors.

66. Which of the following might discourage covered interest arbitrage even if interest rate parity does not exist?

- transaction costs.
- political risk.
- differential tax laws.
- all of the above.

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.

- discount; 2.73
- premium; 2.73
- discount; 3.65
- premium; 3.65

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?

SOLUTION: Exchange dollars for pounds = $\$1,000,000 / \$1.4 = 714,286$; exchange pounds for yen = $714,286 \times 140 = 100,000,000$ yen. Exchange yen for dollars = $100,000,000 \text{ yen} \times \$0.011 = \$1,100,000.$ Yield = $(\$1,100,000 - \$1,000,000) / \$1,000,000 = 10\%$

69. Assume the following information:

	<u>Quoted Bid Price</u>	<u>Quoted Ask Price</u>
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?

SOLUTION: $\$100,000 / \$0.077 = 1,298,701$ pesos / 8.5 = A\$152,788 $\times \$0.67 = \$102,368$
 Profit = $\$102,368 - \$100,000 = \$2,368$

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

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

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.

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

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.

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.

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

	<u>Quoted Bid</u> <u>Price</u>	<u>Quoted Ask</u> <u>Price</u>
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

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.

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.

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.

Chapter 7—Relationships among Inflation, Interest Rates, and Exchange Rates

1. Assume a two-country world: Country A and Country B. Which of the following is correct about purchasing power parity (PPP) as related to these two countries?

- a. If Country A's inflation rate exceeds Country B's inflation rate, Country A's currency will weaken.
- b. If Country A's interest rate exceeds Country B's inflation rate, Country A's currency will weaken.
- c. If Country A's interest rate exceeds Country B's inflation rate, Country A's currency will strengthen.
- d. If Country B's inflation rate exceeds Country A's inflation rate, Country A's currency will weaken.

2. Given a home country and a foreign country, purchasing power parity (PPP) suggests that:

- a. a home currency will depreciate if the current home inflation rate exceeds the current foreign interest rate.
- b. a home currency will appreciate if the current home interest rate exceeds the current foreign interest rate.
- c. a home currency will appreciate if the current home inflation rate exceeds the current foreign inflation rate.
- d. a home currency will depreciate if the current home inflation rate exceeds the current foreign inflation rate.

3. The international Fisher effect (IFE) suggests that:

- a. a home currency will depreciate if the current home interest rate exceeds the current foreign interest rate.
- b. a home currency will appreciate if the current home interest rate exceeds the current foreign interest rate.
- c. a home currency will appreciate if the current home inflation rate exceeds the current foreign inflation rate.
- d. a home currency will depreciate if the current home inflation rate exceeds the current foreign inflation rate.

4. Because there are a variety of factors in addition to inflation that affect exchange rates, this will:

- a. reduce the probability that PPP shall hold.
- b. increase the probability that PPP shall hold.
- c. increase the probability the IFE will hold.
- d. B and C

5. Because there are sometimes no substitutes for traded goods, this will:

- a. reduce the probability that PPP shall hold.
- b. increase the probability that PPP shall hold.
- c. increase the probability the IFE will hold.
- d. B and C

6. According to the IFE, if British interest rates exceed U.S. interest rates:

- a. the British pound's value will remain constant.
- b. the British pound will depreciate against the dollar.
- c. the British inflation rate will decrease.
- d. the forward rate of the British pound will contain a premium.
- e. today's forward rate of the British pound will equal today's spot rate.

7. Given a home country and a foreign country, the international Fisher effect (IFE) suggests that:

- a. the nominal interest rates of both countries are the same.
- b. the inflation rates of both countries are the same.
- c. the exchange rates of both countries will move in a similar direction against other currencies.
- d. none of the above

8. Given a home country and a foreign country, purchasing power parity suggests that:

- a. the inflation rates of both countries will be the same.
- b. the nominal interest rates of both countries will be the same.
- c. A and B
- d. none of the above

9. If interest rates on the euro are consistently below U.S. interest rates, then for the international Fisher effect (IFE) to hold:

- a. the value of the euro would often appreciate against the dollar.
- b. the value of the euro would often depreciate against the dollar.
- c. the value of the euro would remain constant most of the time.
- d. the value of the euro would appreciate in some periods and depreciate in other periods, but on average have a zero rate of appreciation.

10. If the international Fisher effect (IFE) did not hold based on historical data, then this suggests that:

- a. some corporations with excess cash can lock in a guaranteed higher return on future foreign short-term investments.
- b. some corporations with excess cash could have generated profits on average from covered interest arbitrage.
- c. some corporations with excess cash could have generated higher profits on average from foreign short-term investments than from domestic short-term investments.
- d. most corporations that consistently invest in foreign short-term investments would have generated the same profits (on average) as from domestic short-term investments.

11. Under purchasing power parity, the future spot exchange rate is a function of the initial spot rate in equilibrium and:

- a. the income differential.
- b. the forward discount or premium.
- c. the inflation differential.
- d. none of the above

12. According to the international Fisher effect, if U.S. investors expect a 5% rate of domestic inflation over one year, and a 2% rate of inflation in European countries that use the euro, and require a 3% real return on investments over one year, the nominal interest rate on one-year U.S. Treasury securities would be:

SOLUTION: $5\% + 3\% = 8\%$

13. According to the international Fisher effect, if investors in all countries require the same real rate of return, the differential in nominal interest rates between any two countries:

- a. follows their exchange rate movement.
- b. is due to their inflation differentials.
- c. is zero.
- d. is constant over time.

e. C and D

14. Assume that U.S. and British investors require a real return of 2%. If the nominal U.S. interest rate is 15%, and the nominal British rate is 13%, then according to the IFE, the British inflation rate is expected to be about ____ the U.S. inflation rate, and the British pound is expected to .

- a. 2 percentage points above; depreciate by about 2%
- b. 3 percentage points above; depreciate by about 3%
- c. 3 percentage points below; depreciate by about 3%
- d. 2 percentage points below; appreciate by about 2%

15. Assume U.S. and Swiss investors require a real rate of return of 3%. Assume the nominal U.S. interest rate is 6% and the nominal Swiss rate is 4%. According to the international Fisher effect, the franc will by about .

- a. appreciate; 3%
- b. appreciate; 1%
- c. depreciate; 3%
- d. appreciate; 2%

16. Assume that the U.S. and Chile nominal interest rates are equal. Then, the U.S. nominal interest rate decreases while the Chilean nominal interest rate remains stable. According to the international Fisher effect, this implies expectations of ____ than before, and that the Chilean peso should against the dollar.

- a. lower U.S. inflation; depreciate
- b. lower U.S. inflation; appreciate
- c. higher U.S. inflation; depreciate
- d. higher U.S. inflation; appreciate

17. According to the international Fisher effect, if Venezuela has a much higher nominal rate than other countries, its inflation rate will likely be than other countries, and its currency will ____.

- a. lower; strengthen
- b. lower; weaken
- c. higher; weaken
- d. higher; strengthen

18. If interest rate parity holds, then the one-year forward rate of a currency will be ____ the predicted spot rate of the currency in one year according to the international Fisher effect.

- a. greater than
- b. less than
- c. equal to
- d. answer is dependent on whether the forward rate has a discount or premium

19. The Fisher effect is used to determine the:

- a. real inflation rate.
- b. real interest rate.

- c. real spot rate.
- d. real forward rate.

20. Latin American countries have historically experienced relatively high inflation, and their currencies have weakened. This information is somewhat consistent with the concept of:

- a. interest rate parity.
- b. locational arbitrage.
- c. **purchasing power parity.**
- d. the exchange rate mechanism.

21. Assume that the inflation rate in Singapore is 3%, while the inflation rate in the U.S. is 8%. According to PPP, the Singapore dollar should by %.

SOLUTION: $(1.08/1.03) - 1 = 4.85\% \Rightarrow$ appreciate

22. The inflation rate in the U.S. is 3%, while the inflation rate in Japan is 10%. The current exchange rate for the Japanese yen (¥) is \$0.0075. After supply and demand for the Japanese yen has adjusted in the manner suggested by purchasing power parity, the new exchange rate for the yen will be:

SOLUTION: $(1.03/1.10) \times \$0.0075 = \0.0070

23. Assume that the U.S. inflation rate is higher than the New Zealand inflation rate. This will cause U.S. consumers to their imports from New Zealand and New Zealand consumers to ____ their imports from the U.S. According to purchasing power parity (PPP), this will result in a(n) ____ of the New Zealand dollar (NZ\$).

- a. reduce; increase; appreciation
- b. **increase; reduce; appreciation**
- c. reduce; increase; depreciation
- d. reduce; increase; appreciation

24. The following regression analysis was conducted for the inflation rate information and exchange rate of the British pound:

$$e_{\$/\pounds} = \alpha_0 + \alpha_1 \left(\frac{(1 + I_{US})}{(1 + I_{\pounds})} - 1 \right) + \mu$$

Regression results indicate that $\alpha_0 = 0$ and $\alpha_1 = 2$. Therefore:

- a. purchasing power parity holds.
- b. purchasing power parity overestimated the exchange rate change during the period under examination.
- c. **purchasing power parity underestimated the exchange rate change during the period under examination.**
- d. purchasing power parity will overestimate the exchange rate change of the British pound in the future.

25. Which of the following is indicated by research regarding purchasing power parity (PPP)?

- a. PPP clearly holds in the short run.
- b. **Deviations from PPP are reduced in the long run.**
- c. PPP clearly holds in the long run.
- d. There is no relationship between inflation differentials and exchange rate movements in the short run or long run.

26. The interest rate in the U.K. is 7%, while the interest rate in the U.S. is 5%. The spot rate for the British pound is \$1.50. According to the international Fisher effect (IFE), the British pound should adjust to a new level of:

SOLUTION: $(1.05/1.07) \times (1.50) = \1.47 .

27. If nominal British interest rates are 3% and nominal U.S. interest rates are 6%, then the British pound (£) is expected to ____ by about ____%, according to the international Fisher effect (IFE).

SOLUTION: $(1.06/1.03) - 1 = 2.9\% \Rightarrow$ appreciate

38. Which of the following theories suggests that the percentage change in spot exchange rate of a currency should be equal to the inflation differential between two countries?

- a. **purchasing power parity (PPP).**
- b. triangular arbitrage.
- c. international Fisher effect (IFE).
- d. interest rate parity (IRP).

39. Which of the following theories suggests that the percentage difference between the forward rate and the spot rate depends on the interest rate differential between two countries?

- a. purchasing power parity (PPP).
- b. triangular arbitrage.
- c. international Fisher effect (IFE).
- d. **interest rate parity (IRP).**

40. Which of the following theories can be assessed using data that exists at one specific point in time?

- a. purchasing power parity (PPP)
- b. international Fisher effect (IFE).
- c. A and B
- d. **interest rate parity (IRP).**

41. Which of the following theories suggests the percentage change in spot exchange rate of a currency should be equal to the interest rate differential between two countries?

- a. absolute form of PPP.
- b. relative form of PPP.
- c. **international Fisher effect (IFE).**

42. The following regression analysis was conducted for the inflation rate information and exchange rate of the British pound:

$$e_{BP} = \alpha_0 + \alpha_1 \left(\frac{(1 + I_{US})}{(1 + I_B)} - 1 \right) + \mu$$

Regression results indicate that $\alpha_0 = 0$ and $\alpha_1 = 1$.
Therefore:

- purchasing power parity holds.
- purchasing power parity overestimated the exchange rate change during the period under examination.
- purchasing power parity underestimated the exchange rate change during the period under examination.
- purchasing power parity will overestimate the exchange rate change of the British pound in the future.

43. The following regression analysis was conducted for the inflation rate information and exchange rate of the British pound:

$$e_{BP} = \alpha_0 + \alpha_1 \left(\frac{(1 + I_{US})}{(1 + I_B)} - 1 \right) + \mu$$

Regression results indicate that $\alpha_0 = 0$ and $\alpha_1 = 0.4$.
Therefore:

- purchasing power parity holds.
- purchasing power parity overestimated the exchange rate change during the period under examination.
- purchasing power parity underestimated the exchange rate change during the period under examination.
- purchasing power parity will overestimate the exchange rate change of the British pound in the future.

44. Assume that the one-year interest rate in the U.S. is 7% and in the U.K. is 5%. According to the international Fisher effect, British pound's spot exchange rate should by about over the year.

SOLUTION: $(1 + .07)/(1 + .05) - 1 = 1.9\% \Rightarrow$
appreciate

45. According to the international Fisher effect (IFE):

- the nominal rate of return on a foreign investment should be equal to the nominal rate of return on the domestic investment.
- the exchange rate adjusted rate of return on a foreign investment should be equal to the interest rate on a local money market investment.
- the percentage change in the foreign spot exchange rate will be positive if the foreign interest rate is higher than the local interest rate.

- the percentage change in the foreign spot exchange rate will be negative if foreign interest rate is lower than the local interest rate.

46. Assume that the U.S. one-year interest rate is 5% and the one-year interest rate on euros is 8%. You have \$100,000 to invest and you believe that the international Fisher effect (IFE) holds. The euro's spot exchange rate is \$1.40. What will be the yield on your investment if you invest in euros?

- 8%
- 5% $100000/1.40 \cdot (1+8\%) \cdot 1.36 = 104914.29$
- 3% $(104914.29 - 100000)/100000 = 5\%$
- 2.78%

47. Assume that the U.S. one-year interest rate is 3% and the one-year interest rate on Australian dollars is 6%. The U.S. expected annual inflation is 5%, while the Australian inflation is expected to be 7%. You have \$100,000 to invest for one year and you believe that PPP holds. The spot exchange rate of an Australian dollar is \$0.689. What will be the yield on your investment if you invest in the Australian market?

SOLUTION: $(1 + .05)/(1 + .07) \cdot \$0.689 = \$0.676$
 $(\$100,000/\$0.689) - (1 + .06) =$
 $\$153,846 - \$0.676 = \$104,000$
 $(\$104,000 - \$100,000)/\$100,000 = 4\%$

48. Assume that the international Fisher effect (IFE) holds between the U.S. and the U.K. The U.S. inflation is expected to be 5%, while British inflation is expected to be 3%. The interest rates offered on pounds are 7% and U.S. interest rates are 7%. What does this say about real interest rates expected by British investors?

- real interest rates expected by British investors are equal to the interest rates expected by U.S. investors.
- real interest rates expected by British investors are 2 percentage points lower than the real interest rates expected by U.S. investors.
- real interest rates expected by British investors are 2 percentage points above the real interest rates expected by U.S. investors.
- IFE doesn't hold in this case because the U.S. inflation is higher than the British inflation, but the interest rates offered in both countries are equal.

53. Assume that the interest rate offered on pounds is 5% and the pound is expected to depreciate by 1.5%. For the international Fisher effect (IFE) to hold between the U.K. and the U.S., the U.S. interest rate should be _____.

SOLUTION: $(1 + .05) - (1 + .015) - 1 = 3.43\%$

58. The inflation rate in the U.S. is 4%, while the inflation rate in Japan is 1.5%. The current exchange rate for the Japanese yen (¥) is \$0.0080. After supply and demand for the Japanese yen has adjusted according to purchasing power parity, the new exchange rate for the yen will be

- \$0.0078.
- \$0.0082.**
- \$0.0111.
- \$0.00492.

59. Assume that the New Zealand inflation rate is higher than the U.S. inflation rate. This will cause U.S. consumers to their imports from New Zealand and New Zealand consumers to ____ their imports from the U.S. According to purchasing power parity (PPP), this will result in a(n) ____ of the New Zealand dollar (NZ\$).

- reduce; increase; appreciation
- increase; reduce; depreciation
- reduce; increase; depreciation**
- reduce; increase; appreciation

60. The following regression was conducted for the exchange rate of the Cyprus pound (CYP):

$$e_{BP} = a_0 + a_1 \left(\frac{(1 + I_{US})}{(1 + I_B)} - 1 \right) + \mu$$

Regression results indicate that $a_0 = 0$ and $a_1 = 2$. Therefore,

- purchasing power parity holds.
- purchasing power parity overestimated the exchange rate change during the period under examination.
- purchasing power parity underestimated the exchange rate change during the period under examination.**
- purchasing power parity will overestimate the exchange rate change of the Cyprus pound in the future.

61. Among the reasons that purchasing power parity (PPP) does not consistently occur are:

- exchange rates are affected by interest rate differentials.
- exchange rates are affected by national income differentials and government controls.
- supply and demand may not adjust if no substitutable goods are available.
- all of the above are reasons that PPP does not consistently occur.**

62. Which of the following is not true regarding IRP, PPP, and the IFE?

- IRP suggests that a currency's spot rate will change**

according to interest rate differentials.

- PPP suggests that a currency's spot rate will change according to inflation differentials.
- The IFE suggests that a currency's spot rate will change according to interest rate differentials.
- All of the above are true.

Chapter 8—Forecasting Exchange Rates

1. Which of the following forecasting techniques would best represent the use of today's forward exchange rate to forecast the future exchange rate?

- fundamental forecasting.
- market-based forecasting.**
- technical forecasting.
- mixed forecasting.

2. Which of the following forecasting techniques would best represent sole use of today's spot exchange rate of the euro to forecast the euro's future exchange rate?

- fundamental forecasting.
- market-based forecasting.**
- technical forecasting.
- mixed forecasting.

3. Which of the following forecasting techniques would best represent the use of relationships between economic factors and exchange rate movements to forecast the future exchange rate?

- fundamental forecasting.**
- market-based forecasting.
- technical forecasting.
- mixed forecasting.

4. Which of the following forecasting techniques would best represent the sole use of the pattern of historical currency values of the euro to predict the euro's future currency value?

- fundamental forecasting.
- market-based forecasting.
- technical forecasting.**
- mixed forecasting.

5. If a particular currency is consistently declining substantially over time, then a market-based forecast will usually have:

- a. underestimated the future exchange rates over time.
- b. overestimated the future exchange rates over time.**
- c. forecasted future exchange rates accurately.
- d. forecasted future exchange rates inaccurately but without any bias toward consistent underestimating or overestimating.

6. According to the text, the analysis of currencies forecasted with use of the forward rate suggests that:

- a. currencies exhibited about the same mean forecast errors as a percent of the realized value.
- b. the Canadian dollar can be forecasted by U.S. firms with greater accuracy than other currencies.**
- c. the Swiss franc can be forecasted by U.S. firms with greater accuracy than other currencies.
- d. none of the above

7. Assume the following information:

	Predicted Value of	Realized Value of
<u>Period</u>	<u>New Zealand Dollar</u>	<u>New Zealand Dollar</u>
1	\$.52	\$.50
2	.54	.60
3	.44	.40
4	.51	.50

Given this information, the mean absolute forecast error as a percentage of the realized value is about:

SOLUTION:
$$\frac{[|$.52 - $.50|/$.50 + |$.54 - $.60|/$.60 + |$.44 - $.40|/$.40 + |$.51 - $.50|/$.50]}{4}$$
$$= [.04 + .10 + .10 + .02]/4$$
$$= .065 = \mathbf{6.50\%}$$

8. If it was determined that the movement of exchange rates was not related to previous exchange rate values, this implies that a _____ is not valuable for speculating on expected exchange rate movements.

- a. technical forecast technique**

- b. fundamental forecast technique
- c. all of the above
- d. none of the above

9. Which of the following is true?

- a. Forecast errors cannot be negative.
- b. Forecast errors are negative when the forecasted rate exceeds the realized rate.
- c. Absolute forecast errors are negative when the forecasted rate exceeds the realized rate.
- d. None of the above.**

10. Which of the following is true according to the text?

- a. Forecasts in recent years have been very accurate.
- b. Use of the absolute forecast error as a percent of the realized value is a good measure to use in detecting a forecast bias.
- c. Forecasting errors are smaller when focused on longer term periods.
- d. None of the above.**

11. A fundamental forecast that uses multiple values of the influential factors is an example of:

- a. sensitivity analysis.**
- b. discriminant analysis.
- c. technical analysis.
- d. factor analysis.

12. When the value from the prior period of an influential factor affects the forecast in the future period, this is an example of a(n):

- a. lagged input.**
- b. instantaneous input.
- c. simultaneous input.

13. Assume a forecasting model uses inflation differentials and interest rate differentials to forecast the exchange rate. Assume the regression coefficient of the interest rate differential variable is $-.5$, and the coefficient of the inflation differential variable is $.4$. Which of the following is true?
- The interest rate variable is inversely related to the exchange rate, and the inflation variable is directly (positively) related to the interest rate variable.
 - The interest rate variable is inversely related to the exchange rate, and the inflation variable is directly related to the exchange rate.**
 - The interest rate variable is directly related to the exchange rate, and the inflation variable is directly related to the exchange rate.
 - The interest rate variable is directly related to the exchange rate, and the inflation variable is directly related to the interest rate variable.
14. Which of the following is not a limitation of fundamental forecasting?
- uncertain timing of impact.
 - forecasts are needed for factors that have a lagged impact.**
 - omission of other relevant factors from the model.
 - possible change in sensitivity of the forecasted variable to each factor over time.
 - none of the above
15. Assume that interest rate parity holds. The U.S. five-year interest rate is 5% annualized, and the Mexican five-year interest rate is 8% annualized. Today's spot rate of the Mexican peso is \$.20. What is the approximate five-year forecast of the peso's spot rate if the five-year forward rate is used as a forecast?
- SOLUTION:** $(1.05)^5 / (1.08)^5 - 1 = -13\%$; $$.20[1 + (-13\%)] = \$.174$
16. Assume that the forward rate is used to forecast the spot rate. The forward rate of the Canadian dollar contains a 6% discount. Today's spot rate of the Canadian dollar is \$.80. The spot rate forecasted for one year ahead is:
- SOLUTION:** $$.80 \times [1 + (-6\%)] = \$.752$
17. If today's exchange rate reflects all relevant public information about the euro's exchange rate, but not all relevant private information, then _____ would be refuted.
- weak-form efficiency
 - semistrong-form efficiency
 - A and B**
18. According to the text, research generally supports _____ in foreign exchange markets.
- weak-form efficiency
 - semistrong-form efficiency
 - strong-form efficiency
 - A and B**
19. Assume that the U.S. interest rate is 11 percent, while Australia's one-year interest rate is 12 percent. Assume interest rate parity holds. If the one-year forward rate of the Australian dollar was used to forecast the future spot rate, the forecast would reflect an expectation of:
- depreciation in the Australian dollar's value over the next year.**
 - appreciation in the Australian dollar's value over the next year.
 - no change in the Australian dollar's value over the next year.
 - information on future interest rates is needed to answer this question.
20. If the forward rate was expected to be an unbiased estimate of the future spot rate, and interest rate parity holds, then:
- covered interest arbitrage is feasible.
 - the international Fisher effect (IFE) is supported.**
 - the international Fisher effect (IFE) is refuted.
 - the average absolute error from forecasting would equal zero.

21. Which of the following is not a forecasting technique mentioned in your text?

- a. accounting-based forecasting.
- b. technical forecasting.
- c. fundamental forecasting.
- d. market-based forecasting.

22. The following regression model was estimated to forecast the value of the Malaysian ringgit (MYR):

$$MYR_t = a_0 + a_1 INC_{t-1} + a_2 INF_{t-1} + m_t$$

Where MYR is the quarterly change in the ringgit, INF is the previous quarterly percentage change in the inflation differential, and INC is the previous quarterly percentage change in the income growth differential. Regression results indicate coefficients of $a_0 = 0.005$; $a_1 = 0.4$; and $a_2 = 0.7$. The most recent quarterly percentage change in the inflation differential is -5% , while the most recent quarterly percentage change in the income differential is 3% . Using this information, the forecast for the percentage change in the ringgit is:

SOLUTION: $MYR_t = .005 + (.4)(.03) + (.7)(-.05)$
 $= -1.80\%$

23. The following regression model was estimated to forecast the value of the Indian rupee (INR):

$$INR_t = a_0 + a_1 INT_t + a_2 INF_{t-1} + m_t$$

Where INR is the quarterly change in the rupee, INT is the real interest rate differential in period t between the U.S. and India, and INF is the inflation rate differential between the U.S. and India in the previous period. Regression results indicate coefficients of $a_0 = .003$; $a_1 = -.5$; and $a_2 = .8$. Assume that $INF_{t-1} = 2\%$. However, the interest rate differential is not known at the beginning of period t and must be estimated. You have developed the following probability distribution:

<u>Probability</u>	<u>Possible Outcome</u>
30 %	-2 %
40 %	-3 %
30 %	-4 %

The expected change in the Indian rupee in period t is:

$$INR_t = .003 + (-.5)(-.03) + (.8)(.02) = 3.40\%$$

24. Huge Corporation has just initiated a market-based forecast system using the forward rate as an estimate of the future spot rate of the Japanese yen (¥) and the Australian dollar (A\$). Listed below are the forecasted and realized values for the last period:

<u>Currency</u>	<u>Forecasted Value</u>	<u>Realized Value</u>
Australian dollar	\$.60	\$.55
Japanese yen	\$.0067	\$.0069

25. According to this information and using the absolute forecast error as a percentage of the realized value, the forecast of the yen by Huge Corp. is__ the forecast of the Australian dollar.

- a. more accurate than
- b. less accurate than
- c. more biased than
- d. the same as

SOLUTION: Absolute forecast error for the Australian dollar = $(|.60 - .55|)/.55 = 9.09\%$

Absolute forecast error for the Japanese yen = $(|.0067 - .0069|)/.0069 = 2.90\%$

Therefore, Huge Corp. has estimated the Japanese yen more accurately by approximately 6.19% .

25. 26. Gamma Corporation has incurred large losses over the last ten years due to exchange rate fluctuations of the Egyptian pound (EGP), even though the company has used a market-based forecast based on the forward rate. Consequently, management believes its forecasts to be biased. The following regression model was estimated to determine if the forecasts over the last ten years were biased:

$$S_t = a_0 + a_1 F_{t-1} + m_t$$

SOLUTION: $E[INT_t] = (-.02)(.3) + (-.03)(.4) + (-.04)(.3) = -3.00\%$

Where S_t is the spot rate of the pound in year t and F_{t-1} is the forward rate of the pound in year $t - 1$. Regression results reveal coefficients of $a_0 = 0$ and $a_1 = 1.3$. Thus, Gamma has reason to believe that its past forecasts have _____ the realized spot rate.

- a. overestimated
- b. underestimated
- c. correctly estimated

26. Which of the following is not a method of forecasting exchange rate volatility?

- a. using the absolute forecast error as a percentage of the realized value.
- b. using the volatility of historical exchange rate movements as a forecast for the future.
- c. using a time series of volatility patterns in previous periods.
- d. deriving the exchange rate's implied standard deviation from the currency option pricing model.

27. If a foreign currency is expected to substantially against the parent's currency, the parent may prefer to _____ the remittance of subsidiary earnings.

- a. weaken; delay
- b. weaken; expedite
- c. appreciate; expedite
- d. none of the above

28. If an MNC invests excess cash in a foreign country, it would like the foreign currency to _____; if an MNC issues bonds denominated in a foreign currency, it would like the foreign currency to _____.

- a. appreciate; depreciate
- b. appreciate; appreciate
- c. depreciate; depreciate

29. Severus Co. has to pay 5 million Canadian dollars for supplies it recently received from Canada. Today, the Canadian dollar has appreciated by 2 percent against the U.S. dollar. Severus has determined that whenever the Canadian dollar appreciates against the U.S. dollar by more than 1 percent, it experiences a reversal of 40 percent on the following day. Based on this information, the Canadian dollar is expected to _____ tomorrow, and Severus would prefer to make payment _____.

SOLUTION: $e_{t+1} = (2\%) \cdot (-40\%) = -0.8\%$ today

31. Sulsa Inc. uses fundamental forecasting. Using regression analysis, it has determined the following equation for the euro:

$$\begin{aligned} \text{euro}_t &= b_0 + b_1 INF_{t-1} + b_2 INC_{t-1} \\ &= .005 + .9 INF_{t-1} + 1.1 INC_{t-1} \end{aligned}$$

32. The most recent quarterly percentage change in the inflation differential between the U.S. and Europe was 2 percent, while the most recent quarterly percentage change in the income growth differential between the U.S. and Europe was -1 percent. Based on this information, the forecast for the euro is a(n) _____ of _____%.

SOLUTION: $\text{euro}_t = .005 + .9(.02) + 1.1(-.01) = 1.2\%$
 \Rightarrow appreciation

33. The U.S. inflation rate is expected to be 4 percent over the next year, while the European inflation rate is expected to be 3 percent. The current spot rate of the euro is \$1.03. Using purchasing power parity, the expected spot rate at the end of one year is \$_____.

SOLUTION: $e_{\$} = \frac{1.04}{1.03} - 1 = .0097$

$$E(S_{t+1}) = \$1.03(1.0097) = \$1.04$$

34. If the one-year forward rate for the euro is \$1.07, while the current spot rate is \$1.05, the expected percentage change in the euro is _____%.

SOLUTION: $E(e) = 1.07/1.05 - 1 = 1.90\%$

34. If both interest rate parity and the international Fisher effect hold, then between the forward rate and the spot rate, the _____ rate should provide more accurate forecasts for currencies in _____-inflation countries.

- a. spot; high
- b. spot; low
- c. forward; high**
- d. forward; low

35. If a foreign country's interest rate is similar to the U.S. rate, the forward rate premium or discount will be _____, meaning that the forward rate and spot rate will provide _____ forecasts.

- a. substantial; similar
- b. substantial; very different
- c. close to zero; similar**
- d. close to zero; very different

36. Factors such as economic growth, inflation, and interest rates are an integral part of _____ forecasting.

- a. technical
- b. fundamental**
- c. market-based
- d. none of the above

37. Silicon Co. has forecasted the Canadian dollar for the most recent period to be \$0.73. The realized value of the Canadian dollar in the most recent period was \$0.80. Thus, the absolute forecast error as a percentage of the realized value was ____%.

SOLUTION: $\frac{|0.73 - 0.80|}{0.80} = 8.8\%$

38. The absolute forecast error of a currency is _____, on average, in periods when the currency is more _____.

- a. lower; volatile
- b. higher; stable
- c. lower; stable**
- d. none of the above

39. If the foreign exchange market is _____ efficient, then historical and current exchange rate information is not useful for forecasting exchange rate movements.

- a. weak-form
- b. semistrong-form
- c. strong form
- d. all of the above**

40. Foreign exchange markets are generally found to be at least _____ efficient.

- a. weak-form
- b. semistrong-form**
- c. strong form
- d. none of the above

63. 41. Monson Co., based in the U.S., exports products to Japan denominated in yen. If the forecasted value of the yen is substantially _____ than the forward rate, Monson Co. will likely decide _____ the payments.

- a. higher; to hedge
- b. lower; not to hedge
- c. higher; not to hedge**

65. 42. The following is not a limitation of technical forecasting:

- a. It's not suitable for long-term forecasts of exchange rates.
- b. It doesn't provide point estimates or a range of possible future values.
- c. It cannot be applied to currencies that exhibit random movements.
- d. It cannot be applied to currencies that exhibit a continuous trend for short-term forecast.**

66. 43. The following regression model was estimated to forecast the percentage change in the Australian Dollar (AUD):

$$AUD_t = a_0 + a_1INT_t + a_2INF_{t-1} + m_t,$$

where AUD is the quarterly change in the Australian Dollar, INT is the real interest rate differential in period t between the U.S. and Australia, and INF is the inflation rate differential between the U.S. and Australia in the previous period. Regression results indicate coefficients of $a_0 = .001$; $a_1 = -.8$; and $a_2 = .5$. Assume that $INF_{t-1} = 4\%$. However, the interest rate differential is not known at the beginning of period t and must be estimated. You have developed the following probability distribution:

<u>Probability</u>	<u>Possible Outcome</u>
20%	-3%
80%	-4%

There is a 20% probability that the Australian dollar will change by _____, and an 80% probability it will change by _____.

SOLUTION: Probability 20% = $.001 + (-.8)(-.03) + (.5)(.04) = 4.5\%$
 Probability 80% = $.001 + (-.8)(-.04) + (.5)(.04) = 5.3\%$

67. Purchasing power parity is used in:

- a. technical forecasting.
- b. fundamental forecasting.
- c. market-based accounting.
- d. all of the above.

68. If speculators expect the spot rate of the yen in 60 days to be than the 60-day forward rate on the yen, they will _____ the yen forward and put _____ pressure on the yen's forward rate.

- a. higher; buy; upward
- b. higher; sell; downward
- c. higher; sell; upward
- d. lower; buy; upward

69. If speculators expect the spot rate of the Canadian dollar in 30 days to be _____ than the 30-day forward rate on Canadian dollars, they will _____ Canadian dollars forward and put pressure on the Canadian dollar forward rate.

- a. lower; sell; upward
- b. lower; sell; downward
- c. higher; sell; upward
- d. higher; sell; downward

70. Assume that U.S. annual inflation equals 8%, while Japanese annual inflation equals 5%. If purchasing power parity is used to forecast the future spot rate, the forecast would reflect an expectation of:

- a. appreciation of yen's value over the next year.
- b. depreciation of yen's value over the next year.

71. Assume that U.S. interest rates are 6%, while British interest rates are 7%. If the international Fisher effect holds and is used to determine the future spot rate, the forecast would reflect an expectation of:

- a. appreciation of pound's value over the next year.
- b. depreciation of pound's value over the next year.
- c. no change in pound's value over the next year.
- d. not enough information to answer this question.

72. If the foreign exchange market is efficient, then technical analysis is not useful in forecasting exchange rate movements.

- a. weak-form
- b. semistrong-form
- c. strong form
- d. all of the above

73. If today's exchange rate reflects any historical trends in Canadian dollar exchange rate movements, but not all relevant public information, then the Canadian dollar market is:

- a. weak-form efficient.
- b. semistrong-form efficient.
- c. strong-form efficient.
- d. all of the above.

74. Leila Corporation used the following regression model to determine if the forecasts over the last ten years were biased:

$$S_t = a_0 + a_1 F_{t-1} + m_t,$$

where S_t is the spot rate of the yen in year t and F_{t-1} is the forward rate of the yen in year $t - 1$. Regression results reveal coefficients of $a_0 = 0$ and $a_1 = .30$. Thus, Leila Corporation has reason to believe that its past forecasts have the realized spot rate.

- a. overestimated
- b. underestimated
- c. correctly estimated

75. Assume that U.S. interest rate for the next three years is 5%, 6%, and 7% respectively. Also assume that Canadian interest rates for the next three years are 3%, 6%, 9%. The current Canadian spot rate is \$.840. What is the approximate three-year forecast of Canadian dollar spot rate if the three-year forward rate is used as a forecast?

SOLUTION $\{[(1.05)(1.06)(1.07)]/[(1.03)(1.05)(1.08)]\}$
 $\times \$.84 = \$.856$

76. Which of the following is not one of the major reasons for MNCs to forecast exchange rates?

- a. to decide in which foreign market to invest the excess cash.
- b. to decide where to borrow at the lowest cost.
- c. to determine whether to require the subsidiary to remit the funds or invest them locally.
- d. to speculate on the exchange rate movements.

77. Sensitivity analysis allows for all of the following except:

- a. accountability for uncertainty.
- b. focus on a single point estimate of future exchange rates.
- c. development of a range of possible future values.
- d. consideration of alternative scenarios.

78. A regression model was applied to explain movements in the Canadian dollar's value over time. The coefficient for the inflation differential between the U.S. and Canada was -0.2. The coefficient of the interest rate differential between the U.S. and Canada produced a coefficient of 0.8. Thus, the Canadian dollar depreciates when the inflation differential and the interest rate differential .

- a. increases; increases
- b. decreases; increases
- c. increases; decreases
- d. increases; decreases

79. Which of the following is not a forecasting technique mentioned in your text?

- a. Accounting-based forecasting
- b. Technical forecasting
- c. Fundamental forecasting
- d. Market-based forecasting

92. 80. The following regression model was estimated to forecast the value of the Malaysian ringgit (MYR):

$$MYR_t = a_0 + a_1 INC_{t-1} + a_2 INF_{t-1} + m_t,$$

where MYR is the quarterly change in the ringgit, INF is the previous quarterly percentage change in the inflation differential, and INC is the previous quarterly percentage change in the income growth differential. Regression results indicate coefficients of $a_0 = 0.005$; $a_1 = 0.4$; and $a_2 = 0.7$. The most recent quarterly percentage change in the inflation differential is -5%, while the most recent quarterly percentage change in the income differential is 3%. Using this information, the forecast for the percentage change in the ringgit is

- a. 4.60%.
- b. -1.80%.
- c. 5.2%.
- d. -4.60%.

93. Pro Corp, a U.S.-based MNC, uses purchasing power parity to forecast the value of the Thai baht (THB), which has a current exchange rate of \$0.022. Inflation in the U.S. is expected to be 3% during the next year, while inflation in Thailand is expected to be 10%. Under this scenario, Pro Corp would forecast the value of the baht at the end of the year to be:

- a. \$0.023.
- b. \$0.021.
- c. \$0.020.

94. Small Corporation would like to forecast the value of the Cyprus pound (CYP) five years from now using forward rates. Unfortunately, Small is unable to obtain quotes for five-year forward contracts. However, Small observes that the five-year interest rate in the U.S. is 11%, while the Cyprus five-year interest rate is 15%. Based on this information, the Cyprus pound should _____ by _____% over the next five years.

- a. appreciate; 16.22
- b. depreciate; 16.22
- c. appreciate; 6.66
- d. depreciate; 6.66

95. The one-year forward rate of the British pound is \$1.55, while the current spot rate is \$1.60. Based on the forward rate, what is the expected percentage change in the British pound over the next year?

- a. +5.0%
- b. -3.1%
- c. +3.1%
- d. +3.2%

96. Which of the following is not a method of forecasting exchange rate volatility?

- a. Using the absolute forecast error as a percentage of the realized value to improve your forecast.
- b. Using the volatility of historical exchange rate movements as a forecast for the future.
- c. Using a time series of volatility patterns in previous periods.
- d. Deriving the exchange rate's implied standard deviation from the currency option pricing model.

Chapter 9—Measuring Exposure to Exchange Rate Fluctuations

1. Translation exposure reflects:

- a. the exposure of a firm's international contractual transactions to exchange rate fluctuations.
- b. the exposure of a firm's local currency value to transactions between foreign exchange traders.
- c. the exposure of a firm's financial statements to exchange rate fluctuations.
- d. the exposure of a firm's cash flows to exchange rate fluctuations.

2. Transaction exposure reflects:

- a. the exposure of a firm's international contractual transactions to exchange rate fluctuations.
- b. the exposure of a firm's local currency value to transactions between foreign exchange traders.
- c. the exposure of a firm's financial statements to exchange rate fluctuations.
- d. the exposure of a firm's cash flows to exchange rate fluctuations.

3. Economic exposure refers to:

- a. the exposure of a firm's international contractual transactions to exchange rate fluctuations.
- b. the exposure of a firm's local currency value to transactions between foreign exchange traders.
- c. the exposure of a firm's financial statements to exchange rate fluctuations.
- d. the exposure of a firm's cash flows to exchange rate fluctuations.

4. Diz Co. is a U.S.-based MNC with net cash inflows of euros and net cash inflows of Swiss francs. These two currencies are highly correlated in their movements against the dollar. Yanta Co. is a U.S.-based MNC that has the same level of net cash flows in these currencies as Diz Co. except that its euros represent net cash outflows. Which firm has a higher exposure to exchange rate risk?

- a. Diz Co.
- b. Yanta Co.

5. Jacko Co. is a U.S.-based MNC with net cash inflows of euros and net cash inflows of Sunland francs. These two currencies are highly negatively correlated in their movements against the dollar. Kriner Co. is a U.S.-based MNC that has the same exposure as Jacko Co. in these currencies, except that its Sunland francs represent cash outflows. Which firm has a high exposure to exchange rate risk?

- a. Jacko Co.
- b. Kriner Co.
- c. the firms have about the same level of exposure.
- d. neither firm has any exposure.

6. According to the text, currency variability levels perfectly stable over time, and currency correlations _____ perfectly stable over time.

- a. are; are not
- b. are; are
- c. are not; are not
- d. are not; are

7. Which of the following operations benefits from appreciation of the firm's local currency?

- a. borrowing in a foreign currency and converting the funds to the local currency prior to the appreciation.
- b. receiving earnings dividends from foreign subsidiaries.
- c. purchasing supplies locally rather than overseas.
- d. exporting to foreign countries.

8. Which of the following operations benefit(s) from depreciation of the firm's local currency?

- a. borrowing in a foreign country and converting the funds to the local currency prior to the depreciation.
- b. purchasing foreign supplies.
- c. investing in foreign bank accounts denominated in foreign currencies prior to depreciation of the local currency.
- d. A and B

9. Economic exposure can affect:

- a. MNCs only.
- b. purely domestic firms only.
- c. A and B
- d. none of the above

10. Under FASB 52:

- a. translation gains and losses are included in the reported net income.
- b. translation gains and losses are included in stockholder's equity.
- c. A and B
- d. none of the above

11. Assume that the British pound and Swiss franc are highly correlated. A U.S. firm anticipates the equivalent of \$1 million cash outflows in francs and the equivalent of \$1 million cash outflows in pounds. During a cycle, the firm is affected by its exposure.

- a. strong dollar; favorably
- b. weak dollar; not
- c. strong dollar; not
- d. weak dollar; favorably

12. A U.S. MNC has the equivalent of \$1 million cash outflows in each of two highly negatively correlated currencies. During dollar cycles, cash outflows are _____.

- a. weak; somewhat stable
- b. weak; favorably affected
- c. weak; adversely affected
- d. none of the above

13. Magent Co. is a U.S. company that has exposure to the Swiss francs (SF) and Danish kroner (DK). It has net inflows of SF200 million and net outflows of DK500 million. The present exchange rate of the SF is about \$.40 while the present exchange rate of the DK is \$.10. Magent Co. has not hedged these positions. The SF and DK are highly correlated in their movements against the dollar. If the dollar weakens, then Magent Co. will:

- a. benefit, because the dollar value of its SF position exceeds the dollar value of its DK position.
- b. benefit, because the dollar value of its DK position exceeds the dollar value of its SF position.
- c. be adversely affected, because the dollar value of its SF position exceeds the dollar value of its DK position.
- d. be adversely affected, because the dollar value of its DK position exceeds the dollar value of its SF position.

14. Generally, MNCs with less foreign costs than foreign revenues will be ___ affected by a ___ foreign currency.

- a. favorably; stronger
- b. not; stronger
- c. favorably; weaker
- d. not; weaker

15. When the dollar strengthens, the reported consolidated earnings of U.S.-based MNCs are affected by translation exposure. When the dollar weakens, the reported consolidated earnings are affected.

- a. favorably; favorably affected but by a smaller degree
- b. favorably; favorably affected by a higher degree
- c. unfavorably; favorably affected
- d. favorably; unfavorably affected

16. A firm produces goods for which substitute goods are produced in all countries. Appreciation of the firm's local currency should:

- a. increase local sales as it reduces foreign competition in local markets.
- b. increase the firm's exports denominated in the local currency.
- c. increase the returns earned on the firm's foreign bank deposits.
- d. increase the firm's cash outflow required to pay for imported supplies denominated in a foreign currency.
- e. none of the above

17. A firm produces goods for which substitute goods are produced in all countries. Depreciation of the firm's local currency should:

- a. decrease local sales as foreign competition in local markets is reduced.
- b. decrease the firm's exports denominated in the local currency.
- c. decrease the returns earned on the firm's foreign bank deposits.
- d. decrease the firm's cash outflow required to pay for imported supplies denominated in a foreign currency.
- e. none of the above

18. If a U.S. firm's cost of goods sold exposure is much greater than its sales exposure in Switzerland, there is a overall impact of the Swiss franc's depreciation against the dollar on .

- a. positive; interest expenses
- b. positive; gross profit
- c. negative; gross profit
- d. negative; interest expenses

19. Assume that your firm is an importer of Mexican chairs denominated in pesos. Your competition is mainly U.S. producers of chairs. You wish to assess the relationship between the percentage change in its stock price (SP_t) and the percentage change in the peso's value relative to the dollar ($PESO_t$). SP_t is the dependent variable. You apply the regression model to an earlier subperiod and a more recent subperiod. In the recent subperiod, you increased your importing volume. You should expect that the regression coefficient in the $PESO_t$ variable would be ___ in the first subperiod and in the second subperiod.

- a. negative; positive
- b. positive; positive
- c. positive; negative
- d. negative; negative

21. Which of the following is not a form of exposure to exchange rate fluctuations?

- a. transaction exposure.

- b. credit exposure.
- c. economic exposure.
- d. translation exposure.

22. Subsidiary A of Mega Corporation has net inflows in Australian dollars of A\$1,000,000, while Subsidiary B has net outflows in Australian dollars of A\$1,500,000. The expected exchange rate of the Australian dollar is \$.55. What is the net inflow or outflow as measured in U.S. dollars?

SOLUTION: $A\$1,000,000 - A\$1,500,000 = -A\$500,000$
 $-A\$500,000 \times \$0.55 = -\$275,000$
 \Rightarrow **\$275,000 outflow.**

23. Dubas Co. is a U.S.-based MNC that has a subsidiary in Germany and another subsidiary in Greece. Both subsidiaries frequently remit their earnings back to the parent company. The German subsidiary generated a net outflow of €2,000,000 this year, while the Greek subsidiary generated a net inflow of €1,500,000. What is the net inflow or outflow as measured in U.S. dollars this year? The exchange rate for the euro is \$1.05.

SOLUTION: $-\text{€}2,000,000 + \text{€}1,500,000 = -\text{€}500,000$
 $-\text{€}500,000 \times \$1.05 = -\$525,000$
 \Rightarrow **\$525,000 outflow**

24. One argument for exchange rate irrelevance is that:

- a. MNCs can hedge exchange rate exposure much more effectively than individual investors.
- b. investors can invest in a diversified stock portfolio of MNCs that have different exposures to exchange rates.
- c. purchasing power parity does not hold very well.
- d. MNCs are typically not diversified across numerous countries.

25. ____ exposure is the degree to which the value of contractual transactions can be affected by exchange rate fluctuations.

- a. Transaction
- b. Economic
- c. Translation
- d. None of the above

26. If an MNC expects cash inflows of equal amounts in two currencies, and the two currencies are ____ correlated, the MNC's transaction exposure is relatively ____.

- a. negatively; high
- b. negatively; low
- c. positively; low
- d. none of the above

27. If an MNC has a net inflow in one currency and a net outflow of about the same amount in another currency, then the MNC's transaction exposure is if the two currencies are correlated.

- a. high; positively
- b. low; negatively
- c. high; negatively
- d. none of the above

Exhibit 10-1

Cerra Co. expects to receive 5 million euros tomorrow as a result of selling goods to the Netherlands. Cerra estimates the standard deviation of daily percentage changes of the euro to be 1 percent over the last 100 days. Assume that these percentage changes are normally distributed. Use the value-at-risk (VAR) method based on a 95% confidence level for the following question(s).

28. Refer to Exhibit 10-1. What is the maximum one-day loss if the expected percentage change of the euro tomorrow is 0.5%?

SOLUTION: $0.5\% - (1.65 \times 1\%) = -1.2\%$

29. Refer to Exhibit 10-1. What is the maximum one-day loss in dollars if the expected percentage change of the euro tomorrow is 0.5%? The current spot rate of the euro (before considering the maximum one-day loss) is \$1.01.

SOLUTION: $0.5\% - (1.65 \times 1\%) = -1.2\%$
 $\$1.01 \times (-0.012) \times 5,000,000 = -\$60,600$

30. The maximum one-day loss computed for the value-at-risk (VAR) method does not depend on:

- a. the expected percentage change in the currency for the next day.
- b. the standard deviation of the daily percentage changes in the currency over a previous period.
- c. the current level of interest rates.**
- d. the confidence level used.

Exhibit 10-2

Volusia, Inc. is a U.S.-based exporting firm that expects to receive payments denominated in both euros and Canadian dollars in one month. Based on today's spot rates, the dollar value of the funds to be received is estimated at \$500,000 for the euros and \$300,000 for the Canadian dollars. Based on data for the last fifty months, Volusia estimates the standard deviation of monthly percentage changes to be 8 percent for the euro and 3 percent for the Canadian dollar. The correlation coefficient between the euro and the Canadian dollar is 0.30.

31. Refer to Exhibit 10-2. What is the portfolio standard deviation?

SOLUTION:

$$\sigma_p = \sqrt{(.625)^2 (.08)^2 + (.375)^2 (.03)^2 + 2(.625)(.375)(.08)(.03)(.30)}$$

$$= 5.44\%$$

32. Refer to Exhibit 10-2. Assuming an expected percentage change of 0 percent for each currency during the next month, what is the maximum one-month loss of the currency portfolio? Use a 95 percent confidence level and assume the monthly percentage changes for each currency are normally distributed.

SOLUTION:

$$\sigma_p = \sqrt{(.625)^2 (.08)^2 + (.375)^2 (.03)^2 + 2(.625)(.375)(.08)(.03)(.30)}$$

$$= 5.44\%$$

$$0\% - (1.65 \times 5.44\%) = -9.00\%$$

33. Appreciation in a firm's local currency causes a(n) _____ in cash inflows and a(n) _____ in cash outflows.

- a. reduction; reduction**
- b. increase; increase

- c. increase; reduction
- d. reduction; increase

34. In general, a firm that concentrates on local sales, has very little foreign competition, and obtains foreign supplies (denominated in foreign currencies) will likely a(n) local currency.

- a. be hurt by; appreciated
- b. benefit from; depreciated
- c. be hurt by; depreciated**
- d. none of the above

35. The the percentage of an MNC's business conducted by its foreign subsidiaries, the the percentage of a given financial statement item that is susceptible to translation exposure.

- a. greater; smaller
- b. smaller; greater
- c. greater; greater**
- d. none of the above

37. If the U.S. dollar appreciates, an MNC's:

- a. U.S. sales will probably decrease.**
- b. exports denominated in U.S. dollars will probably increase.
- c. interest owed on foreign funds borrowed will probably increase.
- d. exports denominated in foreign currencies will probably increase.

38. Assume that Mill Corporation, a U.S.-based MNC, has applied the following regression model to estimate the sensitivity of its cash flows to exchange rate movements:

$$PCF_t = a_0 + a_1 e_t + m_t$$

where the term on the left-hand side is the percentage change in inflation-adjusted cash flows measured in the firm's home currency over period t , and e_t is the percentage change in the exchange rate of the currency over period t . The regression model estimates a coefficient of a_1 of 2. This indicates that:

- a. if the foreign currency appreciates by 1%, Mill's cash flows will decline by 2%.
- b. if the foreign currency appreciates by 1%, Mill's cash flows will decline by .2%.
- c. if the foreign currency depreciates by 1%, Mill's cash flows will increase by 2%.
- d. if the foreign currency depreciates by 1%, Mill's cash flows will decline by 2%.

39. _____ is (are) not a determinant of translation exposure.

- a. The MNC's degree of foreign involvement
- b. The locations of foreign subsidiaries
- c. The local (domestic) earnings of the MNC
- d. The accounting methods used

40. The following regression model was run by a U.S.-based MNC to determine its degree of economic exposure as it relates to the Australian dollar and Sudanese dinar (SDD):

$$PCF_t = a_0 + a_1 e_t + m_t$$

where the term on the left-hand side is the percentage change in inflation-adjusted cash flows measured in the firm's home currency over period t , and e_t is the percentage change in the exchange rate of the currency over period t . The regression was run over two subperiods for each of the two currencies, with the following results:

	Regression Coefficient (a_1)	Regression Coefficient (a_1)
<u>Currency</u>	<u>Earlier Subperiod</u>	<u>Recent Subperiod</u>
Australian dollar (A\$)	-.80	.10
Sudanese dinar (SDD)	.20	.25

41. Based on these results, which of the following statements is probably not true?

- a. The MNC was more sensitive to movements in the Australian dollar than in the dinar in the earlier subperiod.
- b. The MNC was more sensitive to movements in the

dinar than in the Australian dollar in the more recent subperiod.

- c. The MNC probably had more outflows than inflows in Australian dollars in the earlier subperiod.
- d. The MNC probably had more inflows than outflows denominated in dinar in the more recent subperiod.

41. Consider an MNC that is exposed to the Taiwan dollar (TWD) and the Egyptian pound (EGP). 25% of the MNC's funds are Taiwan dollars and 75% are pounds. The standard deviation of exchange movements is 7% for Taiwan dollars and 5% for pounds. The correlation coefficient between movements in the value of the Taiwan dollar and the pound is .7. Based on this information, the standard deviation of this two-currency portfolio is approximately:

SOLUTION

$$\sigma_p = \sqrt{(.25)^2 (.07)^2 + (.75)^2 (.05)^2 + 2(.25)(.75)(.07)(.05)(.7)}$$

$$= 5.13\%$$

42. Consider an MNC that is exposed to the Bulgarian lev (BGL) and the Romanian leu (ROL). 30% of the MNC's funds are lev and 70% are leu. The standard deviation of exchange movements is 10% for lev and 15% for leu. The correlation coefficient between movements in the value of the lev and the leu is .85. Based on this information, the standard deviation of this two-currency portfolio is approximately:

SOLUTION

$$\sigma_p = \sqrt{(.30)^2 (.10)^2 + (.70)^2 (.15)^2 + 2(.30)(.70)(.10)(.15)(.85)}$$

$$= 13.15\%$$

65. Vada, Inc. exports computers to Australia invoiced in U.S. dollars. Its main competitor is located in Japan. Vada is subject to:

- a. economic exposure.
- b. transaction exposure.
- c. translation exposure.
- d. economic and transaction exposure.

66. Jenco Co. imports raw materials from Japan, invoiced in U.S. dollars. The price it pays is not expected to change for the next several years. If the Japanese yen appreciates, its imports from Japan will probably and if the Japanese yen depreciates, its imports from Japan will probably_.

- a. increase; decrease

- b. decrease; increase
- c. increase; stay the same
- d. stay the same; stay the same

67. Yomance Co. is a U.S. company that has exposure to Japanese yen and British pounds. It has net inflows of 5,000,000 yen and net outflows of 60,000 pounds. The present exchange rate of the Japanese yen is \$.012 while the present exchange rate of the British pound is \$1.50. Yomance Co. has not hedged its positions. The yen and pound movements against the dollar are highly and positively correlated. If the dollar strengthens, then Yomance Co. will:

- a. benefit, because the dollar value of its pound position exceeds the dollar value of its yen position.
- b. benefit, because the dollar value of its yen position exceeds the dollar value of its pound position.
- c. be adversely affected, because the dollar value of its pound position exceeds the dollar value of its yen position.

68. Generally, MNCs with less foreign revenues than foreign costs will be ___ affected by a_ foreign currency.

- a. favorably; stronger
- b. favorably; weaker
- c. not; stronger
- d. not; weaker

69. If a U.S. firm's cost of goods sold in Switzerland is much greater than its sales in Switzerland, the appreciation of the Swiss franc has a impact on the firm's .

- a. positive; interest expenses
- b. positive; gross profit
- c. negative; gross profit

70. If a U.S. firm's sales in Australia are much greater than its cost of goods sold in Australia, the appreciation of the Australian dollar has a impact on the firm's ____.

- a. positive; interest expenses

- b. positive; gross profit
- c. negative; interest expenses
- d. negative; gross profit

71. U.S. based Majestic Co. sells products to U.S. consumers and purchases all of materials from U.S. suppliers. Its main competitor is located in Belgium. Majestic Co. is subject to:

- a. economic exposure.
- b. translation exposure.
- c. transaction exposure.

72. Vermont Co. has one foreign subsidiary. Its translation exposure is directly affected by each of the following, except:

- a. the interest rate in the country of the subsidiary.
- b. proportion of business conducted by the subsidiary.
- c. its accounting method.

73. Treck Co. expects to pay €200,000 in one month for its imports from Greece. It also expects to receive €250,000 for its exports to Italy in one month. Treck Co. estimates the standard deviation of monthly percentage changes of the euro to be 3 percent over the last 40 months. Assume that these percentage changes are normally distributed. Using the value-at-risk (VAR) method based on a 95% confidence level, what is the maximum one-month loss in dollars if the expected percentage change of the euro during next month is -2%? Assume that the current spot rate of the euro (before considering the maximum one-month loss) is \$1.23.

SOLUTION: Net exposure = €250,000 - €200,000 = €50,000

Maximum one-month loss: $-2\% - (1.65 \times 3\%) = -6.95\%$

$\$1.23 \times (-.0695\%) \times €50,000 = -\$4,274$

74. Jensen Co. expects to pay €50,000 in one month for its imports from France. It also expects to receive €200,000 for its exports to Belgium in one month. Jensen estimates the standard deviation of monthly percentage changes of the euro to be 2.5 percent over the last 50 months. Assume that these percentage changes are normally distributed. Using the value-at-risk (VAR) method based on a 97.5% confidence level, what is the maximum one month loss in dollars if the expected percentage change of the euro during next month is 2%? Assume that current spot rate of the euro (before considering the maximum one-month loss) is \$1.35.

SOLUTION: Net exposure = €200,000 - €50,000 = €150,000

Maximum one-month loss: $2\% - (1.96 \times 2.5\%) = -2.9\%$

€150,000 \times \$1.35 \times (-0.029) = **-\$5,873**

75. Lazer Co. is a U.S. firm that exports computers to Belgium invoiced in euros and to Italy invoiced in dollars. Additionally, Lazer Co. has a subsidiary in Korea that produces computers in South Korea and sells them there. Lazer also has competitors in different countries. Lazer Co. is subject to:

- a. transaction exposure.
- b. economic exposure.
- c. translation exposure.
- d. all of the above.**

76. Lampon Co. is a U.S. firm that has a subsidiary in Hong Kong that produces light fixtures and sells them to Japan, denominated in Japanese yen. Its subsidiary pays all of its expenses, including the cost of goods sold, in U.S. dollars. The Hong Kong dollar is pegged to the U.S. dollar. If the Japanese yen appreciates against the U.S. dollar, the Hong Kong subsidiary's revenue will ____, and its expenses will__.

- a. increase; decrease
- b. decrease; remain unchanged
- c. decrease; increase
- d. increase; remain unchanged**

77. Assume that the Japanese yen is expected to depreciate substantially over the next year. The U.S.-based MNC has a subsidiary in Japan, where its costs exceed revenues. The overall value of MNC will because of the yen's depreciation.

- a. decrease
- b. increase**
- c. remain unchanged
- d. A and C are possible

91. Which of the following is not a form of exposure to exchange rate fluctuations?

- a. Transaction exposure
- b. Credit exposure**
- c. Economic exposure
- d. Translation exposure

92. Which of the following is not true regarding currency correlations?

- a. Two highly positively correlated currencies act almost as if they are the same currency.
- b. If two inflow currencies are highly positively correlated transaction exposure is somewhat offset.**
- c. If two inflow currencies are negatively correlated transaction exposure is somewhat offset.
- d. If two currencies, one an inflow currency and the other an outflow currency, are highly positively correlated, transaction exposure is somewhat offset.

93. If the U.S. dollar appreciates,

- a. an MNC's U.S. sales will probably decrease.**
- b. an MNC's exports denominated in U.S. dollars will probably increase.
- c. an MNC's interest owed on foreign funds borrowed will probably increase.
- d. an MNC's exports denominated in foreign currencies will probably increase.
- e. all of the above

94. Which of the following is not true regarding economic exposure?

- a. Even purely domestic firms can be affected by economic exposure.
- b. In general, depreciation of the firm's local currency causes a decrease in both cash inflows and outflows.**
- c. The degree of economic exposure will likely be much greater for a firm involved in international business than for a purely domestic firm.
- d. The impact of a change in the local currency on inflow and outflow variables can sometimes be indirect and therefore different from what is expected.

Chapter 10—Direct Foreign Investment

1. Based on the text, it should be obvious that markets are in reality, and consequently, monopolistic advantages be exploited.

- a. perfect; may possibly
- b. perfect; cannot
- c. imperfect; may possibly**
- d. imperfect; cannot

2. When a firm analyzes the feasibility of a project, it should consider the:

- a. variability of the project's cash flow.
- b. correlation of the project's cash flow relative to the prevailing cash flows of the MNC.
- c. A and B**
- d. none of the above

3. The a project's variability in cash flows, and the _____ the positive correlation between the project's cash flow and the MNC's cash flow, the lower the risk of the project.

- a. higher; higher
- b. higher; lower
- c. lower; lower**
- d. lower; higher

5. Consider Firm A and Firm B that both produce the same product. Firm A would more likely have more stable cash flows if its percentage of foreign sales were _____ and the number of foreign countries it sold products to was_.

- a. higher; large**
- b. higher; small
- c. lower; small

6. According to the text, a firm may be able to achieve a "more efficient" project portfolio if it:

- a. focuses solely on one product.
- b. focuses solely on one location to market what it produces.
- c. A and B
- d. none of the above**

7. According to information in the text, a host government would be least likely to provide incentives for direct foreign investment (DFI) into its country if the firm planning DFI:

- a. would compete with local firms of the host country.**
- b. would produce a good not currently available in the host country.
- c. would produce a good and export it to other countries.

8. If countries are highly influential upon each other, the correlations of their economic growth levels would likely be . A firm would benefit_ by diversifying sales among these countries relative to another set of countries that were not influential upon each other.

- a. high and positive; more
- b. close to zero; more
- c. high and positive; less**
- d. close to zero; less

9. A firm will likely benefit most from diversifying if:

- a. the correlations between country economies are high.
- b. the correlations between country economies are low.**

10. Consider a country that presently has a high level of unemployment because of weak economic conditions. Its income levels are very low. This country may be an attractive target as a result of motives by U.S. firms that engage in direct foreign investment.

- a. revenue-related
- b. cost-related**
- c. A and B
- d. none of the above

11. Which of the following is a reason to consider international business?

- a. economies of scale.
- b. exploit monopolistic advantages.
- c. diversification.
- d. all of the above**

12. From the concept of an "efficient frontier," the point on a frontier that is optimal for all firms:

- a. is the top point.
- b. is the point closest to the vertical axis.
- c. is the point half way between the two end points.
- d. cannot be determined since firms vary in their willingness to accept risk.**

13. Direct foreign investment is perceived by foreign governments to:

- a. be a cause of national problems.
- b. be a remedy for national problems.
- c. either A or B is possible.**
- d. have no impact on national problems.

14. Direct foreign investment would typically be welcomed if:

- a. the products to be produced are substitutes for other locally produced products.

- b. people from the country of the company's headquarter are transferred to the foreign country to work at the subsidiary.
- c. the products to be produced are going to be exported.**
- d. all of the above

16. Assume a U.S. firm initiates direct foreign investment in the U.K. If the British pound is expected to appreciate against the dollar, the dollar value of earnings remitted to the parent should . The parent may request that the subsidiary in order to benefit from the expectation about the pound.

- a. increase; postpone remitting earnings until the pound strengthens**
- b. decrease; postpone remitting earnings until the pound strengthens
- c. decrease; remit earnings immediately before the pound strengthens
- d. increase; remit earnings immediately before the pound strengthens

17. Assume the British pound appreciates against the dollar while the Japanese yen depreciates against the dollar. Which of the following is true?

- a. Japanese exporters can increase American sales by shifting operations from their British subsidiaries to Japan.**
- b. British exporters can increase American sales by shifting operations from their Japanese subsidiaries to Britain.
- c. American exporters can increase sales to Japan by shifting operations from Japanese subsidiaries to American subsidiaries.
- d. B and C

18. Even if production costs are higher in a foreign country, a U.S. firm may establish a manufacturing plant in the foreign country now if:

- a. the host government of that country eliminates all quotas.
- b. the host government of that country reduces all quotas.
- c. the host government of that country increases all quotas.**

- d. the host government of that country eliminates all tariffs.

19. A country with high unemployment could best increase its employment by:

- a. encouraging foreign firms to establish subsidiaries that produce the same products local firms produce.
- b. encouraging foreign firms to establish licensing arrangements for products local firms produce.
- c. **encouraging foreign firms to establish subsidiaries that produce products local firms do not produce.**
- d. none of the above would reduce employment.

20. According to your text,___ is a country that has been perceived as one of the most attractive sources of new demand.

- a. Paraguay
- b. Morocco
- c. Sweden

d. China

21. _____ is not a disadvantage of direct foreign investment.

- a. The expense of establishing a foreign subsidiary
- b. The uncertainty of inflation and exchange rate movements
- c. Political risk
- d. **All of the above are disadvantages of direct foreign investment**

22. Assume the correlation coefficient between the return on the existing project and the return on a proposed foreign project is 1. Also assume the returns on the existing project and the new project are equal, and that the existing project has a lower standard deviation than the proposed project. Under this scenario, undertaking the proposed project will the variance of the firm's overall returns.

- a. decrease
- b. **increase**
- c. decrease or increase, depending on the exact size of the returns and standard deviations

23. Which of the following is not true regarding host government attitudes towards direct foreign investment (DFI)?

- a. Host governments may offer incentives to MNCs in the form of subsidies in certain circumstances.
- b. **Host governments generally perceive DFI as a remedy to eliminate a country's political problems.**
- c. The ability of a host government to attract DFI is dependent on the country's markets and resources.
- d. Some types of DFI will be more attractive to some governments than to others.

24. Which of the following is not true regarding the efficient frontier considered by MNCs?

- a. **There is exactly one point on the efficient frontier that is optimal for every MNC, regardless of its degree of risk aversion.**
- b. The efficient frontier for international projects will probably lie to the left of the efficient frontier for domestic projects.
- c. Each point on the efficient frontier represents a portfolio of projects as opposed to an individual project.
- d. All of the above are true.

25. Which of the following is not a cost-related motive of direct foreign investment?

- a. **International diversification.**
- b. Low labor costs.
- c. Land can be purchased at a low price.
- d. Manufacturing plants can be built for a low price.

27. _____ is not a revenue-related motive for direct foreign investment.

- a. Attracting new sources of demand
- b. **Fully benefiting from economies of scale**
- c. Exploiting monopolistic advantages
- d. Entering profitable markets

28. _____ is not a cost-related motive for direct foreign investment.

- a. Exploiting monopolistic advantages**
- b. Fully benefiting from economies of scale
- c. Using foreign factors of production
- d. Using foreign raw materials

29. When a firm perceives that a foreign currency is _____, the firm may attempt direct foreign investment in that country, as the initial outlay should be relatively _____.

- a. overvalued; high
- b. overvalued; low**
- c. undervalued; high
- d. undervalued; low**

30. The best means to accomplish the revenue-related motive of attracting new sources of demand is to:

- a. acquire a competitor that has controlled its local market.
- b. establish a subsidiary or acquire a competitor in a new market.**
- c. establish a subsidiary in a market where tougher trade restrictions will adversely affect the firm's export volume.
- d. establish subsidiaries in markets whose business cycles differ from those where existing subsidiaries are based.

31. To enter markets where superior profits are possible, an MNC should:

- a. acquire a competitor that has controlled its local market.**
- b. establish a subsidiary or acquire a competitor in a new market.
- c. establish a subsidiary in a market where tougher trade restrictions will adversely affect the firm's export volume.
- d. establish subsidiaries in markets whose business cycles differ from those where existing subsidiaries are based.

34. To exploit monopolistic advantages, an MNC should:

- a. acquire a competitor that has controlled its local market.
- b. establish a subsidiary or acquire a competitor in a new market.
- c. establish a subsidiary in a market where tougher trade restrictions will adversely affect the firm's export volume.
- d. establish subsidiaries in markets where competitors are unable to produce the identical product.**

35. To fully benefit from economies of scale, an MNC should:

- a. establish a subsidiary in a new market that can sell products produced elsewhere.**
- b. establish a subsidiary in a market that has relatively low costs of labor or land.
- c. establish a subsidiary in a market where raw materials are cheap and accessible.
- d. participate in a joint venture in order to learn about a production process or other operations.

36. To use foreign factors of production, an MNC should:

- a. establish a subsidiary in a new market that can sell products produced elsewhere.
- b. establish a subsidiary in a market that has relatively low costs of labor or land.**
- c. establish a subsidiary in a market where raw materials are cheap and accessible.
- d. participate in a joint venture in order to learn about a production process or other operations.

38. When economic conditions of two countries are _____, then a firm would _____ its risk by operating in both countries instead of concentrating just in one.

- a. highly correlated; reduce
- b. not highly correlated; not reduce
- c. not highly correlated; reduce**
- d. none of the above

39. Assume a U.S. firm initiates direct foreign investment in Italy. If the euro is expected to depreciate against the dollar, the dollar value of earnings remitted to the parent should__ . The parent may request that the subsidiary .

- a. increase; postpone remitting earnings until the euro weakens
- b. decrease; postpone remitting earnings until the euro weakens
- c. decrease; remit earnings immediately before the euro weakens

40. To diversify internationally for the purpose of reducing risk, which strategy is appropriate?

- a. Establish subsidiaries in markets whose business cycles are the same as those where existing subsidiaries are based.
- b. Establish a subsidiary in a market that has relatively low cost of labor or land.
- c. Establish a subsidiary in a market where the local currency is weak but is expected to appreciate over time.
- d. Establish subsidiaries in markets whose business cycles differ from those where existing subsidiaries are based.

41. To fully benefit from use of foreign raw materials:

- a. establish a subsidiary in a market where raw materials are cheap and accessible.
- b. sell the finished product to countries where the raw materials are more expensive.
- c. establish a subsidiary in a new market that can sell products produced elsewhere.
- d. A and B

42. Procedural and documentation requirements imposed by the foreign government are referred to as:

- a. regulatory barriers.
- b. industry barriers.
- c. "Red Tape" barriers.

52. Constraints pertaining to taxes, currency convertibility, earnings remittance, and employee rights are best described as:

- a. ethical differences.
- b. regulatory barriers.
- c. quota barriers.
- d. "Red Tape" barriers.

53. Assume that the government of Krusho requires bribes to approve certain projects. MNCs that attempt to do business in Krusho must deal with:

- a. protective barriers.
- b. "red tape" barriers.
- c. ethical differences.
- d. regulatory barriers.

57. Direct foreign investment is commonly considered by MNCs because it allows the MNC to:

- a. attract new sources of demand.
- b. enter profitable markets.
- c. react to exchange rate movements.
- d. react to trade restrictions.
- e. all of the above

58. _____ is not a revenue-related motive for direct foreign investment (DFI).

- a. Attracting new sources of demand
- b. Fully benefiting from economies of scale
- c. Exploiting monopolistic advantages
- d. Reacting to trade restrictions

59. _____ is not a cost-related motive for direct foreign investment (DFI).

- a. Using foreign factors of production
- b. Using foreign raw materials
- c. Using foreign technology
- d. Reacting to trade restrictions

60. When a foreign currency is perceived by a firm to be ____, the firm will probably ____ direct foreign investment in that country.

- a. undervalued; consider
- b. undervalued; not consider
- c. overvalued; not consider
- d. A and C**

61. The best means of using direct foreign investment (DFI) to fully benefit from cheap foreign factors of production is probably to:

- a. acquire a competitor that has controlled its local market.
- b. establish a subsidiary in a new market that can sell products produced elsewhere; this allows for increased production and possibly greater production efficiency.
- c. establish a subsidiary in a market that has relatively low costs of labor and land; sell the finished product to countries where the cost of production is higher.**
- d. establish a subsidiary in a market in which raw materials are cheap and accessible; sell the finished product to countries in which the raw materials are more expensive.

62. The__ the correlation in project returns is over time, the will be the project portfolio risk as measured by the portfolio variance.

- a. lower; lower**
- b. higher; lower
- c. lower; higher
- d. none of the above

63. Which of the following is not true regarding host government attitudes towards direct foreign investment (DFI)?

- a. Host governments may offer incentives to MNCs in the form of subsidies in certain circumstances.
- b. Host governments generally perceive DFI as a remedy for their national problems.**
- c. The ability of a host government to attract DFI is dependent on the country's markets and resources.

Chapter 11—Multinational Capital Budgeting

1. If a U.S. parent is setting up a French subsidiary, and funds from the subsidiary will be periodically sent to the parent, the ideal situation from the parent's perspective is a after the subsidiary is established.

- a. strengthening euro**
- b. stable euro
- c. weak euro
- d. B and C are both ideal.

2. According to the text, in order to develop a distribution of possible net present values from international projects, a firm should use:

- a. a risk-adjusted discount rate.
- b. a payback period.
- c. certainty equivalents.
- d. simulation.**

3. When evaluating international project cash flows, which of the following factors is relevant?

- a. future inflation.
- b. blocked funds.
- c. exchange rates.
- d. all of the above**

6. When assessing a German project administered by a German subsidiary of a U.S.-based MNC solely from the German subsidiary's perspective, which variable will most likely influence the capital budgeting analysis?

- a. the withholding tax rate.
- b. the euro's exchange rate.
- c. the U.S. tax rate on earnings remitted to the U.S.
- d. the German government's tax rate.**

7. In capital budgeting analysis, the use of a cumulative NPV is useful for:

- a. determining a probability distribution of NPVs.
- b. determining the time required to achieve a positive NPV.**
- c. determining how the required rate of return changes over time.
- d. determining how the cost of capital changes over time.

8. Assume the parent of a U.S.-based MNC plans to completely finance the establishment of its British subsidiary with existing funds from retained earnings in U.S. operations. According to the text, the discount rate used in the capital budgeting analysis on this project should be most affected by:

- a. the cost of borrowing funds in the U.K.
- b. the economic conditions in the U.K.
- c. the parent's cost of capital.**
- d. A and B

9. Assume a U.S.-based MNC has a Chilean subsidiary that annually remits 30 million Chilean pesos to the U.S. If the peso , the dollar amount of remitted funds .

- a. appreciates; decreases
- b. depreciates; is unaffected
- c. appreciates; is unaffected
- d. **depreciates; decreases**
- e. B and C

10. Assume an MNC establishes a subsidiary where it has no other existing business. The present value of parent cash flows from this subsidiary is more sensitive to exchange rate movements when:

- a. the subsidiary finances the entire investment by local borrowing.
- b. the subsidiary finances most of the investment by local borrowing.
- c. the parent finances most of the investment.
- d. **the parent finances the entire investment.**

11. If an MNC exports to a country, then establishes a subsidiary to produce and sell the same product in the country, then cash flows from prevailing operations would likely be affected by the project. If an MNC establishes a foreign manufacturing subsidiary that buys components from the parent, the cash flows from prevailing operations would likely be _____ affected by the project.

- a. adversely; adversely
- b. favorably; adversely
- c. favorably; favorably
- d. **adversely; favorably**

12. An MNC is considering establishing a two-year project in New Zealand with a \$30 million initial investment. The firm's cost of capital is 12%. The required rate of return on this project is 18%. The project is expected to generate cash flows of NZ\$12 million in Year 1 and NZ\$30 million in Year 2, excluding the salvage value. Assume no taxes, and a stable exchange rate of \$.60 per NZ\$ over the next two years. All cash flows are remitted to the parent. What is the break-even salvage value?

- e. **about NZ\$25 million.**

SOLUTION:

$$\begin{array}{lcl}
 1 & \text{NZ\$12,000,00} & \$7,200,000/(1.18) = \$6,101,695 \\
 & 0 - \$.60 = & \\
 & \$7,200,000 & \\
 2 & \text{NZ\$30,000,00} & \$18,000,000/(1.18 = \underline{\$12,927,32} \\
 & 0 - \$.60 =)^2 & \underline{0} \\
 & \$18,000,000 & \\
 & & \$19,029,01 \\
 & & 5
 \end{array}$$

Break-even

$$\text{salvage} = [\text{Initial outlay} - \text{PV of cash flows}] (1 + k)_m$$

value

$$\begin{aligned}
 &= [\$30,000,000 - \$19,029,015] (1.18)^2 \\
 &= \$15,276,000
 \end{aligned}$$

Break-even

$$\text{salvage} = \$15,276,000 / \$.60 = \text{NZ\$25,459,999}$$

value

in NZ\$

13. A firm considers an exporting project and will invoice the exports in dollars. The expected cash flows in dollars would be more difficult if the currency of the foreign country is .

- a. fixed
- b. **volatile**
- c. stable
- d. none of the above, as the firm is not exposed

15. Other things being equal, a blocked funds restriction is more likely to have a significant adverse effect on a project if the currency of that country is expected to _____ over time, and if the interest rate in that country is relatively .

- a. appreciate; low
- b. appreciate; high
- c. depreciate; high
- d. **depreciate; low**

17. Other things being equal, firms from a particular home country will engage in more international acquisitions if they expect foreign currencies to _____ against their home currency, and if their cost of capital is relatively .

- a. appreciate; low
- b. appreciate; high
- c. depreciate; high
- d. depreciate; low

18. The discrepancy between the feasibility of a project in a host country from the perspective of the U.S. parent versus the subsidiary administering the project is likely to be greater for projects in countries where:

- a. the taxes are the same as in the U.S.
- b. there are no blocked fund restrictions.
- c. **the currency of the host country is expected to depreciate consistently.**
- d. none of the above; a discrepancy is not possible.

19. The break-even salvage value of a particular project is the salvage value necessary to:

- offset any losses incurred by the subsidiary in a given year.
- offset any losses incurred by the MNC overall in a given year.
- make the project have zero profits.
- make the project's return equal the required rate of return.

20. The impact of blocked funds on the net present value of a foreign project will be greater if interest rates are in the host country and there are investment opportunities in the host country.

- very high; limited
- very low; limited
- very low; numerous
- very high; numerous

21. One foreign project in Hungary and another in Japan had the same perceived value from the U.S. parent's perspective. Then, the exchange rate expectations were revised, upward for the value of the Hungarian forint and downward for the Japanese yen. The break-even salvage value for the project in Japan would now be from the parent's perspective.

- negative
- higher than that for the Hungarian project
- lower than that for the Hungarian project
- the same as that for the Hungarian project

22. Exchange rates for purposes of multinational capital budgeting:

- are very difficult to forecast.
- can be easily hedged with currency swaps.
- are unimportant, as they do not affect the cash flows of the multinational project.
- all of the above

23. A U.S.-based MNC has just established a subsidiary in Algeria. Shortly after the plant was built, the MNC determines that its exchange rate forecasts, which had previously indicated a slight appreciation in the Algerian dinar, were probably false. Instead of a slight appreciation, the MNC now expects that the dinar will depreciate substantially due to political turmoil in Algeria. This new development would likely cause the MNC to ___ its estimate of the previously computed net present value.

- lower
- increase
- lower, but not necessarily if the MNC invests enough in Algeria to offset the decrease in NPV
- increase, but not necessarily if the MNC reduces its investment in Algeria by an offsetting amount

Exhibit 14-1

Assume that Baps Corporation is considering the establishment of a subsidiary in Norway. The initial investment required by the parent is \$5,000,000. If the project is undertaken, Baps would terminate the project after four years. Baps' cost of capital is 13%, and the project is of the same risk as Baps' existing projects. All cash flows generated from the project will be remitted to the parent at the end of each year. Listed below are the estimated cash flows the Norwegian subsidiary will generate over the project's lifetime in Norwegian kroner (NOK):

<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
NOK10,000,000	NOK15,000,000	NOK17,000,000	NOK20,000,000

The current exchange rate of the Norwegian kroner is \$.135. Baps' exchange rate forecast for the Norwegian kroner over the project's lifetime is listed below:

<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
\$.13	\$.14	\$.12	\$.15

24. Refer to Exhibit 14-1. What is the net present value of the Norwegian project?

SOLUTION:

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Cash flow to parent	-\$5,000,000	\$1,300,000	\$2,100,000	\$2,040,000	\$3,000,000
PV of parent cash flow		1,150,442	1,644,608	1,413,822	1,839,956
Cumulative NPV		3,849,558	2,204,950	791,128	1,048,828

25. Refer to Exhibit 14-1. Assume that NOK8,000,000 of the cash flow in year 4 represents the salvage value. Baps is not completely certain that the salvage value will be this amount and wishes to determine the break-even salvage value, which is \$.

- 510,088.04
- 1,710,088
- 1,040,000
- none of the above

SOLUTION:

Even if there is no salvage value, the NPV would still be positive, as shown below:

<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
---------------	---------------	---------------	---------------	---------------

Cash flow to parent	-\$5,000	\$1,300,000	\$2,100,000	\$2,040,000	\$1,800,000
PV of parent cash flow		1,150,442	1,644,608	1,413,822	1,103,974
Cumulative NPV		-3,849,558	-2,204,950	-791,128	312,846

26. Refer to Exhibit 14-1. Baps is also uncertain regarding the cost of capital. Recently, Norway has been involved in some political turmoil. What is the net present value (NPV) of this project if a 16% cost of capital is used instead of 13%?

SOLUTION:

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Cash flow to parent	-\$5,000	\$1,300,000	\$2,100,000	\$2,040,000	\$3,000,000
PV of parent cash flow		1,120,690	1,560,642	1,306,942	1,656,873
Cumulative NPV		-3,879,310	-2,318,668	-1,011,726	645,147

27. Petrus Company has a unique opportunity to invest in a two-year project in Australia. The project is expected to generate 1,000,000 Australian dollars (A\$) in the first year and 2,000,000 Australian dollars in the second. Petrus would have to invest \$1,500,000 in the project. Petrus has determined that the cost of capital for similar projects is 14%. What is the net present value of this project if the spot rate of the Australian dollar for the two years is forecasted to be \$.55 and \$.60, respectively?

SOLUTION:

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>
Cash flow to parent	-\$1,500,000	\$550,000	\$1,200,000
PV of parent cash flow		482,456	923,361
Cumulative NPV		-1,017,544	94,183

28. Which of the following is not a characteristic of a country to be considered within an MNC's international tax assessment?

- corporate income taxes.
- withholding taxes.
- provisions for carrybacks and carryforwards.

- tax treaties.
- all of the above are characteristics to be considered.**

29. Like income tax treaties, _____ help to avoid double taxation and stimulate direct foreign investment.

- withholding taxes
- excise taxes
- tax credits**
- carryforwards

30. If the parent's government imposes a _____ tax rate on funds remitted from a foreign subsidiary, a project is less likely to be feasible from the point of view.

- high; subsidiary's
- high; parent's**
- low; parent's
- A and C
- none of the above

31. If a subsidiary project is assessed from the subsidiary's perspective, then an expected appreciation in the foreign currency will affect the feasibility of the project .

- positively
- negatively
- either positively or negatively, depending on the percentage appreciation
- none of the above**

32. When a foreign subsidiary is not wholly owned by the parent and a foreign project is partially financed with retained earnings of the parent and of the subsidiary, then:

- the parent's perspective should be used to evaluate a foreign project.
- the subsidiary's perspective should be used to evaluate a foreign project.
- the foreign project should enhance the value of both the parent and the subsidiary.**
- none of the above

33. The _____ is (are) likely the major source of funds to support a particular project.

- initial investment**
- variable costs
- fixed costs
- none of the above

35. The required rate of return of a project is _____ the MNC's cost of capital.

- greater than
- less than
- the same as
- any of the above, depending on the specific project**

36. An international project's NPV is____ related to the size of the initial investment and____ related to the project's required rate of return.

- a. positively; positively
- b. positively; negatively
- c. negatively; positively
- d. **negatively; negatively**

37. An international project's NPV is____ related to consumer demand and related to the project's salvage value.

- a. **positively; positively**
- b. positively; negatively
- c. negatively; positively
- d. negatively; negatively

38. Everything else being equal, the _____ the depreciation expense is in a given year, the_____a foreign project's NPV will be.

- a. higher; lower
- b. **higher; higher**
- c. lower; higher
- d. none of the above

39. A foreign project generates a negative cash flow in year 1 and positive cash flows in years 2 through 5. The NPV for this project will be higher if the foreign currency in year 1 and in years 2 though 5.

- a. depreciates; depreciates
- b. appreciates; appreciates
- c. **depreciates; appreciates**
- d. appreciates; depreciates

40. If an MNC sells a product in a foreign country and imports partially manufactured components needed for production to that country from the U.S., then the local economy's inflation will have:

- a. **a more pronounced impact on revenues than on costs.**
- b. a less pronounced impact on revenues than on costs.
- c. the same impact on revenues as on costs.
- d. none of the above

41. When conducting a capital budgeting analysis and attempting to account for effects of exchange rate movements for a foreign project, inflation included explicitly in the cash flow analysis, and debt payments by the subsidiary____ included explicitly in the cash flow analysis.

- a. **should be; should be**
- b. should definitely not be; should definitely not be
- c. should definitely not be; should be
- d. should be; should definitely not be

42. As the financing of a foreign project by the parent relative to the financing provided by the subsidiary, the parent's exchange rate exposure .

- a. increases; decreases
- b. decreases; increases
- c. **increases; increases**
- d. none of the above

60. _____can cause the parent's after-tax cash flows to differ from the subsidiary's after-tax cash flows.

- a. The number of units sold by the subsidiary
- b. The subsidiary's earnings before income and taxes (EBIT)
- c. The tax rate the subsidiary is subject to in the host country
- d. **Withholding taxes imposed by the host government**

61. _____is an input required for a multinational capital budgeting analysis, given that it is conducted from the parent's viewpoint.

- a. Salvage value
- b. Price per unit sold
- c. Initial investment
- d. Consumer demand
- e. **All of the above are inputs required for capital budgeting analysis.**

62. _____ is not a method of incorporating an adjustment for risk into the capital budgeting analysis.

- a. **Discriminant analysis**
- b. Risk-adjusted discount rate
- c. Sensitivity analysis
- d. Simulation

63. Which of the following is not true regarding simulation?

- a. It can be used to generate a probability distribution of NPVs.
- b. It generates a probability distribution of NPVs by randomly drawing values for the input variable(s).
- c. **It can only be used for one variable at a time.**
- d. It can be used to develop probability distributions of all variables with uncertain future values.

64. Which of the following is not a factor that should be considered in multinational capital budgeting?

- a. Blocked funds
- b. Exchange rate fluctuations
- c. Inflation
- d. Financing arrangements
- e. **All of the above should be considered.**

Chapter 12—Multinational Cost of Capital and Capital Structure

1. An argument for MNCs to have a debt-intensive capital structure is:

- a. they are well diversified.
- b. foreign government tax rules may change over time.
- c. exposure to exchange rate fluctuations.
- d. exposure to fund blockage.

2. According to the text, there is evidence that the debt ratios (debt/capital) of MNCs based in:

- a. the U.S. tend to be generally higher than MNCs headquartered in Japan and Germany.
- b. the United Kingdom tend to be generally higher than MNCs headquartered in other non-U.S. countries.
- c. the U.S. tend to be generally lower than MNCs headquartered in Japan and Germany.
- d. A and B

3. According to the text, the cost of capital for an international project will:

- a. always be greater than the firm's cost of capital.
- b. always be less than the firm's cost of capital.
- c. always be the same as the firm's cost of capital.
- d. none of the above

4. Which of the following factors is not expected to generally have a favorable impact on the firm's cost of capital according to the text?

- a. easy access to international capital markets.
- b. high degree of international diversification.
- c. volatile exchange rate fluctuations.
- d. all of the above

5. The capital asset pricing theory is based on the premise that:

- a. only unsystematic variability in cash flows is relevant.
- b. only systematic variability in cash flows is relevant.
- c. both systematic and unsystematic variability in cash flows are relevant.
- d. neither systematic nor unsystematic variability in cash flows is relevant.

6. According to the text, MNCs:

- a. use only debt financing in foreign countries to support foreign subsidiaries.
- b. use only equity financing in foreign countries to support foreign subsidiaries.
- c. use only parent financing in foreign countries to support foreign subsidiaries.
- d. none of the above

7. The term "global" target capital structure for an MNC represents the MNC's capital structure:

- a. in the U.S.

- b. relative to competitors across all countries.
- c. where it has its largest subsidiary.
- d. when consolidating all of its subsidiaries.

8. According to the text, an MNC's "global" target capital structure is:

- a. always debt-intensive.
- b. always equity-intensive.
- c. sometimes different from an MNC's "local" capital structures (at subsidiaries).
- d. none of the above

9. One argument for why subsidiaries should be wholly-owned by the parent is that the potential conflict of interests between the MNC's is avoided.

- a. managers and shareholders
- b. majority shareholders and minority shareholders
- c. existing creditors
- d. managers and creditors

10. One argument for why subsidiaries should be only partly-owned by the parent is:

- a. that the potential conflict of interests between the MNC's managers and shareholders is avoided.
- b. that the potential conflict of interests between the MNC's majority shareholders and minority shareholders is avoided.
- c. that the potential conflict of interests between the MNC's existing creditors is avoided.
- d. to motivate subsidiary managers by allowing them partial ownership.

12. Other things being equal, countries with relatively___ populations and___ inflation are more likely to have a low cost of capital.

- a. young; high
- b. old; high
- c. old; low
- d. young; low

13. Other things being equal, the financial leverage of MNCs will be higher if the governments of their home countries are likely to rescue them (in the event of failure), and if their home countries are likely to experience a recession.

- a. more; more
- b. less; more
- c. less; less
- d. more; less

14. Based on the factors that influence a country's cost of capital, the cost of capital in less developed countries is likely to be than that of the U.S. and ___ than that of Japan.

- a. higher; higher
- b. higher; lower

15. According to the text, the cost of debt:

- a. for each country is somewhat stable over time.
- b. among countries changes over time, and these changes are negatively correlated.
- c. among countries changes over time, and these changes are positively correlated.**
- d. among countries changes over time, and are not correlated.

16. The term "local target capital structure" is used in the text to represent the:

- a. average capital structure of local firms where the MNC's subsidiary is based.
- b. average capital structure of local firms where the MNC's parent is based.
- c. desired capital structure of a subsidiary of a particular MNC.**
- d. desired capital structure of a particular MNC overall (including all subsidiaries).

17. The term "global capital structure" is used in the text to represent the:

- a. average capital structure of all MNCs across countries.
- b. average capital structure of all domestic firms across countries.
- c. capital structure of a subsidiary of a particular MNC.
- d. capital structure of a particular MNC overall (including all subsidiaries).**

19. Assume that the risk-free interest rate in the U.S. is the same as that in Country M. Assume that the government of Country M is more likely to rescue local firms that experience financial problems. Other things being equal, Country M's firms are likely to use a_ degree of financial leverage than U.S. firms. If a firm based in Country M had the same degree of financial leverage and the same operating characteristics as a U.S. firm, its cost of capital would be than that of the U.S. firm.

- a. higher; higher
- b. higher; lower**
- c. lower; lower
- d. lower; higher

20. When an MNC's firm's cost of capital rises, it would be likely to divest an existing project, other things held constant.

- a. more**
- b. less
- c. neither; there is no effect
- d. neither; MNCs do not ever divest projects

21. Which of the following is not a factor that favorably affects an MNC's cost of capital, according to your text?

- a. exchange rate risk.**
- b. size.

- c. access to international capital markets.
- d. international diversification.

22. According to your text, which of the following is not a factor that affects an MNC's cost of capital unfavorably?

- a. exchange rate risk.
- b. country risk.
- c. an increase in the risk-free interest rate.
- d. size.**

23. The___ an MNC, the___ its cost of capital is likely to be.

- a. larger; higher
- b. larger; lower**
- c. smaller; lower
- d. A and C

24. Zoro Corporation has a beta of 2.0. The risk-free rate of interest is 5%, and the return on the stock market overall is expected to be 13%. What is the required rate of return on Zoro stock?

SOLUTION: $5\% + 2(13\% - 5\%) = 21\%$.

25. Which of the following is not a reason provided in the text regarding why the cost of debt can vary across countries?

- a. differences in the risk-free rate.
- b. a high price-earnings multiple.**
- c. differences in the risk premium.
- d. differences in demographics.

26. In general, MNCs probably prefer to use foreign debt when their foreign subsidiaries are subject to local interest rates.

- a. more; low**
- b. more; high
- c. less; low
- d. B and C
- e. none of the above

27. In general, MNCs probably prefer to use foreign debt when their foreign subsidiaries are subject to potentially local currencies.

- a. more; strong
- b. more; weak**
- c. less; strong
- d. less; weak

28. A firm's cost of_____reflects an opportunity cost: what the existing shareholders could have earned if they had received the earnings as dividends and invested the funds themselves.

- a. debt
- b. retained earnings**

- c. new common equity
- d. none of the above

29. The___ the cost of capital, the___ will be a project's net present value for a project with a given set of expected cash flows.

- a. lower; higher
- b. higher; higher
- c. lower; lower
- d. none of the above

30. To the extent that individual economies are each other, net cash flows from a portfolio of subsidiaries should exhibit variability, which may reduce the probability of bankruptcy.

- a. dependent on; less
- b. dependent on; more
- c. independent of; less
- d. independent of; more

31. In general, a firm exposed to exchange rate fluctuations will usually have a__ distribution of possible cash flows in future periods.

- a. more; narrower
- b. less; wider
- c. more; wider
- d. none of the above

32. According to the CAPM, the required rate of return on stock is a positive function of all of the following, except:

- a. the risk-free rate of interest.
- b. the market rate of return.
- c. the stock's beta.
- d. the company's earnings.

33. The lower a project's beta, the__ is the project's risk.

- a. lower; systematic
- b. lower; unsystematic
- c. higher; systematic
- d. higher; unsystematic

34. Capital asset pricing theory suggests that risk of projects can be ignored and that is relevant.

- a. unsystematic; unsystematic
- b. unsystematic; systematic
- c. systematic; unsystematic
- d. systematic; systematic

35. Capital asset pricing theory would most likely suggest that the cost of capital is generally___for___.

- a. higher; MNCs
- b. lower; domestic firms
- c. lower; MNCs
- d. none of the above

Exhibit 17-1

Assume the following information for Pexi Co., a U.S.-based MNC that is considering obtaining funding for a project in Germany:

U.S. risk-free rate = 4%

German risk-free rate = 5%

Risk premium on dollar-denominated debt provided by U.S. creditors = 3%

Risk premium on euro-denominated debt provided by German creditors = 4%

Beta of project = 1.2

Expected U.S. market return = 10%

U.S. corporate tax rate = 30%

German corporate tax rate = 40%

37. Refer to Exhibit 17-1. What is Pexi's cost of dollar-denominated debt?

SOLUTION: $(4\% + 3\%) - (1 - .3) = 4.9\%$

38. Refer to Exhibit 17-1. What is Pexi's cost of dollar-denominated equity?

SOLUTION: $4\% + 1.2(10\% - 4\%) = 11.2\%$

39. When an MNC is considering financing a portion of a foreign project within the foreign country, the best method to account for a foreign project's risk is to:

- a. derive net present values based on the WACC.
- b. adjust the weighted average cost of capital for the risk differential.
- c. derive the net present value of the equity investment.
- d. none of the above

61. In general, the___ the cost of capital, the the NPV of a project that is evaluated with this cost of capital.

- a. higher; higher
- b. lower; lower
- c. higher; lower
- d. A and B
- e. none of the above

62. The capital asset pricing model suggests that the required return on a firm's stock is a positive function of:

- a. the risk-free rate of interest.
- b. the market rate of return.
- c. the stock's beta.
- d. all of the above

63. The capital asset pricing model suggests that the required return on a firm's stock is a negative function of:

- a. the risk-free rate of interest.
- b. the market rate of return.
- c. the stock's beta.
- d. none of the above**

64. The cost of capital can vary among countries because:

- a. MNCs based in some countries do not have a competitive advantage over others.
- b. MNCs may be able to adjust their international operations and sources of funds to capitalize on differences in the cost of capital among countries.
- c. of country differences in tax laws or monetary supply.**
- d. none of the above.

65. Werner Corporation has a target capital structure that consists of 40% debt and 60% equity. Werner can borrow at an interest rate of 10%. Also, Werner has determined its cost of equity to be 14%. Werner's tax rate is 40%. What is Werner's weighted average cost of capital?

- a. 10.80%**
- b. 12.40%
- c. 9.20%
- d. None of the above

66. The U.S. risk-free rate is currently 3%. The expected U.S. market return is 10%. Solso, Inc. is considering a project that has a beta of 1.2. What is the cost of dollar-denominated equity?

- a. 8.4%
- b. 11.4%**
- c. 10%
- d. None of the above

67. Which of the following is least likely to influence an MNC's capital structure?

- a. The stability of MNC's cash flows
- b. The MNC's credit risk
- c. The MNC's access to earnings
- d. The MNC's decision to invest excess cash in a Treasury bill rather than in a bank**
- e. None of the above

68. Which of the following is not a host country characteristic that can affect an MNC's capital structure decision?

- a. The strength of host country currencies
- b. The country risk in host countries
- c. Political decisions to increase penalties for criminals**
- d. Tax laws in host countries

69. If the parent the debt of the subsidiary, the subsidiary's borrowing capacity might be .

- a. does not back; increased
- b. backs; decreased
- c. does not back; decreased
- d. backs; increased
- e. C and D**

Chapter 13—Financing International Trade

1. Which of the following is a reason why commercial banks can facilitate international trade?

- a. The exporter may not wish to accept credit risk of the importer.
- b. The government may impose exchange contracts that prevent payment by the importer to the exporter.
- c. The exporter may need financing until payment for the goods is received.
- d. All of the above**

2. Consider an exporter that sells its accounts receivables off to another firm that becomes responsible for obtaining cash from the various importers. This reflects:

- a. accounts receivable financing.
- b. consignment.
- c. factoring.**
- d. a letter of credit.

3. Consider a bank that acknowledges that it will make payments on behalf of a computer importer after the computers are delivered to the importer. This reflects:

- a. accounts receivable financing.
- b. forfaiting.
- c. factoring.
- d. a letter of credit.**

4. Consider an importer that issues a promissory note to pay for the imported capital goods over a period of five years. The notes are extended to an exporter who sells them at a discount to a bank. This reflects:

- a. accounts receivable financing.
 - b. forfaiting.**
 - c. factoring.
 - d. a letter of credit.
5. Consider an exporter that is willing to send goods to the importer without a guaranteed payment by the bank. The bank provides a loan to the exporter that is backed by the value of the exported goods. This reflects:
- a. accounts receivable financing.**
 - b. forfaiting.
 - c. factoring.
 - d. a letter of credit.
7. MNCs can use _____ to sell their existing accounts receivable as a means of obtaining cash.
- a. factoring**
 - b. a bill of lading
 - c. a banker's acceptance
 - d. a letter of credit
8. The _____ was established in 1934 with the intention to facilitate Soviet-American trade.
- a. Domestic International Sales Corporation (DISC)
 - b. Private Export Funding Corporation (PEFCO)
 - c. Export-Import Bank**
 - d. Foreign Credit Insurance Association (FCIA)
9. A _____ provides a summary of freight charges and conveys title to the merchandise.
- a. letter of credit
 - b. banker's acceptance
 - c. bill of lading**
 - d. bill of exchange

10. According to the text, international trade activity has generally _____ over time. This should cause the popularity of trade finance techniques to _____ over time.

- a. increased; increase**
- b. increased; decrease
- c. decreased; increase
- d. decreased; decrease

11. Which of the following payment terms provides the supplier with the greatest degree of protection?

- a. letters of credit.
- b. consignment.
- c. prepayment.**
- d. drafts (sight/time).

12. With _____, the exporter ships the goods to the importer while still retaining actual title to the merchandise.

- a. a letter of credit arrangement
- b. an open account arrangement
- c. a draft arrangement
- d. a consignment arrangement**

13. With _____, a bank purchases a receivable without recourse to the exporter.

- a. accounts receivable financing
- b. factoring**
- c. a banker's acceptance
- d. a letter of credit

14. In _____, a bank arranges to fund a loan to pay the exporter instead of charging the importer's account immediately.

- a. refinancing of a sight letter of credit**
- b. a banker's acceptance
- c. a short-term bank loan
- d. accounts receivable financing

15. A bill of exchange requesting the bank to pay the face amount upon presentation of documents is a:

- a. banker's acceptance.
- b. time draft.
- c. letter of credit.
- d. sight draft.**

16. A bill of exchange requesting the bank to pay the face amount at a future date is a:

- a. banker's acceptance.
- b. time draft.**
- c. letter of credit.
- d. sight draft.

17. An exchange of goods between two parties under two distinct contracts expressed in monetary terms is:

- a. compensation.
- b. counterpurchase.**
- c. factoring.
- d. accounts receivable financing.

18. Which of the following is not a program of the Export-Import Bank of the U.S.?

- a. working capital guarantee program.
- b. project finance loan program.
- c. direct loan program.
- d. the foreign sales corporation program.**

19. Who bears the payment risk in a letter of credit?

- a. the exporter.
- b. the importer.
- c. the issuing bank.**
- d. both the exporter and importer.

20. Countertrade represents foreign trade:

- a. restrictions imposed by the government on imports

from another country.

- b. restrictions imposed by the government on exports sent from the country.
- c. transactions that force the sales of goods of one country to be linked to the purchase or exchange of goods from the country.**
- d. financing provided to an exporter in exchange for goods provided to the creditor by the exporter.

24. The Direct Loan Program is administered by the:

- a. Private Export Funding Corporation (PEFCO).
- b. Overseas Private Investment Corporation (OPIC).
- c. Ex-Imbank.**
- d. Foreign Credit Insurance Association (FCIA).

25. The Working Capital Guarantee Program is administered by the:

- a. Private Export Funding Corporation (PEFCO).
- b. Overseas Private Investment Corporation (OPIC).
- c. Ex-Imbank.**
- d. Foreign Credit Insurance Association (FCIA).

26. Which of the following is not a payment method used for international trade?

- a. consignment.
- b. open account.
- c. factoring.**
- d. draft.
- e. letter of credit.

27. Under a letter of credit arrangement, the bank issuing the letter of credit is known as the ____ bank, the correspondent bank in the beneficiary's country to which the issuing bank sends the letter of credit is known as the bank, and the bank that agrees to examine documents under the letter of credit and pay the beneficiary is called the bank.

- a. issuing; negotiating; advising

- b. **issuing; advising; negotiating**
- c. advising; issuing; negotiating
- d. negotiating; issuing; advising
- e. advising; negotiating; issuing
28. A(n)_____ letter of credit is not a trade-related letter of credit.
- a. commercial
- b. import/export
- c. revocable
- d. irrevocable
- e. **all of the above are trade-related letters of credit**
29. Which of the following is not true regarding letters of credit?
- a. They are issued by banks on behalf of the importer promising to pay the exporter.
- b. A revocable letter of credit can be cancelled or revoked at any time without prior notification to the beneficiary.
- c. **They guarantee that the goods shipped are the goods purchased.**
- d. All of the above are true.
30. A banker's acceptance is a draft drawn on and accepted by a(n)_____.
- a. **bank**
- b. importer
- c. exporter
- d. none of the above
31. Which of the following is not true regarding a banker's acceptance?
- a. It can be beneficial to the exporter, as he does not have to worry about the credit risk of the importer.
- b. It can be beneficial to the importer, as he may have greater access to foreign markets when purchasing supplies.
- c. It can be beneficial to the bank accepting the draft in
- that it earns a commission for creating an acceptance.
- d. **It is a sight draft.**
32. _____ is not a type of program offered by Ex-Imbank.
- a. Guarantees
- b. Loans
- c. **Currency swap insurance**
- d. Bank insurance
33. As part of Ex-Imbank's export credit insurance programs, a(an) policy is generally issued to an administrator, such as a bank, trading company, insurance broker, or government agency, who then administers the policy for multiple exporters.
- a. multiple-buyer
- b. single-buyer
- c. small business
- d. **umbrella**
34. _____ is a private corporation owned by a consortium of commercial banks and industrial companies, but the _____ is a self-sustaining government agency.
- a. Overseas Private Investment Corporation (OPIC); Private Export Funding Corporation (PEFCO)
- b. **Private Export Funding Corporation (PEFCO); Overseas Private Investment Corporation (OPIC)**
- c. Private Export Funding Corporation (PEFCO); Ex-Imbank
- d. Overseas Private Investment Corporation (OPIC); Ex-Imbank
35. The risk to the exporter is highest with the method.
- a. prepayment
- b. letter of credit
- c. consignment
- d. **open account**

36. A is an unconditional promise drawn by one party, instructing the buyer to pay the face amount upon presentation.
- draft**
 - bill of lading
 - trade acceptance
 - letter of credit
37. Under a(n)___ arrangement, the exporter ships the goods to the importer while still retaining actual title to the merchandise.
- draft
 - consignment**
 - prepayment
 - open account
38. In____, the exporter sells accounts receivable without recourse.
- accounts receivable financing
 - factoring**
 - working capital financing
 - countertrade
40. ____ promises to pay the beneficiary if they buyer fails to pay as agreed.
- A standby L/C**
 - A transferable L/C
 - Assignment of proceeds
 - None of the above
42. ____ refers to the purchase of financial obligations, such as bills of exchange or promissory notes, without recourse to the original holder, usually the exporter.
- Factoring
 - Accounts receivable financing
 - Forfaiting**
 - None of the above
44. The Working Capital Guarantee Program and the Medium-term Guarantee Program are offered by the:
- Export-Import Bank of the United States**
 - Private Export Funding Corporation
 - Overseas Private Investment Corporation
 - none of the above
45. The _____ is a self-sustaining federal agency responsible for insuring direct U.S. investments in foreign countries against the risk of currency inconvertibility, expropriation, and other political risks.
- Export-Import Bank of the United States
 - Private Export Funding Corporation
 - Overseas Private Investment Corporation**
 - none of the above
69. Which of the following is not a payment method used for international trade?
- Supplier credit
 - Bill of exchange
 - Bill of lading**
 - Letter of credit
70. Under a_ , the exporter is paid once shipment has been made and the draft is presented to the buyer for payment; under a , the exporter provides instructions to the buyer's bank to release shipping documents against acceptance, by the buyer, of the draft.
- sight draft; time draft**
 - sight draft; banker's acceptance
 - bill of lading; banker's acceptance
 - time draft; sight draft
71. Which of the following is not a trade financing method used in international trade from an exporter's perspective?
- Accounts receivable financing

- b. Letter of credit
- c. Barter
- d. Open account

72. Of all the payment methods available in international trade, _____ probably affords the most protection to the exporter, while _____ probably affords the least protection.

- a. prepayment; consignment
- b. prepayment; open account
- c. open account; prepayment
- d. consignment; prepayment

73. Which of the following is not true regarding letters of credit?

- a. They are issued by banks on behalf of the importer promising to pay the exporter.
- b. A revocable letter of credit can be cancelled or revoked at any time without prior notification to the beneficiary.
- c. They guarantee that the goods shipped are the goods purchased.
- d. All of the above are true.

Chapter 14—International Cash Management

1. The Mexican one-year interest rate is 27 percent, while the U.S. one-year interest rate is 9 percent. If a U.S. firm creates a one-year deposit in Mexico, the Mexican peso would have to _____ against the U.S. dollar by _____ in order to make that investment have an effective yield that is achievable in the U.S.

SOLUTION: $1.09/1.27 - 1 = -14.2\% = > \text{depreciate}$

2. Assume that Subsidiaries X and Y often trade with each other. Assume that Subsidiary X has excess cash while Subsidiary Y is short on cash. How can Subsidiary X help out Subsidiary Y?

- a. X should lag its payments sent to Y to pay for imports from Y.
- b. X should request that Y lead its payments to be sent for goods that Y sent to X.

- c. A and B
- d. None of the above

3. Netting can achieve all but one of the following:

- a. Cross border transactions between subsidiaries are reduced.
- b. Transactions costs are reduced.
- c. Currency conversion costs are reduced.
- d. Transaction exposure is eliminated.

4. Which of the following is true?

- a. Some countries may prohibit netting.
- b. Some countries may prohibit forms of leading and lagging.
- c. A and B
- d. None of the above

5. According to the text:

- a. banks in the U.S. are prohibited from facilitating cash transfers for MNCs.
- b. banks in most non-U.S. countries are more advanced than the U.S. in facilitating cash transfers for MNCs.
- c. an MNC with subsidiaries in several different countries has no problems in coordinating its cash transfers since a uniform global banking system exists.
- d. none of the above

7. Assume the U.S. one-year interest rate is 11% and the French one-year interest rate is 18%. The break-even level of depreciation in the euro at which the U.S. and French investments would exhibit the same return to a U.S. investor is:

SOLUTION: $1.11/1.18 - 1 = -5.9\%$

8. Assume that a U.S. investor invests in a British CD offering a six-month interest rate of 5%. Over this six-month period, the pound depreciates by 9%. The effective yield on the British CD for the U.S. investor is:

SOLUTION: $(1 + 6\%)[1 + (-9\%)] - 1 = -4.45\%$

9. Assume that there are several foreign currencies that exhibit a higher interest rate than the U.S. interest rate. The U.S. firm has a higher probability of generating a higher effective yield on a portfolio of currencies (relative to the domestic yield) if:

- a. the foreign currency movements against the U.S. dollar are highly correlated.
- b. the foreign currency movements against the U.S. dollar are perfectly positively correlated.
- c. **the foreign currency movements against the U.S. dollar exhibit low correlations.**
- d. none of the answers above would have any impact on the probability of a foreign cash investment generating a higher effective yield than a U.S. investment.

10. If the international Fisher effect (IFE) exists, then a U.S. firm that has access to banks offering high interest rates in deposits denominated in foreign currencies should:

- a. invest in the foreign deposits since they will, on average, generate higher effective yields than a U.S. deposit.
- b. invest in the U.S. deposits since they will, on average, generate higher effective yields than a foreign deposit.
- c. **invest in the U.S. deposits since they will, on average, generate similar effective yields as a foreign deposit.**
- d. invest in the foreign deposits since they will, on average, generate similar effective yields as a U.S. deposit.

11. The most useful measure of an MNC's liquidity is its:

- a. cash balance.
- b. amount of securities held as investments.
- c. political risk rating.
- d. **potential access to funds.**

13. According to the international Fisher effect:

- a. exchange rates adjust to compensate for income differentials between countries.
- b. interest rates adjust to compensate for income differentials between countries.
- c. **exchange rates adjust to compensate for interest rate differentials between countries.**

- d. exchange rates adjust to compensate for risk differentials between countries.

14. The international Fisher effect suggests that:

- a. **the effective yield on short-term foreign securities should, on average, equal the yield on short-term domestic securities.**
- b. the effective yield on short-term securities of high inflation countries is greater than the yield on short-term domestic securities.
- c. if domestic income grows faster than foreign income, the effective yield on short-term foreign securities is higher than short-term domestic securities.
- d. if foreign tax rates equal domestic tax rates, the exchange rates of different currencies will change by the same degree.

15. If a foreign currency consistently depreciated against the dollar over several periods and had lower interest rates at the beginning of those periods than the U.S. interest rates, then:

- a. U.S. firms could have achieved a higher effective yield on foreign deposits than on U.S. deposits during those periods.
- b. the international Fisher effect is supported by the results.
- c. A and B
- d. **none of the above**

17. A common purpose of inter-subsidiary leading or lagging strategies is to:

- a. **allow subsidiaries with excess funds to provide financing to subsidiaries with deficient funds.**
- b. assure that the inventory levels at subsidiaries are maintained within tolerable ranges.
- c. change the prices a high-tax rate subsidiary charges a low-tax rate subsidiary.
- d. measure the performance of subsidiaries according to how quickly subsidiaries remit dividend payments to the parent.

18. Assume that a U.S. firm considers investing in British one-year Treasury securities. The interest rate on these securities is 12%, while the interest rate on the same securities in the U.S. is 10%. The firm believes that today's spot rate is an appropriate forecast for the spot rate of the pound in one year. Based on this information, the effective yield on British securities from the U.S. firm's perspective is:

- a. equal to the U.S. interest rate.
- b. equal to the British interest rate.
- c. lower than the U.S. interest rate.
- d. higher than the British interest rate.
- e. lower than the British interest rate, but higher than the U.S. interest rate.

19. Assume that in recent months, most currencies of industrialized countries depreciated substantially against the dollar. Assume that their interest rates were similar to the U.S. interest rate. If non-U.S. firms invested in U.S. Treasury securities during this period, their effective yield would have been:

- a. negative.
- b. zero.
- c. positive, but less than the interest rate of their respective countries.
- d. more than the interest rate of their respective countries.

20. According to , the effective yield earned by U.S. investors will be the same as the effective yield earned by non-U.S. investors in any given period.

- a. interest rate parity (IRP)
- b. the international Fisher effect (IFE)
- c. purchasing power parity (PPP)
- d. none of the above

21. Assume Costner Corporation, a U.S.-based MNC, invests 2,500,000 Zambian kwacha (ZMK) for a one-year period at a nominal interest rate of 9%. At the time the loan is extended, the spot rate of the kwacha is \$.00060. If the spot rate of the kwacha in one year is \$.00056, the dollar amount initially invested in Zambia is \$_, and \$_are paid out after one year.

- a. 1,500; 1,526
- b. 1,526; 1,500
- c. 1,500; 1,400
- d. 1,400; 1,500

SOLUTION: $ZMK2,500,000 \times .0006 = \$1,500$

$(ZMK2,500,000 \times 1.09) \times .00056 = \$1,526$

22. Bullock Corporation invests 1,500,000 South African rand at a nominal interest rate of 10%. At the time the investment is made, the spot rate of the rand is \$.205. If the spot rate of the rand at maturity of the investment is \$.203, what is the effective yield of investing in rand?

SOLUTION: Depreciation of rand: $.203/.205 - 1 = -.098\%$

Effective yield: $(1 + 10\%) + [1 + (-.098\%)] - 1 = 8.92\%$.

23. Assume that interest rate parity holds. The U.S. one-year interest rate is 10% and the Australian one-year interest rate is 8%. What will the approximate effective yield be for an Australian citizen of a one-year deposit denominated in U.S. dollars? Assume the deposit is covered by a forward sale of dollars.

- a. 10%.
- b. 8%.
- c. 2%.

SOLUTION: If interest rate parity holds, the Australian citizen will be able to earn approximately his or her domestic interest rate.

24. Assume that you forecast the value of the euro as follows for the next year:

<u>Percentage Change</u>	<u>Probability of Occurrence</u>
-2%	30%
3%	40%
5%	30%

If the interest rate on the euro is 12%, the expected effective yield from a euro-denominated deposit is:

SOLUTION:

<u>Effective Rate</u>	<u>Financing</u>	<u>Probability</u>	<u>Computation of Expected Value</u>
(1.12)(.98) - 1	= 9.76%	30%	2.93%
(1.12)(1.03) - 1	= 15.36%	40%	6.14%
(1.12)(1.05) - 1	= 17.60%	30%	5.28%
			14.35%

Exhibit 21-1

To benefit from the low correlation between the Trinidad dollar and the Japanese yen (¥), Sciorra Corporation decides to invest 50% of total funds invested in Trinidad dollars and the remainder in yen. The domestic yield on a one-year deposit is 8%. The Trinidad one-year interest rate is 10% and the Japanese one-year interest rate is 7%. Sciorra has determined the following possible percentage changes in the two individual currencies as follows:

<u>Currency</u>	<u>Percentage Change</u>	<u>Probability</u>
Trinidad dollar	-1.0%	35%
Trinidad dollar	2.0%	65%
Japanese yen	-2.0%	45%
Japanese yen	1.0%	55%

25. Refer to Exhibit 21-1. What is the expected effective yield of the portfolio Sciorra is contemplating (assume the two currencies move independently from one another)?

- 6.47%.
- 8.84%.**
- 8.50%.

d. none of the above

ANS: B

SOLUTION:

Step 1. Determine effective yield for each currency under each possible scenario.

<u>Currency</u>	<u>Percentage Change</u>	<u>Probability</u>	<u>Effective Yield</u>
Trinidad dollars	-1.0%	35%	(1.10)(.99) - 1 = 8.90%
Trinidad dollars	2.0%	65%	(1.10)(1.02) - 1 = 12.20%
Japanese yen	-2.0%	45%	(1.07)(.98) - 1 = 4.86%
Japanese yen	1.0%	55%	(1.07)(1.01) - 1 = 8.07%

Step 2. Determine joint probabilities and effective yield of portfolio for each scenario.

<u>Trinidad Dollar</u>	<u>Japanese Yen</u>	<u>Joint Probability</u>	<u>Portfolio Effective Rate</u>
8.90%	4.86%	(.35)(.45) = .1575	(.5)(8.90%) + (.5)(4.86%) = 6.88%
8.90%	8.07%	(.35)(.55) = .1925	(.5)(8.90%) + (.5)(8.07%) = 8.49%

$$12.20\% \quad 4.86\% \quad (.65)(.45) = (.5)(12.20\% + .2925) + (.5)(4.86\%) = 8.53\%$$

$$12.20\% \quad 8.07\% \quad (.65)(.55) = (.5)(12.20\% + .3575) + (.5)(8.07\%) = 10.14\%$$

1.0000

Step 3. Determine effective yield of portfolio.

$$(.1575)(6.88\%) + (.1925)(8.49\%) + (.2925)(8.53\%) + (.3575)(10.14\%) = 8.84\%$$

26. Refer to Exhibit 21-1. What is the probability that the yield of the two-currency portfolio is less than the domestic yield?

- a. .1575.
- b. .35.
- c. .6425.
- d. 1.

SOLUTION: Since the domestic financing rate is 8%, the table above shows that there is a .1575 chance that foreign investment with the portfolio of currencies will yield a higher rate than investing domestically.

Exhibit 21-2

Moore Corporation would like to simultaneously invest in Malaysian ringgit (MYR) and Romanian leu (ROL) for a three-month period. Moore would like to determine the expected yield and the variance of a portfolio consisting of 40% ringgit and 60% leu. Moore has identified the following information:

Mean effective financing rate of Malaysian ringgit 3% for three months

Mean effective financing rate of Romanian leu for 2% three months

Standard deviation of Malaysian ringgit's effective financing rate .15

Standard deviation of Romanian leu's effective financing rate .07

Correlation coefficient of effective financing rates of these two currencies .19

27. Refer to Exhibit 21-2. What is the expected effective yield of the portfolio contemplated by Moore Corporation?

SOLUTION: $(.4)(3\%) + (.6)(2\%) = 2.40\%$.

28. Refer to Exhibit 21-2. What is the standard deviation of the portfolio contemplated by Moore Corporation?

$$\text{SLT} \quad \sqrt{(.4)^2(.15)^2 + (.6)^2(.07)^2 + 2(.4)(.6)(.15)(.07)(.19)} = 7.95\%$$

36. To _____, MNCs can use preauthorized payments.

- a. accelerate cash inflows
- b. minimize currency conversion costs
- c. manage blocked funds
- d. manage intersubsidiary cash transfers

37. _____ may complicate cash flow optimization.

- a. The use of a zero-balance account
- b. Government restrictions
- c. Leading and lagging
- d. None of the above

38. MNCs often use _____ to invest excess cash while retaining liquidity.

- a. international bond markets
- b. international equity markets
- c. international money markets
- d. the market for acquisitions

45. The effective yield of investing in a foreign currency depends on both the ___ and the ___ of the foreign currency.

- a. inflation rate; exchange rate movements
- b. income level; interest rates
- c. interest rates; exchange rate movements**
- d. interest rates; amount invested

46. Zanada Corporation invests 1,500,000 South African rand (ZAR) at a nominal interest rate of 10%. At the time the investment is made, the spot rate of the rand is \$0.205. If the spot rate of the rand at maturity of the investment is \$0.203, what is the effective yield of investing in rand?

- a. 11.08%
- b. 8.93%**
- c. 10.00%
- d. None of the above

47. Which of the following statements is false?

- a. If interest rate parity exists, covered interest arbitrage is not worthwhile.
- b. If interest rate parity holds and the forward rate is an accurate forecast of the future spot rate, an uncovered investment in a foreign security is not worthwhile.
- c. If interest rate parity exists and the forward rate is an unbiased forecast of the future spot rate, an uncovered investment in a foreign security will on average earn an effective yield similar to an investment in a domestic security.
- d. If interest rate parity exists and the forward rate is expected to underestimate the future spot rate, an uncovered investment in a foreign security is expected to earn a lower effective yield than an investment in a domestic security.**

48. If interest rate parity does not hold, and the forward ___ is greater than the interest rate differential, then covered interest arbitrage is feasible for investors residing in the ___ country.

- a. premium; home**
- b. discount; home
- c. premium; foreign

49. Assume the U.S. one-year interest rate is 15%, while the South African one-year interest rate is 13%. If the South African rand ___ by ___ %, a U.S.-based MNC is indifferent between investing in dollars and investing in rand.

- a. depreciates; 1.77
- b. appreciates; 1.74
- c. appreciates; 1.77**
- d. depreciates; 1.74

50. Which of the following is not a technique to optimize cash flows?

- a. Accelerate cash inflows
- b. Minimize currency conversion costs
- c. Manage blocked funds
- d. All of the above are techniques to optimize cash flows**

51. A ___ allows customers to send payments to a post office box number.

- a. bilateral netting system
- b. multilateral netting system
- c. lockbox**
- d. preauthorized payment

