Answers to Self-Test Questions

Chapter 17

1. Growth may have caused Goshen to require a large amount for financing that could not be completely provided by retained earnings. In addition, the interest rates may have been low in these foreign countries to make debt financing an attractive alternative. Finally, the use of foreign debt can reduce the exchange rate risk since the amount in periodic remitted earnings is reduced when interest payments are required on foreign debt.

2. If country risk has increased, Lynde can attempt to reduce its exposure to that risk by removing its equity investment from the subsidiary. When the subsidiary is financed with local funds, the local creditors have more to lose than the parent if the host government imposes any severe restrictions on the subsidiary.

3. Not necessarily. German and Japanese firms tend to have more support from other firms or from the government if they experience cash flow problems and can therefore afford to use a higher degree of financial leverage than firms from the same industry in the United States.

4. Local debt financing is favorable because it can reduce the MNC’s exposure to country risk and exchange rate risk. However, the high interest rates will make the local debt very expensive. If the parent makes an equity investment in the subsidiary to avoid the high cost of local debt, it will be more exposed to country risk and exchange rate risk.

5. The answer to this question is dependent on whether you believe unsystematic risk is relevant. If the CAPM is used as a framework for measuring the risk of a project, the risk of the foreign project is determined to be low, because the systematic risk is low. That is, the risk is specific to the host country and is not related to U.S. market conditions. However, if the project’s unsystematic risk is relevant, the project is considered to have a high degree of risk. The project’s cash flows are very uncertain, even though the systematic risk is low.
CHAPTER 18

1. A firm may be able to obtain a lower coupon rate by issuing bonds denominated in a different currency. The firm converts the proceeds from issuing the bond to its local currency to finance local operations. Yet, there is exchange rate risk because the firm will need to make coupon payments and the principal payment in the currency denoting the bond. If that currency appreciates against the firm’s local currency, the financing costs could become larger than expected.

2. The risk is that the Swiss franc would appreciate against the pound over time since the British subsidiary will periodically convert some of its pound cash flows to francs to make the coupon payments.

   The risk here is less than it would be if the proceeds were used to finance U.S. operations. The Swiss franc’s movement against the dollar is much more volatile than the Swiss franc’s movement against the pound. The Swiss franc and the pound have historically moved in tandem to some degree against the dollar, which means that there is a somewhat stable exchange rate between the two currencies.

3. If these firms borrow U.S. dollars and convert them to finance local projects, they will need to use their own currencies to obtain dollars and make coupon payments. These firms would be highly exposed to exchange rate risk.

4. Paxson Co. is exposed to exchange rate risk. If the yen appreciates, the number of dollars needed for conversion into yen will increase. To the extent that the yen strengthens, Paxson’s cost of financing when financing with yen could be higher than when financing with dollars.

5. The nominal interest rate incorporates expected inflation (according to the so-called Fisher effect). Therefore, the high interest rates reflect high expected inflation. Cash flows can be enhanced by inflation because a given profit margin converts into larger profits as a result of inflation, even if costs increase at the same rate as revenues.

CHAPTER 19

1. The exporter may not trust the importer or may be concerned that the government will impose exchange controls that prevent payment to the exporter. Meanwhile, the importer may not trust that the exporter will ship the goods ordered and therefore may not pay until the goods are received. Commercial banks can help by providing guarantees to the exporter in case the importer does not pay.

2. In accounts receivable financing, the bank provides a loan to the exporter secured by the accounts receivable. If the importer fails to pay the exporter, the exporter is still responsible to repay the bank. Factoring involves the sales of accounts receivable by the exporter to a so-called factor, so that the exporter is no longer responsible for the importer’s payment.

3. The guarantee programs of the Export-Import Bank provide medium-term protection against the risk of nonpayment by the foreign buyer due to political risk.
CHAPTER 20

1. \[ r_f = (1 + i_f)(1 + e_f) - 1 \]
   
   If \( e_f = -6\% \), \( r_f = (1 + .09)(1 + (-.06)) - 1 \)
   
   \[ = .0246, \text{ or } 2.46\% \]
   
   If \( e_f = 3\% \), \( r_f = (1 + .09)(1 + .03) - 1 \)
   
   \[ = .1227, \text{ or } 12.27\% \]

2. \[ E(r_f) = 50%(2.46\%) + 50%(12.27\%) \]
   
   \[ = 1.23\% + 6.135\% \]
   
   \[ = 7.365\% \]

3. \[ e_f = \frac{1 + r_f}{1 + i} - 1 \]
   
   \[ = \frac{1 + .08}{1 + .05} - 1 \]
   
   \[ = .0286, \text{ or } 2.86\% \]

4. \[ E(e_f) = \frac{\text{Forward rate} - \text{Spot rate}}{\text{Spot rate}} \]
   
   \[ = (\$0.60 - \$0.62)/\$0.62 \]
   
   \[ = -0.0322, \text{ or } -3.22\% \]

   \[ E(e_f) = (1 + i_f)[1 + E(e_f)] - 1 \]
   
   \[ = (1 + .09)[1 + (-.0322)] - 1 \]
   
   \[ = .0548, \text{ or } 5.48\% \]

5. The two-currency portfolio will not exhibit much lower variance than either individual currency because the currencies tend to move together. Thus, the diversification effect is limited.

CHAPTER 21

1. The subsidiary in Country Y should be more adversely affected because the blocked funds will not earn as much interest over time. In addition, the funds will likely be converted to dollars at an unfavorable exchange rate because the currency is expected to weaken over time.

2. \[ E(r) = (1 + i_f)[1 + E(e_f)] - 1 \]
   
   \[ = (1 + .14)(1 + .08) - 1 \]
   
   \[ = .2312, \text{ or } 23.12\% \]

3. \[ E(e_f) = \frac{\text{Forward rate} - \text{Spot rate}}{\text{Spot rate}} \]
   
   \[ = (\$0.19 - \$0.20)/\$0.20 \]
   
   \[ = -.05, \text{ or } -5\% \]

   \[ E(r) = (1 + i_f)[1 + E(e_f)] - 1 \]
   
   \[ = (1 + .11)[1 + (-.05)] - 1 \]
   
   \[ = .0545, \text{ or } 5.45\% \]
4. \[ e_f = \frac{1 + r}{1 + i_f} - 1 \]
\[ = \frac{1 + .06}{1 + .90} - 1 \]
\[ = -\frac{.4421}{1 + .90} \]
\[ = -44.21\% \]

If the bolivar depreciates by less than 44.21 percent against the dollar over the 1-year period, a 1-year deposit in Venezuela will generate a higher effective yield than a 1-year U.S. deposit.

5. Yes. Interest rate parity would discourage U.S. firms only from covering their investments in foreign deposits by using forward contracts. As long as the firms believe that the currency will not depreciate to offset the interest rate advantage, they may consider investing in countries with high interest rates.