1) If the expected return on U.S. Treasury bonds falls from 10 to 5 percent and the expected return on GE stock rises from 7 to 8 percent, then the expected return of holding GE stock _____ relative to U.S. Treasury bonds and the demand for GE stock _____.
   A) rises; rises B) rises; falls C) falls; rises D) falls; falls

2) When the interest rate on a bond is _____ the equilibrium interest rate, in the bond market there is excess _____ and the interest rate will _____.
   A) below; demand; rise
   B) below; demand; fall
   C) above; supply; rise
   D) below; supply; rise

3) When prices in the stock market become less uncertain, the demand curve for bonds shifts to the _____ and the interest rate _____.
   A) right; rises B) right; falls C) left; falls D) left; rises

4) In Figure 1, one possible explanation for the increase in the interest rate from \( i_1 \) to \( i_2 \) is
   A) an increase in the expected inflation rate.
   B) a decrease in the expected inflation rate.
   C) an increase in economic growth.
   D) a decrease in economic growth.
5) Figure 2 illustrates the effect of an increased rate of money supply growth. From the figure, one can conclude that the
A) the liquidity effect is smaller than the expected inflation effect and interest rates adjust quickly to changes in expected inflation.
B) the liquidity effect is larger than the expected inflation effect and interest rates adjust quickly to changes in expected inflation.
C) the liquidity effect is larger than the expected inflation effect and interest rates adjust slowly to changes in expected inflation.
D) the liquidity effect is smaller than the expected inflation effect and interest rates adjust slowly to changes in expected inflation.

6) If the expected path of one-year interest rates over the next five years is 1 percent, 2 percent, 3 percent, 4 percent, and 5 percent, the expectations theory predicts that the bond with the highest interest rate today is the one with a maturity of
A) one year.
B) two years.
C) three years.
D) four years.

7) An increase in marginal tax rates would likely have the effect of _____ the demand for municipal bonds, and _____ the demand for U.S. government bonds.
A) increasing; increasing        B) increasing; decreasing
C) decreasing; increasing       D) decreasing; decreasing

8) According to the liquidity premium theory
A) a steeply rising yield curve indicates that short-term interest rates are expected to remain unchanged in the future.
B) a moderately rising yield curve indicates that short-term interest rates are expected to rise moderately in the future.
C) a flat yield curve indicates that short-term interest rates are expected to rise moderately in the near future, then fall moderately in the distant future.
D) a downward sloping yield curve indicates that short-term interest rates are expected to fall sharply in the future.
9) A decrease in the expected rate of inflation will _____ the expected return on bonds relative to the
    that on _____ assets, and shift the _____ curve to the left.
    A) reduce; financial; demand
    B) reduce; real; demand
    C) raise; financial; supply
    D) raise; real; supply

10) In rational expectations theory, the term "optimal forecast" is essentially synonymous with
    A) correct forecast.       B) the correct guess.
    C) the actual outcome.    D) the best guess.

11) If market participants notice that a variable behaves differently now than in the past, then, according
    to rational expectations theory, we can expect market participants to
    A) change the way they form expectations about future values of the variable.
    B) begin to make systematic mistakes.
    C) no longer pay close attention to movements in this variable.
    D) give up trying to forecast this variable.

12) Sometimes one observes that the price of a company's stock falls after the announcement of favorable
    earnings. This phenomenon is
    A) clearly inconsistent with the theory of efficient capital markets.
    B) consistent with the theory of efficient capital markets if the earnings were not as high as
       anticipated.
    C) consistent with the theory of efficient capital markets if the earnings were not as low as
       anticipated.
    D) the result of none of the above.

13) Which of the following types of information most likely allows the exploitation of a profit
    opportunity?
    A) Financial analysts' published recommendations
    B) Technical analysis
    C) Hot tips from a stockbroker
    D) None of the above

14) To say that stock prices follow a "random walk" is to argue that
    A) stock prices rise, then fall, then rise again.
    B) stock prices rise, then fall in a predictable fashion.
    C) stock prices tend to follow trends.
    D) stock prices cannot be predicted based on past trends.

15) According to efficient markets theory
    A) one cannot expect to earn an abnormally high return by purchasing a security.
    B) information in newspapers and in the published reports of financial analysts is already reflected in
       market prices.
    C) unexploited profit opportunities abound, thereby explaining why so many people get rich by
       trading securities.
    D) both (a) and (b) of the above are true.
16) According to the law of one price, if the price of Colombian coffee is 100 Colombian pesos per pound and the price of Brazilian coffee is 4 Brazilian reals per pound, then the exchange rate between the Colombian peso and the Brazilian reals is:
A) 40 pesos per real.
B) 100 pesos per real.
C) 25 pesos per real.
D) 0.4 pesos per real.

17) The theory of purchasing power parity cannot fully explain exchange rate movements because
A) not all goods are identical in different countries.
B) monetary policy differs across countries.
C) some goods are not traded between countries.
D) of both (a) and (c) of the above.

18) Bonus Question: The Wall Street Journal article ‘Journal’s Dartboard Retires’ relates to
(a) the media controversy raised by the forced retirement of Journal’s financial editor, Steve Dartboard.
(b) how some financial experts recommended stocks by throwing darts randomly instead of analyzing a company’s earnings and growth potential data.
(c) the efficient markets hypothesis, suggesting that the stocks chosen by experts do not perform significantly better than the Dow Jones Index or a random selection of stocks.
(d) MacDonald is exploiting cheap labor in developing countries. Thus, globalization promotes unfair practices against poor countries.

Answers to Multiple Choices:
Q19. (a) (4 points). Suppose that in February 2003 the yen/dollar exchange rate was 120 yen/$. After one year, in February 2004, the yen is trading at 105 yen/$. Did the dollar appreciate or depreciate against yen from February 2003 to February 2004? By how much? (Show your work)

(b) (4 points) Now suppose that the annual interest rate on dollar bank deposits in February 2003 was 5 %. Further, in February 2003 it was expected that the future exchange rate in February 2004 would be 105 yen/$. If the interest rate parity condition holds, what was the implied interest rate on yen deposits? (Show your work)

Ans. (a) Dollar’s depreciation against yen = \( \frac{(E_{2004} - E_{2003})}{E_{2003}} = \frac{(105-120)}{120} = -0.125 \)
Hence, dollar depreciated by 12.5%

(b) If the interest parity condition holds:

\[
\text{Yen deposit rate} = \text{Dollar deposit rate} + \text{dollar’s expected appreciation}
\]

\[
\text{Yen deposit rate} = 0.05 + \frac{(105-120)}{120} = 0.05 -0.125 = -0.075
\]
Hence, the implied yen deposit rate is equal to -7.5%.
Q20. (a) (3 points) Assuming that the expectations theory is the correct theory of the term structure, calculate the interest rates in the term structure for maturities of one to five years for the following path of one-year interest rates over the next five years: 5%, 6%, 6%, 7%, 6%.

(b) (3 points) Now suppose that investors prefer short-term bonds. Specifically, the liquidity premiums for one- to five-year bonds are 0%, 0.2%, 0.4%, 0.6%, and 0.8%, respectively. How would your answers to part (a) change? Calculate the new values.

a. Apply the expectation hypothesis of term structure i.e., the long-term interest rates are averages of short terms. Then the yields on bonds of different maturities are

<table>
<thead>
<tr>
<th>Maturity (yr)</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- yr</td>
<td>5%</td>
</tr>
<tr>
<td>2- yr</td>
<td>(5+6)/2 = 5.5%</td>
</tr>
<tr>
<td>3- yr</td>
<td>(5+6+6)/3 = 5.67%</td>
</tr>
<tr>
<td>4- yr</td>
<td>(5+6+6+7)/4 = 6%</td>
</tr>
<tr>
<td>5- yr</td>
<td>(5+6+7+6+6)/5 = 6%</td>
</tr>
</tbody>
</table>

b. After adding corresponding liquidity premiums, the yields will be as follows:

<table>
<thead>
<tr>
<th>Maturity (yr)</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- yr</td>
<td>5 + 0 = 5%</td>
</tr>
<tr>
<td>2- yr</td>
<td>5.5 + 0.2 = 5.7 %</td>
</tr>
<tr>
<td>3- yr</td>
<td>5.67 + 0.4 = 6.07 %</td>
</tr>
<tr>
<td>4- yr</td>
<td>6 + 0.6 = 6.6 %</td>
</tr>
<tr>
<td>5- yr</td>
<td>6 + 0.8 = 6.8 %</td>
</tr>
</tbody>
</table>
Q21. (8 points) In general, corporate bonds pay higher yields than the treasurys of the same term to maturity. This difference is termed as the risk spread. One reason for the recent widening yield difference (spread) between treasury bonds and corporate bonds is said to be investors’ ‘flight to quality’: in the wake of recent corporate accounting scandals it is said that the perceived risk on corporate bond has increased relative to the treasurys. Explain why this ‘flight to quality’ has led to an increase in the spread by using a demand and supply framework for bonds. (For getting full points you need to draw a demand-supply diagram, illustrate the shifts, and clearly indicate how interest rates are affected by those shifts)

Ans. Basically, the relative risk on corporate bonds has increased. The demand for corporate bonds will shift to the left while the demand for treasurys will shift to the right. Hence, the yields on corporate bonds have increased while those on treasurys have decreased. In the result, the yield spread has widened. Here is the diagrammatic explanation.

![Increase in Default Risk on Corporate Bonds](image-url)
Q 22.

(a) Why are Europeans worried about the recent depreciation of dollar against euro? To what extent are their worries justified? (3 points)

(b) United States has been running huge current account deficits and one way these deficits can be reduced is through further depreciation of dollar against its trading currencies. How are China and Japan responsible for not letting this happen? (2 points)

(c) One way the European Central Bank can hold dollar from declining further against euro is by controlling interest rates. Should it lower or increase euro interest rates? Using exchange rate and returns diagram show how this interest rate change will obtain the desired exchange rates. (5 points)

Answer:

(a) Europeans are concerned that their currencies appreciation will hurt their exports and economy. However, according to the article, their concern seems to be exaggerated as many European companies price their exports in terms of dollars. Second, in trade weighted terms (which means one should look at the currencies appreciation or depreciation in relation to currencies of all trading partners) Euro has not appreciated much – it seems to be around the same value where it began. On the other hand, its concern that Japan, China, and other Asian countries are creating an imbalance by funding US current account deficits looks to be justified to some extent.

(b) China and Japan are artificially restraining their currencies to appreciate against dollar, so that they can still keep their goods cheaper for Americans. They do so by buying US bonds to keep the demand for dollars high.

(c) The ECB should decrease euro interest rates. Then the RETF schedule (See chapter 19, figure 4), will shift to the left which will increase euro/dollar exchange rate, i.e., appreciate the dollar.