Part Two

Answers
to End-of-Chapter
Questions and Problems

Chapter 1

ANSWERS TO QUESTIONS

1. *What is the typical relationship among interest rates on three-month Treasury bills, long-term Treasury bonds, and Baa corporate bonds?*

The interest rate on three-month Treasury bills fluctuates more than the other interest rates and is lower on average. The interest rate on Baa corporate bonds is higher on average than the other interest rates.

1. *What effect might a fall in stock prices have on business investment?*

The lower price for a firm’s shares means that it can raise a smaller amount of funds, so investment in facilities and equipment will fall.

1. *What effect might a rise in stock prices have on consumers’ decisions to spend?*

Higher stock prices mean that consumers’ wealth is higher, and they will be more likely to increase their spending.

1. *Why are financial markets important to the health of the economy?*

They channel funds from people who do not have a productive use for them to people who do, thereby resulting in higher economic efficiency.

1. *What was the main cause of the recession that began in 2007?*

The United States economy was hit by the worst financial crisis since the Great Depression. Defaults in subprime residential mortgages led to major losses in financial institutions, producing not only numerous bank failures, but also the demise of two of the largest investment banks in the United States. These factors led to the “Great Recession” which began late in 2007.

1. *What is the basic activity of banks?*

The basic activity of banks is to accept deposits and make loans.

1. *What are the other important financial intermediaries in the economy, besides banks?*

Savings and loan associations, mutual savings banks, credit unions, insurance companies, mutual funds, pension funds, and finance companies.

1. *Can you think of any financial innovation in the past ten years that has affected you personally? Has it made you better off or worse off? Why?*

Answers will vary.

1. *Has the inflation rate in the United States increased or decreased in the past few years? What about interest rates?*

In the period from 2007 to 2011, both inflation and interest rates have generally trended downward compared to before that period.

1. *If history repeats itself and we see a decline in the rate of money growth, what might you expect to happen to*
	1. *real output?*
	2. *the inflation rate?*
	3. *interest rates?*

The data in Figures 3, 5, and 6 suggest that real output, the inflation rate, and interest rates would all fall.

1. *When interest rates decrease, how might businesses and consumers change their economic behavior?*

Businesses would increase investment spending because the cost of financing this spending is now lower, and consumers would be more likely to purchase a house or a car because the cost of financing their purchase is lower.

1. *Is everybody worse off when interest rates rise?*

No. It is true that people who borrow to purchase a house or a car are worse off because it costs them more to finance their purchase; however, savers benefit because they can earn higher interest rates on their savings.

1. *Why do managers of financial institutions care so much about the activities of the Federal Reserve System?*

Because the Federal Reserve affects interest rates, inflation, and business cycles, all of which have an important impact on the profitability of financial institutions.

1. *How does the current size of the U.S. budget deficit compare to the historical budget deficit or surplus for the time period since 1950?*

The deficit as a percentage of GDP has expanded dramatically since 2007; in 2010 the deficit to GDP ratio was 10%, well above the historical average of around 2% since 1950.

1. *How would a fall in the value of the pound sterling affect British consumers?*

It makes foreign goods more expensive, so British consumers will buy fewer foreign goods and more domestic goods.

1. *How would an increase in the value of the Japanese yen affect American businesses?*

It makes Japanese goods more expensive relative to American goods. Thus, because they will find it easier to sell them in America and abroad, American businesses will see an increase in demand for their goods in the United States.

1. *How can changes in foreign exchange rates affect the profitability of financial institutions?*

Changes in foreign exchange rates change the value of assets held by financial institutions and thus lead to gains and losses on these assets. Also changes in foreign exchange rates affect the profits made by traders in foreign exchange who work for financial institutions.

1. *According to Figure 8, in which years would you have chosen to visit the Grand Canyon in Arizona rather than the Tower of London?*

In the mid- to late 1970s and in the late 1980s and early 1990s, the value of the dollar was low, making travel abroad relatively more expensive; thus it was a good time to vacation in the United States and see the Grand Canyon. With the rise in the dollar’s value in the early 1980s, travel abroad became relatively cheaper, making it a good time to visit the Tower of London. This was also true, to a lesser extent, in the early 2000s.

1. *When the dollar is worth more in relation to currencies of other countries, are you more likely to buy American-made or foreign-made jeans? Are U.S. companies that manufacture jeans happier when the dollar is strong or when it is weak? What about an American company that is in the business of importing jeans into the United States?*

When the dollar increases in value, foreign goods become less expensive relative to American goods; thus you are more likely to buy French-made jeans than American-made jeans. The resulting drop in demand for American-made jeans because of the strong dollar hurts American jeans manufacturers. On the other hand, the American company that imports jeans into the United States now finds that the demand for its product has risen, so it is better off when the dollar is strong.

1. *Much of the U.S. government debt is held by foreign investors as treasury bonds and bills. How do fluctuations in the dollar exchange rate affect the value of that debt held by foreigners?*

As the dollar becomes stronger (worth more) relative to a foreign currency, one dollar is equivalent to (can be exchanged for) more foreign currency. Thus, for a given face value of bond holdings, a stronger dollar will yield more home currency to foreigners, so the asset will be worth more to foreign investors. Likewise, a weak dollar will lead to foreign bond holdings worth less to foreigners.

ANSWERS TO APPLIED PROBLEMS

1. *The following table lists foreign exchange rates between U.S. dollars and British pounds (GBP) during April. Which day would have been the best for converting $250 into British pounds? Which day would have been the worst? What would be the difference in pounds?*

|  |  |
| --- | --- |
| **Date** | **U.S. Dollars per GBP** |
| 4/1  | 1.9474 |
| 4/4  | 1.9203 |
| 4/5  | 1.9050 |
| 4/6  | 1.9284 |
| 4/7  | 1.9520 |
| 4/8  | 1.8835 |
| 4/ 11  | 1.8732 |
| 4/ 12  | 1.8468 |
| 4/ 13  | 1.7870 |
| 4/14  | 1.7812 |
| 4/ 15  | 1.7695 |
| 4/ 18  | 1.7414 |
| 4/ 19  | 1.7165 |
| 4/20  | 1.6824 |
| 4/21  | 1.6630 |
| 4/22  | 1.6594 |
| 4/25  | 1.6584 |
| 4/26  | 1.6767 |
| 4/27  | 1.6835 |
| 4/28  | 1.7111 |
| 4/29  | 1.7422 |

The best day is 4/25. At a rate of $1.6584/pound, you would have £150.75. The worst day is 4/7. At $1.9520/pound, you would have £128.07, or a difference of £22.68.

ANSWERS TO Data analysis PROBLEMS

1. *Go to the St. Louis Federal Reserve FRED database and find data on the three-month treasury bill rate (TB3MS), the three-month AA nonfinancial commercial paper rate (CPN3M), the 30-year treasury bond rate (GS30), the 30-year conventional mortgage rate (MORTG), and the NBER recession indicators (USREC).*
	1. *In general, how do these interest rates behave during recessions and during expansionary periods?*

Generally speaking, the interest rates fall during recessions, and rise during expansionary periods.

* 1. *In general, how do the three-month rates compare to the 30-year rates? How do the treasury rates compare to the respective commercial paper and mortgage rates?*

In nearly all instances, the 30-year rates are significantly higher than the three-month rates. Likewise, in most cases the 30-year mortgage rate is higher than the 30-year treasury rate, and the three-month commercial paper rate is higher than the three-month treasury rate.

* 1. *For the most recent available month of data, take the average of each of the three-month rates and compare it to the average of the three-month rates from January 2000. How do the averages compare?*

|  |  |  |
| --- | --- | --- |
|  | April 2014 | January 2000 |
| Three-month rate avg. | 0.07% | 5.53% |
| 30 year rate avg. | 3.93% | 7.42% |

* 1. *For the most recent available month of data, take the average of each of the 30-year rates and compare it to the average of the 30-year rates from January 2000. How do the averages compare?*

 See table above. For both rate averages, they have decreased significantly since January 2000.

1. *Go to the St. Louis Federal Reserve FRED database and find data on the M1 money supply (M1SL) and the 10-year treasury bond rate (GS10). Add the two series into a single graph by using the “Add Data Series” feature. Transform the M1 money supply variable into the M1 growth rate by adjusting the units for the M1 money supply to “Percent Change from Year Ago.”*
	1. *In general, how have the growth rate of the M1 money supply and the 10-year treasury bond rate behaved during recessions and during expansionary periods since the year 2000?*

Generally, the 10-year treasury rate fell during the recessionary periods of 2001 and 2007-2009; during expansionary periods, there was less of a pattern. The money growth rate increased significantly during recessionary periods, however during expansions there is less of a pattern; following the 2001 recession, money growth gradually declined, but after the 2007-2009 recession, money growth was relatively high and variable.

* 1. *In general, is there an obvious, stable relationship between money growth and the 10-year interest rate since the year 2000?*

When money growth rises, the 10-year treasury rate appears to fall, and vice-versa, however this effect is more obvious over some periods than others.

* 1. *Compare the money growth rate and the 10-year interest rate for the most recent month available to the rates for January 2000. How do the rates compare?*

|  |  |  |
| --- | --- | --- |
|  | April 2014 | January 2000 |
| M1 Money Growth | 10.33% | 2.19% |
| 10-year Treasury rate | 2.71% | 6.66% |

The money growth rate is significantly higher in April 2014 than it was in January 2000. The 10-year treasury rate is significantly lower in April 2014 than it was in January 2000.