



Chapter 15 Exercises

Self-Check Questions

1. Why is it important for the members of the Board of Governors of the Federal Reserve to have longer terms in office than elected officials, like the president?
2. Given the danger of bank runs, why don't banks keep the majority of deposits on hand to meet the demands of depositors?
3. Bank runs are often described as "self-fulfilling prophecies." Why is this phrase appropriate?
4. If the central bank sells \$500 in bonds to a bank that has issued \$10,000 in loans and is exactly meeting the reserve requirement of 10%, what will happen to the amount of loans and to the money supply in general?
5. What would be the effect on the money supply of increasing the reserve requirements of banks?
6. Why does contractionary monetary policy cause interest rates to rise?
7. Why does expansionary monetary policy cause interest rates to drop?
8. Why might banks want to hold excess reserves in a time of recession?
9. Why might the velocity of money change unexpectedly?

Review Questions

10. How is a central bank different from a typical commercial bank?
11. List the three traditional tools that a central bank has for controlling the money supply when it is operating in a limited reserves scenario.
12. How is bank regulation linked to conducting monetary policy?
13. In a program of deposit insurance as it is operated in the United States, what is being insured, and who pays the insurance premiums?
14. In government programs of bank supervision, what is being supervised?
15. What is the lender of last resort?
16. Name and briefly describe the responsibilities of each of the following agencies: FDIC, NCUA, and OCC.
17. Explain how to use an open market operation to expand the money supply.
18. Explain how to use the reserve requirement to expand the money supply.
19. Explain how to use the discount rate to expand the money supply.
20. How do expansionary and contractionary monetary policies affect the quantity of money?
21. How do expansionary and contractionary monetary policy affect interest rates?
22. How do expansionary and contractionary monetary policy affect aggregate demand?
23. Which kind of monetary policy would you expect in response to high inflation: expansionary or contractionary? Why?
24. Explain how to use quantitative easing (QE) to stimulate aggregate demand.
25. Which kind of monetary policy would you expect in response to a recession: expansionary or contractionary? Why?
26. How might each of the following factors complicate the implementation of monetary policy: long and variable lags, excess reserves, and movements in velocity?

27. Define the velocity of the money supply.
28. What is the basic quantity equation of money?
29. How does a monetary policy of inflation targeting work?

Critical Thinking Questions

30. Why do presidents typically reappoint Chairs of the Federal Reserve Board even when they were originally appointed by a president of a different political party?
31. In what ways might monetary policy be superior to fiscal policy? In what ways might it be inferior?
32. The term *moral hazard* describes increases in risky behavior resulting from efforts to make that behavior safer. How does the concept of moral hazard apply to deposit insurance and other bank regulations?
33. Explain what would happen if banks were notified that they had to increase their required reserves by one percentage point from, for example, 9% to 10% of deposits. What would their options be to come up with the cash?
34. A well-known economic model called the Phillips curve describes the short-run tradeoff typically observed between inflation and unemployment. Based on the discussion of expansionary and contractionary monetary policy, explain why one of these variables usually falls when the other rises.
35. How does rule-based monetary policy differ from discretionary monetary policy (that is, monetary policy not based on a rule)? What are some of the arguments for each?
36. Is it preferable for central banks to primarily target inflation or unemployment? Why?

Problems

37. Suppose the Fed conducts an open market purchase by buying \$10 million in Treasury bonds from Acme Bank. Sketch out the balance sheet changes that will occur as Acme converts the bond sale proceeds to new loans. Here is Acme Bank's initial T-account:

Assets		Liabilities + Net Worth	
Reserves	30	Deposits	100
Bonds	50		
Loans	50	Net Worth	30

38. Suppose the Fed conducts an open market sale by selling \$10 million in Treasury bonds to Acme Bank. Sketch out the balance sheet changes that will occur as Acme restores its required reserves (10% of deposits) by reducing its loans. Here is Acme Bank's initial T-account:

Assets		Liabilities + Net Worth	
Reserves	30	Deposits	300
Bonds	50		
Loans	250	Net Worth	30

39. All other things being equal, by how much will nominal GDP expand if the central bank increases the money supply by \$100 billion and the velocity of money is 3?
40. Suppose economists expect the velocity of money to increase by 50% as a result of the monetary stimulus. What will be the total increase in nominal GDP?
41. Suppose GDP is 1,500 and the money supply is 400.
- What is the velocity of money?
 - If GDP rises to 1,600 but the money supply does not change, how has the velocity changed?
 - If GDP falls back to 1,500 and the money supply falls to 350, what is the velocity of money?