



## Chapter 14 Exercises

### Self-Check Questions

1. In many casinos, customers buy chips to use for gambling. Within the casino, these chips can be used to buy food and drink or even a hotel room. Do chips in a gambling casino serve all three functions of money? Explain.
2. Name an item that is a store of value but does not serve the other functions of money.
3. If you are shopping, what is easiest and most convenient for you to spend: M1 or M2? Explain your answer.
4. For the following list of items, indicate if they are in M1, M2, or neither:
  - a. A \$5,000 line of credit on a Bank of America card
  - b. \$50 dollars' worth of unused traveler's checks
  - c. \$1 in quarters in your pocket
  - d. \$1,200 in a checking account
  - e. \$2,000 in a money market account
5. Explain why the money listed under assets on a bank balance sheet may not actually be in the bank.
6. Imagine that you are in the position to buy loans in the secondary market (that is, buying the right to collect the payments on loans made by banks) for a bank or other financial services company. Explain why you would be willing to pay more or less for a given loan if:
  - a. The borrower has been late on multiple loan payments.
  - b. Interest rates in the economy as a whole have risen since the loan was made.
  - c. The borrower is a firm that has just declared a high level of profits.
  - d. Interest rates in the economy as a whole have fallen since the loan was made.

### Review Questions

7. What are the four functions of money?
8. How does money simplify the process of buying and selling?
9. What is the double coincidence of wants?
10. What components of money are part of M1?
11. What components of money are part of M2?
12. Why is a bank called a financial intermediary?
13. What does a balance sheet show?
14. What are a bank's assets? What are its liabilities?
15. How do you calculate the net worth of a bank?
16. How can a bank end up with negative net worth?
17. What is the asset-liability time mismatch that all banks face?
18. What is the risk if a bank does not diversify its loans?
19. How do banks create money?
20. What is the formula for the money multiplier?

## Critical Thinking Questions

21. The Bring It Home feature discusses the use of cowrie shells as money. Although cowrie shells are no longer used as money, do you think other forms of commodity monies are possible? What role might technology play in our definition of money?
22. Imagine that you are a barber in a world without money. Explain why it would be tricky to obtain groceries, clothing, and a place to live in this situation.
23. Explain why you think the Federal Reserve Bank tracks M1 and M2.
24. The total amount of U.S. currency in circulation divided by the U.S. population comes out to about \$3,500 per person. That is more than most people carry. Where is all the cash?
25. Explain the difference between how you would characterize bank deposits and loans as assets and liabilities on your own personal balance sheet and how a bank would characterize deposits and loans as assets and liabilities on its balance sheet.
26. Should banks have to hold 100% of their deposits? Why or why not?
27. Explain what will happen to the money multiplier process if there is an increase in the reserve requirement?
28. What do you think the Federal Reserve Bank did to the reserve requirement during the Great Recession of 2008–2009?

## Problems

29. If you take \$100 out of your safe and deposit it into your checking account, how did M1 change? Did M2 change?
30. A bank has deposits of \$400. It holds reserves of \$50. It has purchased government bonds worth \$70. It has made loans of \$300. Set up a T-account balance sheet for the bank, with assets and liabilities, and calculate the bank's net worth.
31. Southside Bank is the only bank in the economy. The people in this economy have \$20 million in money, and they deposit all their money in Southside Bank.
  - a. Southside Bank decides on a policy of holding 100% reserves. Draw a T-account for the bank.
  - b. Southside Bank is required to hold 5% of its existing \$20 million as reserves and loan out the rest. Draw a T-account for the bank after this first round of loans has been made.
  - c. Assume that Southside Bank is part of a multibank system. How much will the money supply increase with that original loan of \$19 million?