

CHAPTER 11

MONEY CREATION AND THE BANKING SYSTEM

Chapter in a Nutshell



The fundamental idea that explains how banks create money is the **fractional reserve system**. Fractional reserve simply means that banks have to keep in their vaults or at the Federal Reserve Bank only a fraction of what people deposit in their banks, even though these people have the right to withdraw their deposits on demand (which is why their deposits are called **demand deposits**). How can banks honor a promise to return deposits to people when their deposits aren't there? The answer is that customarily people don't ask for their deposits, certainly not all, and not all at one time. That's what banks count on and, most of the time, it works.

What do banks do with the deposits, if they're not there? That's the "creation" story. When a bank receives a new deposit, it can loan out a portion of the deposit, keeping a fraction of the deposit on hand as reserves. How large that fraction held in reserves must be is determined by the **Federal Reserve System (the Fed)**. That's why they are called **required reserves**. When the borrower who took out the loan spends it on, say, building a house, the housebuilder now has the money and deposits it in his own bank. This second bank is now able to loan a portion of this new deposit, keeping on hand a fraction as required reserves. Its own loan provides income for someone else who deposits it in a third bank, and so on. The process repeats and the money supply expands.

This money creation process doesn't go on forever because each round of deposits is smaller as more reserves must be set aside. Stretching it out, the new deposits eventually become close to zero. How much, then, does an initial deposit create in terms of total new deposits? The answer is found by using the **potential money multiplier** which is $1/LRR$, where **LRR is the legal reserve requirement** (in percentage terms).

The money supply is unlikely to expand to the extent indicated by the potential money multiplier for two reasons. First, banks may prefer to hold reserves in excess of those required. These are called **excess reserves**. Second, and more important, people may simply not borrow sufficiently to exhaust the full amount of the available reserves.

The money creation process can also run in reverse gear. When someone makes a withdrawal, it means the bank's loans are more than its new and lower deposits can support. It must reduce its loans. But that creates its own round-after-round sequence of loan and deposit reductions.

Banks sometimes fail when a large portion of the loans they made are not repaid. When people learn that someone else's bank is failing, they become nervous about their own deposits and may choose to withdraw them. If many people behave this way, they may cause a "run on the bank." If an exceptionally large number of withdrawals take place in a short period of time, loans must be called in, reducing the money supply and real GDP. **The Federal Deposit Insurance Corporation** was created to insure depositors' deposits up to \$100,000 so they would be less anxious about the security of their deposits.

However, in spite of the FDIC and regular bank audits, banks do fail. During the 1980s and the early 1990s, bank failure rates rose significantly. A variety of causes account for these increased rates of bank failure. Savings and loans associations (S&Ls) also went through a difficult period during the 1980s as banks began to compete with them in the home mortgage market. Savings and loans failures were so extensive in the 1980s that a special government-sponsored corporation, the Resolution Trust Corporation, had to be established to handle the claims of depositors and creditors of the failed S&Ls.

In the absence of intervention by a central bank like the Fed, banking practice would tend to

exacerbate the phases of the business cycle. During recession, a bank is less likely to lend for fear of not being repaid. The money supply shrinks as outstanding loans are called in, causing the interest rate to rise and the quantity of investment to fall, just when investment is needed the most. During prosperity, banks are more inclined to lend, which causes the money supply to grow more rapidly than otherwise, resulting in lower interest rates and more borrowing. With the economy near or at full employment, it creates an upward pressure on the price level. The Fed can counteract these outcomes by using some of its monetary tools.

After you study this chapter, you should be able to:

- Explain the concept of a **fractional reserve banking system**.
- Describe how **banks can create money** by making loans based on new deposits.
- Calculate the amount of money a banking system can create given a new deposit and the **legal reserve requirement**.
- Explain why banks may keep **excess reserves**.
- Show how the money supply shrinks when loans are repaid.
- Present reasons for **bank failures**.
- Justify the need for **deposit insurance** and bank audits.
- Recount events associated with the **savings and loan crisis** of the 1980s.
- Explain how a **central bank** can help to stabilize the banking system and manipulate the money supply to dampen the business cycle.

Concept Check — See how you do on these multiple-choice questions.



Are depositors likely to withdraw all of their deposits from a fractional reserve banking system at any given moment?

1. A **fractional reserve banking system** operates so that
 - a. a fraction of depositors' money is available to them at any given time
 - b. a fraction of depositors' money is held in reserve by banks
 - c. banks lend the full amount of people's deposits
 - d. all deposits are insured by FDIC
 - e. the potential money multiplier is equal to 1

Which two groups are linked through the activities of banks?

2. The role of **financial intermediaries** in the economy is to
 - a. provide loans to depositors and accept deposits from borrowers
 - b. aid entrepreneurs by finding potentially profitable investment opportunities
 - c. control the money supply so that inflation does not result
 - d. conduct examinations of banks and savings and loans to make certain they will not fail
 - e. provide loans to borrowers and accept deposits from depositors

What is the difference between required reserves and excess reserves?

3. When a bank has **excess reserves**, it is
 - a. operating with assets equal to liabilities
 - b. able to make new loans if it chooses to do so
 - c. required to call in loans to increase its required reserves
 - d. contributing to the Federal Deposit Insurance Corporation
 - e. causing the potential money multiplier to increase

What is the maximum amount by which demand deposits can be increased from an initial deposit?



initial

4. The **potential money multiplier** is equal to
- $1/LRR$
 - $1/1 - LRR$
 - the legal reserve requirement
 - $1/ID$
 - $1/1 - ID$

What is the rationale for bank deposit insurance?

5. **Federal deposit insurance** is intended to assure depositors that
- they will earn the maximum possible interest on their savings accounts
 - the bank holding their deposits has made sound loans
 - their deposits are safe so they won't be easily inclined to withdraw their funds
 - regular audits of banks will be conducted
 - banks will continue to make loans during downturns in the business cycle

Am I on the Right Track?



Your answers to the questions above should be **b, e, b, a,** and **c**. The money creation process is fairly clear if you follow the sequence of events — new deposits followed by new loans that are spent and become income, new deposits, and new loans. The logic behind the potential money multiplier is the same as the logic behind the income multiplier. Just as the income multiplier can run in reverse, so can the potential money multiplier, with money being destroyed rather than created. Make certain that you understand why a banking system without a central bank can exacerbate the recession and prosperity phases of the business cycle.

Key Terms Quiz — Match the terms on the left with the definitions in the column on the right.

- | | |
|--|--|
| 1. fractional reserve system | _____ a. the percentage of demand deposits banks and other financial intermediaries are required to keep in cash reserves and deposits at the Fed |
| 2. potential money multiplier | _____ b. reserves held by a bank in excess of legal requirements |
| 3. balance sheet | _____ c. a banking system that provides people with immediate access to their deposits but allows banks to hold only a fraction of those deposits in reserve |
| 4. excess reserves | _____ d. a government insurance agency that provides depositors in FDIC-participating banks 100 percent coverage on the first \$100,000 of deposits |
| 5. legal reserve requirement | _____ e. firms that accept deposits from savers and use those deposits to make loans to borrowers |
| 6. Federal Deposit Insurance Corporation | _____ f. the bank's statement of liabilities and assets |
| 7. financial intermediaries | _____ g. the increase in the money supply that is potentially generated by a change in demand deposits |

True-False Questions — If a question is false, explain why.

1. Banks keep all of their deposits on hand as reserves. (T/F)

2. The legal reserve requirement is the amount of capital that a bank must have in order to be chartered by the state. (T/F)
3. The legal reserve requirement is determined by the president. (T/F)
4. Banks may fail when an exceptionally large number of borrowers default on the loans they received from the bank, destroying, in this way, a large part of the bank's financial assets. (T/F)
5. One of the causes of the savings and loan crisis of the 1980s was the increased regulation of the banking industry. (T/F)
6. Increases in the legal reserve requirement increase the amount of money the banking system can create. (T/F)
7. Banks are eager to provide loans, thereby expanding the money supply, during a recession. (T/F)
8. The cave illustration in the text shows how a fractional reserve system came into being. (T/F)
9. A demand deposit is the bank's asset; the loan it makes possible is the bank's liability. (T/F)
10. If a bank is allowed to lend \$900 on a new deposit of \$1,000, then the legal reserve requirement is 0.10. (T/F)
11. The potential money creation associated with a new deposit may be larger than the actual money creation because not all of the money that is made available for loans is actually loaned out. (T/F)
12. If the legal reserve requirement is 0.50, then a \$100 deposit in the Paris First National Bank will allow the bank to create loans of \$50. (T/F)
13. An unregulated banking system without a central bank will tend to create too little money during a prosperity phase and too much money during a recession phase. (T/F)
14. Excess reserves accumulate in a bank when the bank, intentionally or unintentionally, does not loan out the full potential of its assets, subject to the legal reserve requirement. (T/F)
15. The principal role of financial intermediaries, such as banks, savings and loan associations, and credit unions is to accept deposits from savers and make loans to borrowers. (T/F)

Multiple-Choice Questions

1. A fractional reserve banking system is one in which banks within the system
 - a. can lend out all of their reserves
 - b. keep on hand all of their reserves to honor depositors' needs for cash
 - c. can lend out only a fraction of their reserves
 - d. try to maximize their excess reserves
 - e. pay higher rates of interest to depositors than they charge borrowers to maximize deposits

2. The potential money multiplier is equal to
 - a. the income multiplier
 - b. the interest rate
 - c. one divided by the legal reserve requirement
 - d. the legal reserve requirement
 - e. one

3. The actual money multiplier is less than the potential money multiplier because
 - a. borrowers never save any of the money they are loaned by banks
 - b. banks may not lend all of their excess reserves
 - c. the legal reserve requirement is constantly increasing
 - d. bank failures destroy money as other banks create new money
 - e. all money that is borrowed is typically redeposited in other banks after it is spent

4. Prior to the 1980s, S&Ls were fairly stable financial institutions because they
 - a. invested heavily in a buoyant stock market that produced relatively stable rates of return
 - b. invested in high-risk, high-yielding bonds that earned higher than average rates of return
 - c. were successful competing against commercial banks and credit unions for mortgage loans
 - d. were able to open branches in more than one state, thereby diversifying their risks
 - e. did not face competition from commercial banks in the home mortgage lending business

5. Suppose you deposit \$1,000 in a bank and the reserve requirement is 0.25. If the banking system has zero excess reserves, then the total amount of new money (not counting your deposit) that can be created is
 - a. \$3,000
 - b. \$4,000
 - c. \$1,000
 - d. \$250
 - e. \$750

6. If the Federal Reserve raises the legal reserve requirement from 0.10 to 0.20, then
 - a. banks will lower the interest rate to make up for the loss of their loan volumes
 - b. the potential money multiplier increases
 - c. banks will reduce the loans they make and the money supply in the economy will fall
 - d. banks will increase the loans they make and the money supply in the economy will rise
 - e. excess reserves will increase by 10 percent

7. If the Federal Reserve sets the legal reserve requirement at 1.00, then
 - a. banks could loan out as much money as they want
 - b. banks could loan out only the amount they hold in deposit
 - c. all bank deposits would be held as required reserves
 - d. the potential money multiplier would be infinite
 - e. each bank's liabilities would equal its assets

8. When you deposit \$100 in your local bank, even though you can withdraw that amount at any time
 - a. the bank becomes the legal owner of that \$100 deposit
 - b. it automatically and instantaneously creates \$100 in the bank's reserves
 - c. the bank's assets become \$100 more than its liabilities
 - d. the bank's balance sheet remains unchanged because its new asset equals its new liability
 - e. the potential money multiplier increases by \$100 times the legal reserve requirement
9. If you withdraw \$100 from the bank the following month
 - a. the bank's assets become \$100 less than its liabilities
 - b. it automatically and instantaneously creates \$100 in the bank's excess reserves
 - c. the potential money multiplier decreases by \$100 times the legal reserve requirement
 - d. the money supply will eventually decrease
 - e. the money supply will eventually increase
10. On a bank's balance sheet, _____ are assets and _____ are liabilities.
 - a. demand deposits; loans
 - b. demand deposits; reserves
 - c. demand deposits; cash deposits
 - d. loans; reserves
 - e. loans; demand deposits
11. Bank runs are most likely to occur when
 - a. depositors discover that other depositors were not able to withdraw their deposits from their own banks
 - b. borrowers who borrowed at high interest rates learn that interest rates are falling and will stay low for some time
 - c. banks are forced by government to become part of the FDIC
 - d. the Federal Reserve announces a series of upcoming bank audits
 - e. borrowers outnumber savers
12. Suppose that total reserves = \$1,000,000, demand deposits = \$5,000,000, and the legal reserve requirement is 10 percent. How large are the bank's excess reserves?
 - a. \$4,000,000
 - b. \$6,000,000
 - c. \$500,000
 - d. \$1,000,000
 - e. \$4,900,000
13. If the legal reserve requirement is .20 and banks hold \$40 million in excess reserves, then the maximum amount that the money supply can increase is
 - a. \$8 million
 - b. \$80 million
 - c. \$800 million
 - d. \$20 million
 - e. \$200 million
14. Loans that U.S. bankers made to Mexico and Venezuela during the 1970s
 - a. became very high-risk loans when the price of oil fell in the early 1980s
 - b. were quickly repaid in the 1980s, providing U.S. banks with considerable excess reserves
 - c. were at interest rates substantially higher than the U.S. rate, which caused many Latin American projects to fail
 - d. were transformed by the Federal Reserve to outright grants in the 1980s
 - e. were made at low rates of interest because of their commitment to fight poverty in Latin America

15. Prior to the 1980s, savings and loan associations were able to pay depositors relatively low rates of interest on their deposits because
 - a. these rates were dictated by commercial banks
 - b. mortgage lending was relatively unprofitable for them
 - c. Regulation Q set ceilings on these rates
 - d. the S&Ls were monopolists
 - e. interest rates were falling dramatically in the early 1980s

16. Contrary to what the economy really needs, the banking system tends to _____ during periods of recession and _____ during periods of prosperity
 - a. increase the money supply; decrease the money supply
 - b. lower interest rates; raise interest rates
 - c. decrease its liabilities; increase its assets
 - d. increase its liabilities; decrease its assets
 - e. decrease the money supply; increase the money supply

17. One argument opposing the FDIC is that by insuring deposits, banks are encouraged to engage in moral hazard, meaning that they will tend to
 - a. make too few loans during a recession
 - b. charge borrowers interest rates that are too high
 - c. engage in race and gender discrimination when they evaluate loan applications
 - d. make loans that are riskier than they otherwise would
 - e. increase the fees charged to small depositors for routine bank services

18. The amount of money created in the banking system by a new deposit may be less than the amount potential money multiplier because
 - a. many banks, intentionally or unintentionally, may end up holding excess reserves
 - b. many banks may end up with more liabilities than assets
 - c. many banks may end up with more assets than liabilities
 - d. the legal reserve requirements may be less than the requirements associated with the potential money multiplier
 - e. double counting of deposits inflates the amount of new money actually created banks in the system

19. When loans are paid back, checks are written, which decreases deposits so that banks may be forced to reduce their loans in order to maintain their legal reserve requirement thus causing
 - a. the money supply to grow
 - b. bank failures
 - c. a push for lower legal reserve requirements in the banking community
 - d. the money supply to decrease
 - e. an increase in the price level

20. Waves of bank failures like those that occurred during the Great Depression exacerbate downturns in economic activity because
 - a. with no banks to borrow from, the government cannot pursue a fiscal policy of increased spending
 - b. as deposits are withdrawn, the money supply shrinks, interest rates increase, and the investment associated with failed loans is halted
 - c. the money supply increases as people withdraw cash from banks and this causes inflation
 - d. the Federal Reserve typically increases the legal reserve requirement
 - e. failed banks are prevented from re-opening by stringent audit requirements

The following questions relate to the theoretical, interdisciplinary, and global perspectives in the text.

21. The biggest concern associated with the advent of electronic banking, or banking in cyberspace, is
 - a. job losses in the banking industry as fewer workers are required to run banks
 - b. longer hours for bankers because banking can now be done 24 hours per day, 7 days a week
 - c. the reliability of the Web and the security of transactions carried out via cyberspace
 - d. the sense of loss people will have not coming into physical contact with money and checks
 - e. the inability of people to write checks then put money in the bank to cover them

22. Suppose the Fed introduces a 100 percent reserve requirement for banks. The effect of this policy would be to
 - a. increase the ability of banks to make loans since the banking system will be more stable
 - b. slightly reduce the amount of lending banks are able to do
 - c. increase the money supply and lower the interest rate
 - d. prevent money creation from happening in the banking system
 - e. increase GDP and the volatility in GDP

23. The term “moral hazard,” as it is applied to the Federal Deposit Insurance Corporation that insures bank deposits, means that
 - a. insuring bank deposits is inherently risky and hazardous because of bank robberies
 - b. banks may be inclined to make riskier loans because deposits are insured
 - c. banks will be inclined to make loans to individuals with little prospect of repaying them so that the banks can seize their assets
 - d. the risk of bank failures is reduced
 - e. the risk of bank failures has been shifted from the United States to our major trading partners like Japan

24. The fact that deposit insurance has spread to numerous countries other than the United States over time suggests that
 - a. deposit insurance is relatively low-cost since bank failures are rare and usually involve small sums
 - b. banks and consumers are quite willing to pay for deposit insurance
 - c. banks make risky loans whether or not deposits are insured
 - d. people in other countries are less concerned about problems of moral hazard than are people in the United States
 - e. the benefits from increased stability in the banking system must outweigh the costs of riskier loans

Fill in the Blanks

1. Fractional reserve banking is based on the idea that a bank need not keep all of its _____ on hand as _____.

2. If banks hold loans up to their _____ and checks are written on their deposits, then the banks must _____.

3. During an economic expansion, banks are more inclined to _____, which causes the _____ to grow and _____ to fall.

4. An increase in the legal reserve requirement will cause the potential money multiplier to _____.

Discussion Questions

1. Why is the potential money multiplier probably larger than the actual money multiplier?
2. Suppose you hear someone remark that “If there were no legal reserve requirement, banks would keep sufficient reserves anyway.” Evaluate.
3. Why is the money supply too important to be left to the banks?
4. Outline the problems faced by financial intermediaries in the United States during the 1980s and early 1990s.

Problems

1. Suppose that Springfield National Bank has reserves totaling \$100,000 on \$1,000,000 of deposits. The reserve requirement is 10 percent. Can this bank make any new loans? Explain.

2. Suppose that Jeff Ankrom, fearing an impending financial crisis, withdraws \$20,000 from his account at Springfield National Bank and buries the cash in his backyard. By how much will the bank have to reduce its loans? Calculate the maximum amount the money supply may contract as a result. Show your work.

Everyday Applications

Have you seen “*It’s a Wonderful Life*” — the classic Jimmy Stewart film? If not, rent it so you can see a marvelous depiction of a run on a small-town savings and loan. If you’ve seen it, watch it again, this time from the perspective of someone who understands fractional reserve banking.



Economics Online

The FDIC has its own Web site providing information of interest to the banking industry, public information, laws and regulations, and consumer news, along with other topics. To learn more about the FDIC visit the site (<http://www.fdic.gov/>).

Answers to Questions

Key Terms Quiz

- | | |
|------|------|
| a. 5 | f. 3 |
| b. 4 | g. 2 |
| c. 1 | |
| d. 6 | |
| e. 7 | |

True-False Questions

1. False. Banks keep a fraction of their deposits on hand and at the Federal Reserve Bank to satisfy the legal reserve requirement. They lend the remaining reserves, assuming excess reserves equal zero.
2. False. The legal reserve requirement is the fraction of deposits that must be kept as reserves.
3. False. The legal reserve requirement is determined by the Federal Reserve.
4. True
5. False. The savings and loan crisis followed the deregulation of the banking industry.
6. False. Increases in the legal reserve requirement decrease the amount of money the banking system can create.
7. False. Bankers will be reluctant to make loans during a recession because economic conditions are bad.
8. True
9. False. A demand deposit is a liability for a bank and a loan is an asset.
10. True
11. True
12. True
13. False. An unregulated banking system tends to create too much money during periods of prosperity and too little money during a recession.

14. True
15. True

Multiple-Choice Questions

- | | | | | |
|------|-------|-------|-------|-------|
| 1. c | 6. c | 11. a | 16. e | 21. c |
| 2. c | 7. c | 12. c | 17. d | 22. d |
| 3. b | 8. b | 13. e | 18. a | 23. b |
| 4. e | 9. d | 14. a | 19. d | 24. e |
| 5. a | 10. e | 15. c | 20. b | |

Fill in the Blanks

1. deposits; reserves
2. legal reserve requirement; reduce their loans
3. lend; money supply; interest rates
4. decrease

Discussion Questions

1. The potential money multiplier equal to $1/LRR$, where LRR is the legal reserve requirement, is probably larger than the actual money multiplier for three reasons. First, banks may choose to hold excess reserves over and above their legal reserves in an effort to be cautious. Second, potential borrowers may choose not to borrow the excess reserves that banks have to lend. Finally, not all the money that is loaned by banks is redeposited in other banks, and this will limit the extent of the money creation process.
2. It is correct, in most cases, that even without a legal reserve requirement, banks would keep sufficient reserves to cover the day-to-day needs of depositors. After all, a bank does not want to be vulnerable to a possible run on its deposits. The bank is in business to make a profit, and its stability is critical to achieving profitability. However, in some cases, in an effort to make a profit more quickly or out of sheer recklessness, banks may not keep sufficient reserves, find themselves vulnerable to runs on their deposits, and fail if the runs materialize. Also, a legal reserve requirement enables the Fed to directly influence the money supply and, as a result, the state of the economy. It is for this reason that a legal reserve requirement is imposed on banks.
3. Just as war is too important to be left to the generals, the money supply is too important to be left to the bankers. An uncontrolled banking system without a central bank will tend to create too little money during the recessionary phase of the business cycle and too much money during the prosperity phase. This pattern stands to reason. Bankers are self-interested people who will be disinclined to risk loans in a period when economic conditions are bad. Their natural tendency will be to increase their excess reserves during a recession as unemployment rises, incomes fall, and businesses fail. As a result, the money supply will contract, interest rates will rise, and the recession will be made worse. Just the opposite is observed during the prosperity phase of the business cycle. Bankers observe healthy economic growth and feel confident that any new loans they can make will be repaid in a timely manner. Hence, lots of lending occurs, the money supply grows more rapidly than it would otherwise, interest rates fall, spending increases, and the economy may be subject to higher inflation.
4. The rate of bank failures in the United States grew markedly during the early 1980s as a result of severe shocks to specific sectors in the economy. One of these was agriculture. Higher prices for agricultural products during the 1970s led to rising values for farmland that provided farmers with collateral on which they could borrow. Many farmers purchased land and machinery at inflated prices on borrowed funds. When farm prices and land values collapsed in the early 1980s, these same farmers began to default on loans, putting pressure on the banks that owned the loans.

Some large urban banks were hit during the same period by a decrease in oil prices that led to the need to restructure loans made to oil-exporting countries such as Venezuela and Mexico. A large number of bank failures occurred in states with oil-based economies such as Texas, Oklahoma, and Louisiana.

Finally, there is the Savings and Loan crisis of the 1980s and 1990s. S&Ls faced new competition from commercial banks in the home mortgage lending business as a result of deregulation in the banking industry. Also, Regulation Q, which had set a ceiling on interest rates paid on deposits, was discarded. S&Ls had to increase the interest rates they paid to depositors in order to compete with banks and other financial institutions like investment houses, which meant that the lower rates at which they had loaned money to home buyers were no longer profitable. Therefore, S&Ls moved into new loan markets that were riskier, and fraud became evident in many of the operations. As a result, many S&Ls failed. Even though depositors were protected by the Federal Savings and Loan Insurance Corporation, the FSLIC was unable to cover all of the failed S&Ls' deposits, forcing the government to create the Resolution Trust Corporation to handle the disposal of the failed S&Ls.

Problems

1. No, it cannot because with a 10 percent reserve requirement, the \$100,000 in actual reserves is exactly equal to the \$100,000 in required reserves it must hold on deposits of \$1,000,000.
2. Springfield National's reserves decrease by \$20,000 to \$80,000 when Jeff withdraws the \$20,000 in cash. Its deposits fall to $\$1,000,000 - \$20,000 = \$980,000$. Springfield National should have \$98,000 in reserves to cover deposits equal to \$980,000. Therefore, Springfield National must reduce its loans by \$18,000, causing the money supply to contract by as much as \$180,000 — the money multiplier multiplied by the amount by which loans must be reduced. Note that deposits can contract by as much as \$200,000, including the initial reduction in deposits equal to \$20,000.

Homework Questions

True-False Questions — If a statement is false, explain why.

1. A fractional reserve banking system creates money by lending. (T/F)
2. A deposit is an asset for a bank. (T/F)
3. Bankers are most likely to make loans when the economy most needs an increase in the money supply, at the onset or during a downturn in the economy. (T/F)
4. Deposit insurance makes it less likely that depositors will withdraw large amounts during an economic downturn, thus decreasing the chances of a financial panic. (T/F)
5. A decrease in the legal reserve requirement causes the potential money multiplier to increase. (T/F)

Multiple-Choice Questions

1. If I find \$1 million in my backyard and deposit the money in my local bank that has a legal reserve requirement equal to .2, then the banking system can create a maximum amount of **new money** (excluding the original deposit) equal to
 - a. \$1 million
 - b. \$10 million
 - c. \$5 million
 - d. \$4 million
 - e. \$2 million
2. During the 1970s, banks provided farmers with significant amounts of new debt because
 - a. banks had considerable excess reserves they wished to divest
 - b. farmers were more willing than urban businesses to pay the high rates of interest banks demanded
 - c. prices of grain and land were rising, providing farmers with higher-valued collateral to back the loans
 - d. the government encouraged banks to make these loans in order to stabilize a sluggish farm economy
 - e. they knew that Willie Nelson would bail them out with Farm Aid
3. The Federal Deposit Insurance Corporation (FDIC) is designed to
 - a. protect depositors from losing all their deposits in the event of bank failure
 - b. protect banks from being sued by depositors in the event of bank failure
 - c. protect banks against the possibility of bank failure
 - d. insure the deposits in the Federal Reserve System
 - e. safeguard the banking system against bank fraud
4. Paradoxically, banks make _____ loans when the economy needs an injection of new money during a downturn and _____ loans when the money is easy to borrow during a prosperous period.
 - a. large; small
 - b. low interest; high interest
 - c. too many; too few
 - d. too few; too many
 - e. small; large

