

Econ 601: Basic Economic Analysis

Assignment #9 - Topic: Financial Institutions and Monetary Policy

1. List the basic functions of money and explain how a \$20 bill fulfills each of these functions.
2. What are the basic components of M1 and M2? How do these two measures differ? In your opinion, which is a better measure of the money supply? Why?
3. The First National Bank of Anytown had \$5,000,000 in its reserve account at the Fed one morning. Later that morning, \$250,000 in checks that had been deposited at the bank were processed at the Fed, and the bank ordered \$100,000 in currency. Later that day \$300,000 worth of checks written by the bank's customers cleared through the Fed. How much did the bank have in its reserve account at the Fed at the end of the day?
4. Assuming that the supply of money in the economy is \$1.3 trillion and velocity is 5, answer questions a through d.
 - a. What is the dollar value of output produced in the economy?
 - b. What would happen to the dollar value of output and the real value of output if \$50 billion were added to the money supply when the economy was at full employment?
 - c. What would happen to prices and to the level of output produced in the economy if the Fed reduced the supply of money to dampen inflationary pressure when the economy was at full employment?
 - d. What would happen to the dollar value of output if people spent money faster (velocity increased) following a reduction in the money supply by the Fed?
5. Assume that Hometown Bank has \$30,000,000 in demand deposits, a 15% reserve requirement, and \$5,200,000 in actual reserves. Based on these figures, what are Hometown Bank's required and excess reserves, and how much in new loans could it make?
6. What is the money multiplier, and how is it related to the reserve requirement? If the Federal Reserve increases excess reserves in the system by \$180 million with a reserve requirement of 12 percent, what is the maximum amount by which the money supply can increase as a result of the increased excess reserves?
7. Suppose the Federal Reserve is concerned about demand-pull inflationary pressure that is building in the economy.
 - a. What would be the appropriate change in excess reserves to counteract this problem?
 - b. What would be the appropriate change in the reserve requirement, the discount rate, and open market operations to bring about change in excess reserves?
8. What would be the effect of each of the following on Uptown Bank's excess reserves and loan-making ability if the bank had \$60 million in deposits, a 5% reserve requirement, and actual reserves of \$4 million.
 - a. The Federal Reserve sells \$500,000 in government securities to Uptown Bank.
 - b. The reserve requirement increases from 5% to 6%.
 - c. The discount rate is increased.
 - d. The reserve requirement is lowered from 5% to 4%, and the Federal Reserve buys \$1 million in government securities from the bank.