

Econ 102- Principles of Macroeconomics

Discussion Section Handout #8

Announcement:

Homework for Chapter 13 is due on Friday April 13th no later than 5pm. Drop it in your TA's mailbox.

Key concepts:

Functions of money, M1 and M2, fiat money v.s. commodity money,
Required reserve, required reserve ratio, and excess reserves
Discount policy and discount rate, Open market operations,
Velocity of money

Examples:

1. Suppose the required reserve ratio is 10%. Which of the following banks is keeping excess reserves?
 - a. The Bank of Chicago has Checking deposits for \$100,000; Vault cash for \$6,000 and Deposits at the Fed for \$4,000.
 - b. The Bank of Las Vegas has Checking deposits for \$400,000; Vault cash for \$30,000 and Deposits at the Fed for \$20,000.
 - c. The Bank of Baltimore has Checking deposits for \$30,000; Vault cash for \$1,000 and Deposits at the Fed for \$1,500.
 - d. The Bank of San Diego has Checking deposits for \$200,000; Vault cash for \$20,000 and no Deposits at the Fed.

2. In Atlaland, the required reserve ratio is 20% and the First Bank of Atlaland is currently holding \$50,000 in excess reserves. If a depositor withdraws \$20,000, the required reserves of the bank will:
 - a. remain unchanged.
 - b. decline by \$4,000.
 - c. decline by \$20,000.
 - d. decline by \$50,000.

3. (Use the information in question #2 to answer this question.) After the depositor withdraws \$20,000, the excess reserves of the bank will:
 - a. remain unchanged.
 - b. decline by \$16,000.
 - c. decline by \$20,000.
 - d. decline by \$50,000.

4. The Fed conducts an open market sale of Treasury bills for \$70 million. If the required reserve ratio is 10%, what is the potential change in the money supply?
 - a. \$700 million
 - b. \$70 million
 - c. -\$70 million
 - d. -\$700 million

5. In country A, the M1 is \$100 trillion in 2007, and the real GDP in 2008 is expected to enjoy a growth rate of 4%. The central bank plans to buy back its Treasury bills for 4 trillion in 2008. What do we expect the inflation rate to be in 2008 if the velocity of money is constant? What if the velocity of money is going to decrease 1%?