

Economics – Chapter 12 – Money and Banking

1. **Money** – any good that is widely accepted for purposes of exchange and in the repayment of debts
2. **Barter** – exchanging goods and services for other goods and services w/o the use of money
3. **Medium of Exchange** – anything that is generally acceptable in exchange for goods and services
4. **Unit of Account** – a common measurement in which relative values are expressed
5. **Store of Value** – the ability of an item to hold value over time
6. Money serves the purposes of being a medium of exchange, an unit of account, and a store of value
7. Double Coincidence of Wants – in a barter economy, a trader must find another trader who is willing to trade what the 1st trader wants and at the same time, what the 1st trader has. With money, as long as the 2nd trader has what the 1st wants, the trade can take place
8. Using money is faster, hence saving time, which gives people more time for leisure or make other trades
9. Money does not need to be backed by gold because it is universally accepted
10. **Gresham's Law** – bad money drives good money out of circulation – if a dime minted before 1900 had a higher silver content than a dime minted after 1900, people would not use the ones before 1900, they'll save them for their higher silver content, and use the "bad" dimes minted afterwards, hence driving the ones before 1900 out of circulation
11. **M1** – includes currency held outside banks + checkable deposits + traveler's checks
12. **M2** – M1 + small denomination time deposits + savings deposits + money market accounts + overnight repurchase agreements + overnight Eurodollar deposits
13. **Currency** – includes coins and paper money
14. **Federal Reserve Notes** – paper money issued by the Fed
15. **Checkable Deposits** – Deposits on which checks can be written
16. **Time Deposits** – interest earning deposits that have a maturity date and carry penalties for early withdrawal
17. **Savings Deposit** – a type of time deposit. The depositor may need to give advance written notice to withdraw
18. **Money Market Accounts** – accounts with banks (MMDA's) or mutual fund companies (MMMMF's) that pay interest and offer limited check writing privileges
19. **Liquid Asset** – asset that can easily and quickly be turned into cash. Some assets are more "liquid" than others
20. **Overnight Repurchase Agreements** – an agreement by a financial institution to sell short term securities to its customers, combined with an agreement to repurchase the securities at a higher price at a specified future date
21. **Overnight Eurodollar Deposits** – dollar denominated deposits in banks outside the United States
22. **Credit Cards** – Credit Cards are NOT money. They're simply loans. The card company loans you the money to make purchases, you pay them back at the end of the month.
23. Goldsmiths, who stored gold for local townspeople, issued warehouse receipts, and were the 1st "banks"
24. **Fractional Reserve Banking** – a banking arrangement that allows banks to hold reserves equal to only a fraction of their deposit liabilities
25. **Federal Reserve System (The Fed)** – the central bank of the United States
26. **Reserves** – the sum of bank deposits at the Fed
27. **Required Reserve Ratio (r)** – a percentage of each dollar deposited that must be held on reserve
28. **Required Reserves** – the minimum amount of reserves a bank must hold against its checkable deposits
29. **Excess Reserves** – any reserves held beyond the required amount
30. **T-Account** – a simplified balance sheet that shows the changes in a bank's assets and liabilities
31. **The Money Expansion Process** – Loans, in effect, are assets because by loaning out \$1000, the bank will eventually get it back, so it has not spent any money. However, by loaning the \$1000, and then the person taking out the loan putting the \$1000 loan in a checking account, the bank now has \$2000, because it still has the \$1000 loan, along with the \$1000 in the checking account, hence increasing the money supply.....
32. **See below for another explanation**
33. **Simple Deposit Multiplier** – the reciprocal of the required reserve ratio, $1/r$
Max change in checkable deposits = $(1/r) * \text{Change in original funds (in this case, \$1000)}$
34. **Cash Leakage** – occurs when funds are held as currency instead of being deposited into a checking account
35. The maximum change assumes no cash leakage and that the bank lends all its excess reserves
36. The money expansion process also works in reverse, when Bill, instead of depositing \$1000, withdraws \$1000, gives it back to the Fed, and the Fed destroys it.
37. The money expansion and destruction process occur if new money is CREATED or DESTROYED. However, if Bill just had \$1000 in his room, deposited it, the total amount of money does not change, except now instead of cash, it's a checkable deposit.

Added 11/16/02

1. **Assets** – something of value owned by a person or a firm. To a bank, these are loans, bonds, and reserves
2. **Liability** – something of a value a person or firm owes to someone else. To a bank, these are deposits
3. **Assets must ALWAYS ALWAYS ALWAYS equal liabilities at any one point in time**
4. **Loans** – made by banks to others. The bank earns interest on these loans

5. **Bonds** – promises of a firm or government to pay back a certain amount after a number of years
6. **Relationship between reserves and deposits** – Assume that the Fed wanted to increase bank reserves
 - a. It buys bonds from the banks, then credits the amount of reserves that the banks hold at the Fed
 - b. **Open Market Operation** – the buying and selling of bonds by the central bank
 - c. **How reserves affect deposits**
 - i. The reserve ratio, lets assume, is 10%.
 - ii. Assume that BankOne has 100 million worth of deposits, and 10 million worth of reserves at the Fed.
 - iii. The Fed now buys 10 million worth of bonds from BankOne, and credits BankOne's account.
 - iv. BankOne now has 20 million worth of reserves at the Fed. However, BankOne now has more than the required amount (10 mil more, since its deposits have not changed), and since reserves at the Fed don't pay interest, BankOne wants to loan out the 10 mil, since loans pay interest.
 - v. BankOne loans 10 million to some company, CompanyOne and writes it a check (Remember, a check is a promise for payment. BankOne hasn't paid anyone yet)
 - vi. CompanyOne deposits the check in its own bank, BankTwo
 - vii. BankTwo goes to BankOne and asks for payment (cashing the check), and BankOne pays BankTwo by lowering its reserves from 20 million back to 10 million, while crediting BankTwo's reserves 10 million.
 - viii. At this point, BankOne's total assets have not changed – their bonds went down by 10 million (sold to the Fed), their reserves went up by 10 million (From the Fed for the bonds), their loans went up by 10 million (loaned to CompanyOne), and their reserves then went down again by 10 million (paid to BankTwo for the loan). Hence, BankOne's total assets have not changed
 - ix. BankTwo's deposits (a liability) have increased by 10 million (from CompanyOne depositing the loan check from BankOne). Its reserves (an asset) have also gone up by 10 million (from the actual payment from BankOne). Hence, BankTwo's assets still equal its liabilities – both just went up by 10 million
 - x. However, of the 10 million deposited, BankTwo only needs to keep 1 million of it in reserves. Hence, just like BankOne earlier, BankTwo will want to loan out 9 million to some company, CompanyTwo by writing it a check
 - xi. CompanyTwo will deposit the money in its own bank, BankThree, and the process continues
 - xii. In the end, the 10 million that the Fed spent to change the reserves would have caused a 100 million change in the deposits.
 - xiii. General Formula:
 Change in deposits = whatever the Fed buys in bonds / Required Reserve Ratio