Banking

Bank Deposits and Money Creation

- U.S. banks do not print or issue money anymore.
- But demand deposits are part of the money supply, so banks play an important role in how money is “created.”
- To understand modern banking, let’s start with a short history of banking….

Goldsmiths as Bankers

- In Medieval Europe, people would store their gold coins with the local goldsmith, who had a safe.
  - Goldsmith gave them receipts for a certain amount of gold.
  - Gradually, the receipts began to circulate as paper money.

- Goldsmiths realized that everyone did not come for their gold at the same time.
  - They began to lend out gold coins from the safe.
  - Next, they began to lend out receipts for gold.
- Banking system created when the number of receipts was greater than coins in safe.

Reserve Ratio

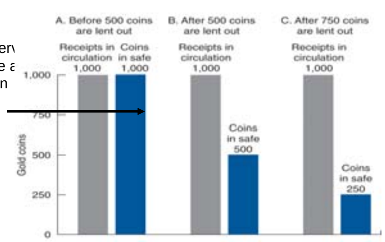
- Money created through loans.
  - More receipts were circulating than gold in safes.
- To be reliable, bank (or goldsmith) had to keep enough gold coins for anyone who came to cash in their receipts.
- Reserve ratio:

$$\frac{\text{Number of coins in safe}}{\text{Number of receipts in circulation}} = \frac{\text{Reserves in vault}}{\text{Demand deposits}}$$

Calculating Reserve Ratio

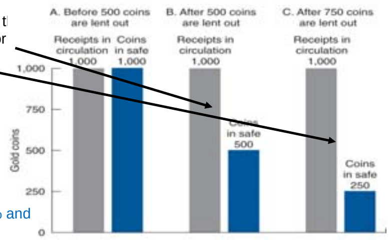
A. What is the goldsmith’s reserv
ratio when there a
1,000 receipts in
circulation and
1,000 coins the
safe?

Answer: 100%



Calculating Reserve Ratio #2

Try calculating t
reserve ratio for
and C.



Answers: 50% and 25%

Modern Banking

- A bank is a financial institution that accepts deposits, makes loans, and offers checking accounts.
- Like the goldsmiths, banks lend out some of their deposits and keep some as reserves:
  - They pay interest to their depositors.
  - They charge higher interest rates to their borrowers.

- Profit incentive is to keep reserves low:
  - Banks would prefer a low reserve ratio, around 2%.
  - Federal regulators make them keep around 10% of their checking deposits on reserve, to ensure stability of banking system.
- Government regulation prevents runs on banks.

Banks are a Form of Financial Intermediaries

- Financial intermediaries channel funds from savers to borrows.

- Not all financial intermediaries are banks:
  - Sometime business borrowers dispense with financial middlemen altogether by borrowing directly from savers.
    - The U.S. Treasury does this every month by issuing new bonds, certificates, notes, and bills.
    - Large business borrows by issuing relatively short-term commercial paper and long-term bonds.
  - Money market funds, pension funds, insurance companies, and consumer finance companies all invest their contributions by lending money or buying stocks and bonds.
  - Subprime mortgages are generally issued by nonbank financial intermediaries (Countrywide Credit, Household International).

Home Mortgage Market

- In the home mortgage market, banks and other financial intermediaries differentiate between the relatively well off and the less fortunate.
  - Conventional market: Banks, savings & loans, and credit unions make loans to middle-class and well-off homeowners.
  - Subprime market: Caters to poorer homeowners and has interest rates that are double that in conventional markets.

Bank Regulation

- Unlike some forms of business, someone cannot just decide to open a bank.
- To operate a bank you must get a state or national charter.
  - More than two-thirds of the nation's banks have state charters.
  - The rest have national charters. All nationally chartered banks must join the Federal Reserve System.

- To get a bank charter you need to demonstrate:
  1. That your community needs another bank.
  2. That you have enough capital to start a bank.
  3. That you are of good character.

Bank Branches

- Three types of banking have evolved under various state laws:
  1. Unrestricted branch banking: a bank may open branches throughout the state.
  2. Limited branch banking: a bank may be allowed to open branches only in contiguous communities.
  3. Unit banking in which state law forbids any branching whatsoever.

- Interstate banking was technically illegal until 1994:
  - Some banks owned banks in multiple states but operated them as separate entities.
  - Passage of the Riegle-Neal Interstate Banking and Branching Act of 1994 swept away the last barriers to opening branches in different states.

Problem of Bank Runs

- A **bank run** is a phenomenon in which many of a bank's depositors try to withdraw their funds due to fears of a bank failure.
- Historically, they have often proved contagious, with a run on one bank leading to a loss of faith in other banks, causing additional bank runs.

Financial Panics

- Banks borrow short-term and lend long-term.
- If depositors lose faith in banks and call on the bank to redeem checking accounts, banks have only their reserves, a small percentage of deposits, to give depositors.
- The result is that the bank fails, even though it might be financially sound in the long run.

Government Policy to Prevent Panic

- To prevent panics, the U.S. government guarantees the obligations of various financial institutions through programs such as the Federal Deposit Insurance Corporation (FDIC).
- Financial institutions pay a small premium for each dollar of deposits to the FDIC.
- The FDIC uses the money to bail out banks experiencing a run on deposits.

Key Regulator: The Federal Deposit Insurance Corporation (FDIC)

- After the massive bank failures of the 1930s, Congress set up the FDIC.
  - Aim of FDIC is to avert bank panics by assuring the public that the federal government stands behind the bank, ready to pay off depositors, if it should fail.
  - Each depositor insured up to $100,000.
- More than 99 percent of banks are members of FDIC.

Banks Gone Wild! Moral Hazard

- When deposits are guaranteed, some banks may make risky loans knowing that the government has guaranteed deposits.
- Guaranteeing deposits can be expensive for taxpayers.

The Savings and Loan Bailout

- During the late 1980s, the recently deregulated S&Ls made bad loans that led to their failure and the government's repaying their depositors.
- The cost of funds increased during the 1980s and the S&Ls charged high interest rates and made many risky loans that failed.

Capital Requirements

- **Capital Requirements** - regulators require that the owners of banks hold substantially more assets than the value of bank deposits. In practice, banks' capital is equal to 7% or more of their assets.
  - This is to prevent bankers from going wild

Reserve Requirements

- **Reserve Requirements** - rules set by the Federal Reserve that determine the minimum reserve ratio for a bank. For example, in the United States, the minimum reserve ratio for checkable bank deposits is 10%.