An Overview of the Financial System

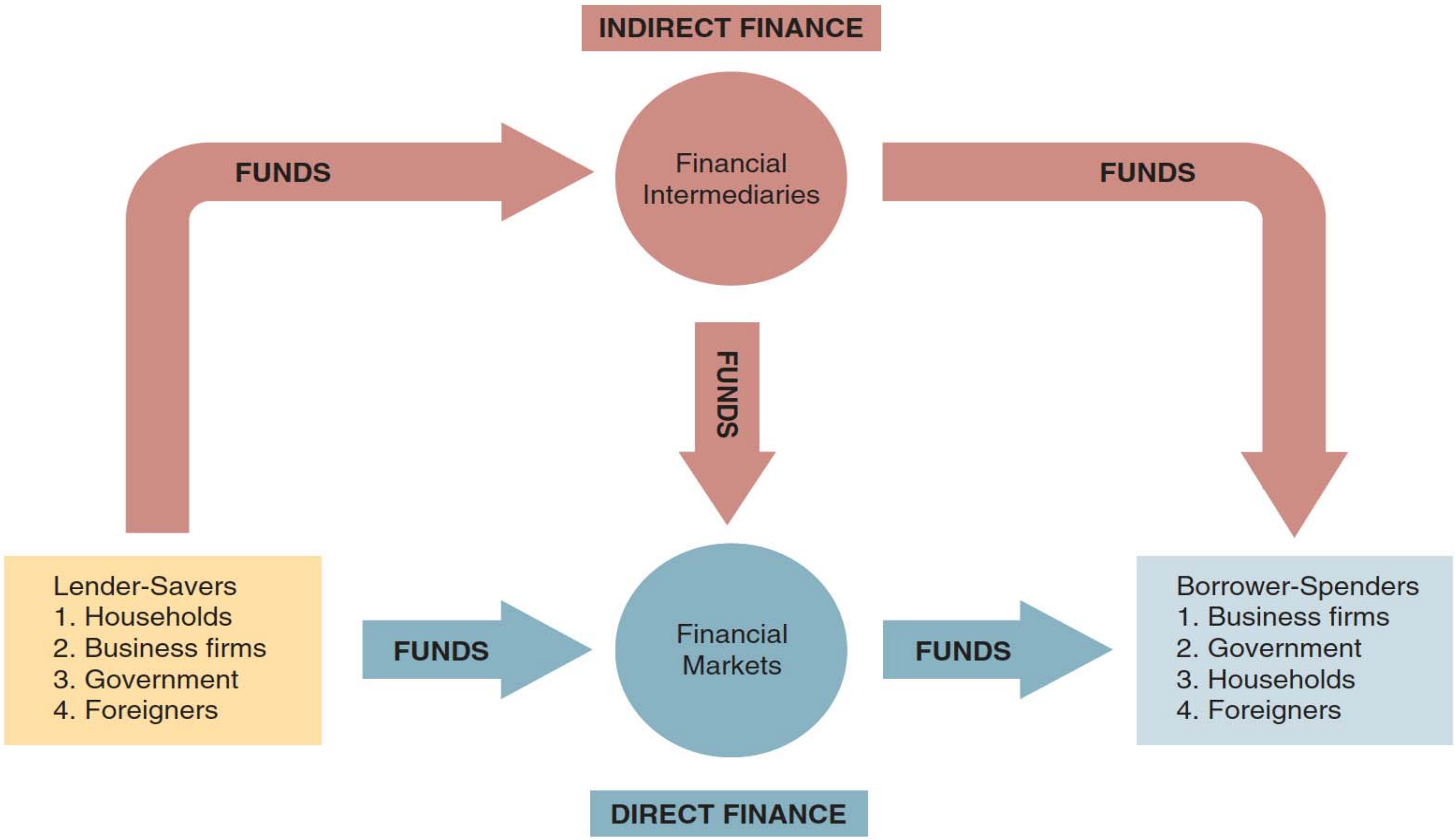
This lecture presents the general structure of financial markets (bond and stock markets) and financial intermediaries (banks, insurance companies, and pension funds).

Function of Financial Markets

A. Financial markets channel funds from those with a surplus (savers) to those with a shortage (borrowers).

1. Financial markets are necessary for producing an efficient allocation of capital in the economy.
2. Financial markets improve the well-being of consumers by enabling them to time their purchases better.

B. The financial system: flow of funds



1. In direct finance, borrowers directly sell securities (bonds or stock) in financial markets to lenders.
2. In indirect finance, borrowers lend funds from financial intermediaries who acquire those funds from savers.

Structure of Financial Markets

A. Debt markets (ex., bond or mortgage market).

1. The issuance of debt is a contractual agreement by the borrower to pay the holder of the debt instrument fixed amounts at regular intervals until a specified date.

2. The <u>maturity</u> of a debt instrument is the number of years until the instrument is paid off.

    a. <u>Short-term</u> debt matures in less than 1 year.

    b. <u>Long-term</u> debt matures in more than 10 years.

    c. <u>Intermediate-term</u> debt matures between 1 and 10 years.

B. Equity or stock markets

1. Equities are claims to the net income and assets of a business.
2. Equities often make periodic payments (dividends) to their holders.
3. Equities are considered long-term securities because they have no maturity date.

C. Advantages and disadvantages of debt and equities

1. A business must pay all of its debt holders before it pays its equity holders. That is, equity holders get paid last in bankruptcy.
2. Equity holders benefit from any increases in business profitability because equities represent ownership in a business.

D. Primary and secondary markets

1. Primary market

    a. A financial market where new issues of a security are sold to initial buyers. (Not well known to the public.)

    b. <u>Investment bank</u> assists in the sale of assets in the primary market by guaranteeing a price for a business' securities (<u>underwriting</u>) and then selling those securities to the public (ex., Goldman Sachs).

2. Secondary market (ex., NYSE, NASDAQ)

    a. This market is where previously issued securities trade.

    b. <u>Brokers</u> work for a buyer or seller looking for a trade.

    c. <u>Dealers</u> facilitate a trade between a buyer and seller.

E. Exchanges and over-the-counter markets

    1. These are secondary markets.

    2. Exchanges are one central location where buyers and sellers meet.

    3. Over-the-counter markets are when dealers at different locations are ready to buy and sell securities.

F. Money and capital markets

    1. Money market is a financial market in which short-term debt is traded.

    2. Capital market is a financial market in which equities and longer-term debt are traded.

Financial Market Instruments

A. Money market instruments

1. U.S. treasury bills (T-bills)

    a. U.S. Government debt issued in 1-, 3-, and 6-month maturities.

    b. T-bills pay a set amount at maturity and do not pay interest. (T-bills sell at a discount.)

    c. T-bills have a low probability of default because governments can always raise taxes and/or issue more currency.

2. <u>Commercial paper</u> is short-term debt issued by large banks and well-known companies.

3. <u>Repurchase agreements</u> are short-term loans (less than 2 weeks) where T-bills serve as collateral.

4. Bank certificates of deposit
    a. A certificate of deposit (CD) is debt sold by a bank to depositors that pays a given interest rate and matures on a specific date at the original purchase price.
    b. Negotiable CDs are CDs in excess of $100,000 that are usually sold to institutional investors.
5. Federal Funds
    a. Federal funds are typically overnight loans between banks with deposits at the Federal Reserve.
    b. The federal funds rate is the interest rate that banks charge each other for loans in the federal funds market.

B. Capital market instruments
   1. Stocks
   2. Mortgages and mortgage-backed securities
      a. Mortgages are loans to purchase land, housing, or other structures, where the property is the collateral for the loan.
      b. Banks, savings & loans, and insurance companies can provide mortgages.
      c. Mortgage-backed securities are bond-like debt instruments backed by a bundle of individual mortgages.
   3. U.S. government securities
   4. State and local government bonds (municipal bonds)
      a. Interest on these bonds is exempt from federal income taxes and most state and local income taxes.

5. U.S. government agency securities
6. Corporate bonds
    a. Long-term bonds issued by businesses with great credit.
    b. These bonds typically pay interest twice a year and pay off at face value when the bond matures.
7. Consumer and bank commercial loans

C. Foreign financial market instruments

1. <u>Foreign bonds</u> are sold in a foreign country and denominated in that country's currency.
2. <u>Eurobond</u> is a bond denominated in a currency other than that of the country in which it is sold.
3. <u>Eurodollars</u> are deposits of U.S. dollars in banks outside the U.S.

Indirect Finance via Financial Intermediation

A. A financial intermediary borrows funds from a lender-saver and uses those funds to make a loan to a borrower-spender.

B. <u>Transaction costs</u> are the time and money spent carrying out financial transactions. These costs are high for small savers which encourage those savers to use financial intermediaries.

C. <u>Asymmetric information</u> occurs when one party does not know enough about the other party to make competent decisions. Financial intermediaries try to minimize informational problems.

   1. <u>Adverse selection</u> occurs when asymmetric information is present *before* the transaction occurs. Financial intermediaries gather information to avoid lending to risky borrowers.

   2. <u>Moral hazard</u> occurs when asymmetric information is present *after* the transaction occurs. Financial intermediaries restrict activities that might impact a borrower's ability to repay.

Types of Financial Intermediaries

A. Depository institutions

1. Commercial banks receive funds from deposits and use them to make commercial, consumer, mortgage loans.

2. Savings and loans receive funds from deposits and in the past used them primarily for mortgage loans.

3. Credit unions are financial institutions typically organized around a particular group.

B. Contractual savings institutions

1. Life insurance companies get funds from policy premiums and use them to buy corporate bonds and mortgages.

2. Fire and casualty insurance companies acquire funds from policy premiums and use them to buy more liquid assets like municipal bonds and U.S. government securities.

3. Pension funds and government retirement funds acquire funds from employee contributions and use them to buy corporate bonds and stocks.

C. Investment intermediaries

1. Finance companies sell commercial paper and issue bonds and stock. They lend funds to consumers and small businesses.

2. Mutual funds sell shares to individuals and then purchase a diversified portfolio of stocks and bonds.

3. Money market mutual funds sell shares to individuals and then purchase money market instruments.

4. Hedge funds work like mutual funds except minimum investments start at $100,000 or higher.

5. Investment banks

Regulation of the Financial System

A. Regulations require certain information be made available to investors in order to reduce asymmetric information problems. For example, the Securities and Exchange Commission writes and enforces regulations on the financial system

B. Regulations also promoted the soundness of financial intermediaries.

   1. Restrictions on entry limit financial intermediaries to outstanding citizens with a large amount of initial funds.

   2. Strict disclosure requirements for financial intermediaries.

   3. Financial intermediaries are restricted on what activities they can engage in with their assets.

   4. U.S. chartered commercial banks are required to have deposit insurance to protect depositors in the event the bank fails.