AN OVERVIEW OF THE FINANCIAL SYSTEM

Function of Financial Markets

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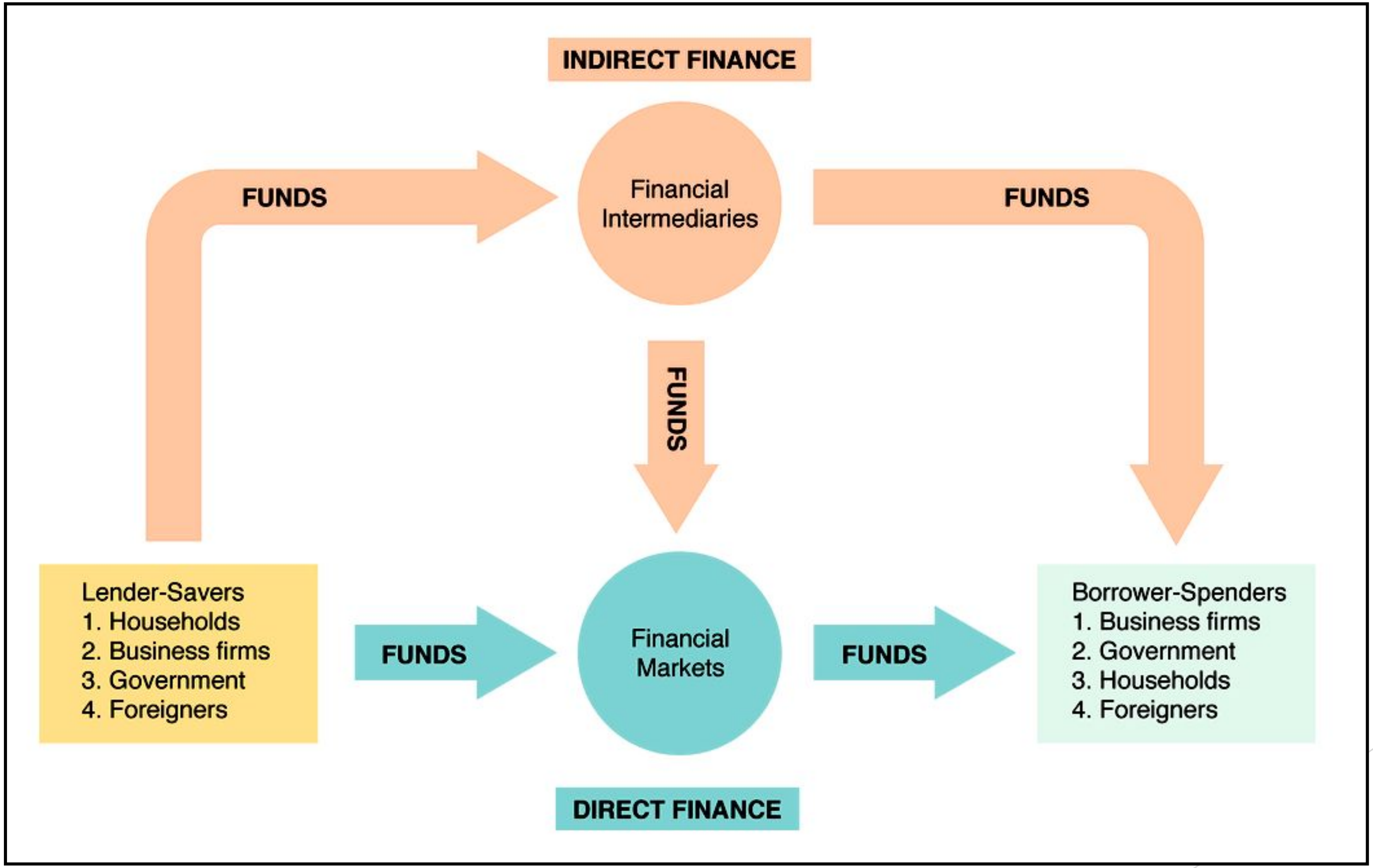
- To bring lenders and borrowers together to make both of them better-off.
  - Efficient allocation of capital, which increases production
  - Improve the well-being of consumers by allowing them to time purchases better

Function of Financial Markets



Structure of Financial Markets

- Debt and Equity Markets
- Primary and Secondary Markets (D&E)
  - Investment Banks *underwrite* securities in primary markets
  - Brokers and dealers work in secondary markets
- Exchanges
  - NYSE, TSE, NASDAQ
- Over-the-Counter (OTC) Markets
  - FX, Fed funds
- Money and Capital Markets
  - Money markets deal in short-term debt instruments
  - Capital markets deal in longer-term debt and equity instruments

Financial Intermediaries

- Financial Intermediation is the process of transforming certain financial assets into more widely preferred type of asset/liability
- A **financial intermediary** is an institution or individual that serves as a conduit for parties in a financial transaction. They act as agents in transferring funds from savers-lenders to borrowers-spenders.

Functions of Intermediation : Indirect Finance

- <u>**Lower transaction costs**</u> (time and money spent in carrying out financial transactions):
  - Economies of scale
  - Liquidity services
- <u>**Reduce risk:**</u>
  - Risk sharing(asset transformation: packaging risky assets into safer ones for investors)
  - Diversification by pooling and issuing new assets

Functions of Intermediation : Indirect Finance

- Deal with asymmetric information problems
  - (before the transaction) Adverse Selection: try to avoid selecting the risky borrower.
    - Gather information about potential borrower.
  - (after the transaction) Moral Hazard: ensure borrower will not engage in activities that will prevent him/her to repay the loan.
    - Sign a contract with restrictive covenants.

Financial Intermediaries

A closer look at Financial Institutions

- Types
  - Banks – Commercial, Investment, Credit Unions, Savings and Loan organizations etc.
  - Investment Companies : mutual funds, hedge funds, pension funds and etc.
  - Insurance Companies
  - Other Foundations, etc.
- Functions
  - Transforming, Exchanging, and Designing Financial Assets
  - Advising and Managing Financial Assets

Financial intermediaries

There are other services that financial intermediaries can provide:

- Facilitating the trading of financial assets for the financial intermediary's customers through brokering arrangements.
- Facilitating the trading of financial assets by using its own capital to take the other position in a financial asset to accommodate a customer's transaction.
- Assisting in the creation of financial assets for its customers and then either distributing those financial assets to other market participants.
- Providing investment advice to customers.
- Managing the financial assets of customers.
- Providing a payment mechanism

Types of financial intermediaries

- Brokers help their clients buy/sell securities by finding counterparties to trade in a cost efficient manner. They may work for a large brokerage firms, banks or at exchanges
- Dealers facilitate trading by buying or selling from their own inventory. Dealers provide liquidity in the market and profit primarily from the spread (bid-asked spread).

Type of Intermediary	Primary Liabilities (Sources of Funds)	Primary Assets (Uses of Funds)
Depository Institutions (Banks)		
Commercial banks	Deposits	Loans, mortgages, government bonds
Trust and mortgage loan companies	Deposits	Mortgages
Credit unions and caisses populaires	Deposits	Mortgages
Contractual Savings Institutions		
Life insurance companies	Premiums from policies	Corporate bonds and mortgages
Property and casualty insurance companies	Premiums from policies	Corporate bonds and stocks
Pension funds	Retirement contributions	Corporate bonds and stocks
Investment Intermediaries		
Finance companies	Finance paper, stock, bonds	Consumer and business loans
Mutual funds	Shares	Stocks and bonds
Money market mutual funds	Shares	Money market instruments

Regulation of the Financial System

- To increase the information available to investors:
  - Reduce adverse selection and moral hazard problems
  - Reduce insider trading (SEC).
- To ensure the soundness of financial intermediaries:
  - Restrictions on entry (chartering process).
  - Disclosure of information.
  - Restrictions on Assets and Activities (control holding of risky assets).
  - Deposit Insurance (avoid bank runs).
  - Limits on Competition (mostly in the past):
    - Branching
    - Restrictions on Interest Rates

Commercial Banks

- Most prominent financial institution
- Range in size from huge to small
- Major sources of funds :
  - used to be demand deposits of public
  - also accept savings and time deposits
- Uses of funds
  - short-term government securities
  - long-term business loans
  - home mortgages

INVESTMENT BANKS

- Help corporations sell securities to investors (underwriting services)
- Provide advice to firms about merger& acquisition and raising capital

CREDIT UNIONS

Credit unions are similar to traditional banks in the sense that both institutions offer financial products to customers.

Credit Unions are small not-to-profit depository institutions that are owned by their members who are also their customers

Credit union members, like bank customers, have access to checking and savings accounts, CDs, loan products, and credit cards.

- Organized as cooperatives for people with common interest
- Members buy shares [deposits] and can borrow

Insurance Companies

- Insurance companies play an important role in an economy in that they are risk bearers or the underwriters of risk for a wide range of insurable events.
- Insurance companies are major participants in the financial market as investors.
- As compensation for insurance companies selling protection against the occurrence of future events, they receive one or more payments over the life of the policy. The payment that they receive is called a *premium.*
- Between the time that the premium is made by the policyholder to the insurance company and a claim on the insurance company is paid out (if such a claim is made), the insurance company can invest those proceeds in the financial market.

Life Insurance Companies

- Insure against death
- Receive funds in form of premiums
- Use of funds is based on mortality statistics—predict when funds will be needed
- Invest in long-term securities—high yield
  - Long-term corporate bonds
  - Long-term commercial mortgages

Property and Casualty Insurance Companies

- Insure homeowners and businesses against losses
- Receive premiums
- Need to be fairly liquid due to uncertainty of claims
- Purchase a variety of securities
  - high-grade stocks and bonds
  - short-term money market instruments for liquidity

Investment Companies

- Investment Companies, also known as asset management companies, manage the funds of individuals, businesses and state local governments and are compensated for their services by fees that they charge
- Include: mutual funds, hedge funds, pension funds and etc.

Investment Companies: Pension Funds

- Concerned with long run
- Receive funds from working individuals building "nest-egg"
- Accurate prediction of future use of funds
- Invest mainly in long-term corporate bonds and high-grade stock

Finance companies

- Finance companies raise funds by selling commercial paper and by issuing stocks and bonds
- They lend these funds to consumers, who make purchases of such items as furniture, automobiles, and home improvements, and to small businesses
- Some finance companies are organized by a parent corporation to help sell its product

Investment Companies : Mutual Funds

- A mutual fund accepts funds from investors who in exchange receive mutual fund shares
- In turn, the mutual fund invests those funds in a portfolio of financial instruments
- The mutual fund shares represent an equity interest in the portfolio of financial instruments and the financial instruments are the assets of the mutual fund.
- Individuals can sell their shares at any time, as the mutual fund is required to redeem them.
- The value of each share of the portfolio (not necessarily the price) is called the *net asset value* (NAV) and is computed as follows:

NAV = (Market value of portfolio − Liabilities)/Number of shares

Investment Companies: HEDGE FUNDS

The pools of investment funds run by asset managers that are referred to as *hedge funds*. These entities as of this writing are not regulated. *Usually, hedge funds:*

- *Are organized as private investment partnerships*
- *Use a wide variety of trading strategies involving position-taking in a range of markets.*
- *Employ an assortment of trading techniques and instruments, often including short-selling, derivatives, and leverage.*
- *Pay performance fees to their managers.*