# Monetary Theory and Policy

Chapter 2: An Overview of the Financial System

#### **Function of Financial Markets**

- Perform the essential function of <u>channeling funds</u> from economic players that have saved surplus funds to those that have a shortage of funds
- <u>Direct finance</u>: borrowers borrow funds directly from lenders in financial markets by selling them securities.

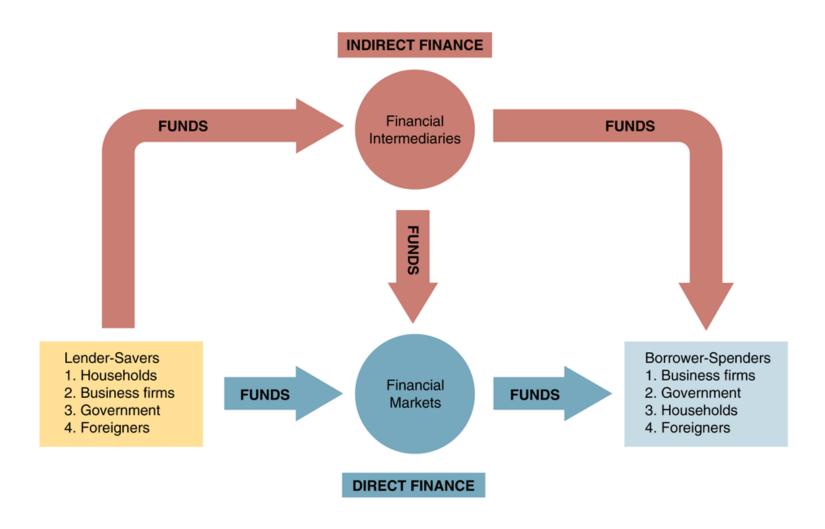
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#### **Function of Financial Markets**

- Promotes economic efficiency by producing an efficient allocation of capital, which increases production
- Directly improve the well-being of consumers by allowing them to <u>time purchases better</u>

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#### FIGURE 1 Flows of Funds Through the Financial System



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#### Structure of Financial Markets

- Debt and Equity Markets
  - Debt instruments (maturity)
  - Equities (dividends)
  - Pros and cons
- Primary and Secondary Markets
  - Investment Banks underwrite securities in primary markets
  - Brokers and dealers work in secondary markets

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#### Structure of Financial Markets

- Exchanges and Over-the-Counter (OTC) Markets
  - Exchanges: NYSE, Shanghai and Shenzhen Stock Exchange,
    Chicago Board of Trade
  - OTC Markets: Foreign exchange, Federal funds.
- Money and Capital Markets
  - Money markets deal in short-term debt instruments
  - Capital markets deal in longer-term debt and equity instruments.

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## **Table 1** Principal Money Market Instruments

TABLE 1	Principal Money Market Instruments
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Amount				
(\$	billions,	end	of	year)

Type of Instrument	1980	1990	2000	2013
U.S. Treasury bills	216	527	647	1,591
Negotiable bank certificates of deposit (large denominations)	317	543	1,053	1,762
Commercial paper	122	557	1,619	951
Federal funds and security repurchase agreements	64	388	768	1,919

Source: Federal Reserve Flow of Funds Accounts; http://www.federalreserve.gov

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# **Table 2** Principal Capital Market Instruments

TABLE 2 Principal Capital Market	Instrume	nts			
	Amount (\$ billions, end of year)				
Type of Instrument	Type of Instrument 1980 1990 2000 2013				
Corporate stocks (market value)	1,601	4,146	17,627	21,363	
Residential mortgages	1,106	2,886	5,463	9,863	
Corporate bonds	366	1,008	2,230	6,436	
U.S. government securities (marketable long-term)	407	1,653	2,184	4,359	
U.S. government agency securities	193	435	1,616	6,199	
State and local government bonds	310	870	1,192	2,925	
Bank commercial loans	459	818	1,091	1,175	
Consumer loans	355	813	536	679	
Commercial and farm mortgages	352	829	1,214	2,463	
Source: Federal Reserve Flow of Funds Accounts; http://www.federalreserve.gov.					

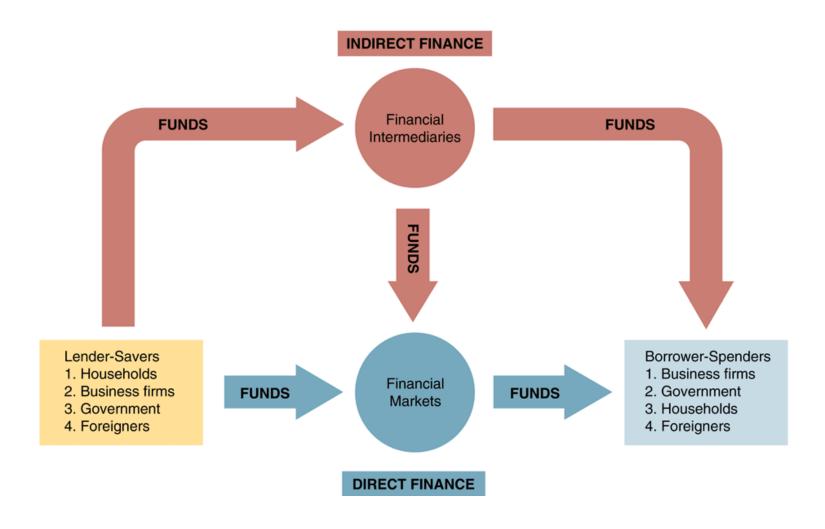
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#### Internationalization of Financial Markets

- Foreign Bonds: sold in a foreign country and denominated in that country's currency
- Eurobond: bond denominated in a currency other than that of the country in which it is sold
- Eurocurrencies: foreign currencies deposited in banks outside the home country
  - Eurodollars: U.S. dollars deposited in foreign banks outside the U.S. or in foreign branches of U.S. banks
- World Stock Markets
  - Nikkei 300 Average, FTSE 100-Share Index, Hang Seng Index

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#### FIGURE 1 Flows of Funds Through the Financial System



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#### Function of Financial Intermediaries: Indirect Finance

- Lower transaction costs (time and money spent in carrying out financial transactions).
  - Economies of scale
  - Liquidity services
- Reduce the exposure of investors to risk
  - Risk Sharing (Asset Transformation)
  - Diversification

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#### Function of Financial Intermediaries: 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.

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#### Function of Financial Intermediaries: Indirect Finance

#### • Conclusion:

• Financial intermediaries allow "small" savers and borrowers to benefit from the existence of financial markets.

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# **Table 3** Primary Assets and Liabilities of Financial Intermediaries

FABLE 3 Primary Assets and Liabilities of Financial Intermediaries			
Type of Intermediary	Primary Liabilities (Sources of Funds)	Primary Assets (Uses of Funds)	
Depository institutions (banks)			
Commercial banks	Deposits	Business and consumer loans, mortgages, U.S. government securities, and municipal bonds	
Savings and loan associations	Deposits	Mortgages	
Mutual savings banks	Deposits	Mortgages	
Credit unions	Deposits	Consumer loans	
Contractual savings institutions			
Life insurance companies	Premiums from policies	Corporate bonds and mortgages	
Fire and casualty insurance companies	Premiums from policies	Municipal bonds, corporate bonds and stock, and U.S. government securities	
Pension funds, government retirement funds	Employer and employee contributions	Corporate bonds and stock	
Investment intermediaries			
Finance companies	Commercial paper, stocks, bonds	Consumer and business loans	
Mutual funds	Shares	Stocks, bonds	
Money market mutual funds Hedge funds	Shares Partnership participation	Money market instruments Stocks, bonds, loans, foreign currencies, and many other assets	

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# Regulation of the Financial System

- To increase the information available to investors:
  - Reduce adverse selection and moral hazard problems
  - Reduce insider trading (Securities and Exchange Committee, SEC).

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## Regulation of the Financial System

- 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

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# Regulation of the Financial System

Regulatory Agency	Subject of Regulation	Nature of Regulations
Securities and Exchange Commission (SEC)	Organized exchanges and financial markets	Requires disclosure of information; restricts insider trading
Commodities Futures Trading Commission (CFTC)	Futures market exchanges	Regulates procedures for trading in futures markets
Office of the Comptroller of the Currency	Federally-chartered com- mercial banks and thrift institutions	Charters and examines the books of federally-chartered commercial banks and thrift institutions; imposes restrictions on assets they can hold
National Credit Union Administration (NCUA)	Federally-chartered credit unions	Charters and examines the books of federally-chartered credit unions and imposes restrictions on assets they can hold
State banking and insurance commissions	State-chartered depository institutions and insurance companies	Charter and examine the books of state-chartered banks and insurance companies, impose restrictions on assets they can hold, and impose restrictions on branching
Federal Deposit Insurance Corporation (FDIC)	Commercial banks, mutual savings banks, savings and loan associations	Provides insurance of up to \$250,000 for each depositor at a bank, examines the books of insured banks, and imposes restrictions on assets they can hold
Federal Reserve System	All depository institutions	Examines the books of commercial banks and systemically important financial institutions; sets reserve requirements for all banks