FOREWORD

Corporate Finance II

WHAT FINANCIAL INSITUTIONS AND MARKETS ARE ABOUT

INFORMATION

Why is information central to financial institutions and markets ?

Because finance is about ….

FUTURE

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UNCERTAINTY

RISK

CHAPTER 1

An Overview of Financial Markets and Institutions

The Financial Sector:

Enables efficient allocation of saving to real investment or consumption

Role of the Financial System

- Facilitates trade in goods and services through an efficient payment system
- Provides for the efficient flow of funds from saving to investment through financial markets and financial institutions
- Provides insurance, futures, and options contracts for managing risk

Surplus Spending Unit

- Has more cash income flow than expenditure on consumption and real investments in a given period of time. The surplus then is allocated to the financial sector.
- Surplus units are also called: saver, lender, buyer of financial assets, financial investor, supplier of loanable funds, buyer of securities.

Surplus Spending Unit, cont'd

- The surplus unit may buy financial assets, hold more money, pay off financial liabilities issued earlier when in a deficit situation.
- Household or individuals are and foreign sectors are usually surplus sectors.

Deficit Spending Unit

- Has more expenditure on consumption and real goods (investment) in the real sector than income during a given period of time.
- The deficit unit must participate (borrow) in the financial sector to balance cash inflows with outflows.

Deficit Spending Unit, cont.

- Deficit Units are also called: spending unit are borrower, demander of loanable funds, seller of securities.
- The deficit spending unit may issue financial liabilities, reduce money balances, sell financial assets acquired previously when in a surplus situation.

Financial Claims

- Contracts related to the transfer of funds from surplus to deficit budget units.
- Financial claims are also called financial assets and liabilities, securities, loans, financial investments.
- For every financial asset, there is an offsetting financial liability.
  - Total receivables equal total payables in the financial system.
  - Loans outstanding match borrowers' liabilities.

Financial Claims, cont.

- Financial markets offer opportunity for:
  - Financing for DSUs (primary)
  - Financial investing for SSUs (primary and secondary)
  - Providing liquidity by trading financial claims in secondary markets

Direct Financing

- DSUs and SSUs negotiate and exchange money for financial claims.
- DSUs issue direct financial claims; SSUs participate in direct lending.
- The sale of securities by an industrial firm directly to an investor (SSU or financial institution) is a private placement.

Direct Financing, cont.

- Brokers bring DSUs and SSUs together; dealers buy the securities from DSUs and resell to the SSUs.
- Investment bankers act as dealers in direct financial markets, purchasing securities from DSUs and selling to original SSUs.

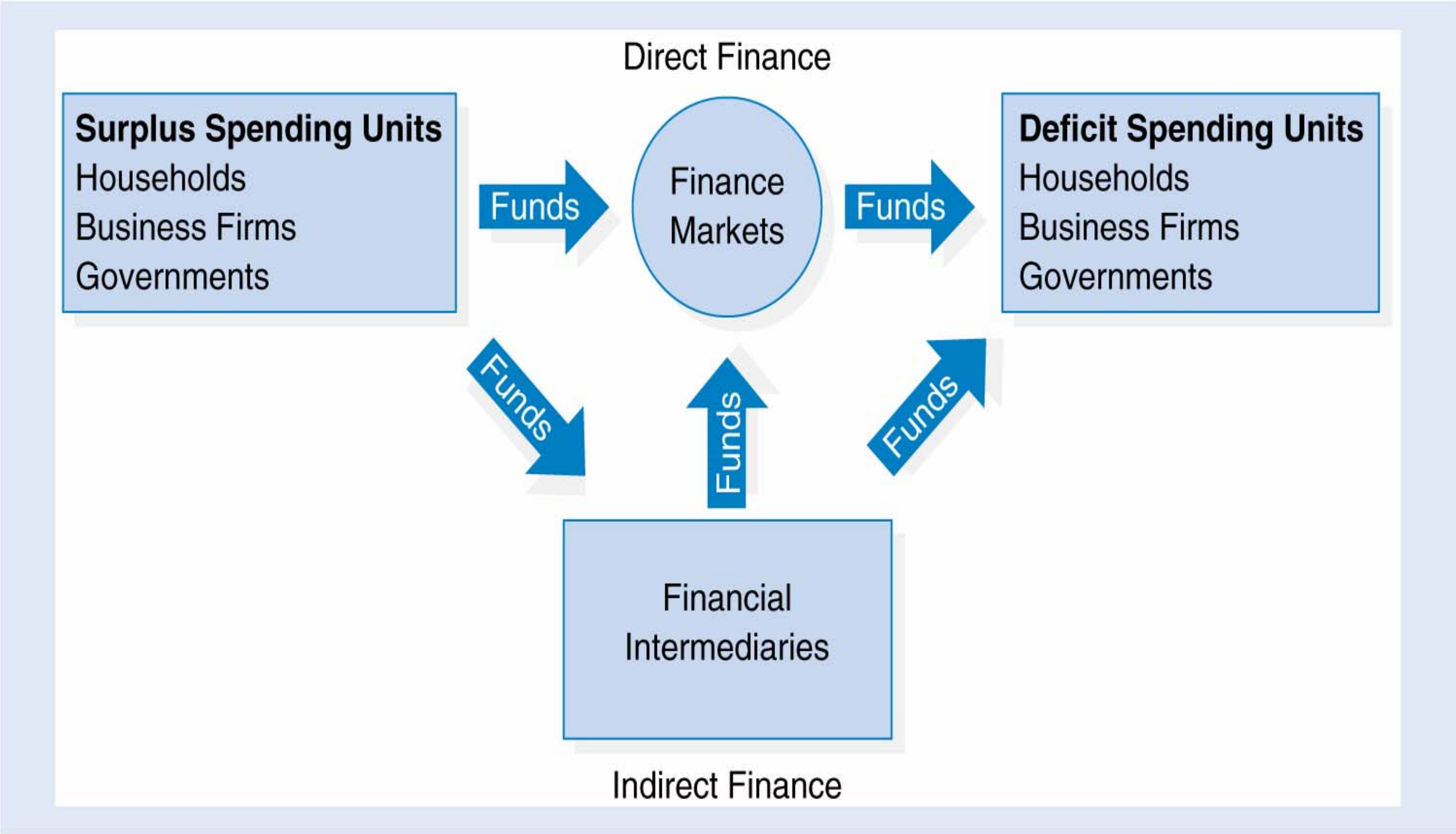
Indirect Financial Investment or Intermediation Financing

- A financial "intermediary" writes a separate contract with the SSU (bank depositor) and DSU (auto loan), generating economic value for both parties.
- Financial intermediaries hold direct claims on DSUs as financial assets and issue indirect financial claims to SSUs as liabilities.

Benefits of Financial Intermediation

- Economies of scale from specialization.
- Transaction and search costs are lowered for SSUs and DSUs.
- Financial intermediaries may be able to gather DSU information more effectively and discreetly.

Transfer of Funds From SSU to DSI



Intermediation Services

- Denomination Divisibility -- Issue varying sized contracts of assets and liabilities.
- Currency Transformation -- buying and selling financial claims denominated in various currencies.
- Maturity Flexibility -- Offer contracts with varying maturities to suit both DSUs and SSUs.

Intermediation Services, cont.

- Credit Risk Diversification -- Assume credit risks of DSUs and keep the risks manageable by spreading the risk over many varied types of DSUs (loan portfolio).
- Liquidity -- Provide a place to store liquidity for SSUs (deposits); a place to find (borrow) liquidity for DSUs.

Types of Financial Intermediaries

- Deposit-Type Institutions -- Offer liquid, government- insured claims to SSUs, such as demand deposits, savings deposits, time deposits, and share accounts.
  - Commercial Banks -- Make a variety of consumer and commercial loans (direct claim) to DSUs.
  - Thrift Institutions -- Make mortgage loans (direct claim) to DSUs.

Types of Financial Intermediaries, cont.

- Credit Unions -- Receive share account deposits and make consumer loans.
  - Membership requires a common bond
  - Church, business employee, or labor union.

Types of Financial Intermediaries, cont.

- Contractual Savings Institutions -- Issue long-term claims to SSUs in the form of insurance policies and pension fund obligations.
  - Life Insurance Companies -- Issue life insurance policies and purchase long-term, high-yield direct financial securities.

Types of Financial Intermediaries, cont.

- Casualty Insurance Companies -- Purchase long-term, liquid, direct financial securities from paid-in-advance premiums from insurance purchasers.
- Pension Funds -- issue claims to SSUs (pension reserves) and invest financially in direct financial securities (stocks and bonds).

Types of Financial Intermediaries, cont.

- Investment Funds -- Issue shares to investors and use these funds to purchase direct financial claims.
  - Mutual Funds -- Offer indirect mutual fund shares to SSUs and purchase direct financial assets (stocks and bonds).
  - Money Market Mutual Funds -- Offer (indirect) shares and purchase direct (commercial paper) and indirect (bank CDs) money market financial assets. Most MMMFs offer check-writing privileges.

Types of Financial Intermediaries, cont.

- Other Types of Financial Intermediaries
  - Finance Companies -- Borrow (issue liabilities) directly from banks and directly from SSUs (commercial paper) and purchase consumer and business loans.
  - Federal Agencies -- Sell direct claims in capital markets and lend to DSUs (farmers, homebuyers).

Size and Growth of Major Financial Intermediaries

EXHIBIT 1.2
Size and Growth of Major Financial Intermediaries

	2001			1980		
Intermediary	Rank	Total Assets ($billion)	Percent of Total	Total Assets ($billion)	Percent of Total	Annual Growth Rate%
Commercial banks	1	6,876	23.7	1,482	35.0	7.6
Private pension funds	2	4,162	14.3	513	12.1	10.5
Mutual funds	3	4,136	14.2	62	1.5	22.2
Life insurance companies	4	3,306	11.4	464	11.0	9.8
Government sponsored enterprises	5	2,301	7.9	195	4.6	12.5
Money market funds	6	2,241	7.7	76	1.8	17.5
State and local government pension funds	7	2,177	7.5	197	4.7	12.1
Thrift institutions	8	1,298	4.5	792	18.7	2.4
Finance companies	9	1,153	4.0	197	4.7	8.8
Casualty insurance companies	10	881	3.0	182	4.3	7.8
Credit unions	11	505	1.7	68	1.6	10.1
Total		29,036	100.0	4,228	100.0	9.6
GDP		10,206		2,796		6.4

Types of Financial Markets

- Markets may be differentiated by when a security is sold.
  - The initial financing of the DSU is the primary market; subsequent resale of the financial claims of the DSU are traded in the secondary markets:
  - primary markets are important from a real saving/investment perspective;
  - secondary markets provide liquidity and portfolio rebalancing capacity for the investor.

Types of Financial Markets, cont.

- Markets may also be differentiated by how or where they are traded.
  - Organized exchanges provide a physical meeting place and communication facilities.
  - Securities may trade off the exchange in the over-the-counter (OTC) market. OTC markets have no central location.

Types of Financial Markets, cont.

- Markets may be differentiated by maturity.
  - High quality short-term (less than one-year) debt securities are issued and traded in the money market.
  - Long-term (greater than one-year) securities are issued and traded in the capital market.

Types of Financial Markets, cont.

- Spot and futures markets -- variation in timing of delivery and payment.
  - Items traded in the market for immediate delivery and payment are traded in the spot market.
  - When delivery at a specific price (payment) is not "spot," that means that a "futures" or "forward" market transaction has occurred.

Types of Financial Markets, cont.

- Option markets trade contracts specifying price and conditional delivery of a quantity of asset for a specific period of time.
  - A call option is an option to buy; a put is an option to sell.
  - Options are traded on major security and commodity exchanges as well as in various over-the-counter markets.

Types of Financial Markets, cont.

- Foreign exchange markets.
  - Foreign exchange, the value of one currency relative to another, is traded in the foreign exchange market.
  - Foreign exchange is traded in the spot, forward, futures, and option markets.

Capital Market

- Market for long-term claims
  - Government Bonds
  - Corporate Bonds
  - Common Stock
  - Mortgages
- Market finances real investment
- Secondary market important for investors

Overview of the Money Market

- Short-term debt market -- most under 120 days
- A few high quality borrowers
- Many diverse investors
- Informal market centered in New York City
- Standardized securities -- one security is a close substitute for another

Overview of the Money Market, cont.

- Good marketability -- secondary market
- Large, wholesale open-market transactions
- Many brokers and dealers are competitively involved in the money market.
- Payment in Federal Funds -- immediately available funds.
- Physical possession of securities seldom made -- centralized safekeeping.

Economic Role of Money Market (MM)

- The money market is a market for liquidity
  - Liquidity is stored in MM by investing in MM securities.
  - Liquidity is bought in MM by issuing securities (borrowing).
- There are few high-quality borrowers and many diverse MM investors.

Characteristics of Money Market Instruments

- High quality borrowers; low default risk
- Short-term maturity
- High marketability providing excellent liquidity

Money Market Balance Sheet Position of Major Participants

	Commercial Banks		Federal Reserve System		Treasury Department		Investment Banks, Dealers, and Brokers		Corporations	
Instrument	A	L	A	L	A	L	A	L	A	L
Treasury bills	•		•			•	•		•	
Agency securities	•		•				•		•	
Negotiable CDs		•					•		•	
Commercial paper		•					•		•	•
Banker’s acceptances	•	•	•				•		•	
Federal Funds	•	•								
Repurchase agreements	•	•	•				•	•	•	

Financial Market Efficiency

- **Allocation efficiency**:a form of economic efficiency that implies that funds will be allocated to (invested in) their highest valued use.
- **Informational efficiency**: an informationally efficient market, market prices reflect all relevant information about the securities.
- **Operational efficiency**: a market is operationally efficient if the cost of transactions are as low as possible. If transaction cost are high fewer financial transaction will take place.

Risks of Financial Institutions

- **Credit** or **default risk** is the risk that a direct DSU issuer will not pay as agreed, thus affecting the rate of return on a loan or security.
- **Interest rate risk** is the risk of fluctuations in a security's price or reinvestment income caused by changes in market interest rates.
- **Liquidity risk** is the risk that the financial institution will be unable to generate sufficient cash flow to meet required cash outflows.

Risks of Financial Institutions, cont.

- **Foreign exchange risk** is the risk that foreign exchange rates will vary in the future affecting the profit of the financial institution.
- **Political risk** is the cost or variation in returns caused by actions of sovereign governments or regulators.