Note: All definitions, summaries, and inspiration drawn from The *The Economics of Money, Banking, and Financial Markets, Seventh Edition* by Frederic S. Mishkin

Chapter 1

Why Study Financial Markets?

Financial institutions - the systems to be modeled

financial instruments - values or entities exchanged between nodes

node - an agent in the financial system, capable of possessing financial instruments

wealth - a value associated with the financial instruments possessed or attributed to a particular agent

spending - the operation by which the wealth of an agent decreases

borrowing - the operation by which the wealth of an agent increases

financial claim - a condition associated with a financial instrument ensuring that a node is entitled to all or at a least a part of a financial instrument

asset - any financial claim or piece of property that is a store of value

security - a claim on the borrower's future income that is sold by the borrower to the lender

bond - a debt security that promises to make payments periodically for a specified period of time (time-dependent transfer)

interest rate - a function dictating the cost (or gain) of borrowing (or lending out) a financial instrument, indicates the amount to be paid to the lender

common stock (stock) - a share of ownership in a corporation, a security that is a claim on the earnings and assets of the corporation

For international markets; way down the road:
foreign exchange market - the financial market in which the conversion between international currencies is determined
conversion - a function for converting one form of currency to another, with the value returned being the
foreign exchange rate - the price of one country's currency in terms of another

Why Study Banking and Financial Institutions?

Structure of the Financial System

financial intermediaries - nodes that borrow funds from people who have saved and in turn make loans to others
i.e. banks, insurance companies, NBFCs (non-banking financial companies), pension funds (retirement), and investment banks

Banks and Other Financial Institutions

banks - financial intermediaries that accept deposits and make loans. Examples include commercial banks, savings and loan associations, mutual savings banks, and credit unions

deposit - a function which subtracts from an agent's wealth and adds to the wealth of a bank, while ensuring a claim on that transfered wealth in the name of the node at hand

loan -a function which subtracts from an agent's (the lender's) wealth and adds to the wealth of another (the borrower), while ensuring a claim on that transfered wealth in the name of the lender

Financial Innovations

way down the road:
e-finance - a separate channel of delivering financial services electronically (different edge flavor)

Money and Business Cycles

money - anything that is generally accepted in payment for goods or services or the repayment of debts

money supply - the quantity of money in an economy (sum of money over all agents)

aggregate output - the total production of final goods and services in an economy
see Textbooks/Economics.../Chapter1.cpp
unemployment rate - a function that returns the percentage of available labor force unemployed

business cycles - the upward and downward movements of aggregate output produced in the economy (a plot of the aggregate output vs time)

recession - any time interval during which the slope a business cycle is negative

monetary theory - the theory that relates changes in the quantity of money to changes in economic activity

Money and Inflation

aggregate price level (price level) - the average price of goods and services in an economy

inflation - any time interval during which the slope of the aggregate price level vs time is positive

inflation rate - the rate of change of the price level, usually measured as a percentage change per year

Money and Interest Rates

Conduct of Monetary Policy

monetary policy - the management of the money supply and interest rates (social philosophy or function), way down the road

central bank - the government agency that oversees the banking system and is responsible for the amount of money and credit supplied in the economy, a node in the network with the most influence; see Wheeler, Modeling Marx: An Exercise in Futility

Federal Reserve System (the Fed) - the central banking authority responsible for monetary policy in the United States

Fiscal Policy and Monetary Policy

fiscal policy - (social philosophy) policy that involves decisions about government spending and taxation

budget deficit - the excess of government expenditure over tax revenues, a function that returns an amount in a given currency

budget surplus - the excess of tax revenues over government expenditure, a function that returns an amount in a given currency

gross domestic product (GDP) - the value of all final goods and services produced in the economy during the course of a year;
see Textbooks/Economics.../Chapter1.cpp

aggregate income - the total income of factors of production (land, labor, capital) in the economy; for now, equivalent to the GDP;
see Textbooks/Economics.../Chapter1.cpp

Chapter 1 Summary

1. Activities in financial markets have direct effects on individuals' wealth, the behavior of businesses, and the efficiency of the economy.
Three financial markets deserve particular attention:
the bond market (where interest rates are determined),
the stock market (which has a major effect on people's wealth and on firms' investment decisions),
and the foreign exchange market (because fluctuations in the foreign exchange rate have major consequences for the American economy)

2. Banks and other financial institutions channel funds from people who might no put them to productive use to people who can do so and thus play a crucial role in improving the efficiency of the economy.

3 .Money appears to be a major influence on inflation, business cycles, and interest rates. Because these economic variables are so important to the health of the economy, we need to understand how monetary policy is and should be conducted. We also need to study government fiscal policy because it can be an influential factor in the conduct of monetary policy.

4. This textbook stresses the economic way of thinking by developing a unifying analytic framework fro the study of money, banking, and financial markets using a few basic economic principles. This textbook also emphasizes the interaction of theoretical analysis and empirical data.

Chapter 2

Function of Financial Markets

Types of financial markets:
  Debt (bonds) and Equity (stock) Markets
  Primary and Secondary Markets
  Exchanges and Over-the-Counter Markets
  Money and Capital Markets

direct finance - the system in which borrowers borrow funds directly from lenders in financial markets by selling them securities

liabilities - IOUs or debts

Structure of Financial Markets

Debt and Equity Markets

maturity - time to the expiration date (maturity date) of a debt instrument

short-term debt instrument - having a maturity of a year or less

long-term debt instrument - having a maturity of over ten years

intermediate-term debt instrument - having a maturity between one and ten years

equities - claims to share in the net income and assets of a corporation (such as common stocks)

dividends - periodic payments made by equities to shareholders

Primary & Secondary Markets

primary market - a financial market in which new issues of a security are sold to initial buyers

secondary market - a financial market in which securities that have been previously issued (and are thus second-hand) can be resold
e.g. New York and American Stock Exchange and NASDAQ, bond markets, foreign exchange markets, futures markets, and options markets

investment banks - firms that assist in the initial sale of securities in the primary market

underwriting - guaranteeing prices on securities to corporations and then selling the securities to the public

brokers - agents for investors; they match buyers with sellers

dealers - people who link buyers with sellers by buying and selling securities at stated prices

liquid - easily converted to cash

Exchanges and Over-the-Counter Markets

exchanges - secondary markets in which buyers and sellers of securities (or their agents or brokers) meet in one central location to conduct transactions
e.g. NYSE, American Stock Exchange, Chicago Board of Trade

over-the-counter (OTC) market == a secondary market in which dealers at different locations who have an inventory of securities stand ready to buy and sell securities "over the counter" to anyone who comes to them and is willing to accept their prices
e.g. U.S. government bond market

Money and Capital Markets

money market - a financial market in which only short-term debt instruments are traded

capital market - a financial market in which longer-term debt and equity instruments are traded

Internationalization of Financial Markets

(way down the road)

International Bond Market, Eurobonds, & Eurocurrencies

foreign bond - bonds sold in a foreign country and denominated in that country's currency

Eurobonds - bonds denominated in a currency other than that of the country in which they are sold

Eurocurrencies - a variant of the eurobond, which are foreign currencies deposited in banks outside the home country

Eurodollar - US. dollars that are deposited in foreign banks outside the U.S. or in foreign branches of U.S. banks

World Stock Markets

(way down the road)

Function of Financial Intermediaries

indirect finance - the system in which funds are reallocated through the use of financial intermediaries

financial intermediation - the process of indirect finance whereby financial intermediaries link lender-savers with borrower-spenders

Transaction Costs

transaction costs - the time and money spent trying to exchange financial assets, goods, or services

economies of scale - the reduction in transaction costs per dollar of transaction as the size (scale) of transactions increases

liquidity services - services that make it easier for customers to conduct transactions

Risk Sharing

risk - the degree of uncertainty associated with the return on an asset

risk sharing - the process of creating and selling assets with risk characteristics that people are comfortable with and then using the funds they acquire by selling these assets to purchase other assets that may have far more risk

asset transformation - the process of turning risky assets into safer assets for investors by creating and selling assets with risk characteristics that people are comfortable with and then using the funds they acquire by selling these assets to purchase other assets that may have far more risk

diversification - investing in a collection (portfolio) of assets whose returns do not always move together, with the result that overall risk is lower than for individual assets

portfolio - a collection of assets

Asymmetric Information: Adverse Selection and Moral Hazard

asymmetric information - the unequal knowledge that each party to a transaction has about the other party

adverse selection - the problem created by asymmetric information before a transaction occurs: the people who are the most undesirable from the other party's perspective are the ones who are most likely to want to engage in the financial transaction

moral hazard - the risk that one party to a transaction will engage in behavior that is undesirable from the other party's perspective

Financial Intermediaries

thrift institutions (thrifts) - savings and loan associations, mutual savings banks, and credit unions

Types of Financial Intermediaries:

Depository Institutions
- Commercial banks
- Savings and Loans Associations (S&Ls)
- Mutual Savings Banks
- Credit Unions

Contractual Savings Institutions
- Life Insurance Companies
- Fire and Casualty Insurance Companies
- Pension Funds and Government Retirement Funds

Investment Intermediaries
- Finance Companies
- Mutual Funds
- Money Market Mutual Funds

Regulation of the Financial System

Increasing Information Available to Investors

Ensuring the Soundness of Financial Intermediaries

financial panic - the widespread collapse of financial markets and intermediaries in an economy

Six types of government implemented regulations:

- Restrictions on Entry
- Disclosure
- Restrictions on Assets and Activities
- Deposit Insurance
- Limits on Competition
- Restrictions on Interest Rates

Chapter 2 Summary

1. The basic function of financial markets is to channel funds from savers who have an excess of funds to spenders who have a shortage of funds. Financial markets can do this either through direct finance, in which borrowers borrow funds directly from lenders by selling them securities, or through indirect finance, which involves a financial intermediary that stands between the lender-savers and the borrower-spenders and helps transfer funds from one to the other. This channeling of funds improves the economic welfare of everyone in the society because it allows funds to move from people who have no productive investment opportunities to those who have such opportunities, thereby contributing to increased efficiency in the economy. In addition, channeling of funds directly benefits consumers by allowing them to make purchases when they need them most.

2. Financial markets can be classified as debt and equity markets, primary and secondary markets, exchanges and over-the-counter markets, and money and capital markets.

3. An important trend in recent years is the growing internationalization of financial markets. Eurobonds, which are denominated in a currency other than that of the country in which they are sold, are now the dominant security in the international bond market and have surpassed U.S. corporate bonds as a source of new funds. Eurodollars, which are U.S. dollars deposited in foreign banks, are an important source of funds for American banks.

4. Financial intermediaries are financial institutions that acquire funds by issuing liabilities and in turn use those funds to acquire assets by purchasing securities or making loans. Financial intermediaries play an important role in the financial system because they reduce transaction costs, allow risk sharing, and solve the problems created by adverse selection and moral hazard. As a result, financial intermediaries allow small savers and borrowers to benefit from the existence of financial markets, thereby increasing the efficiency of the economy.

5. The principal financial intermediaries fall into three categories: banks, contractual savings institutions, and investment intermediaries.

6. The government regulates financial markets and financial intermediaries for two main reasons: to increase the information available to investors and to ensure the soundness of the financial system. Regulations include requiring disclosure of information to the public, restrictions on who can set up a financial intermediary, restrictions on what assets financial intermediaries

can hold, the provision of deposit insurance, reserve requirements, and the setting of maximum interest rates that can be paid on checking accounts and savings deposits.