The Financial Environment: Markets, Institutions, and Interest Rates

- Financial markets
- Types of financial institutions
- Determinants of interest rates
- Yield curves

What is a market?

- A market is a “place” where goods and services are exchanged.

- A financial market is a place where individuals and organizations wanting to borrow funds are brought together with those having a surplus of funds.
Financial Markets

- Financial markets bring together people and organizations wanting to borrow money with those having surplus funds.
- There are many different financial markets in a developed economy, each dealing with a different type of instrument, serving a different set of customers, or operating in a different part of the country.

Markets

- Physical assets vs. Financial assets
  - Physical asset markets (also called "tangible" or "real" asset markets) are the markets for such products as wheat, autos, real estate, computers, and machinery.
  - Financial asset markets deal with stocks, bonds, notes, mortgages, and other claims on real assets.
Markets

- Spot vs. Futures
  - Spot markets are markets in which assets are bought or sold for “on the spot” delivery.
  - Futures markets are markets in which participants agree today to buy or sell an asset at a future date.

Markets

- Money vs. Capital
  - Money markets are the markets for short-term, highly liquid debt securities, those securities that mature in less than one year.
  - Capital markets are the markets for long-term debt and corporate stocks.
Markets

- Primary vs. Secondary
  - Primary markets are the markets in which corporations sell newly issued securities to raise capital.
  - Secondary markets are the markets in which existing (already outstanding) securities are traded among investors.

What is an Initial Public Offering (IPO) market?

An IPO Market is a subset of the primary market. Firms “go public” by offering shares of their stock to the public for the first time.
Markets

- Public vs. Private
  - Private markets are the markets where transactions are worked out directly between two parties.
  - Public markets are the markets where standardized contracts are traded on organized exchanges.

Three Primary Ways Capital Is Transferred Between Savers and Borrowers

- Direct transfer
- Investment banking house
- Financial intermediary
Direct transfer

- Direct transfers of money and securities occur when a business sells its stocks or bonds directly to savers, without going through any type of financial institution.

Financial Intermediary

- Transfers through financial intermediaries occur when a bank or mutual fund obtains funds from savers, issues its own securities in exchange, and then uses these funds to purchase other securities.

- Intermediaries literally create new forms of capital. The existence of intermediaries greatly increases the efficiency of money and capital markets.
Types of Financial Intermediaries

- Commercial banks
- Savings and loan associations
- Mutual savings banks
- Credit unions
- Pension funds
- Life insurance companies
- Mutual funds

Investment Bankers

- Transfers through an investment banking house occur when a brokerage firm, such as Merrill Lynch, serves as a middleman and facilitates the issuance of securities.
- These middlemen help corporations design securities that will be attractive to investors, buy these securities from the corporations, and then resell them to savers in the primary markets.
Stock Markets

- The stock market is one of the most important markets to financial managers because it is here that the price of each stock, and hence the value of all publicly-owned firms, is established. There are two basic types of stock markets.
  - The physical location exchanges, typified by the New York Stock Exchange (NYSE) and the American Stock Exchange (AMEX), are tangible, physical entities.
  - The electronic dealer markets include the Nasdaq stock market, the less formal over-the-counter market, and the recently developed electronic communications networks (ECNs).

What do we call the price, or cost, of debt capital?

**The interest rate**

What do we call the price, or cost, of equity capital?

\[
\text{Required return} = \text{Dividend yield} + \text{Capital gain}
\]
What four factors affect the cost of money?

- Production opportunities
- Time preferences for consumption
- Risk
- Expected inflation

“Real” Versus “Nominal” Rates

\[ k^* \]
= Real risk-free rate.
  T-bond rate if no inflation; 1% to 4%.

\[ k \]
= Any nominal (quoted) rate.

\[ k_{RF} \]
= Rate on Treasury securities.
\[ k = k^* + IP + DRP + LP + MRP. \]

Here:
- \( k \) = required rate of return on a debt security.
- \( k^* \) = real risk-free rate.
- \( IP \) = inflation premium.
- \( DRP \) = default risk premium.
- \( LP \) = liquidity premium.
- \( MRP \) = maturity risk premium.

**Yield Curve**

The term structure of interest rates describes the relationship between long- and short-term interest rates.

The yield curve is the graph of interest rates for similar risk securities for different maturities.
What kind of relationship exists between the Treasury yield curve and the yield curves for corporate issues?

- Corporate yield curves are higher than that of the Treasury bond. However, corporate yield curves are not necessarily parallel to the Treasury curve.
- The spread between a corporate yield curve and the Treasury curve widens as the corporate bond rating decreases.
The PEH contends that the shape of the yield curve depends on investor’s expectations about future interest rates.

- If interest rates are expected to increase, L-T rates will be higher than S-T rates, and vice-versa. Thus, the yield curve can slope up, down, or even bow.
Assumptions of the PEH

- Assumes that the maturity risk premium for Treasury securities is zero.
- Long-term rates are an average of current and future short-term rates.
- If PEH is correct, you can use the yield curve to “back out” expected future interest rates.

Conclusions about PEH

- Some would argue that the MRP ≠ 0, and hence the PEH is incorrect.
- Most evidence supports the general view that lenders prefer S-T securities, and view L-T securities as riskier.
- Thus, investors demand a MRP to get them to hold L-T securities (i.e., MRP > 0).
Other factors that influence interest rate levels

- Federal reserve policy
- Federal budget surplus or deficit
- Level of business activity
- International factors

Risks associated with investing overseas

- Exchange rate risk – If an investment is denominated in a currency other than U.S. dollars, the investment’s value will depend on what happens to exchange rates.

- Country risk – Arises from investing or doing business in a particular country and depends on the country’s economic, political, and social environment.
Factors that cause exchange rates to fluctuate

- Changes in relative inflation
- Changes in country risk