CORPORATE FINANCE

Part II.

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FINANCIAL MARKETS AND INTEREST RATES

Market Players

- An **investor / lender** is an individual, company, government, or any entity that owns more funds than it can use.
- An **issuer / borrower** is an entity that has a need for capital.
- **Brokers** and **dealers** are financial intermediaries, who purchase securities from issuers and sell them to investors

Securities

- **Debt security** or **bond** – promises periodic payments of interest and/or principal from a claim on the issuer's earnings
- **Equity** or **stock** – promises a share in the ownership and profits of the issuer

Types of Financial Markets

- **Money markets** trade <u>short-term</u>, marketable, liquid, low-risk debt securities - "cash equivalents‟
- **Capital markets** trade in longer-term, more risky securities:
  - bond (or debt) markets,
  - equity markets,
  - derivative markets

INTEREST RATES

The stated or offered **rate of interest (r)** reflects three factors:

- Pure rate of interest (r^*)
- Premium that reflects expected inflation (IP)
- Premium for risk (RP)

$$\mathbf{r = r^* + IP + RP}$$

Pure Interest Rate

- the rate for a risk-free security when no inflation is expected
- constantly changes over time, depending on economic conditions

Inflation

- Investors build in an inflation premium to compensate for this loss of value
- the inflation premium is not constant; it is always changing based on investors' expectations of the future level of inflation

Risk

- **Counterparty (default) risk** is the chance that the borrower will not be able to pay the interest or pay off the principal of a loan.
- Ratings companies identify and classify the creditworthiness of corporations and governments to determine how large the risk premium should be (AAA – CCC)

Risk

- **Liquidity risk –** possible losses if there is no opportunity to buy or to sell assets at the proposed volume for the proposed price due to bad market conditions

Risk

- **Interest rate risk** - possible changes of asset value due to changes of the interest rate:
  - As interest rates increase, bond prices decrease.
  - As interest rates decrease, bond prices increase.

Risk

- **Currency risk** – possible changes of the assets value due to changes of the currency exchange rate.
- **Operational risk** – possible losses due to possible technical mistakes.
- Business-event risk – possible losses due to force-mageure events, changes in legislation, etc.

Normal Yield Curve Theories

- upward sloping yield curve is considered normal:
  - expectations theory,
  - the market segmentation theory,
  - the liquidity preference theory

Expectations Theory

- The yield curve reflects lenders' and borrowers' expectations of inflation
- Changes in these expectations cause changes in the shape of the yield curve

Market Segmentation Theory

- The slope of the yield curve depends on supply / demand conditions in the short-term and long-term markets
- An **upward** sloping curve results from a large supply of funds in the short-term market relative to demand and a shortage of long-term funds.
- A **downward** sloping curve indicates strong demand in the short-term market relative to the long-term market

Liquidity Preference Theory

- long-term securities often yield more than short-term securities
- **Investors** generally prefer short-term securities, which are more liquid and less expensive to buy and sell. Investors require higher yield on long-term instruments to compensate for the higher cost

Liquidity Preference Theory

- **Borrowers** dislike short-term debt because it exposes them to the risk of having to roll over the debt or raise new principal under adverse conditions (such as a rise in rates). Borrowers will pay a higher rate for long-term debt than for short-term debt, all other factors being held constant.

Effect on Stock Prices

- The higher the level of interest rates, the lower the level of corporate profits
- High bond yields induce investors to sell their stock holdings and invest in more bonds and vs.