

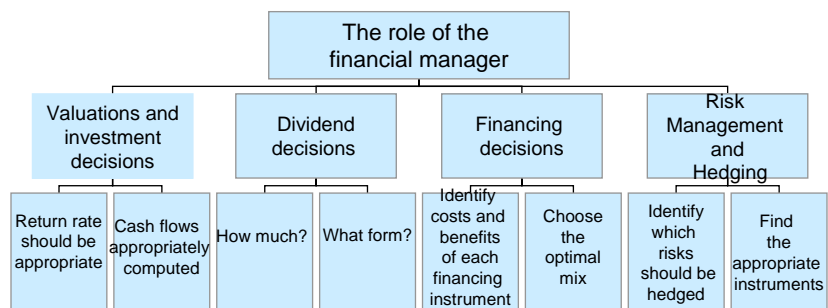
## Finance II (441)

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## What is corporate finance?



## Efficient Capital Markets

- Market efficiency driven by profit motive.
  - No riskless arbitrage.
  - Does not imply that “nobody can beat the market”.
    - Asymmetric information
    - Hard work
    - Luck
- Causes of market inefficiencies: transaction costs, lack of competition, regulation .
- Why should financial managers care if markets are efficient?
  - Can rely on market prices when making decisions.
  - Financing will be a “zero-NPV” proposition.

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## Capital Budgeting

- Divide expected cash flows by the expected rates of return.
  - What is the correct risk-free rate?

$$r_{10\text{-year gov bond}} = r_{10\text{-year risk-free rate}} + \text{Risk Premium}$$

- What is the correct beta?

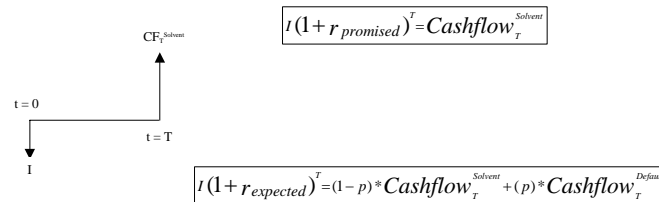
$$A = L + E \quad \Rightarrow \quad \beta_{\text{Equity}} = \beta_{\text{Assets}} + \frac{D}{E}(\beta_{\text{Assets}} - \beta_{\text{Debt}})$$

- Remember to adjust beta for change in asset mix.
- What is the difference between promised and expected returns?

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## Capital Budgeting

- Promised versus Expected Returns



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## Corporate valuation

- Definition of free cash flows
  - To the firm, or to shareholders?
- Forecasting futures free cash flows
  - Importance of assumptions
  - Consistency of the model (change in retained earnings affects balance sheet, and plug closes the model)
- Terminal values

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## Financial Options

- Review payoff diagram for options, forward, futures,....
- Option values account for:
  - Value of Information.
  - Time value of money.
- Comparative Statics: How do option prices change with volatility, T-t, Dividends, ...
- Importance of financial options for Corporate Finance:
  - Financing operations, hedging risks.
  - Analogy to equity versus debt:
    - How are incentives of equityholders affected by option characteristics?

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## Real Options versus NPV

- Options can't have negative values ,
  - ➡ ignoring them causes you to underestimate projects' true values.
- Options are only valuable when information is valuable.
  - Information must cause actions to be altered.
- Real option framework allows you to value “flexibility”.

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## Dividend Policy

- Irrelevance
  - Investment held constant.
  - No transaction costs.
  - Perfect capital markets (efficient and no info asymmetry)
  - No differential tax rates.
  - Managers maximize shareholder wealth.
- Why is dividend policy irrelevant?
- Optimal dividend policy under irrelevance: pay dividends when there are no more +NPV projects.
- Mechanics of Dividend Payments and Share Repurchases