

# Real Estate

“an immovable asset- land earth surface and the permanently attached improvements to it”

# Real Estate Investments

- Free and Clear Equity
- Leveraged equity
- Mortgages
- Aggregation vehicles

# Free and Clear Equity

- a.k.a. “fee simple”
- Full ownership rights to the property

# Leveraged Equity

- Same ownership rights
- Subject to debt
- Mortgaged

# Mortgages

- Investing in mortgages
- Asset backed securities
- Pool of mortgages
- Bondlike payments

# Aggregation vehicles

- Real estate limited partnerships (RELPs)
- Commingled funds- pools of capital by institutions for real estate projects
- Real estate investment trusts (REITs)
- Shares on the stock market
- Mortgage reits & equity reits

# Appraisal concepts

- Market value – independent of a particular investor... intrinsic value of the asset
- Investment value – depends on particular use of the property

# Valuation: Cost Approach

- Cost to replace the asset in its present form
- Limitations: appraisals are difficult, market values can be different from construction cost

# Sales comparison approach

- Estimated relative to a benchmark value
  - Average market price of a similar property
  - Estimates need to be changed for market conditions
- Hedonistic price estimation: characteristics that are relevant and affect its value

# Example

- Valuation of a single family home
  - # of rooms
  - Surface area of the garden
  - Swimming pool?
  - Distance to shopping center
  - Schools

# Income approach

- NOI – potential income minus expenses such as insurance, taxes, utilities etc.
- Appraisal price =  $(\text{NOI} / \text{Mkt cap rate})$
- Market cap rate =  $(\text{benchmark NOI} / \text{benchmark transaction price})$

# Discounted cash flow approach

- Similar to Net income approach
- Deduct depreciation expense and interest from NOI
- Apply a marginal tax rate to get the after-tax cash flow