I. What are REITs?

1. REITs Evolve Rapidly

1. Traditional REITs
   - A closed-end fund: holds properties and/or mortgages
   - Created by Congress in 1960
   - Waived corporate tax:
     - Must be widely held
     - Must distribute most of their income
   - Intended for small investors to invest in real estate

2. Modern REITs
   - An operating company: invests in properties and/or mortgages
   - Problems with fund-like structure
     - Agency issues – external managers
     - Monitoring issues – individual investors
   - Changes in tax laws in 1990s
   - Pools of properties (and/or mortgages) traded in the stock market
   - Need to understand both the property and stock markets

II. Evaluation of REITs

Modern vs. Traditional REITs

III. Why use a REIT Structure

Is it the only choice?
2. REIT: Stock or Real Estate? (2/2)
- But, the price of properties did not drop as much on that day
- Implies that:
  - Price before Black Monday does not reflect property value
  - Price after Black Monday does not reflect property value
  - Both prices before and after do not reflect property value

3. Timing of REITs (1/2)
- REIT price < underlying property value
- Strategy:
  - Buy all the REIT’s stocks (or enough to control the REIT)
  - Disband the REIT
  - Sell off properties
  - Give money to stockholders
  - Some REITs used this strategy

3. Timing of REITs (2/2)
- REIT price > underlying property value
- Strategy:
  - Buy properties
  - Set up a REIT
  - Sell shares in the stock market
  - Need to know both the property and stock markets
  - Timing is extremely important (see table 1.1)

4. Why Do REITs Deserve Our Attention?
- Real estate: 40-50% of wealth in the U.S.
- Majority of properties: private holding
- Large properties: higher value than traded companies
- Properties can be traded like other companies
- After 40 years of experience, the market for REITs is mature

5. Putting the Deal Together

 Suppliers of Properties
  I. Specified
  II. Unspecified

 Players in the Market
  The Team

 Buyers of REIT Stocks
  I. Institutional Investors
  II. Individual Investors
  III. Insurers and Suppliers

 Suppliers of Properties (1/2)
  I. Specified
    1. Limited Partnership
      - Change in structure
      - Tax issues
    2. Development Corp
      - Release holdings
      - Raise capital
    3. Other Corporation
      - Spin-off operation
    4. Investors
      - Increase liquidity
      - Portfolio consideration
Suppliers of Properties (2/2)

II. Unspecified
1. To be acquired
2. Trophy properties
3. At IPO stage

Players in the Market: The team
- Issuers
- Management Company (internal or external)
- Investment bank
- Financial analyst

Buyers of REIT Stocks (1/2)
I. Institutional Investors
- Fundamental
- Corporate governance
- Performance
- Diversification
II. Individual Investors
- Local preference
- Affected by advertising
- Affected by brokers

Buyers of REIT Stocks (2/2)
III. Insurers and Suppliers
- Liquidity
- Control

Lesson
- This is no optimal structure for REITs
- Depending on the needs, the structure of REIT evolves.

II. Evolution of REITs
1. REITs Are Still Evolving (1/2)
- An old idea: business trusts in the mid-19th century
- Rebirth in 1960: The Congress passed laws to establish REITs
- Gone through ups and downs during the past 43 years
  - Caused by changes in the operating environment and tax laws

1. REITs Are Still Evolving (2/2)
- From the inexperience and greed of REIT managers and owners
- Lessons have been learned and changes have been made
- Current REITs are more efficient than REITs in 1960
- REIT industry will have to keep on evolving to survive

2. Early History of REIT Concept (1/3)
- Massachusetts trust:
  - The first business organizational form
  - Allows investment in real estate
  - Through a legal entity
- Provides benefits similar to a corporation
- Eliminated federal taxation at the trust level

2. Early History of REIT Concept (2/3)
- Contribution: trusts provided capital for urban development in other cities
- 1935: U.S. Supreme Court removed its favorable tax status, trusts failed
- Lobbying effort to restore the favorable tax status (from 1935-1960)

2. Early History of REIT Concept (3/3)
- 1960:
  - Tax law was amended
  - Provide tax treatment for REITs similar to closed-end mutual funds
- 1961:
  - First REIT came on the market
  - The concept underlying REIT had been around for over 100 years

3. Early REITs (1/4)
- Patterned after closed-end investment companies
- Restrictions on operations and investments
  - Pay out a minimum of 90 (or 95)% of taxable income
  - At least 100 shareholders
  - No five shareholders own more than 50% of shares (relaxed recently)
  - Additional income and asset restrictions
3. Early REITs (2/4)

- Designed to ensure REITs differ from real estate syndicates and corporations
  - Real estate companies: continuous purchase and sale
  - REITs: passive investment vehicles - prohibited from actively trading or managing property
- Have to employ advisory firms for management and investment
  - Conflict of interest with shareholders
  - Few institutional investors.

3. Early REITs (3/4)

- 1963-1968: a handful of new REITs raising more than $10 million
- 1968-1970: REIT assets more than quadrupled to $4.7 billion
  - Capital markets becoming more comfortable with REITs
  - Higher interest rates in 1968-70 and 1973
  - Shortage of funds for construction and development companies.

4. Early REITs (4/4)

- Banks and insurance companies set up Mortgage REITs to engage in these activities
- Mortgage REITs were uniquely positioned as financial intermediaries
  - REITs: pay higher interest rates, finance riskier mortgage and C&D loans.
  - Banks and developers set up their own mortgage trusts to satisfy the demand for short-term and higher-risk C&D loans.
- See Table 2.1 and Figure 2.

4. 1970s: Rough Times for REITs (1/4)

- Problems soon surfaced:
  - As real estate boom ended through overbuilding
  - REIT managers were inexperienced in real estate investing.
  - New REITs finance long-term mortgages using 30-60 days commercial paper
  - Investment advisors (Bank) do not have sufficient experience in real estate markets.

4. 1970s: Rough Times for REITs (2/4)

- Not All REITs Performed Poorly During the 1970s
  - Equity REITs fared the best
  - Better performing REITs
    - Specialize in direct equity investments
    - Have a conservative investment strategy
    - Use low levels of leverage
- Tax Reform Act of 1976 Helps REITs
  - Flexibility to meet requirements for qualification.
  - Can hold property for sale, if meet criteria
4. 1970s: Rough Times for REITs

- Many REITs gave up their REIT status
  - Became corporations
  - Greater flexibility to deal with losses
- Good opportunity for surviving REITs
  - Equity REITs: purchased low-priced properties from distressed mortgage REITs.
  - Mortgage REITs: evolved into equity REITs when they foreclosed on properties

5. The Changing Market Environment of the 1980s

- Over-reaction in '70s, means a higher value in '80s
  - By 1982, investors viewed REITs as significantly undervalued
  - REIT managers: maintain reserves for the possibility of declining market value
  - When properties sold: extraordinary gains increase REIT values

- New competitor: #1
  - 1981 the Economic Recovery Act:
    - Shortened depreciation periods
    - Provided significant new tax breaks for investors
  - Creation of real estate limited partnerships (RELPs)
    - Use a higher levels of leverage
    - More generous tax write-offs (debt and depreciation)
    - Limited lives ensure that investors would realize a capital gain

- New competitor: #2
  - Master limited partnership (MLP)
    - Liquidity and investment concept: similar to REITs
    - Tax benefits: similar to the traditional limited partnership
    - Compete for fund in the capital market
  - The first MLP was launched in 1981
  - Many are real estate related

- More REIT changes
  - Self-liquidating finite-life REIT (FREIT)
    - 1976: Landsing Corporation sponsored the first FREIT.
    - Assets will liquidated after a finite period of time (10 years)
    - Can terminate early in bad market conditions
    - Intend: investors will receive a capital gain upon liquidation of the FREIT's assets
    - Problem: no growth potential

- More REIT changes (con’t)
  - Participating loans:
    - Providing additional income for lenders if property prices increase
    - It became so complicated and no one can understand them
    - Just like the new derivatives
    - Bad result
  - Joint venture: on projects to spread their risks.

5. The Changing Market Environment of the 1980s (7/8)

- Tax reform changes REITs once more
  - Tax Reform Act of 1986
    - Eliminated tax advantages of RELPs and MLPs
      - Cannot passive losses from partnerships to offset active or portfolio income
      - Was the main attraction of limited partnerships.

5. The Changing Market Environment of the 1980s (8/8)

- Provided REITs with more flexibility
  - To provide customary services to tenants
    - Capture the fees to independent contractors
    - Greater managerial control
    - Make investment decisions internally rather than externally.
    - Reduce conflicts of interest
    - Provided opportunity to improve efficiency
  - Changed the REIT concept

6. REITs Grow and Change Again in the 1990s (1/5)

- Real estate markets collapsed during late 1989 and the early 1990s
  - Many distressed properties
    - Offered by failed banks and S&Ls
    - Push down property prices
    - Affected REIT returns
  - Particularly true for REITs specializing in offices, condominiums, and hotels.
  - REIT return fell from 10% in 1988 to -24% in 1990

6. REITs Grow and Change Again in the 1990s (2/5)

- Increase in equity REITs
  - Mortgage REITs became equity REITs
    - Properties were in distressed
    - Mortgage REITs had no incentive to prevent foreclosure
    - Equity REITs purchased foreclosed properties at low prices
    - The properties owned by Mortgage REITs switched to equity REITs
  - Organizational innovation of the UPREIT.
    - Helped the acquisition of private real property
    - Only applies to properties, not mortgages.

6. REITs Grow and Change Again in the 1990s (3/5)

- The REIT Boom of the 1990s
  - Omnibus Budget Reconciliation Act of 1993
    - Relax 5/50 rule
    - Pension funds can invest in REITs
    - Increased liquidity and monitoring activities in REIT market.
  - Umbrella partnership REIT (UPREIT): REIT owns properties indirectly through the operating partnership
    - Avoid tax: defer capital gains taxes
    - Manage property directly
6. REITs Grow and Change Again in the 1990s

- New REITs are self-advised:
  - Managers took a significant equity position
  - Specialize in property types
  - REIT management is more focused
  - Also more knowledgeable about specific property sectors
  - REIT concept: no more a pool of properties or mortgages

7. Future of REIT Concept

- REIT structure has evolved in the past 100 years
- While the Core REIT concepts and the incentives to establish REITs remain
  - Demand to access public capital markets
  - Demand for a liquid real estate investment vehicle
  - Absence of the double taxation of income.

1. Is There a Free Lunch?

- Wide variety of organizational forms for holding real properties and mortgages
  - Real Estate Investment Trust (REIT)
  - Master Limited Partnership (MLP)
  - Corporation and Business trust

- The REIT Simplification Act and the REIT Modernization Act
  - REITs can perform certain services for tenants
  - Allows REITs to own taxable subsidiaries
    - Provide service to their tenants
    - REITs own nursing homes (healthcare REITs)
    - Hire contractors to run these homes.
  - REIT has become increasingly like the modern operating company

- Change is necessary for the survival of REITs in changing markets
  - Tax laws governing REITs
  - Changes in property markets
  - Changes in market areas
For REITs, tax at the corporation level is exempted.
Many property companies still use corporations.
Given the tax benefits, why not all property firms choose to be a REIT?

There must also be costs:
- Prevent firms from adopting the REIT organizational form
- Will the positive attributes (tax benefits) outweigh negative consequences?
- Which type of REITs can capture the benefits but avoid negative consequences?
- There is no free lunch

Meet some requirements to become a REIT:
- Requirements change over time
- Restriction placed on the ownership structure
- Type of income a REIT can generate
- Company's management structure
- Financial policies of REITs

Reduced benefits of Using Debt:
- REIT's after-tax cost of using debt is higher
- Less incentive for REITs to use debt
- Less debt holders to monitor the manager's decisions

Reduced Growth Potential:
- Pay out 90-95% of taxable income
- Little internal capital for the growth of the company
- In a disadvantaged position to issue debt
- Issuance of new equity normally depress a firm's stock price

Stocks of finite-life REITs perform much worse than other REITs
Finite REITs have no growth potential
Market puts emphasis on a firm's growth opportunities and values them accordingly.
2. The Costs of Being a REIT

Conflict of Interest between Shareholders and Managers
- Traditional developers/operators do not want to lose control of their properties upon conversion to REIT status.
  - Keep a significant portion of the stocks
  - Minority owners are at risk

Advisor of a REIT serves as the party who buys or sells properties and mortgages to the same REIT.
- The compensation of REIT managers can be tied to the size of the REIT.
- Incentive for REIT managers to maximize their welfare by investing in non-profitable assets.

2. The Costs of Being a REIT

Problems of Market Timing
- Investors want to time the market
  - REITs: hold a significant part of assets as properties or mortgages
  - Cannot hold too much cash
  - They cannot time the market
- Not free to dispose properties
  - Cannot move quickly from a cold to a hot market
  - Difficult to get out of distress markets

3. Is Organizational Form Beneficial?

The Tradeoff between Tax Benefits and Flotation Costs
- By Gyourko and Sinai (1999)
- Overall benefit surpasses the cost
  - Tax savings alone contribute about 4%
  - No need to engage in costly tax avoidance strategies: savings estimated to be 1 to 4%
  - Have to raise capital to finance growth: 2.5%
  - Net benefit of being a REIT: 2.5 to 5.5%
- Low payout firms will benefit more from the REIT structure

4. Change Organizational Structure Based on its Needs

Clientele effect
- Low tax bracket investors: invest in stocks with high dividend payout
- High tax bracket investors: invest in stocks with low dividend payout
- REITs: should be tax-exempt investors or investors in low tax brackets
- If a REIT switches: low tax bracket shareholders will be upset
- Switches back again: upset investors in the new corporation
- Might not a good idea to switch

Empirically, investor tax rates is negatively correlated with the dividend yield of a REIT stock
5. When Is the Best Time to Convert? (1/2)
- By Damodaran, John, and Liu (1997)
- REITs in distress switch to a corporate structure
- After the change, it:
  - Pay substantially smaller dividends
  - Restructure assets
  - Sell a significant portion of existing assets
  - Buy new assets

5. When Is the Best Time to Convert? (2/2)
- Indicates: REIT structure has costs
  - Higher for distressed firms
  - In times of distress, need flexibility in financial policies
- When a corporate switch to REIT: has free cash flow
  - After the firm elects to be a REIT
  - Pay out much larger dividends
  - The motivation is for the tax benefits

6. Should We Take Advantage of The REIT Structure? (1/5)
- See Table 3.1
- Many new and de-listed REITs in each year
- 485 REITs
- Overall: REIT organizational structure is gaining support from the stock markets.

6. Should We Take Advantage of The REIT Structure? (2/5)
- Similar patterns can also be observed from Table 3.2

6. Should We Take Advantage of The REIT Structure? (3/5)
- REIT organizational structure: in and out of fashion several times during the 1962-1999 period, based on
  - Cycles in the market
  - Needs of individual companies
  - Changes of tax laws
  - More beneficial to certain investors at certain periods

6. Should We Take Advantage of The REIT Structure? (4/5)
- This is especially true if we look at the 1993-1999 period
  - REIT industry underwent significant changes
  - Those firms that could benefit from these changes became REITs
  - The REITs that could not take advantage of the changes were de-listed as REITs
6. Should We Take Advantage of The REIT Structure? (5/5)

- See Table 3.3
  - Average life of the REITs: only 8 years (or 3,041 days)
  - Maximum: 9,773 days
  - Minimum: 201 days
  - Equity, mortgage, and hybrid REITs: 2,771, 3,510, and 2,962, respectively.
- Firms: take advantage of the REIT structure when situations allow

7. MLP and Corporation (1/5)

- Partnership structure also enjoys similar tax benefits
- MLP is a limited partnership that is traded on a stock exchange

7. MLP and Corporation (2/5)

- Wang and Erickson (1997)
  - 144 MLPs during the 1981-1991 period
  - 60 are real estate related:
    - 19 invest primarily in mortgage debts (similar to Mortgage REITs)
    - 41 invest in real properties (similar to equity REITs)
  - The number of real estate MLPs: significantly lower than the number of REITs during the same period.

7. MLP and Corporation (3/5)

- Burdensome administrative costs and agency issues
  - Keep accounting records for tax purposes
  - Limited partnerships have little control of the partnership
  - Agency issue is especially severe when the partnership (general partner) is formed by a parent company

7. MLP and Corporation (4/5)

- Empirical evidence:
  - By Kapplin and Schwartz (1988)
    - Examine 119 real estate partnership in 1985
    - Average IRR is only 3.5%
    - Far below the return for common stocks during the same period.

7. MLP and Corporation (5/5)

- By Wang and Erickson (1997)
  - Examine stock performance of 144 MLPs
  - Under-performed the market during the 1981-1991 period
- By Martin and Cook (1991)
  - Publicly traded limited partnerships perform worse than common stocks
  - Especially after the Tax Revenue Act of 1987, which limited the tax benefits of limited partnerships
  - Indicate that an MLP has not been a good vehicle for holding real estate
8. Summary: Who Should Not Use REITs? (1/2)

- Adopts a high growth strategy: The cost of being a REIT is greater: the dividend payout constraint
- Needs flexibility on property acquisitions: The limitations on the type of assets will be more serious

8. Summary: Who Should Not Use REITs? (2/2)

- Invests in speculative assets or operates in a dynamic market: REIT regulations prohibit REITs from buying and selling properties in a short period
- Uses a high debt level: The tax benefits of using debt no longer apply under this circumstance

Table 3.3
Summary Statistics of the Duration of Publicly-Traded REIT Stocks

<table>
<thead>
<tr>
<th></th>
<th>Equity REITs</th>
<th>Mortgage REITs</th>
<th>Hybrid REITs</th>
<th>All REITs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of days</td>
<td>2854</td>
<td>3696</td>
<td>2071</td>
<td>3081</td>
</tr>
<tr>
<td>Maximum number of days</td>
<td>10426</td>
<td>9773</td>
<td>10040</td>
<td>10426</td>
</tr>
<tr>
<td>Minimum number of days</td>
<td>343</td>
<td>201</td>
<td>265</td>
<td>201</td>
</tr>
<tr>
<td>Number of observations</td>
<td>150</td>
<td>89</td>
<td>54</td>
<td>253</td>
</tr>
</tbody>
</table>

Table 3.4
Number of Traditional REITs, UPREITs, and DOWNREITs during the 1995-2000 period

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional REITs</td>
<td>116</td>
<td>106</td>
<td>108</td>
<td>118</td>
<td>157</td>
<td>172</td>
</tr>
<tr>
<td>UPREITs</td>
<td>153</td>
<td>106</td>
<td>104</td>
<td>80</td>
<td>69</td>
<td>67</td>
</tr>
<tr>
<td>DOWNREITs</td>
<td>18</td>
<td>14</td>
<td>11</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Total number of REITs</td>
<td>233</td>
<td>217</td>
<td>223</td>
<td>207</td>
<td>228</td>
<td>237</td>
</tr>
</tbody>
</table>

*In this table the number of REITs in each year is less than the number of REITs listed in Table 3.1 because we do not have specific information on several of the REITs. Those REITs are excluded from the sample.