Chapter 7: Valuation Using the Sales Comparison and Cost Approaches

Decision Making in Commercial Real Estate Centers Around Valuation

- Valuation calculations are required when:

Value Concepts

- Market value:
- Investment value:
- Transaction price:

Why Do We Have To Estimate Market Value?

- In a perfectly competitive market the motivations of buyers & sellers & their negotiation abilities have no role in the price formation process (REITs value established on Wall Street)
- In such a market we are all price takers
- What about for Real Estate?
- Who uses appraisals?

What About Private Real Estate Markets?

- Every property is unique
- Not a perfect market to trade in
- Markets are local
- High search costs

Uniform Standards of Professional Appraisal Practice (USPAP)

- Required & followed by all states & federal regulatory agencies
- To comply with USPAP, appraisers must follow the following process…
We will focus on a limited set

Uniform Standards of Professional Appraisal Practice (USPAP)

1. Identify the appraisal problem
   - Client & intended uses of appraisal
   - Date of valuation
   - Rights to be valued (fee simple, etc.)
   - Type of value to be estimated
     - market, insurance, or taxable value?
     - Most common type of valuation?
     - Important assumptions or conditions

Uniform Standards of Professional Appraisal Practice (USPAP)

3. Collect data and describe property
   - Market area data
     - Characteristics of region, city, and neighborhood
   - Subject property data
     - Site, building, & locational characteristics
   - Comparable property data
     - Key to Appraisal?

Uniform Standards of Professional Appraisal Practice (USPAP)

4. Perform data analysis
   - Market analysis
     - Demand & supply
   - Highest & best use; i.e., use which is:
     - legally permissible
     - physically possible
     - financially feasible
     - most profitable (yields highest residual value to land)
   - Highest & best use as though vacant
     - considers any possible use
   - Highest & best use as improved
     - must consider any cost of demolition
5. Determine value of land
   - Important to value separately from improvements

6. Apply 3 approaches to valuation
   - Sales comparison approach
   - Cost approach
   - Income approach

7. Reconcile indicated values from 3 approaches
   - Weight based on relative reliability of the three approaches to the problem at hand

8. Report final value estimate

---

Sales Comparison Approach

- Basic Idea:
  - Value of RE can be determined by analyzing the sale prices of similar properties

Selecting Comparable Sales

- Must be properties that prospective buyers would consider substitutes
- Should be arms-length transactions
- Fairly negotiated prices that occurred under “normal” conditions
  - For example, not a distressed sale
- Select to minimize required physical and locational adjustments

Selecting Comparable Sales

- Data sources:
  - Public records (e.g., county property tax assessor)
  - Multiple listing service
  - Private vendors (title companies, others)
  - CoStar for commercial properties

- Importance of personal relationships
- Fee appraisers are researchers!
Adjustments to Comparable Sale Prices

- Goal?
- Convert characteristics of each comparable to an approximation of subject.

Subject

Comp #1

Comp #2

Adjustments to Comparable Sale Prices

- Transactional Adjustments
  - Concern the nature & terms of the deal
  - Property rights conveyed
  - Financing terms
  - Conditions of sale (arm’s length or not?)
  - Expenditures made immediately after purchase
  - Market conditions

Using Repeat Sales to Adjust for Market Conditions

Exhibit 7-4
Repeat Sale Analysis for Market Conditions Adjustment

<table>
<thead>
<tr>
<th>Property</th>
<th>Date of Previous Sale</th>
<th>Price at Previous Sale (SP)</th>
<th>Price Today (SP)</th>
<th>Change per Month (SP-SP)/mos.</th>
<th>Monthly Rate of Increase (% of SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12 mos. ago</td>
<td>$191,000</td>
<td>$197,900</td>
<td>$575</td>
<td>0.30%</td>
</tr>
<tr>
<td>B</td>
<td>18 mos. ago</td>
<td>158,000</td>
<td>167,000</td>
<td>$467</td>
<td>0.29%</td>
</tr>
<tr>
<td>C</td>
<td>24 mos. ago</td>
<td>148,900</td>
<td>162,000</td>
<td>$446</td>
<td>0.37%</td>
</tr>
</tbody>
</table>

Average monthly rate of increase = 0.32%

Note: It is often difficult to find a sufficient number of comparables that have sold twice. Thus, must often rely on publicly available house price indices to estimate price appreciation for a typical house in the subject’s neighborhood

Adjustment to Comparable Sales Prices

- Property Adjustments
  - Location
  - Physical characteristics
  - Economic characteristics (not applied to residences)
    - Important economic characteristics of income producing properties: operating expenses, lease terms, tenant mix
  - Use
    - If comparable use if different from best use of subject, better not use as a comparable

Sequence of Adjustments

- Transactional adjustments 1st...in order listed above
- Property adjustments 2nd...in no particular order
- Caution: mixing dollar & percentage adjustment
You are appraising a property located adjacent to a high speed freeway.

Improvements consist of a one-story frame dwelling with 8 rooms and 2 baths in a total area of $2,000 sq. ft.

Of average quality construction, home was in good condition at time of inspection.

Floor plan & items of equipment are typical for this class of property.

Investigation disclosed the following transactions involving comparable properties in the neighborhood of the subject and in a similar value range as the subject:

1. One year ago a 2,400 sq. ft. property not adjacent to freeway sold for $160,000. Improvements were nearly identical to subject dwelling in all but size.
2. This year a 2,400 sq. ft. property not adjacent to freeway sold for $150,500. This dwelling was highly similar to subject in all respects except for size.
3. A 2,000 sq. ft. property not adjacent to the freeway sold 1 year ago for $150,000. These improvements are highly similar to subject.
4. A 2,400 sq. ft. property sold this year for $140,300. Located adjacent to the freeway, it was very similar to subject except for size.

Problem:

Develop an indication of the value of subject, showing the source of each adjustment.

Indicated adjustments are for:

- time
- location relative to freeway
- size

Time:
- Sale 1 (1 year ago) $ 160,000
- Sale 2 (current) $ 150,500
- Difference -9,500

Location:
- Sale 2 (not adjacent to freeway) $ 150,500
- Sale 4 (adjacent to freeway) $ 140,300
- Difference -10,200

Size:
- Sale 1 (2,400 sq. ft.) $ 160,000
- Sale 3 (2,000 sq. ft.) $ 150,000
- Difference $ 10,000
Example (continued)

<table>
<thead>
<tr>
<th>Sale</th>
<th>Sale Price</th>
<th>Time</th>
<th>Location</th>
<th>Size</th>
<th>Total Adj. Indicated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$160,000</td>
<td>$9,500</td>
<td>$10,200</td>
<td>$10,000</td>
<td>$29,700</td>
</tr>
<tr>
<td>2</td>
<td>150,500</td>
<td>-10,200</td>
<td>-10,000</td>
<td>-10,000</td>
<td>-10,000</td>
</tr>
<tr>
<td>3</td>
<td>150,000</td>
<td>-9,500</td>
<td>-10,200</td>
<td>-10,000</td>
<td>-19,700</td>
</tr>
<tr>
<td>4</td>
<td>140,300</td>
<td>-10,000</td>
<td>-10,000</td>
<td>-10,000</td>
<td>-29,700</td>
</tr>
</tbody>
</table>

Estimated Market Value: $130,300

Note: Adjustments can be positive or negative. They are all negative here because subject property is inferior to the comparable sales in all ways that matter to the market. Are these good comparables?

What's an extra square foot worth?
(can use the same approach for lots size adjustment)

This is taken from BCAD 2012 Assessment for Three houses on Nature Pass (near UTSA)

<table>
<thead>
<tr>
<th>House Number</th>
<th>Improvements</th>
<th>Square Feet</th>
<th>$/sqft</th>
</tr>
</thead>
<tbody>
<tr>
<td>7742</td>
<td>87000</td>
<td>1446</td>
<td>60.17</td>
</tr>
<tr>
<td>7734</td>
<td>98150</td>
<td>1686</td>
<td>58.21</td>
</tr>
<tr>
<td>7723</td>
<td>114910</td>
<td>2175</td>
<td>52.83</td>
</tr>
</tbody>
</table>

Plotting and doing a quick regression shows...

y = 37.696x + 33337
R² = 0.9937

Adjustment Grid: 2380 Appletree Ct

Reconciliation of Adjusted Sale Prices

<table>
<thead>
<tr>
<th>Source</th>
<th>Final Adjusted</th>
<th>Weight (%)</th>
<th>Weighted Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable 1</td>
<td>167,350</td>
<td>60%</td>
<td>$100,410</td>
</tr>
<tr>
<td>Comparable 2</td>
<td>169,950</td>
<td>29%</td>
<td>57,570</td>
</tr>
<tr>
<td>Comparable 3</td>
<td>167,000 × 20</td>
<td></td>
<td>33,520</td>
</tr>
</tbody>
</table>

Indicated Opinion of Value (using the sales comparison approach) = $167,900

Note: Appraisers do not actually assign weights
Cost Approach

- Procedure
  Estimated reproduction cost of improvements
  - Estimated accrued depreciation
  = Depreciated cost of building improvements
  + Estimated value of site
  = Indicated value by the cost approach

Major Assumption?:
  Cost of creating a property is related to its market value

Cost Approach (continued)

- Two concepts of cost:
  - Replacement cost:
  - Reproduction cost:

Accrued Depreciation

- Not tax depreciation
- Difference between replacement cost & market value of improvements
- Types of accrued depreciation that must be considered:
  1. Physical deterioration
  2. Functional obsolescence
  3. External (economic) obsolescence

Appraisal Assignments Where Cost Approach is Heavily Weighted?

1. New buildings
2. Insurance appraisals
3. Specialty buildings

Revolution in Comparable Sales Appraisal: Automated Valuation Systems (AVMs)

- Example: Freddie Mac: Home Value Suite
- Based on model developed over millions of sales
- Combines complex regression with repeat sales and other statistical techniques
- Regression is used to predict/value the subject property
- Also, see Zillow.com for Zestimates

End of Chapter 7