CHAPTER 14
INTRODUCTION

- The process of applying quantitative and qualitative techniques.
- Identify the elements of comparison affecting the value of the type of property being appraised.
- Compare the attributes of each comparable with the subject.
- Derive a net adjustment for each comparable.
- Reconcile the range of adjusted prices into a single final value.

QUANTITATIVE ADJUSTMENTS

**Paired sales** analysis, given sufficient data is the foundation for quantitative adjustments when using “pure pairings”. That is, two similar sales that exhibit a difference in only one attribute with the price difference reflecting the value of the attribute. The key element in the reliable use of the method is the availability of data. Sometimes multiple adjustments are required to isolate a single variable. When few “pure” pairings are available, the appraiser may use paired sales of adjusted values but must be aware that the difference measured may not equate the difference in the actual value of the attribute being measured. Support of and testing the reliability of data using other analytical methods or secondary data is essential in appraisal. Don’t let mathematical adjustments cloud your thoughts and try to understand how the market behaves when making adjustments.

**Grouped data analysis** is similar to the above except that a number of sales grouped by an independent variable are compared in pairs. This method is reliable when there are many sales available all with similar characteristics.

**Secondary data analysis** is used to support analysis derived from other methods. This makes use of data that does not directly impact the subject or comparables and may be collected by research or from government agencies who analyze the real estate market in general.

**Statistical Analysis** involves the use and understanding of statistical concepts and methodology to arrive at a conclusion. Some expertise and knowledge is required by the appraiser to ensure relevant and meaningful data. Sources of data are available from real estate boards, CMHC and other associations.

**Graphic Analysis** is the visual display of data and the application of statistical curve fit analysis to derive a conclusion. A graphic display serves to show the market’s reaction to changes in the variables of comparison and may reveal a trend, and by using different formulae or curve fit analysis, the best fit for the data being analysed is determined.

**Cost Analysis/Cost Related Adjustments** can use the depreciated building cost or one of its components. Reliable if there is limited sales activity. Support adjustments as cost does not equal value.

**Capitalization of Income Differences** is a method where the loss of income due to some deficiency is capitalized into a capital value. If a house only has one bathroom and two are the market standard, and the estimated income loss is $50.00 per month or $600 per year, then capitalizing this loss at a market rate of 5% indicates a total loss in value of $12,000 for that deficiency. Widely used as its simple to support and commonly used in expropriation.

QUALITATIVE ANALYSIS

- Includes trend analysis, relative comparison analysis and ranking analysis.
**Trend analysis** is effective when there is a large amount of data that can be analyzed to establish a trend. Data from real estate boards and associations are a good example.

**Relative Comparison Analysis** is the study of those relationships of market data without application to quantification. It reflects the imperfect nature of the real estate market and establishes comparative relationships as inferior, superior or similar to the subject. An important consideration in the comparables’ selected for analysis is the highest and best use criterion. Reliable results may be obtained by bracketing the subject between those inferior and superior properties with more research and other analytical tools used to establish a bracket if there is none. It is by and large a subjective decision and often based on the appraiser’s knowledge and experience.

**Ranking Analysis** is a sorting process done by ranking the comparables’ element(s) of comparison, ie size, corner lot, frontage, etc., in relation to the subject, thereby establishing a clear relationship by an element of comparison or by overall comparability. It follows that trends may be established for those variables that are market-sensitive and discarding those that are not.

Just remember the real estate market is very imperfect and no two sales are identical. Comparisons are based on quantitative and qualitative data and supported opinion.

**ELEMENTS OF COMPARISON**

**TRANSACTIONAL ADJUSTMENTS**

**Real Property Rights Conveyed**

- This is normally the first adjustment; with an adjustment required if the property rights between the subject and comparable are not the same.
- Comparable sales with easements or restrictive covenants registered against the title or income-producing properties subject to leases are encumbered and an adjustment has to be made for the reduced bundle of rights.

**Financing Terms**

- If the rate on the assumed or new financing is higher or lower than current market rates then the price may have been affected.
- Check vendor financing for details of mortgage and whether any conditions affect the final selling price.
- If so, then the appraiser must find the discounted value of the mortgage and adjust the selling price accordingly as this has often been considered in negotiations between the buyer and seller.
- Only adjust for the figure if the market has adjusted the same way.
- Refer to text, Page 14.12 for calculation on cash equivalency adjustments.
- Appraisal requires the need to reflect market perceptions with emphasis placed on a market-derived adjustment rather than one derived by calculation.
- Beware of double-counting – interdependence of financing and condition of sale.

**Conditions of Sale**

- In most cases buyers and sellers are typically motivated and transactions are considered arm’s-length.
- If motivation is atypical, and the sale not considered arm’s-length, care is necessitated with the intended use of the appraisal becoming an important consideration.
- Sellers may be forced to sell quickly and therefore the price is lower.
Review Notes: Comparative Analysis

- Buyers may be forced to buy quickly and therefore the price is higher.
- Interviews with the parties involved - buyers, sellers, agents or even neighbours - may reveal information.

Expenditures Made Immediately After Purchase

- A knowing buyer considers these costs and discounts them in his offer price.
- Expenditures include deferred maintenance, demolition and removal of any portion of the improvements, petition for a zoning change and remediation of environmental contamination.
- The relevant figure is not the actual cost incurred but the figure agreed to by the buyer and seller.

Market Conditions or Time Adjustment

- Occurs when comparable properties are sold at different dates from the effective date of appraisal and market conditions change in the interval.
- In the time interval under consideration, given market condition changes, increase or decrease the price of the comparables accordingly.
- Usually adjustment is a monthly percentage figure based on actual sales.
- Use paired sale analysis for primary data supported by secondary or published data.
- Published data tends to be general with more research required for more specific data for the type and location of the subject.
- Don’t rely on hearsay data, do your own analysis with support.

Property Adjustments

Location

- Can refer to a location within one neighbourhood as in the price differentials between interior and corner lots, or to those found between different neighbourhoods.
- Use paired sales analysis backed up by data from other reliable sources.
- Refer to text, Page 14.21 for comparison using statistical and graphical analysis.

Physical Characteristics

- Encompasses those differences noted such as building size, quality of construction, style, age, condition, site size, attractiveness, and amenities between the subject and the comparables.
- Cost ≠ value.

Economic Characteristics

They are attributes of a property that directly affects its income and usually applied to income type properties.

Use/Zoning

All comparables should have similar highest and best use or zoning but if comparables are unavailable then adjustments required for those comparable with a different current use or highest and best use.
Non-Realty Components

- Include personal property, business concerns and other items not considered real property but included in sale price of the comparable or in the ownership interest in the subject property.
- More common in income-producing properties.
- In residential, the items are usually of nominal value - older appliances and some furniture. If price seems high then ask if anything else was included in the price. Examine the motivation of the buyers and sellers.