LESSON NO. 8
The Direct Comparison Approach — Part I

Assigned Reading

   Chapter 17: The Direct Comparison Approach
   Chapter 18: Adjustment and Analytical Techniques in the Direct Comparison Approach

Recommended Reading

1. Rodgers, Thomas. 1994. "Property-to-Property Comparison". Appraisal Journal (January): p. 64-67. Comparison of comparable sales with the subject property by means of qualitative analysis is supported as an alternative to the quantitative grid-adjustment process. This document can be downloaded via the "Online Readings" link on the BUSI 330 Course Resources webpage.

2. Williams, J. Greg. 1995. "Value by Deductive Reasoning". Appraisal Journal (July): p. 363-367. Deductive reasoning is applied through qualitative analysis in order to value a subject property. The author contends that a deductive system allows an appraiser to discern where a subject fits into a scale, thereby indicating positive adjustments for inferior properties and negative adjustments for superior properties. Comparison is done on an overall qualitative basis rather than a segmented quantitative basis. This document can be downloaded via the "Online Readings" link on the BUSI 330 Course Resources webpage.

3. Wilson, Donald C. 1997. "The Principle of Rank Substitution". Appraisal Journal (January): p. 43-54. The most important pages are pages 49-54. This is a technical paper, based on a statistical approach to comparable sales analysis, suggesting that the heuristic logic "Rule of 2" applies in qualitative analysis. This rule states that in the trial-and-error search for similar utility among unique properties, a subject property must fall between at least two properties in terms of its aggregate utility. This document can be downloaded via the "Online Readings" link on the BUSI 330 Course Resources webpage.

Learning Objectives

After completing this lesson, the student should be able to:

1. Explain the steps in the direct comparison approach.
2. Relate the direct comparison approach to its underlying economic principles.
3. Identify the data required to make a direct comparison analysis.
4. Explain and justify the sources of data used in the direct comparison approach.
5. Describe the various methods of making adjustments in the direct comparison approach.
6. Explain how the adjustment process is applied to valuation.
7. Identify the units of comparison which are applicable to residential properties.
8. Explain the term *reconciliation* as it applies to the direct comparison approach.

9. Explain the direct comparison approach’s applicability and its limitations.

**Instructor's Comments**

Chapter 17 introduces the students to the direct comparison approach and begins by reviewing the appraisal principles that apply: supply and demand, substitution, balance, and externalities. Then, a discussion takes place about the applicability and limitations of the direct comparison approach. This is important for students to know because there may be instances when this approach cannot be used and the appraiser will need to explain this to his or her clients.

The five steps of this approach are:

1. researching the data,
2. verifying the data,
3. selecting units of comparison,
4. analyzing and adjusting the comparables, and
5. reconciling the value indications.

In Chapter 17, each step is explained and discussed as to how it is applied.

Chapter 18, titled "Adjustment and Analytical Techniques in the Direct Comparison Approach", introduces the major elements of comparison:

- real property rights conveyed,
- financing terms,
- conditions of sale,
- expenditures made immediately after purchase (usually considered with conditions of sale),
- market conditions,
- location,
- physical characteristics,
- economic characteristics,
- use/zoning, and
- non-realty components of value.

Once the elements of comparison have been selected, the appraiser has to quantify them by using various methods such as paired data analysis, statistical analysis, graphic analysis, trend analysis, cost analysis, or capitalization of rent differences. These adjustments can be percentages or dollar amounts between the comparable and the subject. The sequence of adjustments is important to ensure that the sale price is correctly adjusted. The simplest and most clearly understandable method is to prepare a market data grid so that the client can follow and understand the appraiser’s adjustment process.

In addition to quantitative analysis, a qualitative analysis should also be conducted as this provides a cross-check on the value indication of the quantitative approach. Qualitative analysis, unlike the quantitative approach that analyses each of the elements of comparison, compares each comparable sale on an overall basis with the subject property.

Real property appraisal combines both science and art. In a sense, the quantitative and qualitative comparison techniques illustrate both the scientific and artistic aspects of direct comparison. The quantitative technique is based on market observation and analysis (science), whereas the qualitative technique applies an appraiser’s
judgment based on experience (art). Using one as a crosscheck on the other permits the quantitative objective (scientific) result to be tested by means of the qualitative intuitive (art) result.

The final step in the direct comparison approach is reconciliation, thereby completing the appraisal process and indicating a value estimate for the subject property.

**Reading Notes**

**Chapter 17 — The Direct Comparison Approach**

**Relationship to Appraisal Principles**

The major principle that applies to the direct comparison approach is the principle of substitution; i.e., the value of a given property should be no more than the cost of buying another substitute property. Because of this principle, the appraiser should be well-informed about the market such that when it is time to locate comparable properties, the appraiser knows what is happening, what comparables are available, and where to find them. Again, nothing replaces market knowledge.

In applying this approach, the appraiser will look at the differences in the legal, physical, locational, and economic characteristics of comparable sales and listings. Also examined are the differences in the property rights, the sales dates, the listing dates, the motivation of the parties, and the financing.

A careful search must be made to find recent sales of similar properties which can be used as comparables. The data from these sales must be verified with one of the parties to the transaction: i.e., the vendor, purchaser, or the agent.

Because real estate is unique, and therefore properties are rarely identical, comparable properties have to be adjusted for any characteristics which are dissimilar to the subject property. A careful analysis of the market will indicate the size and direction of the adjustments. Adjustment values can be found by using paired sales to isolate certain components, such as condition or location. In other instances, general trends may have to be used if market data is lacking. Each method has its own advantages and disadvantages and should be fully explained in the appraisal report. In making adjustments, ensure that consistency is maintained among comparables, and that the order of adjustments is logical and systematic.

Appraisers need to be aware of how the market is moving and what is happening to the supply and demand for housing in the area. This should be an ongoing process for all appraisers, as they should read the local and national newspapers, trade papers, network with market participants, and generally keep abreast of what is happening in real estate.

Accompanying this is the principle of balance: over time, one gets to know if there are too many or too few homes on the market in a certain price range or whether the strata condominium market is being under- or over-built and if prices are stagnant, falling, or increasing. Sometimes real estate boards publish information about the number of units for sale as well as the number of units sold every month, broken down by category: residential, strata units, vacant residential lots, and duplexes.

Again, by knowing the neighbourhood and what is happening in and around it, the appraiser will be aware of any existing, new, or disappearing external factors. These factors can have a positive or negative effect on property values in the area. The widening of a road from, say, two to four lanes can mean more traffic and noise thereby making the property less attractive. Alternatively, it could signify that the area is expanding and the older homes on the street may be ready for rezoning from single-family to a multiple-family or even commercial zoning.
The opening or closing of a major retail development nearby may affect prices positively or negatively. It is up to the appraiser to investigate and decide what trend is occurring in this market.

The expansion of a rapid transit system or fast commuter bus line may mean new developments in and around the transit line. Transit stations areas are a magnet for redevelopment of commercial and multi-family residential. Also, large industrial or vacant sites may be ripe for some form of redevelopment. This may have a positive effect on some properties and a negative effect on others. It is the appraiser’s job to decide how these external factors affect property values.

Again, nothing replaces market knowledge, so it is important to continually gather facts and data. These may not be useful today, but they may prove to be very important in the future.

**Applicability and Limitations**

The appraiser should know the advantages and disadvantages of the direct comparison approach because it is so widely used and relied upon by the public. Any problems with the application of this approach should be noted in the appraisal report so that the reader understands the pros and cons. Its advantages include:

1. It reflects the actions of buyers and sellers and therefore should result in "market value"; and
2. It is easily understood and explainable.

However, the direct comparison approach also has a number of disadvantages:

1. In some instances, comparable sales might be difficult to find, either few in number or non-existent;
2. Difficulties may be encountered in making comparisons between properties and between locations;
3. Since prices are historic, they may not represent current market activity;
4. Listings or unconditional offers may need to be used to indicate a value range, even though they are not completed sales transactions; and
5. Special use properties do not lend themselves to this approach, e.g., government properties, churches, sports arenas, etc.

While the direct comparison approach is the most appropriate method to use in most residential appraisals, it must be applied with care.

In the analytical and adjustment processes, the appraiser uses mathematical techniques to assist in adjusting sales prices of the comparables to the subject. Consideration must be given to the degree of similarity of the comparables and the subject. It is important to not lose sight of "reasonableness" of adjustments, or in other words, you must only make adjustments which make sense in a market sense. Attempts should be made to find those comparables that require a minimum of *absolute* adjustments.

The adjustments are best presented in a grid, because this allows readers to logically follow the reasoning of the appraiser. Written support for the adjustments should be provided in the report, explaining the reasoning for how the dollar or percentage adjustments were calculated.

The appraisal report should discuss all methods used and the reasoning behind their application. Remember, all data and appraisal procedures must be backed up with common sense and market knowledge.
Procedure

The student should read and understand the five steps in the direct comparison approach and must be able to apply and verify each step.

Today, the gathering of information is easy since there are many sources of data, from government agencies to private reporting companies. Information is often available on-line or is sent directly to the appraiser by mail or electronic mail. There are many real estate websites that should be investigated to see what information they have on-line and how this could be useful when conducting appraisals.

While the information from many of these sources has been checked for its accuracy before it is sent to the appraiser, it is important to stress that it is the appraiser’s obligation to independently verify the data. Often when verification is required, it can be done on-line with the local government Land Title or Registry Office for a small fee.

Students should read Table 17.1 and know the units of comparison for single family, apartment properties, and vacant land.

For vacant land, add the bulk basis as a unit of comparison. Comparing properties on a "bulk basis" means a one-to-one comparison between the properties’ attributes, as opposed to using some specified unit of comparison (such as dollars per front metre). For instance, if the subject property has 13m frontage and other lots in the subdivision with 13m frontage (and similar depth) are selling for $75,000, then the subject must be worth $75,000 since no adjustments are required.

If the subject lot and comparables were a slightly different size, then they might be compared on a price per front foot. By dividing the sale price of the comparables by their frontage, you would find that these lots sold for $1,500 per front foot (ff). This rate could then be applied to similar lots. On the other hand, larger frontage lots may sell on a comparatively lower rate per front foot, so a 60 foot lot may sell for $1,400/ff or $84,000, while a 40 foot lot might sell for $1,700/ff or $68,000. The market data will reveal this information. If there was enough data, then a statistical analysis could be carried out and a trend line developed to specify the relationship between the frontage and the rate per frontage foot.

Single-family homes are compared on a one-to-one basis with adjustments added to or subtracted from the selling price. For instance, you are appraising the market value of a home with no garage. Your investigation has indicated that comparable properties (all with garages) have recently sold for $130,000 and that the market value of a garage is $5,000. Because these comparables are superior to the subject property, you would have to deduct $5,000 off their selling price to reflect what they would have likely sold for had they not had a garage (in other words, if they had been more similar to the subject property). Therefore, the adjusted sale price of the comparables would be $125,000. For comparables with inferior features, you would have to add to the sale price of the comparables, to reflect the fact that had they sold with superior features, they would have obtained a higher price. An important point to remember is that the prices of the comparables are always adjusted to make them more similar to the subject, and not vice versa. These adjustments are summarized in Figure 1 on the following page. They can be remembered by the key word IASS – Inferior-Add, Superior-Subtract.
COMPARABLE PROPERTY | ADJUSTMENT
---|---
If a feature of the Comparable Property is INFERIOR to the Subject Property | ADD to the Sale Price of the Comparable Property
If a feature of the Comparable Property is SUPERIOR to the Subject Property | SUBTRACT from the Sale Price of the Comparable Property

The units of comparison can be either metric or imperial depending on what the client wants or what is commonly used in the local market.

Analysis is generally carried out using a grid with the information laid-out in a chart-form so it is easy for the appraiser and client to follow the adjustments made to the comparables. See Table 18.1 and 18.2 in Chapter 18 for an example.

Under the heading "Elements of Comparison", it is important for the adjustments to be carried out in the exact order shown as it affects the final value.

Since an appraisal is a gathering of facts followed by an analysis of these facts, the quantitative approach carries the most weight. However, there are times when not everything can be proven with facts from the market and a qualitative approach is required. This approach relies on personal observations and the appraiser’s feel for the property, both of which are difficult to attach exact dollar values to. A comparable may just appear to be better or worse because of some innate quality.

When the analysis is complete, the appraiser must then reconcile the conclusions into a final value or a range of values, depending on what the client wants and the purpose of the appraisal.

**Chapter 18 — Adjustments and Analytical Techniques in the Direct Comparison Approach**

**Elements of Comparison**

The text lists nine elements which form the basis of comparison. These are summarized in the table below, along with examples of each element:

<table>
<thead>
<tr>
<th>Elements</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rights Conveyed</td>
<td>Property subject to easements or restrictions.</td>
</tr>
<tr>
<td>2. Financing Terms</td>
<td>Down payment less than &quot;norm&quot;; Financing terms significantly different from &quot;norm&quot;.</td>
</tr>
<tr>
<td>3. Conditions of Sale</td>
<td>Sale part of foreclosure action; Non-arms’ length transaction; Longer/shorter marketing time than &quot;norm&quot;.</td>
</tr>
</tbody>
</table>
The Direct Comparison Approach — Part I

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Market Conditions (Time)</td>
<td>Prices increased/decreased over time; Change in supply and demand.</td>
</tr>
<tr>
<td>5. Location</td>
<td>Market evidence that comparable sales reflect different price because of location.</td>
</tr>
<tr>
<td>6. Physical Characteristics</td>
<td>Size, condition, age, design, quality, extras, landscaping, etc.</td>
</tr>
<tr>
<td>7. Economic Characteristics</td>
<td>Aspects that affect net operating income of a property.</td>
</tr>
<tr>
<td>8. Use</td>
<td>Zoning bylaws, building codes, landscaping requirements.</td>
</tr>
<tr>
<td>9. Non-Realty Items</td>
<td>Personal items, business concerns, or other items that do not involve real property.</td>
</tr>
</tbody>
</table>

Items 1, 2, and 3 are not common in most sales situations, but they have to be considered in analyzing the data since if they are present, they can have a significant impact on sale price. Items 4 to 9 will usually require some adjustment to make the comparable(s) more similar to the subject.

Rights Conveyed

When the potential of the real estate is affected either positively or negatively due to restrictive covenants, in-place leases, caveats, etc., adjustments within the evaluation must be made to account for their impact. The appraiser must, therefore, identify the real property interest that exists in the subject and comparable properties to determine the difference created by non-market contracts.

Rights conveyed are not typically a problem in most residential appraisals because if there is enough sales data to choose from, any comparable which involves less than a full bundle of rights can be omitted from the analysis.

Financing Conditions

Differences in financing terms which may exist between the subject and the comparable properties utilized can affect the purchase price. In these situations, the appraiser must perform a cash equivalency analysis to determine the mathematical adjustment to account for financing which is different than that available in the open market as of the effective date of the appraisal. This involves the discounting of the cash flows created by the mortgage contract available as at the effective date at market interest rates. This is a precise mathematical calculation and must be supported by the analysis of market data to confirm the validity of the process.

Financing is another category which is not typically a problem, as long as there is sufficient sales data. Comparables with any unusual financing are typically omitted. However, if an adjustment is required, then the appraiser must try to determine what the market actually paid for the beneficial financing. Lesson No. 9 shows an example of this type of calculation.

Conditions of Sale or Motivation

Motivation is sometimes difficult to determine because people do not always disclose their reasons for buying or selling. A sale with suspicious motivation behind it may have to be omitted from the analysis, unless one of the parties is willing to discuss it with the appraiser or the appraiser can find out the details of the transaction from a third party. In many fee reports, it is important to try and find out from one of the parties involved, the seller, the buyer or the salesperson, if there were any unusual circumstances involved in the transaction. If there were, then they should be explained in the report.
An unusual circumstance could include any expenditures that the purchaser must make once the sale is concluded, and this would typically be deducted from the market value of the property. In other words, a buyer expects to pay a certain price for a property, but if major expenditures have to be made then they will reduce their offer by what has to be spent to bring it back to a normal condition, similar to the price of other competitive properties.

**Market Conditions**

Market conditions require a "time adjustment". This adjustment is done to account for changes in market prices since the historic date of the sale. If all comparable sales are current and the market is not changing quickly, then this adjustment is not necessary. However, if the sale is a month or two old or older, then the selling price may need to be adjusted up or down if market values have changed in the meantime.

Sales are analysed to determine the extent to which the pricing of the real estate has changed as a function of the time between transaction dates. The change is generally measured as a percentage from the previous pricing and **is only valid after adjustments have been made for other elements affecting the sale price**. The most reliable of indicators are repeat sales in which the same property sells a number of different times in the marketplace, although if a property such as a house turns over very often in an otherwise stable neighbourhood, this may indicate some underlying problem.

A time adjustment is usually determined by paired sales analysis, where two similar or identical sales are compared to see what has occurred between the two dates. For instance, if a 15m × 34m vacant lot sold May 1 of this year for $100,000 and then sold again (or an identical lot sold) on August 1 for $110,000, then it has increased in value by $10,000 over these 3 months. This indicates an increase of 10% over 3 months or 3.33% per month.¹

Remember that time adjustments for vacant land and improved may not be the same. Do not apply generic city-wide statistical data to individual classes of property. For instance, improved properties may change at a different rate than vacant properties or commercial properties. They are all in separate markets and must be analysed as such. Also, properties with different zoning, different locations, and different sizes may have different rates of change.

**Location**

A location adjustment is made to adjust for comparables which are similar to the subject, except for the fact that they are in a different location which has some impact on value. An adjustment must be made to reflect how the value of a better or poorer location would have affected the sale price of the comparable.

For example, consider two properties which sold on the same date and were identical in all respects other than location. Sale #1 is in a cul-de-sac and sold for $110,000; Sale #2 is on a through-street with moderate traffic and sold for $100,000. The resulting difference of $10,000 is attributable to the better location of Sale #1. So, if we were appraising a property on a cul-de-sac and found a good comparable sale which is located on a high-traffic street, we would have to add $10,000 to its selling price to adjust for its inferior location. Alternatively, the adjustment could also be 10%. This adjustment brings the comparables to the same level as the subject, i.e., as if both were located on a cul-de-sac.

¹ This is a simple time adjustment calculation which is sufficient in most instances. A more precise calculation would account for compounding, resulting in a monthly increase of 3.23% \[\text{PV} = 100,000; \text{FV} = -110,000; \text{PMT} = 0; \text{N} = 3; \text{P/YR} = 1; \text{calculate I/YR}\].
Physical Characteristics

Market derived adjustments should be utilized in order to account for physical differences between the subject and the comparables. Commonly found differences are building or lot size, frontage of lot on street, quality and condition of the improvements, extras or amenities as well as the functional utility of the property.

When making adjustments for physical characteristics, it is impossible to adjust for every single detail. You must know which characteristics the market deems to be most important and adjust only for those items. In some markets, certain items are more important than others. For example, in an upscale neighbourhood, swimming pools may be a positive feature, while in average class neighbourhoods, they may add less value or detract from value. Adjustments can also vary by property type in the same market. For example, house size may be a very important factor in smaller homes, but becomes less important as house size increases to a certain point. In determining adjustments, it is vital to know and understand how your market functions.

Economic Characteristics

This is more applicable to income type properties and not so much as to residential properties. These include all of the attributes of the property affecting its net operating income, such as operating expenses, quality of management, tenant mix, rent concessions, lease terms and expiration dates, renewal options, and expense recoveries.

Use/Zoning

An appraiser must address any difference in the use or the highest and best use of a potential comparable and the subject property. The appraiser must recognize this difference and determine whether the sale is an appropriate comparable and whether an adjustment is required.

This is most applicable to the valuation of vacant land, especially land other than residential. In most instances, appraisers will attempt to find properties with the same zoning so that everything is truly comparable. However, there may be times when this is impossible, requiring that comparables with different zoning be used and adjustments made to make them comparable to the subject.

Non-Realty Items

Non-realty components of value include personal property, business concerns, or other items that do not constitute real property but are included in the sale price of either the comparable or the subject property. Furniture, fixtures, and equipment in a hotel or restaurant are typical examples of personal property.

Almost every residential sale includes certain used appliances such as a fridge, stove, and maybe a washer and dryer. In relation to the overall selling price, the value of these items is insignificant. Therefore, appraisers do not normally adjust for these items (it can also be difficult to determine an amount for these items). However, if the sale price seems outside the normally expected range for that property type, then the appraiser should ask if anything else was included. Sometimes there can be other assets involved other than cash, such as other assets taken in trade (e.g., a car or boat) or other real estate (e.g., a vacant parcel of land or another home).

Identification and Measurement of Adjustments

Various analytical techniques may be used to identify and measure adjustments. Comparative analysis includes the consideration of both quantitative and qualitative adjustments. Quantitative adjustments are developed as either dollar or percentage amounts. Factors that cannot be quantified are dealt with using qualitative analysis. Various techniques used in quantitative and qualitative analyses are listed below.

8.9
Quantitative Adjustments

Once the appraiser has determined what has to be adjusted for, they then need to decide how to determine the size of the adjustments and the technique to quantify them. There are various methods available as explained in the text, but again it all comes down to what and how the market reacts to these items. Unless the appraiser knows how the market participants, buyers and sellers, determine the adjustments, then no matter what the appraiser does it will not reflect accurately the market.

Paired sales analysis is the best option because it reflects market behaviour. However, in practical terms it can be difficult to apply in all situations. It is probably best for large adjustments, like the size of a home, basement finish, or adjusting for the size of the garage. For smaller adjustments like the overall condition of the house, or where the subject and comparable differ in floor area by less than 100 sq.ft., or where there may be small design differences, the paired sales analysis may not be applicable and the appraiser’s experience may be more important.

Statistical, graphic, and trend analysis may also be used, but for many appraisers the time and effort to do this is not warranted and they may not have the expertise or education in statistical analysis to do a proper job. Larger companies or government agencies, like assessment and government land departments, may have the necessary resources and expertise and carry out these types of analyses.

Types of Adjustments

Percentage adjustments

There are two different methods used when making percentage adjustments, depending on whether the subject is being compared to the comparable or the comparable is being compared to the subject. For example, consider a comparable which sold for $100,000 and is considered to be 10% superior in location and 15% inferior physically to the subject. The superior location of the comparable requires a downward adjustment to its sale price, while its physical inferiority requires an upward adjustment. The net adjustment to the comparable is an upward adjustment of 5% which, when the comparable is being compared to the subject, is treated as follows:

\[
\begin{align*}
\$100,000 &= X(1 - .05) \\
X &= \frac{100,000}{.95} \\
X &= \$105,263
\end{align*}
\]

Conversely, if the subject property was considered to be 10% inferior in location and 15% superior physically to the comparable then, again, the comparable’s net adjustment would be an upward adjustment of 5%. However, in this case the subject is being compared to the comparable and therefore results in the following treatment:

\[
\begin{align*}
X &= \$100,000 \times (1 + .05) \\
X &= \$105,000
\end{align*}
\]

The method used should correspond with what the market uses. In most instances, appraisers tend to state the comparable is better or worse than the subject, so the first method would be used.
Dollar adjustments

In some situations, it is easier to make a dollar adjustment rather than a percentage adjustment. It is up to the appraiser to decide which is best and to explain and show in the report how the adjustments were derived.

It should be pointed out that if percentage adjustments are used, quite often the appraiser will convert that percentage adjustment to a dollar figure and show this in the adjustment grid. See Table 18.1 in the text.

<table>
<thead>
<tr>
<th>Method</th>
<th>Technique</th>
<th>Strength/Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>Difference with comparables</td>
<td>Best suited to market (time) and location adjustments.</td>
</tr>
<tr>
<td>Dollar</td>
<td>Difference with comparables</td>
<td>Best suited to physical, motivation, financial.</td>
</tr>
<tr>
<td></td>
<td>expressed as dollars.</td>
<td></td>
</tr>
</tbody>
</table>

Sequence of Adjustments

Table 18.1 also shows the sequence of the adjustments to be applied to the comparables. In most instances, it is important for this sequence to be followed, unless local market conditions show otherwise. When making adjustments, it is important that all of the comparables be adjusted in the same sequence to ensure that they remain comparable to each other and the subject. Changing the order of adjustment for each comparable will result in incorrect value estimates rendering the final value estimate incorrect.

Market Data Grid

Market data grids should be used as a guide by the appraiser when analyzing the data and making adjustments. They assist the appraiser and client to see what adjustments were made, the amount of each adjustment, and the total absolute or gross amount of all the adjustments. The absolute/gross adjustment is the total of all of the adjustments irrespective of their plus/minus signs. It can be compared to the original selling price to find the overall percentage adjustment. If the absolute/gross percentage adjustment is high, say in the 15-30% range, then the comparability of that sale may be suspect. Lower absolute/gross percentage adjustments will make the comparable sale more credible in indicating a value for the subject.

Market data grids are ideally prepared using spreadsheet programs which will automatically calculate the adjusted sale price of the comparables and the absolute/gross dollar amount or percentage.

Qualitative Analysis

Application of a quantitative analysis followed by a qualitative analysis provides a strong framework upon which to provide an estimate of value. Each technique provides a crosscheck on the value indication of the other. In qualitative analysis, comparable sales are identified as inferior, similar, or superior overall to the subject property in order to bracket the probable value range of the subject property.

As mentioned earlier in this lesson, it is often difficult to prove every adjustment with sales evidence and in these cases the appraiser has to rely on qualitative data such as relative comparison analysis, ranking analysis, and personal interviews.
Relative comparison analysis is the study of the relationships indicated by market data without recourse to quantification. This technique reflects the imperfect nature of real estate markets. Comparable sales are analysed to determine whether or not the comparables' characteristics are inferior, similar, or superior to those of the subject property. Unlike quantitative analysis, the adjustments considered in relative comparison analysis are not expressed in dollar or percentage amounts.

Ranking analysis is a variant of relative comparison analysis. In ranking analysis the comparable sales are ranked in descending or ascending order and the appraiser positions the subject property in its appropriate relative position in the array. Ranking analysis can also be used to array or sort the comparable data for differences in specific elements of comparison, e.g., size, corner of interior lot, frontage, etc. Specific value trends can thereby be established.

Personal interviews to solicit professional opinions of the subject’s value vis-à-vis the comparable sales provide secondary data for qualitative analysis, hence should supplement rather than replace one of the other qualitative techniques. Do not hesitate to contact knowledgeable market participants such as developers, real estate salespeople, and property managers because they will usually willingly provide their opinions. These interviews provide insight into establishing appropriate ranking.

The next chapter both explains and provides examples of how the qualitative analysis techniques are applied.

**Reconciliation**

When the above analysis has been completed, the next task of the appraiser is to reconcile the findings into an estimate of value. At this point, the appraiser will review the methods used to see if the value indications arrived at are reasonable.

The text poses a number of questions that appraisers should answer to ensure that their analysis seems reasonable; it is important that the questions be rigorously applied to all of the comparables. Failure to do so will result in incorrect value estimates and an incorrect final estimate of value for the subject.

The appraiser should check and recheck their figures as mathematical calculation errors are quite common. Also, typographical errors are also very common and may occur where the appraiser has transposed numbers incorrectly from one document to another, from one page to another, or from their notes. Make sure your rough notes are easy to read and the numbers you write down are clear, so that you do not get confused when reading them.

Are the house sizes and sites sizes correct? When a house is measured and sketched in your notes, make sure that the measurements are correct. When you arrive back in your office and check your measurements, you may find that one side of the house is shorter than the other. The only alternative is to go back and re-measure the house. So always check your figures before you leave the property.

The idea of adjustments is to narrow the price range of the comparables. If the range between the high and low sales comparable was say $30,000 then the adjusted range should be less than that amount as the idea of the adjustments is to try and have all the comparables bracket very closely the final estimated value of the subject. There have been situations where the range has widened instead narrowed and indicates the adjustment process should be reviewed to try and narrow the range.

When you have arrived at your final estimate of value by this approach take the time to think about the final value and does it make sense in light of the comparables used and what a reasonable person would pay or sell the property for in the open market. In other words does it meet the criteria of market value.
Review and Discussion Questions

1. (a) Explain the basic principle which underlies the direct comparison approach.

(b) In your own words, briefly describe the process used in appraising a property using the direct comparison approach.

2. List three sources of data found in your area of residence that can be used in the direct comparison approach.

3. List the nine main elements of comparison in the proper order and briefly describe each. Explain why elements 1, 2, and 3 have to be considered first before elements 4 through 9.

4. What is meant by a unit of comparison and what principal units of comparison are associated with what types of residential property? Find a publication in your area which lists real estate for sale, and use information from this publication to illustrate two of these units of comparison.

5. (a) What is meant by reconciliation?

(b) When you are reconciling the adjusted values in the direct comparison approach, explain how you would decide which represent the best comparables.

6. Why is the principle of supply and demand critical to the direct comparison approach?

7. When is the direct comparison approach to value the most useful? When is it least applicable?

8. What is the main difference between the quantitative and qualitative adjustment techniques?

---

PLANNING AHEAD

Go to Project No. 2 and read what you will be required to do in this assignment. This assignment will require you to do significant research on characteristics of the property you choose in terms of market value for appraisal purposes. You will likely find this assignment much more manageable if you do some of the work required for it well in advance. You may find that the best sources of information for this assignment are professionals or consultants in this area, such as real estate brokers or appraisers. Finding appropriate contact people and establishing a relationship such that they will be willing to assist you may take some time, so it is strongly recommended that you begin this process as soon as possible.
ASSIGNMENT NO. 8

CHAPTER 17: The Direct Comparison Approach
CHAPTER 18: Adjustment and Analytical Techniques in the Direct Comparison Approach

Marks: 1 mark per question.

1. The principle of ______ holds that the value of a property tends to equal the cost of acquiring an equally desirable substitute.
   (1) balance
   (2) substitution
   (3) externalities
   (4) supply and demand

2. Adjustments are generally made to the _______________ of a comparable property.
   (1) transaction data
   (2) sale price
   (3) square footage
   (4) gross income multiplier

3. An adjustment for market conditions would be made to reflect:
   (1) the size of the residence.
   (2) a sale between relatives.
   (3) below market interest rates.
   (4) a decline in demand.

4. ____________ is a qualitative technique used to study comparable sales.
   (1) Statistical analysis
   (2) Paired sales analysis
   (3) Graphic analysis
   (4) Ranking analysis

***Assignment No. 8 continued on next page***
5. Which of the following statements regarding the direct comparison method of appraisal is TRUE?

(1) The direct comparison method of appraisal is the most inexact approach for finding market value since cost and market value are not necessarily equal at any particular time.
(2) The direct comparison approach should be used if a property possesses latent value.
(3) The direct comparison approach reflects market behaviour and requires a minimum of subjective opinion from the appraiser.
(4) To apply the direct comparison method of appraisal, the appraiser estimates the market value of the subject property using as evidence the sale prices of similar properties which sold at any time prior to the appraisal.

6. Brian Reeves, a professional appraiser, recently moved to a small suburban residential area. He has been asked to appraise an historic church which is located in the middle of his residential neighbourhood. Which of the following statements is TRUE?

(1) One problem in applying the direct comparison approach is the difficulty in establishing similarity. This problem is compounded when there are few comparable properties.
(2) Brian can use the consumer price index to make any necessary time adjustments because changes in property values are typically exactly the same as inflation.
(3) The direct comparison approach is likely the best indicator of market value for this property.
(4) All of the statements above are true.

7. Sandy is using the direct comparison approach of appraisal to value a house and has found a recent sale which she thinks is comparable to the subject property. The subject property has air conditioning, while the comparable does not. However, the comparable has a garage, while the subject property does not. When adjusting for these differences, Sandy will:

(1) add the value of the air conditioning to the comparable, and add the value of the garage to the subject property.
(2) subtract the value of the garage from the comparable, and add the value of the air conditioning to the comparable.
(3) add the value of the air conditioning to the comparable, and subtract the value of the garage from the subject property.
(4) subtract the value of the air conditioning from the subject property, and add the value of the garage to the subject property.
8. Which of the following statements is/are TRUE?

A. Corner lots are always valued higher than inside lots because they offer more air flow and extra light.
B. Corner lots are always valued higher than inside lots because neighbours are not on both sides of the lot, allowing for more privacy and quietness.
C. Corner lots always have larger frontage than inside lots, thus giving them a higher value.
D. There is no definite answer to the question of whether corner lots have greater value than inside lots; more information about market conditions is necessary.

(1) Only statement D is true.
(2) Only statement A is true.
(3) Only statements B and C are true.
(4) Only statements A and B are true.

9. Two properties adjacent to one another have the same lot size and house designs with the same square footage. Suppose they are similar with respect to number of bedrooms, bathrooms, fireplaces, and so on. However, property A has an excellent view, whereas property B has a swimming pool in the backyard. Given this information, how should the appraised values of the two properties differ?

(1) Property A will have a higher value than Property B because of its view location.
(2) Property B will have a higher value than Property A because of the swimming pool.
(3) Both properties will be priced the same because the homes are of the same design and have the same square footage. An appraiser should not attempt to estimate the value of the swimming pool or view location because the value of these attributes will differ with each individual owner.
(4) Cannot be determined; not enough information is provided.

10. Which of the following factors should be considered when using the direct comparison method of appraisal to value a house?

A. Whether the comparables being used can be classified as "recent" sales.
B. If there is an adequate number of comparables that can be used for comparison.
C. Whether the dimensions of a comparable property’s lot are different than the subject property’s lot.
D. Whether or not the comparables are similar to the subject with respect to legal title.

(1) Only factors A, B, and D should be considered.
(2) Only factor D should be considered.
(3) Only factors A and B should be considered.
(4) All of the above factors should be considered.
11. While analyzing the recent sales of properties comparable to the subject property, you note that two similar properties had a significant difference in sale price. The properties were identical in all respects except that one had greater access to major transportation routes and was located closer to shopping and dining facilities. This difference in value can be explained by the principle of _________.

(1) substitution  
(2) balance  
(3) externalities  
(4) supply and demand

12. Which of the following statements regarding adjustments and analytical techniques is FALSE?

(1) Adjustments for differences are made to the price of each comparable property to make that property equivalent to the subject on the date of the opinion of value.
(2) If there is insufficient support for a quantitative adjustment, qualitative analysis can be applied.
(3) A qualitative analysis should not be used to identify a bracket in which the final opinion of value should fall.
(4) Generally, quantitative adjustments are made before qualitative analysis is undertaken.

13. Rick Turnbull, a professional appraiser, is currently examining the conditions of the sales of several properties in Burnaby. Which of the following conditions of sale would be the most likely to result in an above-market value price?

(1) A father selling his apartment to his son, a recent college graduate.
(2) An importer on the verge of bankruptcy selling his warehouse to an eager investor.
(3) A developer purchasing adjacent vacant lots required for the construction of a town-house complex.
(4) All of the above would likely result in an above-market value price.

14. Your colleague has just completed the analysis of sales of comparable properties and has derived net adjustment figures of -20%, 10%, -2%, and 0% for each comparable property. She has not calculated the gross adjustments. She asks you advice on reconciling these comparables’ value indications. In evaluating these net adjustments, which of the following statements is the best advice?

(1) The comparable requiring a net adjustment of -20% should not be considered in determining an estimate of the market value of the subject property because this adjustment is too large.
(2) The comparable requiring no net adjustment is clearly the most similar to the subject property and should therefore be most heavily weighted when determining the value of the subject property.
(3) Only comparables requiring net adjustments of less than 5% should be considered.
(4) Without more information on gross adjustments, the comparable requiring a 10% net adjustment may actually be a more accurate indicator of the subject’s value than the comparable not requiring any net adjustment.
Lesson No. 8

15. You have just been assigned to complete the appraisal of an old, one-storey house in Coquitlam and are conducting an analysis of comparable sales. You have found a comparable property that is similar in all respects except that when sold, the seller arranged a buydown, offering the buyer an interest rate of 1% below the market rate. Which of the following statements is/are TRUE?

A. You must consider the fact that the buyer may have paid more than the market value of the property because of the below-market financing.
B. You must consider the fact that the buyer may have paid less than the market value of the property because of the below-market financing.
C. The financing terms of a sale have no bearing on its price, and therefore do not need to be considered when analyzing comparable sales.
D. Non-market financing arrangements only warrant adjustments to the sale price of comparable properties if market data suggests that they affect value.

(1) Only statement C is true.
(2) Only statements A and D are true.
(3) Only statements B and D are true.
(4) Only statement D is true.

16. Having nearly completed your first appraisal, you are unsure about which data to reconcile for a final opinion of value. Which of the following value indications would require reconciliation?

(1) Value indications expressed in a price per square foot
(2) Value indications expressed in a price per dwelling unit.
(3) Value indications derived from both the direct comparison and income approaches.
(4) All of the above values would require reconciliation.

17. Which of the following statements regarding quantitative adjustment techniques is FALSE?

(1) Regression coefficients developed for a given statistical model cannot be mixed with other market adjustments developed from paired sales analysis or other market data comparison techniques.
(2) When performing a paired data analysis, the difference measured when analyzing pairs of adjusted values always represents the actual difference attributable to the distinguishing characteristic.
(3) In paired data analysis, an adjustment derived from a single pair of sales is not necessarily indicative of market value.
(4) When performing a graphic analysis, a simple graphic display of grouped data may reveal market trends.
18. Dirk is using the direct comparison approach to value a large, two-storey house in Ottawa. He is currently conducting research and gathering data so that he may apply this approach, but is unsure where to gather information about sales, contracts, and offers of similar properties. Which of the following are likely to be helpful sources from which he should try to extract this information?

(1) Trevor Aurom, an Ottawa real estate broker.
(2) A multiple listings service.
(3) Records from the land titles.registry office.
(4) All of the above are likely to be helpful sources.

19. Marcus is using the direct comparison approach to appraise two single-family, residential properties in Montreal. The two properties have similar features, are located in the same neighbourhood, and all other characteristics are very similar, except for the size. Property A is substantially smaller than property B. Which of the following is TRUE?

(1) The price per square foot of Property A may be less than that of Property B because of economies of scale.
(2) The price per square foot of Property A may be greater than that of Property B because of economies of scale.
(3) There should be no appreciable difference in the price per square foot because all other characteristics of the properties are so similar.
(4) The difference in size would only result in a difference in total property price and would not affect the price per square foot of the home.

20. You have just completed a quantitative analysis and are now proceeding to conduct a qualitative analysis of comparable properties. Which of the following statements regarding qualitative analysis is FALSE?

(1) Personal interviews should not be used as the sole criterion for reconciling value ranges.
(2) In relative comparison analysis, the adjustments are not expressed as percentage amounts.
(3) When performing a ranking analysis, an appraiser may sort the comparable data for differences in specific elements of comparison.
(4) Qualitative analysis is only used if a quantitative analysis cannot be performed.