THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT

S. Phillip Lenski, Administrative Law Judge

ALJ Case No. 15-ALJ-17-0050-CC

Appellate Case No. 2015-002637

Brett Gries, Appellant,

v.

Aiken County Assessor, Respondent.

SECOND AMENDED INITIAL BRIEF

CASES, STATUTES AND OTHER AUTHORITIES CITED

Appellant includes Copies of the Cases, Statutes and Other Authorities cited (other than the Transcript), highlighting Pages cited and Language cited as follows.

CASES

Edward Przybyl vs. Edgefield County Assessor

Where Cited: 34,37

STATUTES

South Carolina Article 25 of the South Carolina Real Property Valuation Act

Where Cited: 7,12,15,43

South Carolina Law SECTION 16-9-10

South Carolina Code of Laws
Unannotated

Title 16 - Crimes and Offenses

CHAPTER 9

Offenses Against Public Justice

ARTICLE 1

Perjury

SECTION 16-9-10. Perjury and subornation of perjury.

(A)(1) It is unlawful for a person to wilfully give false, misleading, or incomplete testimony under oath in any court of record, judicial, administrative, or regulatory proceeding in this State.

(2) It is unlawful for a person to wilfully give false, misleading, or incomplete information on a document, record, report, or form required by the laws of this State.

(B)(1) A person who violates the provisions of subsection (A)(1) is guilty of a felony and, upon conviction, must be fined in the discretion of the court or imprisoned not more than five years, or both.

(2) A person who violates the provisions of subsection (A)(2) is guilty of a misdemeanor and, upon conviction, must be imprisoned not more than six months or fined not less than one hundred dollars, or both.

(C) A person may be convicted under this section if he induces, procures, or persuades another person to commit perjury or if he commits perjury by his own act, consent, or agreement.

HISTORY: 1962 Code Section 16-201; 1952 Code Section 16-201; 1942 Code Section 1397; 1932 Code Section 1397; Cr. C. '22 Section 332; Cr. C. '12 Section 340; Cr. C. '02 Section 253; G. S. 2531; R. S. 217; 1712 (2) 487; 1993 Act No. 184, Section 89.

SECTION 16-9-20. Subornation of perjury in civil actions.

(A) It is unlawful for a person to:

(1) wilfully induce, procure, or persuade another person by any means to commit perjury in initiating a civil action or proceeding; or

(2) wilfully induce, procure, or persuade another person to give false, misleading, or incomplete testimony while under oath in a civil action or proceeding.

(B) A person who violates the provision of this section is guilty of a misdemeanor and, upon conviction, must be imprisoned not more than six months and fined not less than two hundred dollars.

HISTORY: 1962 Code Section 16-202; 1952 Code Section 16-202; 1942 Code Section 1398; 1932 Code Section 1398; Cr. C. '22 Section 333; Cr. C. '12 Section 341; Cr. C. '02 Section 254; G. S. 2532; R. S. 218; 1712 (2) 487; 1993 Act No. 184, Section 90.

SECTION 16-9-30. False swearing before persons authorized to administer oaths.

It is unlawful for a person to wilfully and knowingly swear falsely in taking any oath required by law that is administered by a person directed or permitted by law to administer such oath.

A person who violates the provisions of this section is guilty of a felony and, upon conviction, must be fined in the discretion of the court or imprisoned not more than five years, or both.

HISTORY: 1962 Code Section 16-203; 1952 Code Section 16-203; 1942 Code Section 1400; 1932 Code Section 1400; Cr. C. '22 Section 335; Cr. C. '12 Section 343; Cr. C. '02 Section 256; G. S. 2534; R. S. 220; 1833 (2) 485; 1993 Act No. 184, Section 166.

SECTION 16-9-50. Disposition of fines.

The one moiety of the fines imposed by this article shall be for the State and the other moiety to such person as shall be grieved, hindered or molested by reason of the offense or offenses before mentioned that will sue for the same by action in any court of competent jurisdiction.

HISTORY: 1962 Code Section 16-205; 1952 Code Section 16-205; 1942 Code Section 1399; 1932 Code Section 1399; Cr. C. '22 Section 334; Cr. C. '12 Section 342; Cr. C. '02 Section 255; G. S. 2533; R. S. 219; 1712 (2) 488.

ARTICLE 3

Bribery, Corruption of Jurors and the Like

SECTION 16-9-210. Giving or offering bribes to officers.

Whoever corruptly gives, offers or promises to any executive, legislative or judicial officer, after his election or appointment, either before or after he is qualified or has taken his seat, any gift or gratuity whatever, with intent to influence his act, vote, opinion, decision or judgment on any matter, question, cause or proceeding which may be pending or may by law come or be brought before him in his official capacity, shall be punished by imprisonment in the State Penitentiary at hard labor not exceeding five years or by a fine not exceeding three thousand dollars and imprisonment in jail not exceeding one year.

HISTORY: 1962 Code Section 16-211; 1952 Code Section 16-211; 1942 Code Section 1402; 1932 Code Section 1402; Cr. C. '22 Section 337; Cr. C. '12 Section 348; Cr. C. '02 Section 261; G. S. 2536; R. S. 225; 1869 (14) 308.

SECTION 16-9-220. Acceptance of bribes by officers.

Every executive, legislative or judicial officer who corruptly accepts a gift or gratuity or a promise to make a gift or to do an act beneficial to such an officer under an agreement or with an understanding that his vote, opinion or judgment shall be given in any particular manner or on any particular side of any question, cause or proceeding which is or may be by law brought before him in his official capacity or that, in such capacity, he shall make any particular nomination or appointment shall forfeit his office, be forever disqualified to hold any public office, trust or appointment under the laws of this State and be punished by imprisonment in the State Penitentiary at hard labor not exceeding ten years or by fine not exceeding five thousand dollars and imprisonment in jail not exceeding two years.

South Carolina Code of Laws
Unannotated

Title 31 - Housing and Redevelopment

CHAPTER 6

Tax Increment Financing for Redevelopment Projects

SECTION 31-6-10. Short title.

This chapter may be cited as the "Tax Increment Financing Law".

HISTORY: 1984 Act No. 452, Section 1.

SECTION 31-6-20. Declaration of legislative findings.

(A) The General Assembly finds that:

(1) Section 14 of Article X of the Constitution of South Carolina provides that the General Assembly may authorize by general law that indebtedness for the purpose of redevelopment within incorporated municipalities may be incurred and that the debt service of such indebtedness be provided from the added increments of tax revenues to result from the project.

(2) An increasing demand for public services must be provided from a limited tax base. Incentives must be provided for redevelopment in areas which are, or threaten to become, predominantly slum or blighted.

(3) There exist in many municipalities of this State blighted and conservation areas; the conservation areas are rapidly deteriorating and declining and may soon become blighted areas if their decline is not checked; the stable economic and physical development of the blighted areas and conservation areas is endangered by the presence of blighting factors as manifested by progressive and advanced deterioration of structures, by the overuse of housing and other facilities, by a lack of physical maintenance of existing structures, by obsolete and inadequate community facilities, and a lack of sound community planning, by obsolete platting, diversity of ownership, excessive tax and special assessment delinquencies, or by a combination of these factors; that as a result of the existence of blighted areas and areas requiring conservation, there is an excessive and disproportionate expenditure of public funds, inadequate public and private investment, unmarketability of property, growth in delinquencies and crime, and substandard housing conditions and zoning law violations in such areas together with an abnormal exodus of families and businesses so that the decline of these areas impairs the value of private investments and threatens the sound growth and the tax base of taxing districts in such areas, and threatens the health, safety, morals, and welfare of the public.

(4) In order to promote and protect the health, safety, morals, and welfare of the public, blighted conditions need to be eradicated and conservation measures instituted and redevelopment of such areas undertaken; to remove and alleviate adverse conditions it is necessary to encourage private investment and restore and enhance the tax base of the taxing districts in such areas by the redevelopment of project areas. The eradication of blighted areas and treatment and improvement of areas by redevelopment projects is declared to be essential to the public interest.

(4.5) There exists in or contiguous to many municipalities in the State large tracts of land which served the people of this State and its economy when originally developed and maintained over the generations as agricultural property, contributing food, fiber, timber, and pulpwood, and which now, in an evolving economy and amidst a much smaller, yet vastly more efficient agricultural economy, are in need of redevelopment to provide multiple uses utilizing the redevelopment tools provided in this chapter.

(5) The use of incremental tax revenues derived from the tax rates of various taxing districts in redevelopment project areas for the payment of redevelopment project costs is of benefit to the taxing districts because taxing districts located in redevelopment project areas would not derive the benefits of an increased assessment base without the benefits of tax increment financing, all surplus tax revenues are turned over to the taxing districts in redevelopment project areas, and all taxing districts benefit from the removal of blighted conditions, the eradication of conditions requiring conservation measures, and the redevelopment of agricultural areas.

(B) The General Assembly intends to implement the authorization granted in Article X, Section 14, of the Constitution of this State. The authorization in this chapter provides for this State an essential method for financing redevelopment. The governing bodies of the incorporated municipalities are vested with all powers consistent with the Constitution necessary, useful, and desirable to enable them to accomplish redevelopment in areas which are or threaten to become blighted and to sufficiently meet all constitutional requirements pertaining to incurring indebtedness for the purpose of redevelopment and funding the debt service of such indebtedness from the added increment of tax revenues to result from such redevelopment as provided in subsection (10) of Section 14 of Article X of the Constitution of this State. The indebtedness incurred pursuant to subsection (10) of Section 14 of Article X of the Constitution is exempt from all debt limitations imposed by Article X. The powers granted in this chapter must be in all respects exercised for the benefit of the inhabitants of the State, for the increase of its commerce, and for the promotion of its welfare and prosperity.

(C) All action taken by any municipality in carrying out the purposes of this chapter will perform essential governmental functions.

(D) Pursuant to the authorization granted in Article VIII, Section 13, of the Constitution of this State, if a redevelopment project area is located in more than one municipality, the powers granted herein may be exercised jointly.

HISTORY: 1984 Act No. 452, Section 1; 2005 Act No. 109, Sections 9.A, 9.B.

Editor's Note

2012 Act No. 267, Section 1, provides as follows:

"The General Assembly finds and determines that the legislative findings contained in Section 31-6-20 of the 1976 Code remain true and correct as of the effective date of this act. The General Assembly further finds and determines that it would further the purposes of the Tax Increment Financing Law, Sections 31-6-10, et seq. of the 1976 Code, and would be in the public interest, to explicitly confirm the ability of municipalities and one or more taxing districts to provide by intergovernmental agreement for partial or modified participation in a redevelopment project. The General Assembly further finds that such intergovernmental agreements are consistent with and permissible under existing law, and accordingly the purpose of this act is to explicitly confirm the validity and enforceability of such intergovernmental agreements, whether entered into prior or subsequent to the effective date of this act. This act may not be construed to create a negative implication that any such intergovernmental agreement entered into prior to the effective date of this act is not valid or enforceable."

SECTION 31-6-30. Definitions.

Unless the context clearly indicates otherwise:

(1) "Blighted area" means any improved or vacant area within the boundaries of a redevelopment project area located within the territorial limits of the municipality where:

(a) if improved, industrial, commercial, and residential buildings or improvements, because of a combination of five or more of the following factors: age; dilapidation; obsolescence; deterioration; illegal use of individual structures; presence of structures below minimum code standards; excessive vacancies; overcrowding of structures and community facilities; lack of necessary transportation infrastructure; presence of or potential environmental hazards; lack of water or wastewater services; inadequate electric, natural gas or other energy services; lack of modern communications infrastructure; lack of ventilation, light, sanitary or storm drainage facilities; inadequate

COLUMBIA POLICE DEPARTMENT SUMMARY INCIDENT REPORT

REPORT NUMBER: 160070189

INCIDENT INFORMATION

INCIDENT CODE	INCIDENT TYPE	INITIAL / SUPP	DATE/TIME STARTED	DATE/TIME ENDED	DATE/TIME REPORTED
90Z	Information Report	X /	05/26/2015 10:10 AM	05/26/2015 02:25 PM	02/20/2016 08:10 AM

REPORT FILED FROM	TRACKING NUMBER	LOCATION OF OCCURRENCE	APPROVED BY:
***	T16000354	1205 Pendleton Street, , Columbia, SC	21268/Melanie Smith

LOCATION TYPE	THEFT TYPE	METHOD OF ENTRY	METHOD OF EXIT	PT OF ENTRY	PT OF EXIT	ENTRY LOC

PERSON LISTINGS

	TYPE	LAST NAME	FIRST NAME	MIDDLE NAME	DOB	RACE	SEX	DRIVER LIC NO	LIC ST
1	COMPL	Gries	Brett		***	***	*		

SSN	ETHNICITY	RESIDENT	EYE COLOR	HAIR COLOR	AGE	HEIGHT	WEIGHT	CELL PHONE
	***	***	***	***	67	601	185	***

EMAIL	RESIDENCE ADDRESS	HOME PHONE
brettgries@aol.com	***	
EMPLOYER NAME	BUSINESS ADDRESS	WORK PHONE
	***	

NARRATIVE

On February 19, 2016 at approximately 02:30PM, Brett Gries met with Investigator Pugh, to discuss possible Felony Perjury charges against Mr. Mark Sapp, Staff Assessor for Aiken County. The evidence provided included EXHIBIT F: South Carolina Law, Section 16-9-10, MR. SAPP APPRAISAL: Including Cover Letter dated January 14, 2015, with the key document being Document #9, which picture was dated 02.06.2014, EXHIBIT D: With Comparable #4 address of 3042 Farmer Road, EXHIBIT B-4:Property Card for 3042 Farmer Road, showing the pool was assessed to the property at 12.31.2014, 2015 PROPERTY CARD: Property Card for 3042 Farmer Road, showing the pool was assessed to the property at 12.31.2014, EXHIBIT J-4: Picture of pool at 3042 Farmer Road, taken January 13, 2016, TRANSCRIPT: Pages 152 and 153, where Mr. Sapp stated that "when I looked at the property for the date of sale, which was 2013, there was no pool attached to the property.", EXHIBIT Q: Case of Pryzbyl vs. Edgefield County Assessor, which Case cites on page 3, provide the motive for Mr. Sapp to lie in front of Judge Lenski.

While the evidence met the requirements of the law for Felony Perjury, Investigator Pugh declined to pursue charges, as Mr. Sapp could simply state that he did not do his job, and the charges would not stick.

Real estate appraisal

From Wikipedia, the free encyclopedia

Real estate appraisal, **property valuation** or **land valuation** is the process of developing an opinion of value for real property (usually market value). Real estate transactions often require appraisals because they occur infrequently and every property is unique (especially their location, a key factor in valuation), unlike corporate stocks, which are traded daily and are identical (thus a centralized Walrasian auction like a stock exchange is unrealistic). Appraisal reports form the basis for mortgage loans, settling estates and divorces, taxation, and so on. Sometimes an appraisal report is used to establish a sale price for a property.

Most, but not all, countries require appraisers to be Licensed or Certified. Appraisers are often known as "property valuers" or "land valuers"; in British English they are "valuation surveyors". If the appraiser's opinion is based on market value, then it must also be based on the highest and best use of the real property. In the United States, mortgage valuations of improved residential properties are generally reported on a standardized form like the Uniform Residential Appraisal Report.[1] Appraisals of more commercial properties (e.g., income-producing, raw land) are often reported in narrative format and competed by a Certified General Appraiser.

Contents

Types of Value

There are several types and definitions of value sought by a real estate appraisal. Some of the most common are:

- **Market value** – The price at which an asset would trade in a competitive Walrasian auction setting. Market value is usually interchangeable with *open market value* or *fair value*. International Valuation Standards (IVS) define:

  > **Market value** – the estimated amount for which an asset or liability should exchange on the *valuation date* between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.[2]

- **Value-in-use**, or **use value**[3] – The net present value (NPV)[4] of a cash flow that an asset generates for a specific owner under a specific use. Value-in-use is the value to one particular user, and may be above or below the market value of a property.
- **Investment value** – is the value to one particular investor, and may or may not be higher than the market value of a property. Differences between the *investment value* of an asset and its *market value* provide the motivation for buyers or sellers to enter the marketplace. International Valuation Standards (IVS) define:

  > **Investment value** – the value of an asset to the owner or a prospective owner for individual investment or operational objectives.[2]

- **Insurable value** – is the value of real property covered by an insurance policy. Generally it does not include the site value.
- **Liquidation value** – may be analyzed as either a **forced liquidation** or an **orderly liquidation** and is a commonly sought standard of value in bankruptcy proceedings. It assumes a seller who is compelled to sell after an exposure period which is less than the market-normal time-frame.

Price vs Value

There can be differences between what the property is really worth (market value) and what it cost to buy it (price). A price paid might not represent that property's market value. Sometimes, special considerations may have been present, such as a special relationship between the buyer and the seller where one party had control or significant influence over the other party. In other cases, the transaction may have been just one of several properties sold or traded between two parties. In such cases, the price paid for any particular piece is not its market "value" (with the idea usually being, though, that all the pieces and prices add up to market value of all the parts) but rather its market "price".

At other times, a buyer may willingly pay a premium price, above the generally accepted market value, if his subjective valuation of the property (its *investment value* for him) was higher than the market value. One specific example of this is an owner of a neighboring property who, by combining his own property with the subject property, could obtain economies-of-scale. Similar situations sometimes happen in corporate finance. For example, this can occur when a merger or acquisition happens at a price which is higher than the value represented by the price of the underlying stock. The usual explanation for these types of mergers and acquisitions is that "the sum is greater than its parts", since full ownership of a company provides full control of it. This is something that purchasers will sometimes pay a high price for. This situation can happen in real estate purchases too.

But the most common reason for value differing from price is that either the buyer or the seller is uninformed as to what a property's market value is but nevertheless agrees on a contract at a certain price which is either too expensive or too cheap. This is unfortunate for one of the two parties. It is the obligation of a real property appraiser to estimate the true *market value* of a property and not its *market price.*

Market Value Definitions in the United States

In the United States, appraisals are for a certain type of value (e.g., foreclosure value, fair market value, distressed sale value, investment value). The most commonly used definition of value is Market Value. While Uniform Standards of Professional Appraisal Practice (USPAP) does not define Market Value, it provides general guidance for how Market Value should be defined:

A type of value, stated as an opinion, that presumes the transfer of a property (i.e., a right of ownership or a bundle of such rights), as of a certain date, under specific conditions set forth in the definition of the term identified by the appraiser as applicable in an appraisal.

Thus, the definition of value used in an appraisal or Current Market Analysis (CMA) analysis and report is a set of assumptions about the market in which the subject property may transact. It affects the choice of comparable data for use in the analysis. It can also affect the method used to value the property. For example, tree value can contribute up to 27% of property value.[5][6]

Three Approaches to Value

There are three traditional groups of methodologies for determining value. These are usually referred to as the "three approaches to value" which are generally independent of each other:

- The sales comparison approach (comparing a property's characteristics with those of comparable properties that have recently sold in similar transactions).
- The cost approach (the buyer will not pay more for a property than it would cost to build an equivalent).
- The income approach (similar to the methods used for financial valuation, securities analysis or bond pricing).

However, the recent trend of the business tends to be toward the use of a scientific methodology of appraisal which relies on the foundation of quantitative-data,[7] risk, and geographical based approaches.[8][9] Pagourtzi *et al.* have provided a review on the methods used in the industry by comparison between conventional approaches and advanced ones.[10]

As mentioned before, an appraiser can generally choose from three approaches to determine value. One or two of these approaches will usually be most applicable, with the other approach or approaches usually being less useful. The appraiser has to think about the "scope of work", the type of value, the property itself, and the quality and quantity of data available for each approach. No overarching statement can be made that one approach or another is always better than one of the other approaches.

The appraiser has to think about the way that most buyers usually buy a given type of property. What appraisal method do most buyers use for the type of property being valued? This generally guides the appraiser's thinking on the best valuation method, in conjunction with the available data. For instance, appraisals of properties that are typically purchased by investors (e.g., skyscrapers, office buildings) may give greater weight to the Income Approach. Buyers interested in purchasing single family residential property would rather compare price, in this case the Sales Comparison Approach (market analysis approach) would be more applicable. The third and final approach to value is the Cost Approach to value. The Cost Approach to value is most useful in determining insurable value, and cost to construct a new structure or building.

For example, single apartment buildings of a given quality tend to sell at a particular price per apartment. In many of those cases, the sales comparison approach may be more applicable. On the other hand, a multiple-building apartment complex would usually be valued by the income approach, as that would follow how most buyers would value it. As another example, single-family houses are most commonly valued with greatest weighting to the sales comparison approach. However, if a single-family dwelling is in a neighborhood where all or most of the dwellings are rental units, then some variant of the income approach may be more useful. So the choice of valuation method can change depending upon the circumstances, even if the property being valued does not change much.

The Sales Comparison Approach

The sales comparison approach is based primarily on the principle of substitution. This approach assumes a prudent (or rational) individual will pay no more for a property than it would cost to purchase a comparable substitute property. The approach recognizes that a typical buyer will compare asking prices and seek to purchase the property that meets his or her wants and needs for the lowest cost. In developing the sales comparison approach, the appraiser attempts to interpret and measure the actions of parties involved in the marketplace, including buyers, sellers, and investors.

Data collection methods and valuation process

Data is collected on recent sales of properties similar to the subject being valued, called "comparables". Only SOLD properties may be used in an appraisal and determination of a property's value, as they represent amounts actually paid or agreed upon for properties. Sources of comparable data include real estate publications, public records, buyers, sellers, real estate brokers and/or agents, appraisers, and so on. Important details of each comparable sale are described in the appraisal report. Since comparable sales are not identical to the subject property, adjustments may be made for date of sale, location, style, amenities, square footage, site size, etc. The main idea is to simulate the price that would have been paid if each comparable sale were identical to the subject property. If the comparable is superior to the subject in a factor or aspect, then a downward adjustment is needed for that factor. Likewise, if the comparable is inferior to the subject in an aspect, then an upward adjustment for that aspect is needed. The adjustment is somewhat subjective and relies on the appraiser's training and experience. From the analysis of the group of adjusted sales prices of the comparable sales, the appraiser selects an indicator of value that is representative of the subject property. It is possible for various appraisers to choose different indicator of value which ultimately will provide different property value.

Steps in the sales comparison approach

1. Research the market to obtain information pertaining to sales, and pending sales that are similar to the subject property
2. Investigate the market data to determine whether they are factually correct and accurate
3. Determine relevant units of comparison (e.g., sales price per square foot), and develop a comparative analysis for each
4. Compare the subject and comparable sales according to the elements of comparison and adjust as appropriate
5. Reconcile the multiple value indications that result from the adjustment (upward or downward) of the comparable sales into a single value indication

The Cost Approach

The **cost approach** was once called the summation approach. The theory is that the value of a property can be estimated by summing the land value and the depreciated value of any improvements. The value of the improvements is often referred to by the abbreviation RCNLD (for "reproduction/replacement cost new less depreciation"). Reproduction refers to reproducing an exact replica; replacement cost refers to the cost of building a house or other improvement which has the same utility, but using modern design, workmanship and materials. In practice, appraisers almost always use replacement cost and then deduct a factor for any functional dis-utility associated with the age of the subject property. An exception to the general rule of using the replacement cost, is for some insurance value appraisals. In those cases, reproduction of the exact asset after a destructive event like a fire is the goal.

In most instances when the cost approach is involved, the overall methodology is a hybrid of the cost and sales comparison approaches (representing both the suppliers' costs and the prices that customers are seeking). For example, the replacement cost to construct a building can be determined by adding the labor, material, and other costs. On the other hand, land values and depreciation must be derived from an analysis of comparable sales data.

The cost approach is considered most reliable when used on newer structures, but the method tends to become less reliable for older properties. The cost approach is often the only reliable approach when dealing with special use properties (e.g., public assembly, marinas).

The Income Approach

The income capitalization Approach (often referred to simply as the "income approach") is used to value commercial and investment properties. Because it is intended to directly reflect or model the expectations and behaviors of typical market participants, this approach is generally considered the most applicable valuation technique for income-producing properties, where sufficient market data exists.

In a commercial income-producing property this approach capitalizes an income stream into a value indication. This can be done using revenue multipliers or capitalization rates applied to a Net Operating Income (NOI). Usually, an NOI has been stabilized so as not to place too much weight on a very recent event. An example of this is an unleased building which, technically, has no NOI. A stabilized NOI would assume that the building is leased at a normal rate, and to usual occupancy levels. The Net Operating Income (NOI) is gross potential income (GPI), less vacancy and collection loss (= Effective Gross Income) less operating expenses (but excluding debt service, income taxes, and/or depreciation charges applied by accountants).

Alternatively, multiple years of net operating income can be valued by a discounted cash flow analysis (DCF) model. The DCF model is widely used to value larger and more expensive income-producing properties, such as large office towers or major shopping centres. This technique applies market-supported yields (or discount rates) to projected future cash flows (such as annual income figures and typically a lump reversion from the eventual sale of the property) to arrive at a present value indication.

When homes are purchased for personal use the buyer can validate the asking price by using the income approach in the opposite direction. An expected rate of return can be estimated by comparing net expected costs to the asking price. This return can be compared to the home owner's other investing opportunities.[11]

UK Valuation Methods

In the United Kingdom, valuation methodology has traditionally been classified into five methods:[12]

1. Comparative method. Used for most types of property where there is good evidence of previous sales. This is analogous to the sales comparison approach outlined above.

2. Investment method. Used for most commercial (and residential) property that is producing future cash flows through the letting of the property. If the current estimated rental value (ERV) and the passing income are known, as well as the market-determined equivalent yield, then the property value can be determined by means of a simple model. Note that this method is really a comparison method, since the main variables are determined in the market. In standard U.S. practice, however, the closely related capitalizing of NOI is confounded with the DCF method under the general classification of the income capitalization approach (see above).

3. Residual method. Used for properties ripe for development or redevelopment or for bare land only.

4. Profit method. Used for trading properties where evidence of rates is slight, such as hotels, restaurants and old-age homes. A three-year average of operating income (derived from the profit and loss or income statement) is capitalized using an appropriate yield. Note that since the variables used are inherent to the property and are not market-derived, therefore unless appropriate adjustments are made, the resulting value will be value-in-use or investment value, not market value.

5. Cost method. Used for land and buildings of special character for which profit figures cannot be obtained or land and buildings for which there is no market because of their public service or heritage characteristics. Both the residual method and the cost method would be grouped in the United States under the cost approach (see above).

Under the current RICS Valuation Standards, the following bases of value are recognized:

- Market value (see PS 3.2);
- Market rent (see PS 3.3);
- Worth (investment value) (see PS 3.4); and
- Fair value (see PS 3.5)

Further considerations

Scope of Work

While the Uniform Standards of Professional Appraisal Practice (USPAP) (http://www.uspap.org/) has always required appraisers to identify the scope of work needed to produce credible results, it became clear in recent years that appraisers did not fully understand the process for developing this adequately. In formulating the scope of work for a credible appraisal, the concept of a *limited* versus *complete* appraisal and the use of the Departure Rule caused confusion to clients, appraisers, and appraisal reviewers. In order to deal with this, USPAP was updated in 2006 with what came to be known as the Scope of Work Project. Following this, USPAP eliminated both the Departure Rule and the concept of a limited appraisal, and a new Scope of Work rule was created. In this, appraisers were to identify six key parts of the appraisal problem at the beginning of each assignment:

- Client and other intended users
- Intended use of the appraisal and appraisal report
- Definition of value (e.g., market, foreclosure, investment)
- Any hypothetical conditions or extraordinary assumptions
- Effective date of the appraisal analysis
- Salient features of the subject property

Based on these factors, the appraiser must identify the scope of work needed, including the methodologies to be used, the extent of investigation, and the applicable approaches to value. Currently, minimum standards for scope of work are:

- Expectations of the client and other users
- The actions of the appraiser's peers who carry out similar assignments

The scope of work is the first step in any appraisal process. Without a strictly defined scope of work, an appraisal's conclusions may not be viable. By defining the scope of work, an appraiser can properly develop a value for a given property for the intended user, and for the intended use of the appraisal. The whole idea of "scope of work" is to provide clear expectations and guidelines for all parties as to what the appraisal report does, and does not, cover; and how much work has gone into it.

Types of Ownership Interest

The type of real estate "interest" that is being valued, must also be known and stated in the report. Usually, for most sales, or mortgage financings, the fee simple interest is being valued. The fee simple interest is the most complete bundle of rights available. However, in many situations, and in many societies which do not follow English Common Law or the Napoleonic Code, some other interest may be more common. While there are many different possible interests in real estate, the three most common are:

- **Fee simple value** (known in the UK as **freehold**) – The most complete ownership in real estate, subject in common law countries to the powers reserved to the state (taxation, escheat, eminent domain, and police power)
- **Leased fee value** – This is simply the fee simple interest encumbered by a lease. If the lease is at market rent, then the leased fee value and the fee simple value are equal. However, if the tenant pays more or less than market, the residual owned by the leased fee holder, plus the market value of the tenancy, may be more or less than the fee simple value.
- **Leasehold value** – The interest held by a tenant. If the tenant pays market rent, then the leasehold has no market value. However, if the tenant pays less than market, the difference between the present value of what is paid and the present value of market rents would be a positive leasehold value. For example, a major chain retailer may be able to negotiate a below-market lease to serve as the anchor tenant for a shopping center. This leasehold value may be transferable to another anchor tenant, and if so the retail tenant has a positive interest in the real estate.

Home inspection

If a home inspection is performed prior to the appraisal and that report is provided to the appraiser, a more useful appraisal can result. This is because the appraiser, who is not expert home inspector, will be told if there are substantial construction defects or major repairs required. This information can cause the appraiser to arrive at a different, probably lower, opinion of value. This information may be particularly helpful if one or both of the parties requesting the appraisal may end up in possession of the property. This is sometimes the case with property in a divorce settlement or a legal judgment.[13]

Real Estate Appraisal and Data Entry

Appraisers provide all the data needed to input in appraisal reports. A data entry team does the rest; it searches, consolidates and types the data into reports, such as subject data and comparable grid prior sales history. Most data entry organizations work 24 hours a day, 7 days a week, 365 days a year. The appraiser sends empty reports, and the data entry team works all day and night, even while the appraiser is sleeping. This process increases the appraiser's efficiency, and frees up his/her time.[14]

Mass appraisal and automated valuation models

Automated valuation models (AVMs) are growing in acceptance. These rely on statistical models such as multiple regression analysis or geographic information systems (GIS).[15] While AVMs can be quite accurate, particularly when used in a very homogeneous area, there is also evidence that AVMs are not accurate in other instances such as when they are used in rural areas, or when the appraised property does not conform well to the neighborhood.

Governing authorities and professional organizations

International

The various U.S. appraisal groups and international professional appraisal organizations have started collaborating in recent years towards the development of International Valuation Standards. This will facilitate global real estate appraisal standards, a much-needed adjunct to real estate investment portfolios which cross national boundaries. Some appraisal groups are already international organizations and thus, to some extent, already incorporate some level of global standards.

The International Valuation Standards Council (IVSC) is a non-governmental organization (NGO) member of the United Nations with membership that encompasses all the major national valuation standard-setters and professional associations from 41 different countries (including the Appraisal Institute, the American Society of Appraisers, the RICS, the [Practising Valuers Association of India] and the Appraisal Institute of Canada). IVSC publishes the *International Valuation Standards* (IVS), now in its 8th edition.

Germany

In Germany, real estate appraisal is known as real estate valuation (*Immobilienbewertung*). Real estate appraisers (*Immobilienbewerter* or *Gutachter*) can qualify to become a *Öffentlich bestellter und vereidigter Sachverständiger* (officially appointed and sworn expert). However, this formerly very important title has lost a lot of its importance over the past years, but still is of some value in court procedures. The title is not generally required for appraisals.

Governing Authorities

Real estate appraisal in Germany is partly codified by law. The federal Baugesetzbuch (abbr. BauGB, "German statutory code on building and construction"') contains guidelines on governing authorities, defines the term market value and refers to continuative rules (chapter 3, articles 192 ff.). Each municipality (city or administrative district) must form a *Gutachterausschuss* (appraisal committee), consisting of a chairman and honorary members.[16] The committee gathers information on all real estate deals (it is mandatory to send a copy of each notarial purchase contract to the *Gutachterausschuss*) and includes it in the *Kaufpreissammlung* (purchase price database). Most committees publish an official real estate market report every two years, in which besides other information on comparables the land value is determined. The committees also perform appraisals on behalf of public authorities.

Federal regulations

The BauGB defines the *Verkehrswert* or *Marktwert* (market value, both terms with identical meaning) as follows: "The market value is determined by the price that can be realized at the date of valuation, in an arm's length transaction, with due regard to the legal situation and the effective characteristics, the nature and lay of the premises or any other subject of the valuation"[17] (non-official translation). The intention, as in other countries, is to include all objective influences and to exclude all influences resulting from the subjective circumstances of the involved parties.

This federal law is supported by the *Wertermittlungsverordnung* (abbr. WertV, "regulation on the determination of value").[18] The WertV defines the codified valuation approaches and the general valuation technique. German codified valuation approaches (other approaches such as DCF or residual approach are also permitted, but not codified) are the:

- *Vergleichswertverfahren* (sales comparison approach) – used where good evidence of previous sales is available and for owner-occupied assets, especially condominiums and single-family houses;
- *Ertragswertverfahren* (German income approach) – standard procedure for property that produces future cash flows from the letting of the property;
- *Sachwertverfahren* (German cost approach) – used for specialised property where none of the above approaches applies, e. g. public buildings.

WertV's general regulations are further supported by the *Wertermittlungsrichtlinie* (abbr. WertR, "directive on the determination of value").[19] The WertR provides templates for calculations, tables (e.g., economic depreciation) and guidelines for the consideration of different influences. WertV and WertR are not binding for appraisals for nonofficial use, nonetheless they should be regarded as best practice or Generally Accepted (German) Valuation Practice (GAVP).

Comments on German GAVP

In most regards Generally Accepted (German) Valuation Principles is consistent with international practice. The investment market weighs the income approach most heavily. However, there are some important differences:

- Land and improvements are treated separately. German GAVP assumes that the land can be used indefinitely, but the buildings have a limited lifespan; This coincides with the balancing of the assets. The value of the land is determined by the sales comparison approach in both the income and cost approaches, using the data accumulated by the *Gutachterausschuss* which is then added to the building value.
- In order to account for the usage of the land, the net operating income is reduced by the *Liegenschaftszins* (interest paid to the land-owner by the owner of the building, i.e., ground rent). The *Liegenschaftszins* is the product of the land value and the *Liegenschaftszinssatz* (interest rate for land use). The *Liegenschaftszinssatz* is the equivalent of the yield—with some important differences—and is also determined by the *Gutachterausschuss*.
- Unlike the All Risks Yield (ARY) in UK practice, the *Liegenschaftszinssatz* (abbr. LZ) does not include an allowance for default (not to be confused with structural vacancy), therefore this needs

to be subtracted from gross operating income. As a result, the *Liegenschaftszinssatz* will usually be lower than the All Risks Yield.

- Based on the assumption that the economic life of the improvements is limited, the yield and remaining economic life determine the building value from the net operating income.
- Contracts in Germany generally prescribe that the landlord bears a higher portion of maintenance and operating costs than their counterparts in the United States and UK.

Criticism

Mathematically the distinction between land and improvements in the income approach will have no impact on the overall value when the remaining economic life is more than thirty years. For this reason it has become quite common to use the *Vereinfachtes Ertragswertverfahren* (simplified income approach), omitting the land value and the *Liegenschaftszins*. However, the separate treatment of land and buildings leads to more precise results for older buildings, especially for commercial buildings, which typically have a shorter economic life than residential buildings.

An advantage of the comparatively high degree of standardization practiced by professional appraisers, is the greater ability to check an appraisal for inconsistency, accuracy and transparency.

Professional Organizations

The Federal German Organisation of Appointed and Sworn Experts (*Bundesverband Deutscher Sachverständiger und Fachgutachter*, abbr. BDSF)[20] is the main professional organization encompassing the majority of licensed appraisers in Germany. In recent years, with the move towards a more global outlook in the valuation profession, the RICS has gained a foothold in Germany, somewhat at the expense of the BDSF. Another German Organisation of Appointed and Sworn Experts is the (Deutsche Sachverständigen Gesellschaft, *abbr. DESAG)*[21] *This organization also includes a large number of licensed appraisers in Germany.*

With special focus on hypothetical value, in 1996, German banks with real estate financing activities formed the *HypZert GmbH*, an association for the certification of real estate valuers.[22] A *HypZert* qualification is regarded as mandatory by many German banks.

Israel

In Israel, the real estate appraisal profession is regulated by the Council of Land Valuers, an organ of the Ministry of Justice; the largest professional organization, encompassing the majority of appraisers/land valuers is the Association of Land Valuers. Valuers must be registered with the Council, which is a statutory body set up by law, and which oversees the training and administers the national professional exams that are a prerequisite for attaining registration. In 2005 the Council set up a Valuation Standards Committee with the purpose of developing and promulgating standards that would reflect best practice; these have tended to follow a rules-based approach.

Historically, most valuations in Israel were statutory valuations (such as valuations performed for purposes of Betterment Tax, a tax administered on any gains accruing to the property by way of changes to the local planning) as well as valuations performed for purposes of bank lending. Since Israel implemented the International Financial Reporting Standards (IFRS) in 2008, the profession has been engaged in performing valuations for purposes of financial reporting.

United Kingdom

In the UK, real estate appraisal is known as *property valuation* and a real estate appraiser is a *land valuer* or *property valuer* (usually a qualified chartered surveyor who specializes in property valuation).[12] Property valuation in the UK is regulated by the Royal Institution of Chartered Surveyors (RICS), a professional body encompassing all of the building and property-related professions. The RICS professional guidelines for valuers are published in what is commonly known as the *Red Book*. The 2011 version was the *RICS Valuation Standards 7th Edition* (2 May 2011), superseding an edition published in 2007 with later amendments. The RICS Valuation Standards contains mandatory rules, best practice guidance and related commentary. Changes to the standards are approved by the RICS Valuation Professional Group Board, and the *Red Book* is updated accordingly on a regular basis. While based in the UK, RICS is a global organization and has become very active in the United States in recent years through its affiliation with the Counselors of Real Estate, a division of the National Association of Realtors.

United States

Appraisal practice in the United States is regulated by state. The Appraisal Foundation (TAF) is the primary standards body; its Appraisal Standards Board (ASB) promulgates and updates best practices as codified in the Uniform Standards of Professional Appraisal Practice (USPAP), while its Appraisal Qualifications Board (AQB) promulgates minimum standards for appraiser certification and licensing.

The federal government regulates appraisers indirectly because if the Appraisal Subcommittee (ASC) of the Federal Financial Institutions Examination Council (FFIEC) finds that a particular state's appraiser regulation and certification program is inadequate, then under federal regulations all appraisers in that state would no longer be eligible to conduct appraisals for federally chartered banks.[23] The ASC oversees the TAF. Banks make widespread use of mortgage loans and mortgage-backed securities, and would be unable to do so without appraisals.

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) demanded all the states to develop systems for licensing and certifying real estate appraisers.[24] To accomplish this, the Appraisal Subcommittee (ASC) was formed within the Federal Financial Institutions Examination Council (FFIEC), with representatives from the various Federal mortgage regulatory agencies.[25] Thus, currently all the real estate appraisers must be state-licensed and certified. But prior to the 1990s, there were no commonly accepted standards either for appraisal quality or for appraiser licensure. In the 1980s, an ad-hoc committee representing various appraisal professional organizations in the United States and Canada met to codify the best practices into what became known as the Uniform Standards of Professional Appraisal Practice (USPAP). The U.S. Savings and Loan Crisis resulted in increased federal regulation via the Financial Institutions Reform, Recovery and Enforcement Act of 1989, which required federal lending regulators to adopt appraisal standards. A nonprofit organization, The Appraisal

Foundation (TAF), was formed by the same organizations that had developed USPAP, and the copyright for USPAP was signed over to TAF. Federal oversight of TAF is provided by the Appraisal Subcommittee, made up of representatives of various federal lending regulators. TAF carries out its work through two boards: the Appraisal Standards Board promulgates and updates USPAP; the Appraisal Qualifications Board (AQB) promulgates minimum recommended standards for appraiser certification and licensure. During the 1990s, all of the states adopted USPAP as the governing standards within their states and developed licensure standards which met or exceeded the recommendations of TAF. Also, the various state and federal courts have adopted USPAP for real estate litigation and all of the federally lending regulators adopt USPAP for mortgage finance appraisal.[25]

Professional Organizations

In addition, there are professional appraisal organizations, organized as private nonprofit organizations that date to the Great Depression of the 1930s. One of the oldest in the United States is the American Society of Farm Managers and Rural Appraisers (ASFMRA), which was founded in 1929.[26] Others were founded as needed and opportunity arose in specialized fields, such as the Appraisal Institute (AI) and the American Society of Appraisers (ASA) founded in the 1930s, the International Right of Way Association and the National Association of Realtors which were founded after World War II. These organizations all existed to establish and enforce standards, but their influence waned with increasing government regulation. In March 2007, three of these organizations (ASFMRA, ASA, and AI) announced an agreement in principle to merge. NAIFA (National Association of Independent Fee Appraisers), a charter member of The Appraisal Foundation, helped to write Title XI, the Real Estate Appraisal Reform Amendments. It was founded in 1961.

One of the most recognized professional organizations of real estate appraisers in America is the Appraisal Institute (AI). It was formed from the merger of the American Institute of Real Estate Appraisers and the Society of Real Estate Appraisers. Founded along with others in the 1930s, the two organizations merged in the 1990s to form the AI. This group awards two professional designations: *SRA*, to residential appraisers, and *MAI*, to commercial appraisers. The Institute has enacted rigorous regulations regarding the use and display of these designations. For example, contrary to popular belief, "MAI" does *not* stand for "Member, Appraisal Institute". According to the institute, the letters "do not represent specific words", and an MAI may not use the words "Member, Appraisal Institute" *in lieu* of the MAI mark. The primary motive for this rule is to prevent trademark dilution.

The National Association of Appraisers (NAA) (http://www.naapraisers/.org) is the fastest growing appraiser organization in the United States and was formed with a purpose of uniting ALL those engaged in the appraisal profession for the purpose of exerting a beneficial influence upon the profession and to advocate appraiser interests. The NAA has established an advisory group consisting of leadership at the state organizations and coalitions called the Board of Governors where those states can help guide the NAA in acting in the best interest of all appraisers. The NAA also has a designated membership, MNAA (Member of the National Association of Appraisers, who is an individual who holds an appraisal license, certification or similar appraisal credential issued by a governmental agency; and who accepts the membership requirements and objectives of the National Association of Appraisers.

Other leading appraisal organizations include the National Association of Independent Fee Appraisers and the National Association of Master Appraisers, which were also founding sponsor-members of the Appraisal Foundation.[27] The Massachusetts Board of Real Estate Appraisers (MBREA), founded in 1934, is the only state appraisal association that has been named a sponsor of the Appraisal Foundation.[28] In recent years, the Royal Institution of Chartered Surveyors (RICS) has become highly regarded in the United States, and has formed a collaboration with the Counselors of Real Estate, a division of the National Association of Realtors. RICS, which is headquartered in London, operates on a global scale and awards the designations *MRICS* and *FRICS* to Members and Fellows of RICS. The Real Estate Counseling Group of America is a small group of top U.S. appraisers and real estate analysts who have collectively authored a disproportionately large body of appraisal methodology and, the National Association of Real Estate Appraisers (NAREA), founded in 1966, with the goal to elevate the professionalism and success of the Appraisal Industry.

The leading appraisal organization for personal property valuation is the American Society of Appraisers which is a sponsor member of the Appraisal Foundation and awards the ASA (Accredited Senior Appraiser) designation to candidates who complete five years of documented appraisal experience, pass a comprehensive exam along with required commercial and/or residential appraisal coursework, and submit two appraisal reports for review.

Russia

In Russia, on par with many other former Soviet Union economies, the profession emerged in the first half of 1990, and represented a clean break with the former practice of industry-specific pricing specialists and with activities of statutory price-setting authorities in the Soviet Union. Currently, property valuation, as it is called, is a specialism within general-purpose "valuation profession", which functions in a self-regulatory mode overseen by "self-regulated professional organizations" of valuers (SROs),i.e. public supervisory entities established under provisions of special legislation (which very loosely can be likened to trade unions). The principal among those is Russian Society of Appraisers, established in 1993 and presently exercising oversight over about half of the valuation profession membership. Among its 6000+ members a sizeable majority are real property valuers, rubbing shoulders with business and intangible assets appraisers. The latter categories of valuers are also allowed to value property, though valuation professionals tend to specialize. Valuers in Russia, including real property valuers, are individuals maintaining their SRO membership and bearing unlimited property liability for the result of their services, that is their professional status is modeled on the organization of public notaries. Regardless of the fact, over 80% of valuers tend to be employed by valuation or consulting companies, and thus do not enter practice as stand-alone individual entrepreneurs. High-end appraisal services are principally represented by valuation arms of the International "Big-four" consultancies in the country, but there also exist reputable national corporate valuation brands. Most of valuations in the country tend to be performed for statutory purposes envisaged by the Federal Valuation Law (latest amendment in 2013) and other related laws, such as the Joint Stock Companies Law. Such pieces of legislation provide for more than 20 so-called "mandatory cases of valuation", including valuations for privatization purposes, lending purposes, bankruptcy and liquidation etc. Valuations for corporate accounts used to be much more prominent before 2000, when the national accounting regulator ceased to incentivize the accounting fair value option. At present, the mass appraisal of property for taxation purposes is also starting to be outsourced by the Government to the institution of professional valuers. Adjudication of valuer-certified estimates of value in case of the onset of disputes is conducted through the Experts Councils of valuers' SROs. Official courts tend to concur with the resolutions of such

Councils. In some rare instances the imprimatur of SRO's Experts Councils is also required for a valuation done by a particular valuer to enter into effect. The technical details of practice of real estate valuers in Russia are aligned with the international pattern. Members of the Russian Society of Appraisers formerly were bound by the observance of the International Valuation Standards. There also exists a set of 11 general-purpose government-developed "Federal Valuation Standards" (FSOs 1,2,3 --are the general valuation standards fist adopted in 2007 (and revised 2015) and covering Terms of engagement and Valuation report content requirements, FSOs 7-11 are asset-specific standards adopted in 2015, while FSO 9 is currently the only purpose-specific standard in the set dealing with valuations of property for loan security purposes). In view of the international conformity drive in the latest round of FSO standards setting, general requirements im the new FSO standards are close to those in the International Valuation standards set, however they can be more specific on occasion and mandate compulsory disclosure of uncertainty in valuation reports using the interval/range format.

Hong Kong

The Hong Kong Institute of Surveyors (HKIS) regulates property surveyors in Hong Kong. Established in 1984, Institute is the only professional organisation representing the surveying profession in Hong Kong. The HKIS was statutorily incorporated by virtue of the Hong Kong Institute of Surveyors Ordinance in January 1990 (Cap. 1148). In July 1991, the Surveyors Registration Ordinance (Cap. 417) was passed to set up a Registration Board to administer the registration of surveyors. In May 2006, the number of members had reached 6,723. A general practice surveyor advises on the best use of the land, assesses the feasibility and viability of the proposed development project as well as the valuation, marketing, sale, leasing and management of completed developments. It also has a website to provide real-time propertys' value estimate across whole Hong Kong.

Australia

The Australian Property Institute (API) was formed in 1926 as the Commonwealth Institute of Valuers. The Institute has undergone several name changes over the last century as the array of services offered by its members expanded. It serves to regulate the profession of property valuers Sydney (http://www.valsnsw.com.au), Australia.

Today the API represents the interests of more than 8,600 property professionals throughout Australia. API members include residential, commercial and plant and machinery valuers, property advisers, property analysts, property fund and asset managers, property facility managers, property lawyers and property researchers and academics. The Institute's primary role is to set and maintain the highest standards of professional practice, education, ethics and professional conduct for its members and the broader property profession.[29]

New Zealand

Real estate valuation in New Zealand is regulated by the New Zealand Institute of Valuers ('NZIV') and the Valuers Registration Board of New Zealand ('VRB'), both of which are statutory bodies established under the Valuers Act 1948 (NZ). The NZIV remains the statutory professional body for valuers in New Zealand, with perpetual succession under the Act (which is under review as at 2015). The NZIV can make Rules as lower level legislation and has a Code of Ethics. The NZIV Rules were last changed in 2012 and remain current. The VRB has jurisdiction in relation to serious matters affecting the

registration of a valuer including discipline where a valuer has acted in such a way as to meet the threshold. The Valuers Act 1948 sets the threshold under s31 as matters where a valuer could be struck off the register of valuers. The NZIV has power for discipline for relatively more minor matters. The NZIV governs NZIV members and has power to discipline members and fine them up to $500, admonish members or terminate their membership. The designations "Registered Valuer" and "Public Valuer" are legally protected under the legislation, being reserved for Valuers Registered under the Act. The NZIV, under the Act, can admit non-valuer members (such as non-valuer land economists).

There are also voluntary professional bodies for real estate valuation such as the Royal Institute of Chartered Surveyors ('RICS') and the Property Institute of New Zealand ('PINZ'). Both of these bodies have a wider membership, beyond real estate valuers. PINZ has over 2,500 members in New Zealand and overseas (such as ex-pats in the UK, Asia and Australia). PINZ has a service level agreement with the NZIV, whereby PINZ contracts to perform tasks for the statutory professional body, NZIV. PINZ was formed in 2000 to act as the voice of the property professions. There have been 'political divisions' within the valuation profession in New Zealand, expressed at AGMs and through 'proxy wars' over the last 20 years or so. Many valuers are supportive of amalgamation of the NZIV functions under the multi-disciplinary voluntary body PINZ, whilst many others wish to retain a separate statutory professional body for valuers (the NZIV). There are various reasons in the debate and the governing legislation is under review and amendments or repeal is being considered. At present, the Act remains in force and the NZIV is legally a distinct body with statutory functions, powers and duties.

PINZ incorporated much of the membership of the NZIV, the Institute of Plant & Machinery Valuers (IPMV) and the Property & Land Economy Institute of New Zealand (PLEINZ). PINZ now represents the interests of valuers, property and facilities managers, property advisors and plant and machinery valuers. PINZ has developed into one of the largest professional bodies for standards, qualifications and ethics across all facets of the property profession within New Zealand. It works with government, industry and other professional associations, education stakeholders and the media to promote its standards and views.[30]

In New Zealand, the terms "valuation" and "valuer" usually relates to one who undertakes that professional role in terms of the Valuer Act 1948 requirements or the unregulated or voluntarily self-regulated (if members of PINZ) plant and machinery, marine or art valuers. Whereas, the term "appraisal" is usually related to an estimate by a real estate sales person or licensed agent under the Real Estate Agents Act 2008. The Real Estate Institute of New Zealand includes many valuer members, but the governing legislation for sales and agency (disposal of interests of land on behalf of others) does not extend to include provision for that role by valuers regardless of membership of NZIV, RICS or PINZ.

There is a key distinction between the role of a real estate agent and a valuer, as an agent may advocate for its principal's interests, whereas a valuer must impartially and independently provide opinion as to value. Lawyers, Conveyancers and Real Estate Agents are permitted to act in the sale of real estate under quite different legislation from that which governs valuers. The provision for the role in relation to Lawyers and Conveyancers is the Lawyers and Conveyancers 2006.

In 2011 to 2015, the number of Registered Valuers in New Zealand has generally between only around 900 to 950 each year. This is an ageing 'top heavy' professional with difficulty retaining new and young members due to pay, work stress and the recent advent of 'clearing houses' for banks to order valuations for mortgage purposes. The clearing houses have largely ended the long-standing local practice of members of the public seeking advice directly from a valuer. The use of electronic estimates based on

Rating Values (Local Government mass appraisal for levies) is also leading to a reduction in standard valuation work and is significantly affecting the viability of small valuation businesses. The profession is in the process of a wider corporate re-structuring of the valuation market due to these factors with various perceptions within profession as to the merits of the events of the last five years.

See also

- Auditing Standards Board
- Building inspection
- Climate Appraisal
- Conveyancing
- German income approach
- Home inspection
- Investment Rating for Real Estate
- Kriging
- List of real estate topics
- Verification and Validation
- American Measurement Standard
- Royal Institution of Chartered Surveyors

Further reading

- Antipov, Evgeny A.; Pokryshevskaya, Elena B. (2012). "Mass appraisal of residential apartments: An application of Random forest for valuation and a CART-based approach for model diagnostics". *Expert Systems with Applications* **39** (2): 1772–1778. doi:10.1016/j.eswa.2011.08.077.
- Barris, J. (2008) *An expert system for appraisal by the method of comparison.* PhD Thesis, UPC, Barcelona
- Barris, J., & Garcia-Almirall, P. (2011) *A density Function of the Appraisal Value*. European Real Estate Society 2011 – Eindhoven, The Netherlands, Best Paper on Real Estate Valuation
- Baum, A., Nunnigton, N., & Mackmin, D. (2011) *The Income Approach to Property Valuation* (6th Edition). Estates Gazette, London
- Brown, G., & Matysiak, G. (1999) *Real Estate Investment: A Capital Market Approach.* Financial Times, London
- Isaac, D., & O'Leary, J. (2012) *Property Valuation Principles* (2nd Edition), Palgrave MacMillan, London
- Kane, S., Linne, M. and Johnson, J. (2004) *Practical Applications in Appraisal Valuation Modeling.* Appraisal Institute, Chicago
- Hayward, R. (ed.) (2008) *Valuation: Principles into Practice* (6th edition). Estates Gazette, London
- Maliene, V. (2011). "Specialised property valuation: Multiple criteria decision analysis". *Journal of Retail & Leisure Property* **9** (5): 443–50. doi:10.1057/rlp.2011.7.

- Maliene, V., Deveikis, S., Kirsten, L. and Malys, N. (2010). "Commercial Leisure Property Valuation: A Comparison of the Case Studies in UK and Lithuania". *International Journal of Strategic Property Management* **14** (1): 35–48. doi:10.3846/ijspm.2010.04.
- Simons, Robert (2007) *When Bad Things Happen to Good Property* Environmental Law Institute, Washington, DC
- The Appraisal Foundation, *Uniform Standards of Professional Appraisal Practice*. Updated and published annually through the 2006 edition; henceforth, updated editions are to appear biannually.
- The Appraisal Institute, *The Appraisal of Real Estate* (13th Edition). An industry-recognized textbook.
- The Appraisal Services in Middle East and North Africa, *www.landsterling.com*. RICS certified Valuation services.
- Italian Property Valuation Standard - Codice delle Valutazioni Immobiliari, Third edition - English version (2006)

References

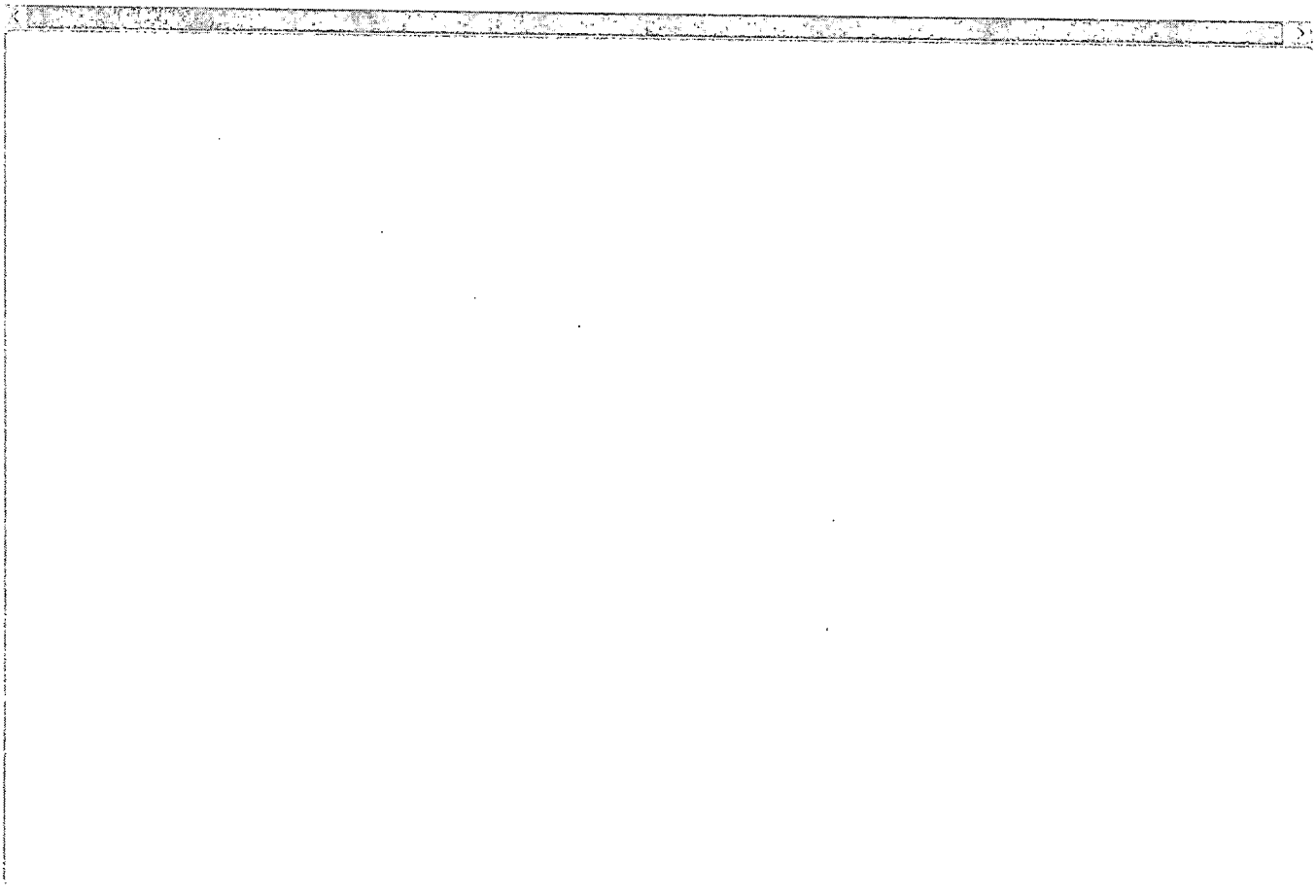
1. Uniform Residential Appraisal Report (Form 1004): PDF (https://www.efanniemae.com/sf/formsdocs/forms/pdf/sellingtrans/1004.pdf)
2. International Valuation Standards 2011
3. Joseph F. Schram, Jr. (January 2006). *Real Estate Appraisal*. Rockwell Publishing. pp. 36–. ISBN 978-1-887051-25-5. Retrieved 7 January 2012.
4. Finn Helles; Niels Strange; Lars Wichmann; Scandinavian Society of Forest Economics. Meeting (2003). *Recent accomplishments in applied forest economics research*. Springer. pp. 20–. ISBN 978-1-4020-1127-6. Retrieved 7 January 2012. Cite uses deprecated parameter | `coauthors=` (help)
5. "Protecting Existing Trees on Building Sites" p.4 published by the City of Raleigh, North Carolina, March 1989, Reprinted February 2000
6. "How Valuable Are Your Trees" (http://agris.fao.org/agris-search/search/display.do?f=1986/US/US86092.xml;US8600601) by Gary Moll, April, 1985, American Forests Magazine
7. Lins, Marcos Pereira Estellita; Novaes, Luiz Fernando de Lyra; Legey, Luiz Fernando Loureiro; et al. (2005). "Real Estate Appraisal: A Double Perspective Data Envelopment Analysis Approach". *Annals of Operations Research* (Springer) **138** (1): 79–96. doi:10.1007/s10479-005-2446-1.
8. Adair, Alastair; Norman Hutchison (2005). "The reporting of risk in real estate appraisal property risk scoring". *Journal of Property Investment & Finance* (Emerald Group Publishing) **23** (3): 254–268. doi:10.1108/14635780510599467.
9. Chica-Olmo, Jorge. "Prediction of Housing Location Price by a Multivariate Spatial Method: Cokriging". Retrieved 15 September 2008.
10. Pagourtzi, Elli; Assimakopoulos, Vassilis; Hatzichristos, Thomas; French, Nick; et al. (2003). "Real estate appraisal: a review of valuation methods". *Journal of Property Investment & Finance* (Emerald Group Publishing) **21** (4): 383–401. doi:10.1108/14635780310483656.
11. "Calculate the Return Before You Buy" (http://www.retailinvestor.org/realestate.html)
12. Maliene, V., Deveikis, S., Kirsten, L. and Malys, N. (2010). "Commercial Leisure Property Valuation: A Comparison of the Case Studies in UK and Lithuania". *International Journal of Strategic Property Management* **14** (1): 35–48. doi:10.3846/ijspm.2010.04.
13. Jennifer Saranow Schultz (October 27, 2010). "Home Inspections During Divorces". *The New York Times*. Retrieved October 30, 2010.
14. http://www.prweb.com/releases/2013/11/prweb11298311.htm Appraisal Data Entry
15. "Valuation" (http://www.rics.org/Property/Residentialproperty/leading_edge_series.htm), RICS Organization
16. Article 192 BauGB (http://bundesrecht.juris.de/bbaug/__192.html)
17. Definition of market value in German (http://bundesrecht.juris.de/bbaug/__194.html)
18. German text of the WertV (http://www.lgnapp.niedersachsen.de/vkv/allgemein/gesetze/b3200171.htm)

19. German text of the WertR (http://www.lgnapp.niedersachsen.de/vkv/allgemein/gesetze/b3200010.htm)
20. German Homepage of the BDSF (http://www.bdsf.de/)
21. German Homepage of the DESAG (http://www.deutsche-sachverstaendigen-gesellschaft.de/)
22. German page of HypZert GmbH (http://www.hypzert.de/)
23. *The Department of the Treasury Blueprint for a Modernized Financial Regulatory Structure* (PDF). United States Department of the Treasury. 2008. pp. 79–80. ISBN 978-016080645-2.
24. Penny Singer, "Reappraising the Appraisal Industry", *New York Times*, Aug 19, 1990 (http://query.nytimes.com/gst/fullpage.html?res=9C0CE4D6133EF93AA2575BC0A966958260&sec=&spon=&pagewanted=all) Retrieved 14 February 2008
25. The Appraisal Foundation (http://www.appraisalfoundation.org)
26. American Society of Farm Managers and Rural Appraisers Homepage (ASFMRA) (http://www.asfmra.org/)
27. 2006 "USPAP Online" (http://commerce.appraisalfoundation.org/html/2006%20USPAP/toc.htm), Appraisal Foundation
28. Massachusetts Board of Real Estate Appraisers (MBREA) (http://www.mbrea.org)
29. http://www.api.org.au/
30. http://www.property.org.nz/Category?Action=View&Category_id=699

Categories: Real estate valuation | Mortgage

Real Estate Appraisal: Chapter 9 Sales Comparison Approach to Value

Set containing 40 terms by JeffreyAdamos



Market Comparison

(Market Data)

In the sales comparison approach the appraiser analyzes data from actual market transactions involving properties similar to the subject property (referred to as comparable sales).

First, the appraiser chooses appropriate transactions, then she identifies the differences that exist between the subject property and the comparable properties, and finally, she makes price adjustments to account for those differences.

The adjusted sales prices of the comparable properties then serve as the basis for an opinion about the value of the subject property.

The sales comparison approach is based on the market theory of value, which states that value is determined by the actions of buyers and sellers in the marketplace in response to the influences of supply and demand.

Value is determined by the principle of substitution: a buyer will not pay more for a property than it would cost to acquire an equally desirable substitute, assuming the substitute property could be acquired within a reasonable length of time.

In an active market where many equivalent properties are available, the value of any one property should be equivalent to the prices paid for similar properties.

Market Data	...
Comparable Sales	A method of deriving a direct capitalization rate by analyzing the sales prices and incomes of comparable properties in the market. The income of a comparable property is divided by its sales price to indicate the capitalization rate.
Market Theory of Value	...
Principle of Substitution	...

-Real Estate Markets

The concept of a real estate market is central to the sales comparison approach.

A real estate market is a distinct group of buyers and sellers whose actions are influenced in similar ways by similar forces of supply and demand.

Prices paid for properties within a given market should indicate the value of other similar properties in that market, but usually don't indicate the value of properties in a different market.

Ex. Prices paid for home in a community with a strong economic base and high wage levels are likely to be much higher than prices paid for similar homes in a depressed community.

In applying the sales comparison approach, the appraiser must be keenly aware of the subject property's market.

The geographic boundaries of a market may be large or small, depending on the type of property.

Markets for residential property tend to be smaller, encompassing neighborhoods or districts, while markets for large commercial properties may be national or even international.

Markets are sometimes defined by physical boundaries, but the critical factor in defining a market for

appraisal purposes is similarity in the forces (economic, social, governmental, and physical/environmental) that influence value.

If these forces are rapidly changing, it becomes much more difficult to identify comparable sales, and the sales comparison approach becomes much less reliable.

Ex. In a period of rapid inflation, the pool of buyers who can afford to purchase a particular size of house may change almost daily, and sales of similar properties that closed a month ago may no longer be representative of the present market.

-Comparable Sales

For a sale to be considered comparable, it must compete with the subject property.

It must be in the same market as the subject property and appeal to the same sorts of buyers.

The sales comparison approach to value is the preferred approach for many appraisal purposes, including residential and vacant land appraisals.

An appraiser can usually find a number of good comparables, and the values indicated by this approach are viewed as highly reliable in most cases.

The strength of this approach--its reliance on market data--is also its weakness, however.

If data for comparable sales are inadequate, or totally lacking, the sales comparison approach can't be properly applied.

This is often the case for special use properties such as public buildings, so the sales comparison approach is rarely used in appraising special use properties.

To use the sales comparison approach, an appraiser must find at least three recently-sold comparables in the subject property's market.

Steps in the Sales Comparison Approach

The sales comparison approach involves 5-basic steps:

1. Collecting data
2. Verifying data
3. Selecting units of comparison
4. Comparative analysis
5. Reconciliation

Collecting and Verifying Data

First, the appraiser must gather data on comparable properties in the market.

In collecting the data, the appraiser needs to evaluate how similar these properties are to the subject property.

The most similar comparable properties should be selected for use in the analysis.

The appraiser should collect all of the same data for the comparables that she already has for the subject property.

This includes the terms and conditions of all transaction, information about the properties' physical characteristics, and information about listing prices and the prices of any pending offers, sales or options.

In step two, the appraiser must verify the data that will be used.

Not only does verification establish the reliability of the data, it also allows the appraiser to determine the circumstances surrounding the transaction.

Ex. If the buyer or seller was not typically motivated, the transaction will not be a reliable value indicator.

Interviewing a party to the transaction is considered the most reliable way to verify transaction data.

Physical review is the most reliable way to verify the characteristics of the property.

Selecting Units of Comparison

When comparing different properties, it is important for the price of each property to be stated in the same unit of comparison.

It would make no sense to compare one property's price per square foot of living area to another property's price per front foot of water frontage.

The third step in the sales comparison approach is selecting units of comparison.

That unit may be an acre, a front foot, or a square foot.

Ex. The price of vacant land is often stated as a price per acre, per square foot, or per front foot.

In residential appraisals, the price per square foot of living area and the price for the entire property are commonly used units of comparison.

The appraiser must choose the unit or units of comparison that are most appropriate for the particular property being appraised.

More than one unit may be appropriate, and the appraiser will make a comparison for each of the applicable units.

If comparing several different units of comparison leads to a consistent indicator of value, that indicator of value will be more reliable.

If a wide range of values results from using different units of comparison, the appraiser will want to investigate the cause of discrepancy.

Ex. An analysis of comparable properties results in an indicated value for the subject property of $304,000, and an indicated value per square foot (derived separately) of $91.32. The size of the subject property is 2,000 square feet, so its indicated value based on value per square foot is $182,640 ($91.32 x 2,000). The values indicated by using different units of comparison are inconsistent, so the appraiser must investigate further to determine the reasons for the discrepancy, and make appropriate adjustments.

Analyzing and Adjusting the Comparables	The next step in the sales comparison approach is comparative analysis. The appraiser first identifies the elements of comparison that may affect the value of the subject property. For each element of comparison, the characteristics of the comparable are compared to those of the subject property; any differences are measured, and an appropriate price adjustment is made. The net total of all the adjustments for each comparable is then added to or subtracted from the price of the comparable to arrive at an indicator of value for the subject property.
Comparable Analysis	A method of deriving a direct capitalization rate by analyzing the sale prices and incomes of comparable properties in the market. The income of a comparable property is divided by its sales price to indicate the capitalization rate.

Reconciling the Value Indicators

The final step in the sales comparison approach is reconciliation of the value indicators provided by analysis of the comparables.

The subject property's value will fall somewhere between the highest and lowest value indicator.

In reconciling the different amounts, the appraiser estimates where within the range of indicated values the subject property's value lies.

Reconciliation is not a simple averaging of the value indicators.

The appraiser must evaluate the characteristics of each comparable and determine which is most reliable.

Comparables that are most similar to the subject property are generally considered to be the most reliable indicators of the subject's value.

Comparative Analysis

Comparative analysis involves several steps.

Step 1: Identify the elements of comparison.

Step 2. For each element of comparison, measure the differences between the subject and each comparable, and determine an appropriate adjustment to account for each difference.

Step 3. For each comparable, find the net total adjustment and apply it to the comparable's sales price to get a value indicator for the subject property.

Identify the Elements of Comparison

The first step in the comparative analysis is to identify the elements of comparison.

An element of comparison is any aspect of a real estate transaction that may affect the sales price, including the terms and conditions of the sale and the characteristics of the property itself.

Don't confuse elements of comparison with units of comparison.

A unit of comparison is simply a unit of measurement; an element of comparison is one of the key considerations that contributes to differences in the prices paid for properties.

Ex. An appraiser knows that the number of baths in a house has an effect on its sales price, so the number of baths is identified as an element of comparison for the appraisal. If the subject property has two baths, but the comparable property has only one, the appraiser will adjust the sales price of the comparable property to account for the difference in this element of comparison.

The elements of comparison for a typical residential appraisal include:

1. Real property rights conveyed (fee simple or other interest)
2. Financing terms
3. Conditions of sale (the motivation of the buyer and the seller)

4. Expenditures needed after the sale
5. Market conditions (date of sale)
6. Location
7. Physical characteristics (size, quality, etc.)
8. Factors affecting use (zoning, water rights, etc.)
9. Non-realty items included in the sale

Note that the first five items on this list concern the transaction, while the remaining four are property-related.

Real Property Rights Conveyed

In most residential transactions, the real property rights conveyed include the full fee simple interest in the property.

Similarly, in most appraisals the property interest that is being appraised is the fee simple.

Some appraisals may involve other types of real property rights.

Two common examples of non-fee simple interests are the leasehold and the leased fee.

A leasehold interest includes the right to use property under the terms of a lease.

The interest of the owner of the leased property is called the leased fee.

Appraisals of leasehold estates usually involve long-term ground leases, where the tenant has constructed a building on the leased land.

In such cases, the building belongs to the tenant (the owner of the leasehold estate), while the land belongs to the owner of the leased fee estate.

When choosing comparable properties, it's important to make sure that the real property interest involved in a comparable transaction was the same type of interest that's being appraised.

If the interest being appraised is a fee simple interest in the subject property, the appraiser should not use a transaction involving a leasehold interest as a comparable.

Financing Terms

The financing used to purchase a property can affect the price paid for it.

If a seller financed the sale of his house at a below-market interest rate, the price paid may have been higher than the buyer would have agreed to without the seller financing.

If the financing terms don't affect the price paid for the property, the financing is referred to as cash equivalent.

Sales that are cash equivalent don't require any price adjustment for financing terms.

If nonstandard financing (Financing terms that are not typical of those available in the market) was used, the appraiser must evaluate the impact of the financing on the transaction.

Nonstandard financing can take a wide variety of forms, from seller financing to interest rate buydowns to loan assumptions.

In some cases, the monetary effect may be fairly obvious. If the seller pays some or all of the points on the buyer's loan, the effect on the sales price is likely to equal the amount paid by the seller.

Other cases are not so clear-cut. In a sale that involves seller financing the buyer may benefit in any of several ways.

	A below-market interest rate, a low downpayment, reduced (or zero) loan fees, and easier loan qualification are some of the possible benefits of seller financing. The appraiser may be able to make an appropriate adjustment to the comparable's sales price, but if the impact on the price was too great or is too difficult to estimate, another comparable should be chosen.
Cash Equivalent	Financing on terms that are typical and commonly available in the market.

Conditions of Sale

Conditions of sale are the circumstances under which a real estate transaction took place.

Normal conditions of sale include a buyer and a seller who are typically motivated--whose motivations in entering into their transaction are essentially the same as those of most other buyers and sellers in the real estate market.

A sale can generally be considered to have taken place under normal conditions if:

1. it was an arm's length transaction (between unrelated parties)
2. neither party was subject to undue stimulus (unusual pressure to act)
3. both parties acted prudently and knowledgeably, and in their own best interest
4. the property was exposed on the open market for a reasonable length of time

If one or more of these conditions were absent, the parties weren't typically motivated.

The price paid for the property isn't necessarily a reliable indication of its market value.

A seller who has been transferred to another city may accept a low offer to make a quick sale, or a developer may pay an above-market price for a property that is necessary to complete a certain project.

If the buyer was a relative, friend, or business associate, the seller may have accepted a lower price than she would have been willing to accept from a stranger in an arm's length transaction.

Ex. The appraiser finds a comparable that is very similar to the subject property and located only two blocks away. The comparable sold for $620,000 three months ago. Because the buyer was the seller's nephew, it wasn't an arm's length transaction, and the appraiser must assume that the motivation of the parties was not typical. The price paid may be significantly less than the property's true market value..

The appraiser must investigate the circumstances surrounding each comparable sale to make sure it took place under normal conditions.

If it didn't, that usually means it shouldn't be used as a comparable.

Because the buyer and the seller were acting under the influence of forces that don't affect the market in general, the price paid is not a reliable indicator of market value.

It's typically very difficult to quantify exactly how much those unusual forces affected the price.

Occasionally a sale that didn't take place under normal conditions can be used as a comparable if the appraiser makes an appropriate

adjustment to the price.

Adjustments for conditions of sale are rare and should be made with great care; the appraiser must conduct careful research to find data that support the adjustment.

If sufficient supporting data are not available, the appraiser should not use the transaction as a comparable sale.

When appraising a property that is owned by a financial institution because of a mortgage default (referred to as an REO, for "real estate owned"), the appraiser should use only other REOs as comparables.

REOs are usually vacant, which means that there's an increased risk of vandalism and other physical deterioration.

Further, there are often delays in the closing process, caused by institutional bureaucracy.

Lengthy delays can jeopardize the buyer's financing and will certainly mean a later possession date.

If an appraiser who is evaluating an REO is forced to use a non-REO as a comparable, she will usually have to make a downward price adjustment to the comparable property.

REO	A sale of property owned by a bank or other financial institution, often as a result of mortgage foreclosure. REO stands for "real estate owned."
Expenditures Needed After the Sale	A property's sales price will be affected by any needed upgrading or repairs that won't be carried out before the sale closes. The buyer recognizes that she'll have to pay for the repairs soon after closing, and she'll take those anticipated expenditures into account in account in negotiations with the seller. If the buyer of a comparable property expected to make repairs after the sale, the appraiser should adjust the price of the comparable to reflect this. The appraiser bases the adjustment on the amount of expenses anticipated at the time of the transaction, since the buyer and the seller agreed on the sales price based on what they anticipated. Even if the actual expenses turned out to be higher or lower, the anticipated expenses determine the appraiser's adjustment.

Market Conditions

The price paid for a comparable property reflects the state of the market as of the date the property was sold, but the forces that affect value are subject to constant change.

If market conditions have changed between the date of the comparable sale and the effective date of the appraisal, an adjustment must be made to account for this fact.

The closer a comparable sale is to the effective date of the appraisal, the more reliable it will be as a value indicator.

Comparables that sold within 6-months of the appraisal date don't necessarily require any adjustment for market conditions, unless significant change has occurred in the market since the date of the comparable sale.

If the real estate market has been unusually inactive, the appraiser may have to use sales older than 6-months as comparables.

In this case, adjustments must be made for inflation or other economic trends that have affected market price since the date of sale.

Ex. The appraiser is unable to locate three comparable properties that have sold in the past 6-months, so he chooses a comparable that sold 10-months ago. Since then, property values have increased about 3% due to inflation. To

account for the effect of inflation, the appraiser adds 3% to the comparable's sales price.

Comparables older than one year are usually not considered, even in the absence of any obvious change in market conditions.

Ex. Suppose an appraisal has an effective date of December 1. If the appraiser locates a comparable that sold back in July, he could use that comparable without adjustment, unless the market was unusually volatile between July and December. If he locates a comparable that sold in April, he would need to adjust the comparable's price to account for any inflation since then. If he locates a comparable that sold in November of the previous year, he would not be able to use that comparable at all.

Location	Another important element of comparison is the location of the comparable in comparison to the location of the subject property. Ideally, the comparable should be in the same neighborhood as the subject. If sufficient recent comparables are not available from the subject neighborhood, the appraiser will consider sales from nearby similar neighborhoods. Using comparables from other neighborhoods requires the appraiser to compare the neighborhoods, as well as the individual properties. This complication should be avoided whenever possible. Even if the comparable is located in the same neighborhood as the subject, the appraiser must consider any differences in value that result from location. Ex. Two identical properties located a block apart in the same neighborhood may have different values if one has a pleasant view, while the other doesn't. The values could also differ due to location if one is on a busy arterial, while the other is on a quiet side street. Adjustment for locational differences normally represent differences in site value, but they may also represent differences in

external obsolescence of the improvements.

In the latter case, the appraiser must be careful not to make duplicate adjustments (under location and under physical characteristics) for the same item.

Physical Characteristics

Most adjustments in residential appraisals are made for differences in the physical characteristics of the site or the improvements.

Comparables with differences in property rights, financing terms, conditions of sale, market conditions, or location are more likely to simply be rejected from consideration.

A wide range of physical characteristics can affect the price paid for a property.

The appraiser must consider all of these potential differences, and make the appropriate adjustment for each characteristic where the subject differs from the comparable.

Physical characteristics that are elements of comparison in residential appraisals include:

1. Size and shape of lot
2. Age and condition of improvements
3. Architectural style and compatibility
4. Type and quality of building materials
5. Square footage of living area/basement/garage
6. Number of rooms
7. Functional utility
8. Equipment and amenities
9. Site improvements

Adjustments should always be based on an item's contributory value, not on its cost.

	According to the principle of contribution, the value of an individual component or improvement is equal to the amount of value it adds to the property as a whole. This amount, referred to as the item's contributory value, depends on market forces and is independent of the item's cost. So a second bathroom that cost $8,000 to install may add $11,000 to the home's value. Conversely, a third bathroom that also cost $8,000 to install may increase the home's value by only $5,000.
Contributory Value	The amount of value contributed by an improvement to a property's total value.
Use	Highest and best use is central to value, comparables are usually rejected if their highest and best use doesn't match that of the subject property. For residential appraisals, choosing comparables with zoning restrictions similar to the subject property usually ensures that they have the same highest and best value. Other factors affecting use, such as water rights of a flood zone designation, may also be elements of comparison.

Non-Realty Items Included in Sale	An appraised value is usually the value of the subject real property only; it doesn't include the value of any personal property (such as furniture) that may be sold in conjunction with the real estate. If the sales price of a comparable includes non-realty item, the appraiser must adjust the price of the comparable to account for the value of the personal property items included in the sale.
Other Elements of Comparison	The elements of comparison discussed above are the most common ones in residential appraisals. Many other elements could conceivably influence the price paid for a particular property. The appraiser must be alert to any characteristics of the subject or a comparable that could influence value, and make whatever adjustments are necessary.

-Analyze and Adjust the Comparables	After identifying the appropriate elements of comparison, the next step in comparative analysis is to analyze the comparable. To do this, the appraiser first measures the differences between each comparable and the subject property for each element of comparison. Next, the appraiser considers how the similarities and differences affect the relative values of the properties, and adjust the sales prices of the comparables to reflect the differences. The appraiser then uses this information to arrive at a indicator of the subject property's market value, with the sales of the comparables as a reference point.
Measuring Differences	The differences between a comparable and the subject property can be measured in two ways: 1. qualitative (superior, inferior, or same) 2. quantitative (dollar amount or percentage) To analyze a difference in value based on qualitative measurement, appraisers use a technique called relative comparison analysis. For analyzing differences in quantitative terms, they use a technique called paired data analysis.

Paired Data Analysis

(Matched Pairs Analysis)
(Paired Data Set Analysis)

A technique for measuring the effect on value that is caused by differences in a single element of comparison.

The effect on value is estimated by comparing the prices of properties that differ in only one element of comparison.

Also called matched pairs analysis.

In paired data analysis (also known as matched pairs analysis, or paired data set analysis), an appraiser uses data from a matched pair of properties to assign a value to an element of comparison.

The appraiser first locates properties that are identical (or very similar) to each other in all aspects except one.

Note that these are not the properties the appraiser has selected as comparables; they don't need to be similar to the subject property, just similar to each other.

By selecting two properties with only one significant difference, the appraiser isolates the effect this one characteristic has on value.

This allows the appraiser to assign a value to the characteristic when it's used as an element of comparison.

So when a comparable differs from the subject property as to this

characteristic, the appraiser can use the value of the characteristic to adjust the price of the comparable property.

Paired data analysis is best illustrated by a market data grid listing several elements of comparison for five different properties.

1. Identify pairs of properties that vary in only one characteristic.

Ex. Properties #1 & #4 are identical except for how big the garage is. Since the price paid for property #4 is $6,000 higher than the price of property #1, an appraiser would conclude that the market value of the extra garage space was $6,000.

Ex. Properties #2 & #5 are identical except for 100 sq.ft more in #2. Since the price paid for property #2 is $8,000 higher than the price of property #5, an appraiser would conclude that the market value places $80 per square foot on the additional living space.

The appraiser in this example has now identified adjustment values for four elements of comparison:

1. Garage size
2. Living area
3. Lot size
4. Basement

These values can hen be used to make adjustments to the sales prices of comparables to account for

differences between the subject property and the comparables.

Although the concept behind paired data analysis is fairly simple, the real world is more complex.

Rarely will an appraiser be able to identify two properties that are identical in all characteristics except one.

It's often necessary necessary to make price adjustments for other differences first, in order to isolate the effect of the particular difference the appraiser is trying to measure.

Another issue that comes into play when using paired data analysis is the effect of one characteristic on value can often depend on another characteristic.

The amount of the adjustment to account for the difference in the size of the improvements may well depend on the age of the improvements: 100 sq. ft. of living space may add more value (in terms of dollar amount) to a 10-year-old home than it does to an 18-year-old home.

Appraisers must analyze and compare hundreds of sales transactions to gain an understanding of the effects on value caused by different elements of comparison.

Paired data analysis is a useful tool in this process, but more

sophisticated statistical analysis is often necessary as well.

For each measured difference in an element of comparison, the appraiser must make adjustment to account for the resulting difference in value.

Adjustment are made to the prices of the comparables.

If a comparable is superior to the subject in some respect, its price is adjusted downward.

If the comparable is inferior to the subject, its price is adjusted upward.

The appraiser makes a series of these adjustments for each significant difference between the subject property and the comparable.

In this way, she arrives at an estimate of what the comparable would have sold for if it has been identical to the subject property.

Adjustments are never made directly to the value of the subject property.

This is because the subject property's value is unknown, so there is no starting point from which to make adjustments.

Because the appraiser is comparing several properties against the subject property, it would be easy to make mistakes such as adjusting twice for the same factor.

Most of an appraiser's adjustments are made to account for differences in physical characteristics between the comparables and the subject property.

Although the appraiser uses comparables that are as similar to the subject property as possible, at least some physical differences will usually exist.

Relative Comparison Analysis

A technique for estimating whether a difference in a single element of comparison has a positive, negative, or neutral impact on value.

Similar to paired data analysis.

In relative comparison analysis, the appraiser considers the relative quality of the comparables and the subject property, without assigning a numerical value to the differences make a comparable superior to the subject property.

Based on the prices of the comparables, the appraiser can develop an opinion of the subject property's value.

The subject property should be worth less than comparables that are superior, and it should be worth more than comparables that are inferior.

Relative comparison analysis provides a range of possible values for the subject property.

The prices of the superior comparables define the upper end of the range, and the price of the inferior comparables define the lower end.

The appraiser can be reasonably confident that the subject property's value falls within the range, without deciding on a precise value figure.

The process of determining a probable range of values is know as

bracketing.

The adjusted sales prices of comparables that require mostly downward adjustment and the comparables that require mostly upward adjustment are "brackets" that mark each end of the range of likely values for the subject property.

If the comparables chosen are all superior or all inferior, only the upper or lower limit of the range can be identified.

To narrow down the range of values for the subject property, the appraiser may need to look for additional comparables.

In addition to measuring the comparables against the subject property, the comparables can also be compared to each other.

The appraiser can rank the comparables based on a particular characteristic and analyze where the subject property would fall in this ranking.

The can help the appraiser identify trends in value related to specific elements elements of comparison.

Ex. An appraiser might rank comparables according to square footage to see where the subject property fits in.

The ranking and prices of the comparables help the appraiser

	understand how the subject property's square footage affect its value.
Bracketing	The process of determining a probable range of values.

Relative Comparison Analysis vs.Paired Data Analysis

At first glance, paired data analysis may appear more accurate than relative comparison analysis because it produces a precise figure instead of a range of values.

The precision of paired data analysis can also be misleading, because the purpose of an appraisal is to evaluate the property as a whole, not just as sum of different characteristics.

Relative comparison analysis allows the appraiser to account for interrelated factors that affect value together.

An appraiser should always consider both methods and choose the one that is most appropriate for the situation.

Depending on the available data, sometimes it is appropriate to use relative comparison analysis and paired data analysis together.

Ex. The appraiser may have paired data to support adjustments related to some elements of comparison but not others.

If paired data is not available for a particular feature, the appraiser will need to use relative comparison analysis for that element of comparison instead.

When an appraisal involves both relative comparison analysis and paired data analysis, they must be used consistently.

	For any specific element of comparison, the appraiser should apply the same method of analysis to all of the comparables.
Adjustment Calculations	An appraiser should carefully consider the form in which adjustments to the prices of comparables are expressed, and the order in which they are applied. Although adjustments are usually expressed in terms of a dollar amount, they may also be expressed as percentages. When an adjustment is expressed as a percentage, the percentage must be converted into dollars in order to calculate the adjusted sales price.

Percentage Adjustments

In converting a percentage to a dollar figure, great care must be taken to understand exactly what the percentage is referring to.

Saying that Property A is worth 10% more than Property B is not the same thing as saying that Property B is worth 10% less than Property A.

In the first case, the 10% is referring t the value of Property B: Property A is worth 110% (100% + 10%) of the value of Property B.

In the second case, the 10% is referring to the value of Property A: Property B is worth 90% (100% - 10%) of the value of Property A.

If Property A is worth $100,000, the value of Property B in the first case would be $100,000 ÷ 1.1 = $90,909.

In the second case, Property B's value would be $100,000 x 0.9 = $90,000.

To determine whether a percentage applies to the value of the subject property or the value of the comparable, simply state the relationship between the values of the two properties.

The statement should be in this form, with X representing the percentage amount: "Property A is worth X% more (or less) than Property B."

If your statement of the relationship

has the subject property first (Property A is the subject property), the percentage applies to the value of the comparable (Property B).

The adjustment calculation is simple, since it is always the comparable's value (not the subject's value) this is adjusted:

1. Multiply the value of the comparable by the percentage amount to get the amount of the adjustment.

2. Then add or subtract this amount from the comparable's value, depending on the relationship between the two properties.

If the statement of the relationship says the subject property is worth more than the comparable (the comparable is Property A), then the percentage applies to the value of the subject (Property B).

If the percentage applies to the value of the subject, the calculation is more difficult, since the value of the subject is not known.

A 4-step process is required.:

1. If the comparable is worth more than the subject, add the percentage to 1 (100%); if the comparable is worth less than the subject, subtract the percentage from 1(100%).

2. Divide the percentage by the number calculated in Step 1.

3. Multiply the value of the comparable by the number calculated in Step 2 to get the amount of the adjustment.

4. Adjust the comparable's value by the adjustment amount calculated in Step 3. Add the amount to the comparable's value if the comparable is worth less than the subject property. Subtract it if the comparable is worth more than the subject property.

Ex. You've located a comparable that is nearly identical to the subject property. The comparable sold for $300,000 two weeks ago, but it's located in a different neighborhood. The comparable's neighborhood is considered a better location and its homes are generally worth about 10% more than properties in the subject property's neighborhood.

First write out the statement of the relationship between the subject property and the comparable: "The comparable is worth 10% more than the subject property." The subject property is Property B, so the percentage applies to the subject property's value.

Step 1. Add the percentage (10% or 0.1) to 1.
0.1 + 1=1.1.

Step 2. Divide the percentage by the result of Step 1.
0.1 ÷ 1.1 =0.091 or 9.1% (rounded).

Step 3. Multiply the value of the

comparable by the percentage from Step 2 to find the amount of the adjustment.
$300,000 x 9.1% = $27,300.

Step 4. Since the comparable is worth more than the subject property, adjust the comparable's value downward by the adjustment amount from Step 3.
$300,000 - $27,300 = $272,700.
This is the adjusted value of the comparable.

Sequence of Adjustments

When making adjustments for a number of different elements of comparison, the sequence in which the adjustments are made doesn't affect the outcome of the calculations, unless one or more of the adjustments is a percentage.

Ex. A comparable requires two adjustments: a 5% upward adjustment for changing market conditions, and a $10,000 downward adjustment because the comparable has an extra bathroom. The price of the comparable is $500,000.
If the appraiser makes the 5% adjustment first, then the first calculation is 5% of $500,000 = $25,000.
The two adjustment amount are then applied to the comparable's price to get an adjusted value of $515,000 ($500,000 + $25,000 - $10,000).
If the appraiser made the $10,000 adjustment first, the first calculation would be: $500,000 - $10,000 = $490,000.
Then the percentage adjustment would be: 5% of $490,000 = $24,500. That would mean that the adjusted value of the comparable is %514,500 ($500,000 - $10,000 + $24,500).
Thus, in this situation, the order in which the adjustments are applied makes a $500 difference in the adjusted value.

There are no hard and fast rules for the sequence of adjustments in a sales comparison analysis.

It's up to the appraiser to determine the most appropriate sequence based on the appraiser's analysis of the market.

In percentage cases the adjustment should be made in the following sequence:

1. Real property rights conveyed
2. Financing terms
3. Conditions of sale
4. Market conditions

These adjustments should be made first, and then adjustments concerning the comparable property (location, physical characteristics, etc.).

Ex. One comparable has unusual financing terms that require the appraiser to make a percentage adjustment. The comparable's price needs to be adjusted based on physical differences in the property: the comparable has a fireplace and the subject property doesn't.
In this situation, the appraiser would make the adjustment for the financing first, before adjusting the value of the comparable to account for the fireplace.

-Reconciliation

The final step in the sales comparison approach to value is reconciliation, in which the appraiser reviews all of the data and analysis and forms an opinion about the subject property's value.

The appraiser will always analyze at least three different comparable properties, with each analysis providing a value indicator for the subject property.

Even if the appraiser has chosen good comparables, it is unlikely that they will all indicate exactly the same value for the subject property.

The adjusted sales price typically present a range of values, and the appraiser must use her judgement and experience to select some value within this range.

The appraiser may need to reconcile values based on paired data analysis with conclusions drawn from relative comparison analysis.

Choosing an appropriate value for the subject property is not a mechanical process.

An appraiser should never average the values indicated by the comparables to estimate the subject property's value.

Instead, in reconciling the values, the appraiser considers their relative reliability and gives more weight to the more reliable value indicators.

According to the principle of substitution, a comparable that is more similar to the subject property should be a more reliable indicator of value.

This is because a more similar comparable competes more directly with the subject property than less similar comparables.

Other factors that may affect a value indicator's reliability might include a neighborhood's stability or a market's size: a changing neighborhood indicates unstable values, while an extremely small market can translate into less reliable indicators.

In paired data analysis, a good indicator of reliability is the extent of adjustment that is required for each comparable.

Comparables requiring less adjustment are generally more reliable than those that require larger adjustments. These comparables will therefore e given more weight when the figures are reconciled.

Ex. The adjusted sales prices of four comparable properties indicate the following range of values for the subject property.

1. $302,300
2. $297,700
3. $305,100
4. $303,700

	Comparable #1 is the most similar to the subject property and requires the fewest adjustment. The appraiser gives the most weight to this comparable, concluding that the indicated value of the subject is $302,000.
Net Adjustment	The net sum of positive and negative adjustment amounts for a comparable sale.
Gross Adjustment	The total of the amounts of adjustments to the sales price of a comparable, without regard to whether the adjustments are negative or positive.