Market Value — An Analytical Approach

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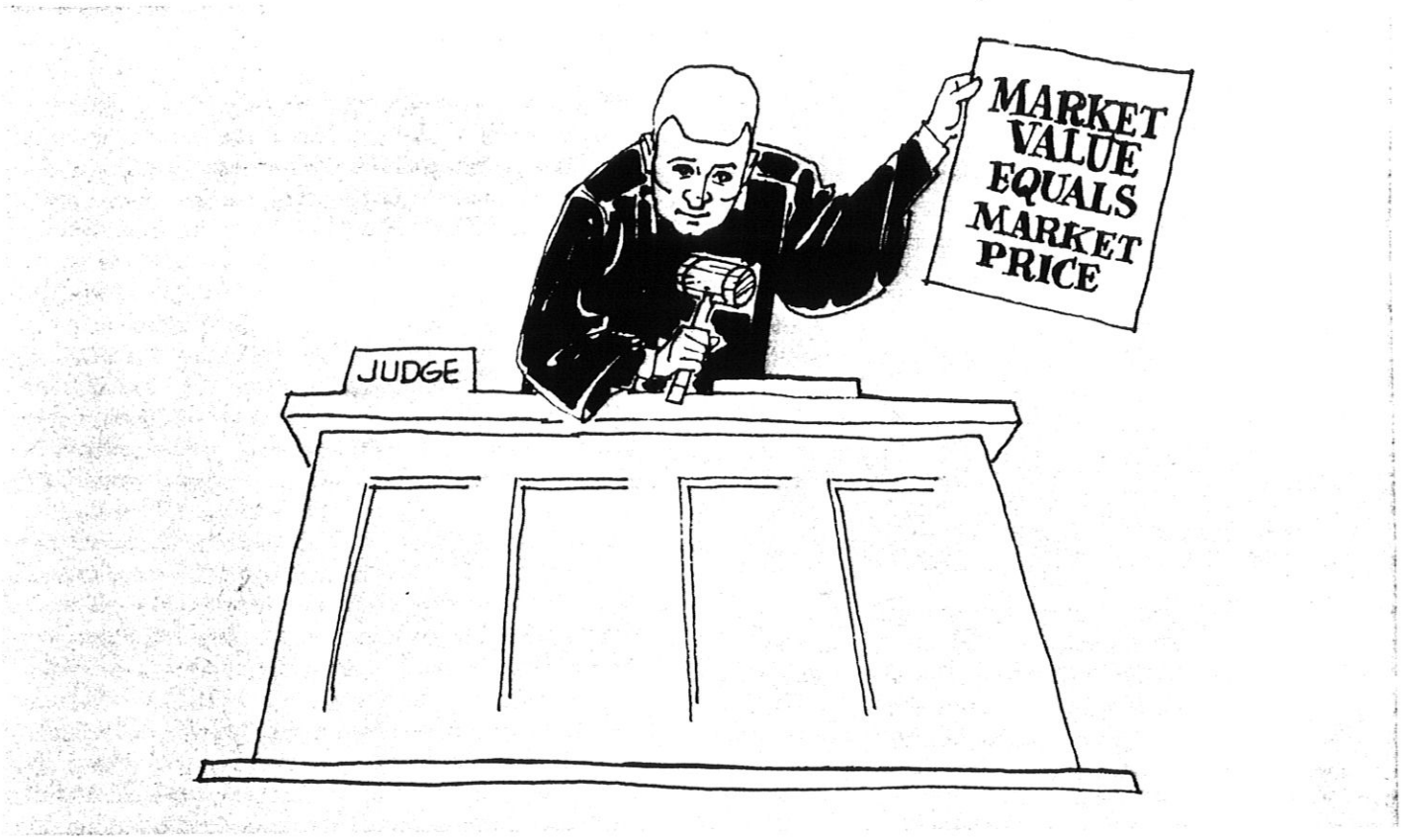

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by Howard F. Jackson and Richard J. DiGeronimo, CRA

Based on the assumption that real estate has a value and that investors, for their own individual or group reasons, purchase real estate, then a market value can be estimated using sales information, investment criteria, and anticipated benefits as source material.

There is no one absolute definition of Fair Market Value. Perhaps, as a result of this paper, a consensus can be reached that will cover most of the items that comprise value. Therefore, we will start with a few simple definitions and finally reach what hopefully will be a working definition.

The purpose of this article is to illustrate and enlarge upon a meaningful definition of Market Value. Upon applying the Market Value definition, a series of analytical approaches were described with the primary emphasis placed on the Cost Approach, Direct Sales Comparison, and Income Capitalization methods of valuation. The application of these stated methods are discussed in relationship to the value sought and the methodology applied.

VALUE

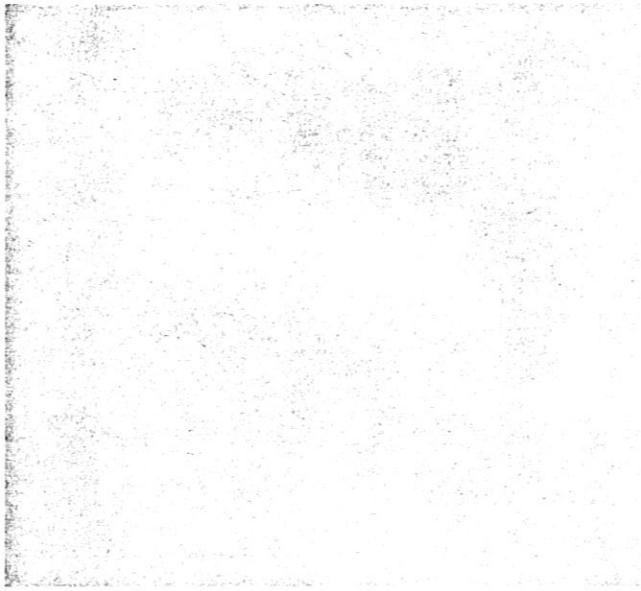
"1. The quantity of one thing which can be obtained in exchange for another.

2. The ratio of exchange of one commodity for another e.g., one bushel of wheat in terms of a given number of bushels of corn; thus, the value of one thing may be expressed in terms of another. Money is the common denominator by which real property value is usually measured.
3. It is the power of acquiring commodities in exchange, generally with a comparison of utilities — the utility of the commodity acquired in the exchange (property).
4. Value also depends upon the relation of an object to unsatisfied needs; i.e., scarcity or supply and demand.
5. Value is the present worth of future benefits arising out of ownership to typical users or investors.
6. The verb "value": The act or process of estimating value."[1]

MARKET VALUE

"The most probable price in terms of money which a

(1) Real Estate Appraisal Terminology, rev. ed., American Institute of Real Estate Appraisers, Society of Real Estate Appraisers, (Bellinger Publishing Company), p. 251.



property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated.
2. both parties are well informed or well advised, and each acting in what they consider their own best interest.
3. a reasonable time is allowed for exposure in the open market.
4. payment is made in cash or its equivalent.
5. financing, if any, is on terms generally available in the community at the specified date and typical for the property type in its locale.
6. the price represents a normal consideration for the property sold unaffected by special financing amounts and/or terms, services, fees, costs, or credits incurred in the transaction."[2]

"Numerous definitions of Market Value have been devised over the years by professional organizations, government bodies, courts, et cetera.

"The Supreme Court of most states have handed down definitions of Market Value for use in the state courts. These definitions are subject to frequent change.

"Persons performing appraisal services which may be subject to litigation are cautioned to seek the exact definition of Market Value in the jurisdiction in which the services are being performed.

Several interesting terms were included that deserve special note. These include:

A. Most probable price — competitive market
B. Fair sale
C. Typically motivated — one must assume that there is a profit motive or some degree of economic viability.
D. Parties well advised — acting in their own best interest.
E. Reasonable time — This would vary depending upon the type of property, location, current economic conditions, and what segment of the market is being analyzed.

When one deals with the courts, the definition becomes precise only when used in specific situations. Consider for a moment tax proceedings in the New York State Supreme Court. This was stated by the Court of Appeals, New York State's highest court, "the statutory test of the full value of property is the price at which the property would sell under ordinary circumstances. . . The only practical test of full value where exactly similar property can be readily bought at a fair price in an open market from willing sellers, or can be sold at a fair price to ready buyers."[3]

The full value concept was reinforced in Pepsi Cola Company v. Tax Commission.

"Full value is equated to market value."[4] Relevant factors which must receive consideration are: location, accessibility of the property, conditions in the neighborhood which affect value, the nature of the buildings and state of repair, cost of construction of buildings on a present day basis less depreciation, bona fide prices in connection with a sale of the premises, . . . bona fide rent received for the premises or portion thereof during or reasonably near the tax years, the reasonable rental value of the premises or any portion thereof, and prices paid on a bona fide sales of comparable property during or reasonable near the tax years.

A major case (1963) held "that despite a statute prohibiting a limited divident housing corporation from selling the subject property at a price in excess of cost less amortization payments, plus unpaid dividends, an assessment at full value could exceed the selling price ceiling imposed by statute. "This was based upon the proposition that such a limitation operated against and was personal to housing companies like petitioner and that restrictions personal to the owner, and which do not attach or run with the land, need not be given effect in the assessment. The limitation was not effective if a foreclosure sale free of the restriction was directed by the court."[5]

It begins to appear that both theory and law indicate that price can be equated to value and that if any property is exposed to the market, then a comparison of similar sales would indicate market value.

The New York Courts have stated, in effect, "that an

(2) Ibid. p. 160-161.

(3) People ex rel. Parkin Operating Corp. v. Miller 287 N.Y. 126, 129, 38 NE 2d 465 (1941). Review and Reduction of Real Property Assessments in New York. Second Edition. Harry O. Lee and Wilford A. LeForester.

(4) 19 A.D. 2d 56, 59, 240 NYS 2d 770 (1st Dept. 1963).

(5) Knickerbocker Village, Inc. v. Bayland 12 NY 2d 1044, 190 N.E. 2d 239, 239 NY 2d 878.

actual sale of the subject property at arm's length is the very best evidence because it reflects market value."[6]

Almost all of the courts give weight to the cost of construction. This is true if the improvements are new and represent the highest and best land use. At this point, both appraisal theory and the law converge. Problems arise in the estimation of depreciation and the updating of cost materials to the current date. These are not unsurmountable problems and when analyzed correctly, can be very persuasive indicators of market value.

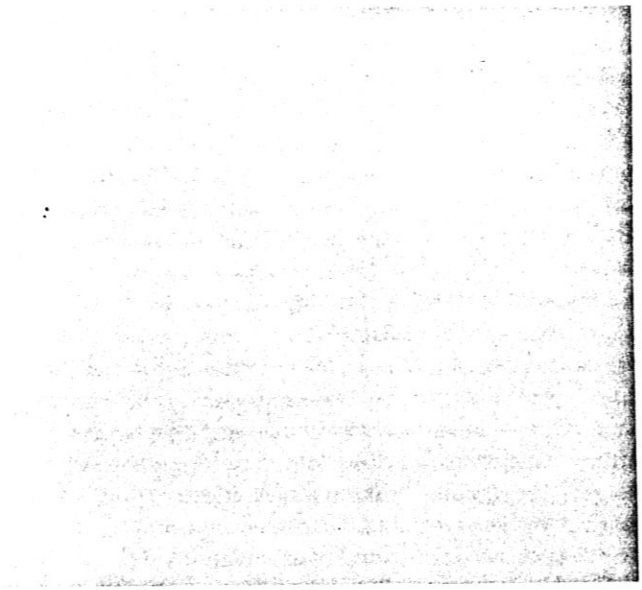
Further definitions include additional caveats, each to support other factors. Black's Law Dictionary defines market value as, "The price property would command in the market. The highest price a willing buyer would pay and a willing seller accept, both being fully informed, and the property being exposed for a reasonable period of time. The market value may be different from the price a property can actually be sold for at a given time (market price). The market value of an article or piece of property is the price which it might be expected to bring if offered for sale in a fair market; not the price which might be obtained on a sale at public auction or a sale forced by the necessities of the owner, but such a price as would be fixed by negotiation and mutual agreement, after ample time to find a purchaser, as between a vendor who is willing (but not compelled) to sell and a purchaser who desires to buy but is not compelled to take the particular article or piece of property. U.S. v. Certain Property in Borough of Manhattan, City, County, and State of New York, C.A.N.Y., 403 F.2d 800, 802. See also Actual market value; Clear market value; Fair cash market value; Fair market value."[7]

Notice that they include "willing buyer and seller, highest price, fully informed, reasonable time." In addition, it states "price, not price at public auction, not a forced sale", mentions "negotiation and mutual agreement." Black's further states "market price".[8]

"Market price is synonymous with market value, and means the price actually given in current market dealings, or the price at which supply and demand are equal. The point of intersection of supply and demand in the market."

Black's also states, "Investment. An expenditure to acquire property or other assets in order to produce revenue; the asset so required. The placing of capital or laying out of money in a way intended to secure income or profit from its employment. Securities & Exchange Commission v. Wickham, D.C.Minn., 12 F.Supp. 245, 247. To purchase securities of a more or less permanent future, or to place money or property in business ventures or real estate, or otherwise lay it out, so that it may produce a revenue or income."[9]

(6) Lane Bryant, Inc. v. Tax Commission, Morgan Roth v. Tax Commission; Dipson Realty Co. v. State 39 AD, 2d 636, 331 NYS 2d 186 (4 Dept 1974).
(7) Black's Law Dictionary, 5th ed., (Westinghouse Company, 1979).
(8) Ibid., p. 878.
(9) Ibid., p. 741.



Then, the concept of Black's defines investment property as, "Generally, any property purchased for the primary purpose of profit. The profit may be from income or resale."[10] It would appear that a reasonable extension could read after "resale", after tax benefits, residual valuation, equity build-up and perhaps refinancing of the underlying mortgage(s).

The Federal Home Loan Bank Board indicates an adoption of the market value definition that covers most of the points discussed (See FHLBB memo). "For certain governmental subsidy programs, such as HUD Section 8 programs, where the real estate project and the ultimate product user represent a distinct and readily identifiable separate market relative to those projects found in the typical market, the appraiser may consider the various subsidized income/vacancy guarantees and/or subsidized aspects of the specific financing/contractual programs."[11] In no case should the final value estimate exceed replacement cost. Replacement cost in this context refers to the sum of the following:

1. Market value of the subject site ("Value" conforming to the above referenced market value definition).
2. Current reproduction cost less deterioration and obsolescence of all building and site improvements.
3. A reasonable, market-supportable, entrepreneurial profit.

The position of the FHLBB clearly indicates a position of cost equaling market value based upon compliance with their definitions as applied to certain specific property types.

Any objective study of market value theory clearly indicates a discomfort among appraisers, economists, and the courts on any definition that acts as a restriction on

(10) Ibid., p. 741.
(11) Federal Home Loan Bank Board, Office of Examinations and Supervision, R 41b 12 March 82.

market value analysis. If the function of an appraisal is to estimate the market value of a subsidized housing project, it follows that this is a legitimate segment of the real estate market. Properties are designed, built, operated, financed, and sold, all within the framework of certain governmental regulations. It follows, therefore, that in arriving at market value, one should look for comparable data in the segment of the market that most closely represents the conditions of the investor, banker, and ultimate end user of the facility. This would seem to indicate that lower than market or fixed mortgage interest rates should be considered. In addition, fixed rentals or rentals based upon income or age should be analyzed in comparison to conventional or unrestricted housing projects, as well as competitive subsidized housing developments. A valuation of the specific agreements that relate to a certain project and the advantages (increase in value) when those restrictions are terminated or as amended is also critical.

If value is the present worth of future benefits, then all benefits that would flow to ownership can and should be measured — these would certainly indicate market value with a ceiling set by an estimate of replacement cost less depreciation.

In the valuation procedures, generally three approaches to value are considered. Properly stated, combinations of the valuation techniques are employed. These are:

A. Cost Valuation
B. Direct Sales Comparison
C. Income Capitalization

Following is a brief descriptive analysis of each of the primary approaches utilized in estimating a property's Fair Market Value.

COST APPROACH

The Cost Approach is one of the techniques utilized in estimating Market Value. This approach generally involves the estimation of the Replacement Cost NEW or the Reproduction Cost NEW of the improvements under consideration. Replacement Cost is the cost of replacing the improvements NEW with one having equivalent utility and design features built with modern materials and according to current standards. Reproduction Cost is the cost of construction, at current prices, an exact duplicate or replica embodying all the deficiencies, superinadequacies, and obsolescence of the subject building.

Following the analysis of replacement or reproduction cost, the property's accrued depreciation is deducted, which reflects the depreciated value of the improvements.

Depreciation is a loss in value from any cause. It is the difference between the value NEW of a structural improvement and depreciated cost as of the appraisal date.

Depreciation may be broadly classified under three categories:

Physical Depreciation — loss in value due to physical deterioration, wear and tear, and/or deferred maintenance.

Functional Obsolescence — loss in value due to the lack of utility or desirability of part or all the property inherent to the improvement.

Economic Obsolescence — loss in value due to causes outside the property and independent of it.

The remainder, after considering the various forms of depreciation, yields the depreciated value of the improvements. To this depreciated value estimate is added the market derived Land Value and appropriate site improvement costs. The result is the indicated value by the Cost Approach method.

There are three methods that can be used individually or in combination to establish the replacement cost new of a specific building. National cost publications "establish a cost range generally expressed as a unit — cost per square foot, cost per cubic foot, cost per square meter. These costs are then adjusted to reflect differences in current costs, local costs, and special features. A second technique would be to obtain actual construction costs on similar buildings generally situated in the same general area. These costs can then be adjusted for time and any other factors which would affect building cost. A final method, if the improvements are fairly new, would be to obtain the historical (actual) cost and simply factor in an adjustment for time."[12]

As an indicator of market value, perhaps the Cost Approach would represent the ceiling of value.

DIRECT SALES COMPARISON APPROACH

This is often, and properly so, called a comparison method of valuation. The basis lies in data obtained from actual market transactions which are then compared to the subject property. Any differences are then adjusted so that a property which has been sold can indicate a value for the subject project.

The American Institute of Real Estate Appraisers sums up the procedures for Cost and Market Analysis, "As in the Cost Approach, the Direct Sales Data Approach is also based on the principle of subsitution, which in this approach implies that a prudent person will not pay more to buy or rent a property than it will cost to buy or rent a comparable substitute property."[13]

It is evident that when dealing with any real property appraisal, that the major research should be on similar properties. This Market Data research in the conventional mode would be useful in establishing economic rentals, operating expenses, and information relating to investment preferences.

When applying Market Data information, it is imperative that all documents relating to conditions, purchase

(12) Marshall Swift Publications Company, Los Angeles, CA, Engineering News Record, McGraw Hill, New York, Boeckh Publications, Milwaukee, Wisconsin.

(13) The Appraisal of Real Estate, American Institute of Real Estate Appraisers, Chicago, Illinois, Sixth Edition, p. 273.

agreements, financing, historical income and expense information, and local regulations be analyzed. If we could picture a project unencumbered and having few controls, then when comparisons are made with similar projects, adjustments can be correctly analyzed. The Direct Sales Approach should develop useful indices of value such as unit cost comparisons, capitalization rates, gross income multipliers, etc., which can then be applied to the subject property.

What has become critical in valuations dealing with syndications or re-syndications is a value estimate based upon both a present value and future value forecast. The allocation of land, personal property, and improvements is also critcal in determining the property's current value basis for depreciation purposes. The value allocation should be based on market derived findings and supported by the primary approaches utilized.

INCOME APPROACH ANALYSIS

The Income Approach is based on the underlying assumption that the value of a property tends to be set by the amount of anticipated benefits to be derived from its ownership. This approach, therefore, is predicated on the assumption that the present worth of a property is equal to the discounted value of a future income stream which a property is reasonably expected to generate over a given period of time. The technique utilized in converting a future net income stream to a present worth figure is generally calculated by a capitalization process as derived by a capitalization rate method. The capitalization rate is then applied to the net income stream, yielding the present worth of the property.

When utilizing this approach, a development of an overall capitalization rate is of primary significance. This rate is dependent primarily on market derived findings with considerable emphasis placed on the type and class of property under review. Since this overall rate generally consists of a mortgage and equity position, these individual elements should be carefully analyzed.

In considering the rate of return necessary to attract capital to invest in a parcel of real estate, several significant factors should be analyzed. Among these are:

1. The return that is available on competing forms of investments, taking into consideration the comparative risks.
2. The character of the property with particular regard to the neighborhood, the type of tenancy, and the problems of management, liquidity, and if appropriate, government restrictions.
3. Tax considerations on a particular investment.
4. Potential property appreciation, equity build-up (debt reduction), and projected cash flows over a specified holding period (residual value).

When sufficient financing terms are available from comparable sales data, a capitalization rate can be developed by several mortgage-equity techniques (e.g., Band of Investment Method, Mortgage/Equity, Ellwood, etc.).

Another viable method of valuation is the Direct Capitalization Method. In this instance, a series of market derived capitalization rates are obtained directly from the comparable sales and utilized as a basis of direct capitalization.

As an alternative method of income valuation, a Discounted Cash Flow analysis can also be applied. In this respect, a more accurate estimate of market value can be obtained if all assumptions and projections are "well-founded" and conform to current market trends.

The selection of an appropriate holding period should be based on an analysis of similar real estate investments with consideration given to typical investment periods (e.g., 10 to 20 years), underlying financing terms, individual federal income tax decisions, and conversion potential. Additional considerations should also be given to the potential sheltering of income during the projected holding period which best maximizes the subject's tax benefits.

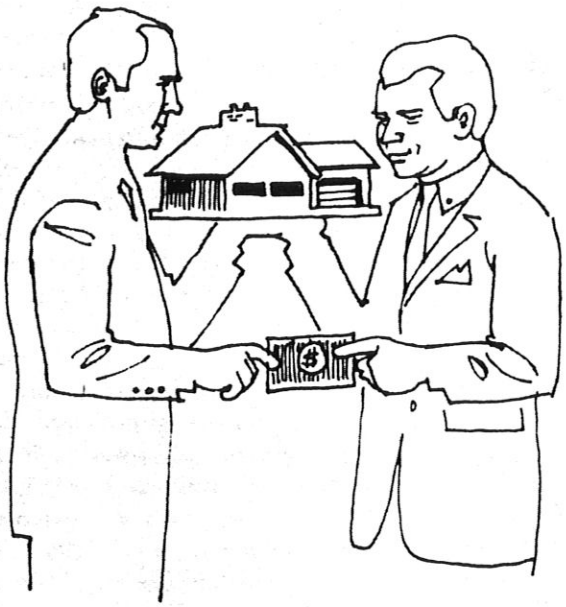
In developing a year by year analysis of income and expense projections, the appraiser's assumptions should be reasonable and well supported. The selection of an accurate and appropriate discount rate is also of primary importance. Consideration should be given to the type and class of the property under review, in addition to its location and potential sheltering of income. The various discount factors should be derived from the Ellwood Tables involving the Present Worth of 1 Factor with each periodic installment discounted to a present worth. To this figure is added the discounted value of the subject's residual value forecast.

RESIDUAL VALUATION ANALYSIS

The valuation of the investor's interest includes all value which flows to the investor through the real estate being appraised. These values include the present value of the reconstructed income stream and the residual value which may occur at the termination of the projected holding period. Value is the present worth of future benefits with values occurring far into the future normally discounted back to a present worth estimate. The investor's interests include both present ownership benefits and rights of ownership occurring at a future period of time.

The value to be estimated is either: a) improvements only; or b) land plus improvements. To facilitate in the estimation of a property's residual value, three methods of value should be considered: Cost, Direct Sales, and Income Capitalization.

To project future land and building values, the appraiser should apply a series of compound interest forecasting techniques based on market derived growth factors and appreciation trends. This valuation, however, depends upon the type and class of property involved. Inflation rates and the growth of the dollar can be utilized



as useful tools to measure future appreciation rates.

Another major consideration relates to the value of the improvements. The Engineering News Record publishes construction costs for the past 75 years. For example, these costs show that for the past 10 years, building costs have increased at an average rate of approximately 7% to 8% yearly. Using published yearly cost increases, a factor would be obtained indicating building costs at or near the residual valuation date.

Based upon information relating to building size, etc., it is possible to project a building cost in the future, based upon the assumptions relating to increasing building costs. Building costs have traditionally increased every year as a direct result of wage and price increases, as well as higher prices for raw materials. These increases were mostly due to inflation.

After obtaining a future replacement cost new, depreciation can be deducted. Anticipated depreciation occurring to the property will offset a great amount of the inflationary cost figures. This then indicates the depreciated value of the improvements. To this is added the "then" forecasted market land value which results in a total residual value estimate. The forecasted land value is generally based on a trending of current land values as projected over the selected holding period or future value date.

The second method of residual analysis is based on forecasted rental and expense conditions as projected at the end of the selected holding period. The purpose of this income and expense forecasting is to derive at a future net income estimate. This net income is then capitalized at an assumed higher rate to reflect the risk and time element associated with future income projections and/or expectations.

The final method involves the Direct Sales Approach based on well established market findings as derived from either a local or regional sales survey. The selection of like comparables is of primary importance as well as a documented market derived adjustment assumption. Upon ascertaining a significant number of current sales data, the appraiser can then project these values into the future by using the actual sale price and estimated annual rates of appreciation of each comparable.

To summarize, Market Value requires a thorough analytical approach and a working knowledge of valuation methodology. In this respect, there is no absolute approach or solution with each valuation problem requiring a slight variation in technique and methodology applied. Each approach should be considered in relationship to current market trends and further buttressed based on documented cost, coupled with accurate and reliable sales data. Future reversionary value potential and its affect on present value estimates should also be considered. The blending of these two economic factors is critical in arriving at a reliable present value estimate. This conclusion is further supported by the following definition "value is the present worth of future benefits." The selection of a final value conclusion, therefore, should consider not only the present but future value potential of the property being appraised. The application of both present and future value forecasting will further enhance the valuation conclusions as applied to a typical market scenario.

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(14) Real Estate Appraisal Terminology, op. cit.