Condemnation Awards and Appraisal Theory

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• AS a confirmed optimist, it is contrary to my nature to view with alarm. Yet it has come as a shock to realize how pervasive is appraisal error in valuations which are relied on in condemnation awards. The nature and implications of these errors in appraisal theory and practice will command our attention later; for the moment, accepting the hypothesis of widespread appraisal error, consider the vicious circle of circumstance which enthrones and perpetuates these errors. To present a somewhat oversimplified sequence of events, an appraisal practitioner develops a plausible method of analysis which presents the appearance of scientific accuracy and which he employs in a condemnation case. His lawyer, finding that this method convincingly supports the client's case, gladly accepts it as sound. In court, because of his long experience in real estate, the appraiser is qualified as an expert. The judge, who is no appraisal expert himself, is not competent to assess the soundness of the method and is inclined to accept it as presented by a qualified expert. The opposing lawyer, also unlearned in appraisal methodology, is in poor position to challenge the process. It sounds impressive to the farmers and housewives on the jury, who rely on its findings in their award. Other appraisers, observing that this method seems to be accepted and effective, employ it in other cases. Other lawyers, finding it unchallenged and accepted by the judges, accept it themselves and dare not question it in court when employed by the other side. It appears as accepted doctrine in judicial pronouncements. It is written into appraisal literature and taught as gospel. Finally, public officials in condemning agencies, demand that their appraisers employ this tried and true method and prepare appraisal forms which call for its use and which all appraisers hired by the agency must complete. Now comes a small voice from somewhere which questions the validity of the method, points to faulty theory on which it is based, and demonstrates its error. Who is there to listen? Who is there to break the vicious circle? The appraiser for the public agency is required to use the method if he wants to be hired. The lawyer for the condemnor and the lawyer for the condemnee will insist that his appraiser use this tested and accepted method, assuming it contributes to the client's case, or he will find another expert witness. If neither side challenges the method, the judge may never become aware of its dubious logic; or if the question is raised, there is the comfortable precedent of past acceptance on which to fall back.

It is a demonstrable fact that not one such error, but many have become built into appraisal theory and practice, accepted by most appraisers, lawyers, judges and public agencies. All parties to the condemnation process have contributed in one way or another—the appraiser, the lawyer, the public agency, the judge and the legislature. Because of the growing importance and frequency of compulsory acquisition of land and the large number of court cases, the appraisal theory and practice which has gained acceptance in this area of activity has acquired a status which makes it controlling in other fields of appraisal.

It is difficult to assess the social importance of appraisal error but as a generalization it is safe to say that any method which results in a condemnation award which fails to reflect the intent of the law represents a social cost and is not to be condoned.

THE NATURE OF APPRAISAL ERROR

Before proposing ways and means for breaking the vicious circle which appears to bar the rationalization of condemnation appraisal practice, it will be well to make the case for the existence of damaging error. Be it said that our view is that of a minority

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within the appraisal fraternity; it is contrary to much of the accepted appraisal literature and not consonant at many points with the teachings of some of the professional appraisal organizations. Thus our case will have to stand on feet of crystal-clear logic, unsupported by precedent and bolstered by but a few sympathetic authorities.

We start with recognition of the fact that no appraisal is ever done in the abstract, that each appraisal assignment is occasioned by the need to make a decision—in condemnation, to determine an award; in mortgage lending, to judge the wisdom of making a loan of a given amount; in real estate investment, to decide how much to sink in the property or project.

A second principle of basic importance is that any value figure must be compounded of past human behavior; there is no other possible basis. There is no such thing as intrinsic value; there is no necessary relationship between value and cost. Take an iron nose ring which might cost 12 cents to produce. It might be worth one goat to a Hottentot for adornment; a farmer with an ill-tempered bull would pay many times its cost; it would have no value whatsoever in New York cafe society. The appraiser of real estate cannot assign a value except by reference to his observations of the value reactions of real people in the past with respect to similar properties under similar circumstances. Even an estimate of cost must be a reflection of what it has cost other people to acquire a new property of similar characteristics.

Finally, there is only one act of value judgment which the appraiser can possibly perform—he can only predict what the property will probably sell for under stated conditions. Appraisal is prediction, a forecast based on the observed value behavior of people in the past. In most appraisal assignments, the client's needs are satisfied by an expert prediction of what would be the most probable selling price of the subject property under existing market conditions. But the client may change the conditions for whatever may be his personal reason; he may ask what the property will probably sell for in next year's market. Or he may want to know what it would sell for if interest rates should be lower by one percent. Or he may recognize that today's market is unbalanced, with an excess of supply and depressed prices. Thus he may ask what the property would sell for in a balanced market. The appraiser may be faced with an infinite variety of hypothetical conditions under which he is to predict the most probable selling price. The particular conditions which have been set for him when appraising for condemnation purposes will be discussed later. But whatever are the conditions which may be set by the appraisal assignment, the only thing which the appraiser can possibly do is to refer to his observations of past transactions and judge as best he can how buyers and sellers are most likely to act under the given conditions of his assignment. It follows that if the appraiser has not observed past transactions of a relevant nature or has no way for discovering records of such behavior, he is not equipped to appraise the property.

To summarize the basic valuation principles which must be understood and accepted if prevalent appraisal errors are to be identified:

1. The appraiser's findings must be directed to the client's problem and the value figures derived must be relevant to this problem.
2. Past human behavior is the only possible basis for appraisal judgment.
3. The only possible appraisal conclusion is the probable selling price of the property under the stated conditions.

THE CONCEPT OF VALUE IN CONDEMNATION

The variety of concepts and definitions of value which are bruited about in appraisal literature is almost as great as the number of appraisers. But in recent times, appraisers have taken over the legal definition of value, labeled "market value" or "fair market value." This judicial definition, which seems to be generally accepted in condemnation cases, derives from a number of legal concepts expressed by the courts which all seem to add up to about the same thing. In effect, the appraiser is told to estimate what the subject property would sell for if both buyer and seller were willing, if not necessitous, if fully informed of market conditions and the potential utility of the property, if the property had been on the market a reasonable length of time and if the

balance of demand and supply were normal. There is no doubt but that this definition of value has an ethical content which is consistent with the intent of the constitution to provide "just compensation." Strangely, its literal application can defeat its purpose. Assume that an appraiser is seeking the "fair market value" under unbalanced conditions—a depression, a surplus of supply and depressed prices resulting from distressed sales. He must start with an estimate of what the subject property would sell for in the present market, which he determines to be $10,000. Then, under the constraints imposed by the value definition, he must adjust this figure to represent a level which could be expected in a balanced market. This he judges to be $15,000. An award made on this basis would permit the condemnee to profit substantially by replacing the property lost with another of like quality for $10,000 and pocketing the excess $5,000. Or assume the reverse situation—a housing shortage with inflated prices. Here the award would be reduced below the current level of selling prices and the condemnee might have to wait several years before the restoration of a balanced market would permit him to replace his property with the proceeds of the award. In neither of these two situations could the award be said to be a "just" measure of the property taken. It would seem that justice would be served if the condemnation award were established by the "most probable selling price under current market conditions." Theoretically, at least, the condemnee could replace the property taken at current prices. As a matter of practice, it is observable that most awards conform more closely to this latter definition of value than to the technical terms of the legal definition.

COST LESS DEPRECIATION

The most shocking violation of appraisal logic is the widespread misuse of the cost less depreciation calculus. Ignoring a number of respected appraisal authorities who have long pointed out the error in the cost approach, appraisers persist in its use and many courts continue to accept it as a valid basis for adducing evidence of value. Much of its popularity, no doubt, derives from a specious appearance of reasonableness, from the widely understood parallel approach in accounting procedure, albeit for entirely different purposes, and from the fact that juries will readily believe that a property is worth what it would cost new less accrued depreciation. As a horrible example of the misuse of the cost approach, take the case of an actual appraisal made recently by a staff member in the organization of an outstanding and nationally known appraiser. This appraisal was submitted to a public agency in connection with land acquisition and prepared in the standard form required by this agency. The property was an old combination store and apartment building, built in 1898 and located in a slum area. The appraiser, at great expense in time, carefully measured up the building and calculated its cost of reproduction. He meticulously examined both exterior and interior and using the recognized classification of the sources of depreciation, he estimated a 30 percent loss in value by reason of physical deterioration, 35 percent because of functional obsolescence, and 20 percent from economic obsolescence. This added up to 85 percent depreciation. When pressed, the appraiser privately admitted that he had no real basis for such massive adjustments and that, in fact, he had already arrived at a tentative value figure based on market information and simply fudged the depreciation estimates so that the net figure was close to his already established value. This case is not unique; in fact, it is typical. The appraiser was required to use this approach by his client, the public agency. He had to fudge the figures because there is, in fact, no basis on which such large adjustments can be made unless the value of the property is already known. The unpleasant fact is that, at considerable cost to his client and the taxpayer, the appraiser was forced to engage in a futile exercise which contributed nothing whatsoever to his conclusion.

Why was the cost approach wrong in the foregoing example, as well as in most cases in which it is currently being freely used?

1. It starts with the false assumption that the cost of the property, new, is equivalent to its value new. But no one would build this structure in this location so that such a figure, cost new, is hypothetical and unrealistic and, in fact, meaningless. Design standards and structural techniques have changed vastly since 1898. The nature of the

location has changed so that no intelligent investor would consider building this kind of a building in an area which has long been on the downgrade.

2. The summation method of cost estimating is unrealistic. The formula calls for adding the value of the land separately determined by comparison as if vacant to the cost-new of the building. Land value is to be based on highest and best use, which would not be a similar structure. Thus land value assumes a different use than the building whose cost of construction is added. The value of vacant land, which in fact is not vacant, is added to the cost of a building which no one would build.

3. If the adjustments for depreciation are to be made to a figure which is meaningless in the first place, the end product is bound to be meaningless.

4. The whole concept of depreciation should be thrown out of court in the appraisal context. The term "accrued depreciation" is wrong because it implies the passage of time, yet the appraiser admits that a poorly designed structure is subject to "depreciation" the minute it is completed. Depreciation is usually defined as "loss in value," which also implies the passage of time.

5. Remembering that the only possible basis for value-determination is human behavior and that in most cases the appraiser seeks to predict "the most probable selling price," it follows that the only use for a cost estimate is when it represents the probable cost of acquisition of an alternative new property which a buyer actually might consider as a substitute for the subject property and which, therefore, will condition his bid for the subject property. It must be an actual potential, to be built on land now vacant and available, and to provide substantially the same utilities and amenities. If there are small qualitative differences, the appraiser may make adjustments (not for depreciation) on the basis of his observations of past market reactions to such differences. Thus, the hypothetical new structure is treated by the appraiser as he treats any "comparable" which represents a real alternative or substitute for the subject property in the market. If it is not a real alternative, it has no relevancy to the problem.

A common rejoinder to the argument that cost data have only limited usefulness in the appraisal process is to point out the problem of the single purpose property or the monument. Now there is little appraising of monuments since there are few business decisions to which they give rise. However, special purpose properties such as churches abound and they constitute fine examples of situations in which neither sales comparison data nor income histories are available. Consider the problem of a non-income property like a church where sales of such properties are rare. What basis other than cost is there for the appraiser to employ? If, in actuality, there is no market whatsoever for churches in the community, then the answer is easy—the property has no value as a church; its probable selling price is zero. This does not mean that it may have no value if convertible to some other use, or that the land may not be appraised as if vacant, less costs of demolition of the structure. But suppose that there is some chance of selling the church to another congregation though no other churches of this size have recently been sold and no comparative sales information is available. Under these circumstances, a cost-new figure can be of use—but not cost new of the subject property; rather, the probable cost of acquiring an available site and building a new structure according to the specifications of the prospective purchaser congregation. The hypothetical new church would not be identical; in fact, it might be quite different in location, plan and architectural treatment. But it would represent an actual and effective alternative for the prospective purchaser. Assume that the purchaser congregation could secure what it wanted, new, at a cost for land and building of $500,000. The problem which would confront it would be to decide, in comparison, how much the subject property would be worth. The appraiser, simulating the purchaser's approach, would adjust the cost new for the age of the subject property, the inefficiency of its floor plan, the outdated architecture and the shortage of parking space, and would conclude that a purchasing congregation would be willing to pay $250,000 for the older building. This is the point of indifference—$500,000 for the new or $250,000 for the old. Thus $250,000 is the most probable selling price provided that the selling congregation should decide that it would rather have the $250,000 than the old church.

INCOME ANALYSIS

It is surprising to an appraiser that some courts frown on the so-called income approach to value. This type of analysis is very useful to the appraiser in at least two circumstances. In the first place, the capacity to produce income is a most significant quality of a property where productivity can be measured in dollars as in the case of an apartment building or office building. Thus the relevance of comparable sales depends upon the similarity of the prospective level, pattern and duration and certainty of the incomes of the subject and comparable properties. Like the architectural design of a dwelling house, the expected income of an income property is an important qualitative characteristic which conditions its selling price.

A second use of income analysis arises when past transactions of purchase and sale of similar properties to that under appraisal have been so infrequent or so remote in time that the appraiser can adduce very little sales evidence on which to base his value prediction. Under these circumstances, the appraiser must simulate the analysis and reasoning of prospective buyers and sellers. He must put himself in the shoes of the typical investor in this type of property and reason like such an investor. This act requires that he be familiar with the calculus which the investor is most likely to employ in arriving at his bid or offer. The greatest failure of appraisers in this connection is their failure to identify realistically with the typical investor.

This failure to simulate realistically the investment reasoning of a prospective buyer sometimes simply reflects the unfamiliarity of the appraiser with market behavior relating to this type of property. Thus the appraiser, unable to act like an investor, simply acts like himself, which may be quite different. Again, the appraiser may employ esoteric calculations—like the building residual method with the Hoskold formula—which impress the undiscerning but which are a far cry from the way real-life investors go about making investment decisions. In the arithmetic of many appraisers, the role of borrowed capital is ignored or glossed over in broad generalizations. Yet in no form of investment is the leverage game more generally played to the hilt. Investors seek the maximum use of borrowed capital; thus the availability of credit and the interest rate and terms under which it can be borrowed are highly significant in the investment decision. Short-term cash flow may be more important to the investor than net income before depreciation which the appraiser painfully estimates for the next forty years. In these days of accelerated depreciation and capital gains advantages, tax advantage may be a primary motivation among investors in this type of property. The main point is that unless the appraiser reasons like an investor, his prediction of the most probable selling price will be off the mark. It is not required that the appraiser employ textbook methods which are used in the market, be they theoretically right or wrong.

Perhaps the most vulnerable part of the usual income appraisal is the capitalization rate. The geometric leverage of this component is such that a small difference in the rate makes a large difference in the value answer. In the majority of communities and for many types of income property, there simply are not sufficient recorded market transactions to provide the appraiser with what he must know—the capitalization rate actually employed by real-life investors in their investment calculations. The appraiser falls back on simulation procedure or he siezes upon a given rate for a certain type of property which has become accepted into local appraisal practice with its doubtful paternity lost in antiquity and its accuracy as a reflection of actual investor behavior subject to serious question.

COMPARATIVE SALES

Comparative sales are clearly the best evidence on the basis of which to predict the most probable selling price of a property. The logic is unassailable but often strained in practice. Any facts on market behavior may have relevance in the problem of predicting the probable selling price of the subject property, and the degree of relevance depends not so much on the degree of identity of the properties but rather on the degree to which the comparable property is competitive, i. e., an acceptable alternative or substitute for the subject property. Thus the real-life buyer may have a hard time

choosing between a two-story colonial on the west side and a ranch-type home on the east side of town but in spite of their qualitative differences, the actual selling price of one would be useful evidence in predicting the probable selling price of the other.

Adjustments for qualitative differences between comparable and subject properties must be founded on actual market reactions to such differences if the adjustments are to be meaningful. The cost required to make the two properties the same is not a dependable basis for adjustment. Thus it might cost $1,000 to modernize the bathroom but no buyer would increase his price offer by more than $500 in response to this improvement. Or $350 spent on exterior painting might bring $750 in a higher selling price. Bona fide bids and offers are useful evidences of market behavior and should not be barred if they represent firm commitments. It is hard to understand why, in some courts, the previous selling price of the subject property is not admissible evidence. It is well-known that the real estate market has a propensity for accepting a transaction price as convincing evidence of the value of a property and uses this figure as a basis for future transactions. Thus the price at which the property recently sold is an important indicator for the future.

THE THREE APPROACHES

The three approaches to value—cost, income and market—have become so imbedded in contemporary appraisal literature and practice that appraisers are stuck with them. Convention requires that they produce three separate value figures and by a mysterious process termed "correlation," derive a final single value. A much simpler and more realistic concept of the appraisal process derives from our earlier hypothesis that the only possible thing which an appraiser can do is to predict probable future market behavior on the basis of past evidence. All relevant evidence is assembled, processed and a final estimate is made. This is but one process though it may be convenient to classify types of evidence under various headings. The customary trichotomy breaks down under this line of reasoning. We view the estimation of cost-new as appropriate only when a new property is a real alternative or substitute for the subject property and when the cost is viewed as a market-determined price of acquisition of a hypothetical comparable property which is to be treated in the same fashion as an existing comparable which represents a real alternative. Income analysis to estimate the characteristics of the income stream is necessary in order to adapt the selling price of a comparable property for use as evidence of the probable selling price of the subject property. When no past sales transactions are to be found, then income analysis is employed to simulate the reasoning of the most probable investors as a basis for prediction of the most probable selling price. This line of attack does not break down neatly into the three approaches and challenges the convention of approaching every appraisal from three directions at once.

PROBABILITY

We have insisted that the appraiser can only predict the most probable selling price under stated conditions. Most clients, including public agencies and courts, mistakenly insist on a single value figure. Many appraisers round off their estimate in recognition of the fact that it is not an exact amount and a few prefer to report their findings in the form of a range. This device of a range is in the right direction; in fact, it would be both logical and useful to the client if the appraiser took a final step and indicated his opinion of the probability that the actual selling price would fall within this range. Consider the fact that, in statistical terms, the appraiser's prediction is in the form of a central tendency, the most probable occurrence in a frequency distribution of possible occurrences. The quality of the appraiser's prediction of an exact value will vary widely from case to case. In appraising a tract house, he usually has available a substantial number of recent sales of nearly identical houses, and his prediction of the most probable selling price of the subject property will be realized in actuality within a narrow range of error. But should he be appraising a large luxury home in a small town where no past sales of similar properties can be found, the actual selling price of the property will probably deviate widely from his value estimate. In both cases he

may have used all available information with the highest level of skill. Thus in any given case, the reliability of the value estimate is a function of both the availability of dependable information and the skill of the appraiser. But who knows better than the appraiser what are the odds that the property will really sell for something close to his appraised value. And since all business decisions call for judgment on the odds for and against success, would it not be helpful to the appraiser's client to know the degree of dependability of the appraiser's estimate. In the tract house valuation, the appraiser might report that the most probable selling price of the property will be $17, 500 with only a one out of ten chance that it will be lower than $17, 000 or higher than $18, 000. For the luxury house, he would indicate that the most probable price would be $75, 000 but that it might fall anywhere from $60, 000 to $90, 000 with only a one out of ten chance that it would be higher or lower. This kind of odds-making is realistic and can be useful in the decision-making of the client. It adds an important qualification to the value figure and avoids the misleading implication that in every appraisal, the appraised value has the same practical significance.

REMEDIES

This discussion began by viewing with alarm the self-perpetuating circle which has frozen certain serious and pervasive appraisal errors into the condemnation process. The existing situation was highlighted by a number of examples of error, and it is to be hoped that a more or less convincing logic has served to support my position, dominant appraisal beliefs and practices not to the contrary. It is not quite true that everyone is out of step but me. A few of the errors discussed have been recognized by the courts in a number of states. Among thoughtful appraisers, there is growing evidence of an acceptance of certain of the viewpoints outlined here. In fact, the misuse of the cost approach was pointed out some thirty years ago and since 1934, the Federal Housing Administration has avoided using it in its millions of appraisals for the very reasons stated in this paper. But the fact remains that most of the protest against traditional but unsound appraisal methods is tacit and not expressed in changed techniques. The major reason for the laggard pace of rationalization in appraisal practice may perhaps be found in the fact that so many courts and public agencies accept unquestioningly or even insist upon wrong practices. In such a precedent-minded environment, what gain is there for the appraiser in fighting upstream against the strong current of tradition and accepted theory.

But it is also true that the great majority of practicing appraisers are not conscious of error. They are following the theory and methods which have long been taught by the trade associations and professional societies and which are supported by most of the books and periodical literature which is recognized as authoritative. Perhaps the lagging state of the appraisal art can be illuminated by viewing it in the perspective of its slow evolution toward professional status.

The history of any professional group will reveal that at the beginning, the development of a theoretical foundation and the refinement of techniques depended almost entirely upon the more able and thoughtful practitioners. Apprentices were trained by those experienced in the art, and accumulated wisdom was passed on to each new generation through observation and personal instruction. Until very recently in the field of appraisal, most of the textbooks were written by practitioners, the articles in the professional magazines were submitted by practicing appraisers, and the organized societies passed on the accumulated knowledge through educational programs prepared and taught by practitioners. Very little was contributed by university professors and scholars. Whatever the reasons, there have been very few significant advances in appraisal theory and practice in more than forty years. But as it became more difficult for the appraiser to retreat behind experience alone to defend his findings, he did develop theoretical gimmicks, such as the three approaches, to serve as rationalizations for his methods. He devised impressive arithmetical treatments for processing appraisal data which gave the specious appearance of scientific analysis and exactitude.

If the experience of other professional fields can be accepted as relevant, the maturing of appraising into a profession will continue to lag until there has been a substantial

increase in the complementary facilities for appraisal education and research in our institutions of higher learning. Without the contributions of a much more extensive academic collaboration than now exists, there will be little progress in raising the standards of this deductive art. On this front, the University of Wisconsin has made a modest addition in the form of a new graduate program of professional education leading to the degree of Master of Science in appraisal. Public agencies could speed the process by insisting on adequate training for staff and fee appraisers and by refusing to accept appraisal findings based on erroneous theory and faulty practice. They could provide retraining facilities for their present staffs. And the judges are in a most strategic position to speed the rationalization of appraisal practice for if, with sufficient frequency, the judges refuse to consider appraisal findings which are unsoundly based, the appraisers will quickly mend their ways. And who is to educate the judges? The lawyers.