

APPRAISING OIL & GAS PROPERTIES

A Newsletter for Appraisal Professionals

Richard J. Miller & Associates, Inc.

Vol.1 No. 4 March, 1994

Well, to paraphrase storyteller Garrison Keillor, it has not been a quiet week in this part of Lake Wobegon. Since the last newsletter in December, we have had an earthquake, some very interesting appeals board and court decisions, and the publication of new appraisal guidelines in Texas and Utah. Our firm has also spent a very busy two months completing a new study of oil property sales in California and preparing for the annual meeting with county tax assessors which was held on March 9, 1994 in Ventura, CA. All these are discussed in the News and Comment section.

Fortunately we had no damage from the earthquake through it did make getting north to Bakersfield more of an adventure. If you are familiar with this part of the country you know Interstate 5 is the only way to go north from LA. without going halfway to China. Several parts of I-5 were repositioned by the quake and those parts will have to be rebuilt. Work started immediately and, while there are delays at the detours, traffic is flowing. The amazing thing is the pace of reconstruction on the damaged parts. The state assigned contracts for construction, included generous early-completion bonuses, and waived virtually all the usual bureaucratic fallderal. As a result I-5 will probably be in full operation by summer - well ahead of schedule. The same is true of other major freeway repair projects. It makes you kind of wonder what would happen to productivity if "govement" got out of the way more often.

The appeals board and court decisions are positive and strongly suggest that actual market conditions can be carried into the appraisal process and be not only understood but acted upon to produce reasonable property values. The new guidelines are also a step in the right direction but there is an increasing need for appraisers to maintain input into the formulation of such rules.

On the down side, oil prices are the lowest in years and there is no real reason to expect a change soon. A front page article in the Wall Street Journal (3/21) reported an expectation for prices in the \$15 range for the foreseeable future. In California, Midway-Sunset 13/API is posted at \$9.75/Bbl. Real oil prices today are the same as they were in 1973. We are operating with 1973 prices and 1994 costs. What is the value of an oil property under these conditions?

Because of all the news that we need to cover, I decided to focus on a relatively compact subject as the Topic for Discussion in this issue. Each decision, new guideline, and study serves to highlight the increasing importance of appraisal issues, particularly for ad valorem tax and acquisition/sale usage, and the need to focus on some areas of appraisal that may be taken for granted. One of these areas that often goes unnoticed is the cash flow; the income stream expected by owners and investors in oil properties. Right about now you may be saying, "Everybody knows about cash flows - this should be dull." But, what I have in mind is not the mechanics of the cash flow - how to build one - but what the cash flow really accomplishes in the appraisal process.

Topic for Discussion - The Role of The Cash Flow

The Income Approach is the predominant method for appraisal of oil and gas properties by industry and by an increasing number of taxing jurisdictions. While other methods are occasionally used, the valuation of oil properties by the Income Approach is generally unquestioned. The Income Approach has two primary components: a Cash Flow and a Discount Rate.

The discount rate is immensely interesting and deserving of an extended discussion. We plan a three part series on Market Derived Discount rates starting next issue. The discount rate probably has more impact on value than any other single element of an appraisal and has, therefore, been the subject of considerable discussion - often generating more heat than light in professional journals, public and private meetings, and not a few courtrooms as appraisers try to determine the appropriate discount rate(s) to use to appraise an oil property. It has been my observation from all of the above sources that the discussion is often confused, clouded, and bogged down in apparent misconceptions about the relation of the discount rate to the cash flow part of an Income Approach and also to other methods of appraisal such as the Comparative Sales method. I can recount spending days in hearings and other proceedings trying to disentangle discount rate concepts from other aspects of the appraisal. Frequently this time consuming diversion occurred because of a lack of understanding of the role of the cash flow in the appraisal of an oil property.

The Cash Flow

As noted above, the cash flow part of the Income Approach is sometimes overlooked or taken for granted in discussions of oil property appraisal while the discount rate gets all the attention. The cash flow, however, is the Income Approach. The cash flow is the means for projecting and estimating the future income from the subject property. It is the ability of appraisers to estimate an income stream for an oil property that makes the Income Approach so much more useful than other methods of appraisal. In it's simplest form, the discount rate serves only to reduce future income to a present value. However; if the cash flow is not done correctly, arguing over the discount rate is a waste of time.

Most appraisers are familiar with the structure of a cash flow. You make an estimate of future production of oil and gas for a property; apply expected product prices; deduct operating costs, royalties, production taxes, and necessary capital expenditure; and calculate and deduct income taxes. The result is a cash flow or income stream that can then be discounted to present value or fair market value. There can be many variations to the components such as: (a) escalation of prices and costs, and (b) risk adjustment of production streams or other parts. The cash flow can be made as simple or complex as data, time, and the client's patience allow but the composition and structure of the cash flow is pretty basic.

In constructing and using the cash flow, model we often do not think too much about the role that the cash flow plays in the Income Approach, particularly in the appraisal of oil properties. Of course, we are used to thinking of the cash flow as a vehicle to reach value decisions, determine economic reserves and the remaining life of properties, and to help assess investment alternatives. These are all functions of the mechanical aspects of a cash flow - you put data in to get a result out.

It's sort of like the good ole' boy said about his waterflood operation - "I put water in one end and oil comes out the other, I don't worry about what happens in between." Whatever works. But occasionally it can be fun to muse on what happens in between. If oil prices continue where they are, we may all have a lot of time to ponder all sorts of things.

Role vs. Structure

Assume that we have a reasonably knowledgeable appraiser and both sufficient data and time to do a credible appraisal. Data is not as much a problem as it used to be - time is something else again. The cash flow that could be developed in these circumstances would probably have the familiar structure and would probably fulfill the intended purpose of a cash flow by providing the analytical vehicle discussed above. From an appraisal standpoint however, the constructed cash flow provides a greater service by accommodating three other considerations that are essential in the appraisal of oil properties.

- The Characteristics of the Property.
- Incorporation of Current and
- Anticipated Economics.
- Reduction of Differences Among Properties.

The accommodation of these concerns is accomplished in the Income Approach by the critical analysis of available production and other data about the subject property and the piecing together of that data to form a rational and appropriate cash flow.

The Characteristics of the Property

A properly developed production and income projection ("cash flow"), whether of one-well, a multiwell lease, or an entire field, contains all the definable and quantifiable characteristics of that property. The property characteristics and resulting projections may not be unique but the property can be fully represented nonetheless.

Assume, for simplicity, a multiwell lease with sufficient production and operating history to allow the property to be analyzed without having to rely on data from other properties. The production performance of the wells and the lease as a whole is a direct function of (a) the properties of the reservoir rocks, (b) the composition of the reservoir fluids, and (c) the method of operation of the lease. The wells will produce only what the rock permeability, porosity, etc. will allow; reservoirs with high water and/or gas saturations may produce more water and/or gas than reservoirs that are not highly saturated; and wells that are fraced, pumped, steamed, oil produced intermittently will have those conditions reflected in the production history (and other data). Therefore, if the projection of future production is based on past performance, the projection automatically includes those same characteristics. Likewise, a proposed or anticipated change in future operations, presumably based on an analysis of the effects of such a change, would also reflect the character of the property.

Other parts of the cash flow incorporate other characteristics. The oil price directly reflects the oil gravity, composition, and probable end-use. Gas price reflects heating value, transportation, etc. Royalties are property specific. Production taxes are a direct function of location right down to the city, sub-division, and tax jurisdiction. Operating costs are a function of depth of production, number of wells, production methods, gross fluid volume, composition, oil gravity, location, and virtually every other characteristic of the property. The contribution of each characteristic may not be definable or quantifiable and one may partially offset another, but there can be no argument that operating costs reflect the specific character of the property - so much so that they are not readily transferable except in broad terms.

Incorporation of Current and Future Economics

Construction of a cash flow for a property allows the appraiser to incorporate not only existing economic conditions of the property but also to apply expectations for the future in terms of oil price, gas price, operating costs, taxes, and other factors. While the discussion of economics usually centers on future product price and operating costs, other areas such as the need for further investment; production and ad valorem tax increases; changes in royalty or other ownership; and, of course, income tax need to be considered in an appraisal. Our review of cash flows from property transactions in California indicates that the market considers all these factors and more.

These expectations for the future are not trivial matters. Expectations are what makes the marketplace sellers obviously have different expectations than buyers. Expectations also have significant influence on the remaining life and reserves of a property by defining the economic limit of production and by invoking other economic conditions such as the cost of abandonment and cleanup. Question: If oil price drops below the economic limit, are reserves reduced to zero? If price is expected to recover in the future, at what point are the reserves restored? Responses welcomed.

Reduction of Differences Among Properties

If constructed so that it reflects the characteristics of the property and includes reasonable economic expectations, the cash flow can then render its greatest service to investors, owners, and appraisers by providing a means of directly comparing one property or investment to another on a readily quantifiable basis - a stream of future income.

Assume, for instance, two properties. Property A is a multiwell lease in Kern County producing steamflood oil from the S. Belridge-Tulare. Property B is a multiwell lease producing from, oh, let's say the Seminole-San Andreas. An appraiser knowledgeable of both properties could doubtless run off a couple dozen characteristics that differ between the properties without working up a sweat. However, at the same time, he or she would be hard pressed to find a characteristic in the list that is not reflected by some part of the cash flow.

The first thing anyone would point out is the difference in oil gravity. I wish I had a nickel for every time I have heard "You can't compare to California - the gravity is too low", or some such. The gravity is different but the difference is reflected in the price paid for the oil along with the costs of production. The same thing is true for the production rates, decline rates, gas production and net

gas sales, water production and disposal, production taxes, etc. Each item is included in the cash flow based on how it relates to the subject property - not to some other property. Even the pressure of environmental and other regulations - which in California tend to increase to compensate for the declining production - : are being factored into operating costs as producers find ways to allocate these costs.

The result of constructing a cash flow for Property A and for Property B, assuming reasonable use of available data, is two projections of future income which reflect, explicitly and implicitly, all the salient characteristics of the properties and most of the more subtle ones also. If the cash flows were unlabeled, one would be indistinguishable from the other; as a result the cash flows can be directly compared to each other. In this regard the reduction of differences by cash flow serves at least two classes of people very well: Investors and Appraisers.

For investors, the construction of cases flows that reduce the differences among properties (investment opportunities) to a comprehensive income stream allows the use of analysis tools such as Net Present Value, Internal Rate-of-Return, Profitability Ratio, Payout, and other methods to select among investments. The various characteristics of the property are already part of the income stream and need not be considered further. There are always exceptions ("TAAE").

For appraisers, the construction of cash flows that incorporate the characteristics of various properties and reduces those differences to comparable income streams performs the same function as the Pairs Analysis required by the Comparative Sales Approach to value. In doing so, the cash flow portion of the Income Approach allows other components of the Income Approach - primarily the discount rate - to be obtained from generic sources such as market sales.

This appraisal function of the cash flow is a very important point to keep in mind or at least think about while driving home tonight. It is relevant, for instance, to acquisition and investment appraisals but it is particularly important in those situations where the appraiser is dealing with clients, assessors, appeals board, and other taxing agencies who are, by background and daily work, more accustomed to surface real estate than to oil and gas appraisal. There is often a tendency to commingle the methods and concepts of the Comparative Sales Approach with the Income Approach. I have done it at one time or another and so has every evaluator and appraiser I know. It often shows up in attempts to use schedules of property characteristics, such as reserve volume, to select discount rates or suggesting that discount rates should be higher or lower due to oil gravity or location.

Returning to our two properties, A and B, there can, of course, remain some observable and quantifiable differences such as the term or length of the cash flow and the risk that may be perceived to attach to one or both cash flows or properties. Risk cannot be removed but can be accounted for in a number of ways including internal adjustments within the cash flow or the construction of multiple cash flows summarized to an expected value. Both are very common methods of treating risk (particularly production or reserves risk) in property appraisals and lead to cash flows that are directly comparable on a risk adjusted basis.

The difference in expected economic life and/or the shape of the revenue stream is reduced by discounting the cash flow to a present value at an appropriate discount rate. (We will save this discussion for later.) This approach is not without problems. It gives disproportionate weight to early years, for instance, but at the same time it is a consistent and convenient means of comparison.

No Help for Rocky

The Pop Quiz in our September, 1993 newsletter attempted to capture some of this problem. If some readers thought this was a setup, you are right. We got a lot of feedback on the quiz including some from assessors.

Loyal readers may remember that, when we left our friend Rocky, he was puzzling over a list of factors or characteristics that might influence his choice of a discount rate for use in the Income Approach appraisal he was doing for an oil property. His list included Field Location, Oil Price, API Gravity, Number of Wells, and other characteristics. These factors and others are often given as the basis for the "quality" of a property and as the basis for selecting a discount rate.

It seems apparent, though, that the factors in Rocky's list are included in the cash flow, either directly or indirectly, and should not need to be reflected in the discount rate unless there had been definitive studies done to determine the extent to which one or more of the listed factors might influence the choice of the discount rate. To the extent that one or more of the factors in Rocky's list could be classed "good" or "bad", they are considered in the impact of that factor on the expected cash flow. Therefore, the discount rate does not need to be selected based on specific characteristics or the more ephemeral "quality".

There is only one exception on Rocky's list. The Long or Short Production History of the property could influence the choice of the discount rate to the extent that it represents an element of risk in the estimation of future production. However, if the history of the subject property is too short or unstable, even this can be mitigated by the use of type curves from similar properties, or other engineering techniques along with the appraiser's experience and judgement.

Appraising Oil and Gas Properties is a publication of the Petroleum Engineering and Appraisal consulting firm of Richard J. Miller & Associates. For further information, letters and comments, and/or additional copies, please write, call, or fax:

16152 Beach Blvd., Ste. 107
Huntington Beach, CA 92647
Phone (714) 375-2790
Fax (714) 375-2792

Copyright 1994

Reproduction with attribution

Richard J. Miller & Associates is a petroleum engineering and economic evaluation firm specializing in the appraisal of oil, gas, and geothermal properties. The firm provides traditional reservoir and production engineering evaluation services for operators and investors, financial institutions, and for forensic purposes. RJM&A provides clients with evaluation and appraisal services for project planning and development, financing, trust and estate management and taxes, ad valorem taxes, and other purposes throughout the United States and Canada. Clients include major oil companies, financial institutions, and individuals. The firm does not do appraisals for acquisition of properties. RJM&A is a division of Pacific Resources Management, Inc., a California corporation founded in 1977.

Richard J. Miller is a petroleum engineer with BS and MS degrees in petroleum engineering and an MBA in finance and economics. He has over 25 years of petroleum evaluation experience throughout the U.S. with Texaco, Inc., James A. Lewis Engineering, and United California Bank prior to founding RJM&A. Mr. Miller is an Accredited Senior Appraiser specializing in oil and gas properties. Member of SPE, SPEE, and ASA.

Historical Footnote

October 4, 1993 was the 10th anniversary of the California Court of Appeals decision in the case of *Herbert E. Roberts v. Gulf Oil Corporation* (147 Cal. App. 3d 770; 195 Cal. Rpt. 393). Mr. Roberts was the Assessor for Kern County at the time and had sued Gulf to compel the company to provide data for certain properties operated by Gulf in Kern County pursuant to the Revenue and Taxation Code. The R&T Code requires that the taxpayer furnish the assessor "such information or records for examination as may be required by the assessor to make a proper assessment." Gulf declined to provide some of the data requested by Kern County contending that the data was interpretive data -not raw data. Gulf acceded to the requirement to provide raw data which could presumably be interpreted by the assessor using his own expertise. Gulf won the issue in Superior Court but lost on appeal.

Since the *Gulf v. Roberts* opinion - as it is called assessors in California have had the power to ask for virtually any form of information about on-going operations and new acquisitions. Most taxpayers seem to comply but not without some reluctance. The power to require data on acquisitions of properties was not new but was substantially reinforced by the decision. This "full-disclosure" doctrine gives assessors the opportunity to be fully informed of timely and relevant conditions in the marketplace which can then be translated, through SBE Rule 8 and Rule 468, into market values for ad valorem tax assessment.

This "full-disclosure" doctrine is unique to California -no other jurisdiction requires the reporting of the details of property transactions including cash flows and other very sensitive data. The "full-disclosure" authority is balanced by a requirement on the part of the assessor to maintain strict confidentiality of the data so that no other party has access.

The *Gulf v. Roberts* or "full-disclosure" issue is a sure way to warm-up a slow conversation. Try this icebreaker the next time you are in the (insert name) Petroleum Club: "Property tax appraisal would be fairer (or more accurate or more consistent) if assessors had access to actual market information."

The issue is a good one and becoming more important as value-based taxes continue to increase as a proportion of oil and gas revenue. Should disclosure be open-ended or be limited to

specific types of information for on-going operations and/or for acquisitions? Is confidential disclosure of data for use in generally accepted appraisal practice preferable, as an alternative, to legislated procedures and results that may or may not 'adequately reflect the market'?

Well, enough musing for now. This has been my William F. Buckley imitation. We would be interested in hearing your thoughts on this issue.

News and Comment

Santa Ana, CA. (November, 1993) - The Orange County Assessment Appeals Board significantly reduced the assessed valuation on a major portion of the Huntington Beach field operated by Shell Western E&P.

The appeal of assessed valuation covering several private and State of California tidelands leases for each year 1989-92 was heard in September, 1993. After presentation of appraisals by experts for the County and for Shell, the Appeals Board issued a considerably reduced value based in large part on economic parameters derived from evidence of actual market sales offered as evidence during the hearing.

The Appeals Board determined reduced value of the onshore and offshore leases by limiting the anticipated future production to existing primary and waterflood production, including extensions in progress at the lien date, and by allowing for the deduction of anticipated abandonment costs for wells and facilities from projected cash flow. The escalation rates for product prices and operating costs and the discount rate were taken from reported market sales data relevant to the respective lien dates; the primary source being the annual WSPA/CIPA market study. The same 23% discount rate was applied to each of the eight leases for each year under appeal.

The values assigned to the properties by the Board included the value of the royalty interest owned by the State of California in five tidelands leases. This inclusion of the state royalty was, at the time, a pending issue in the California Superior Court. The Board cited the decision in County of Kern v. Oryx as grounds for including the state royalty.

Findings of fact have not been issued as of this date. As the result of a recent California Superior Court decision (see below), Shell has requested the Assessment Appeals Board to reconsider it's tentative decision on the inclusion of the state royalty in the value of the property.

This decision was very similar to decisions by the same Board for appeals by Unocal of assessed valuation of major onshore properties for the same tax periods. The findings in these appeals indicate that, at least in Orange County, the assessed value of oil properties should reflect the value, as measured by market data, that would be assigned to the property by the marketplace at the lien date.

Santa Ana, CA. (March, 1994) - County of Orange v. Orange County Assessment Appeals Board No. 1.

In a separate but directly related issue, the California Superior Court determined that Shell (the taxpayer and party at interest) was not required to pay ad valorem tax on the value of the State of California royalty from five leases operated by Shell in Huntington Beach field. The court further found that the "Oryx" decision did not apply to the Shell-operated leases because the terms of the California Public Resources Code, under which the leases are held, do not allow renegotiation of royalty to offset ad valorem tax. The decision upheld a prior Assessment Appeals Board ruling for the base year 1986 which had been appealed by the County. Presumably, under Proposition 13, the ruling would apply to all subsequent years and would further reduce the assessed value for 1989-92 (see above).

Salt Lake City, UT. (February, 1994) - The Utah State Tax Commission, Property Tax Division, has issued) oil and gas parameters for use in 1994 appraisals of oil properties in Utah.

The parameters include a discount rate; escalation rate; and weighted average crude oil prices for five major producing areas in Utah and adjacent regions of Colorado and Wyoming. The Discount Rate is based on a calculation of weighted average cost-of-capital plus a property tax adjustment. Utah uses a capital structure of 70% equity and 30% debt to obtain a before income tax Weighted Average Cost-of-Capital ("WACC") of 14.60%. A property tax adjustment of 1.15% is added) to reach a total discount rate of 15.75%. The recommended escalation rate is 3.5% which is the expected rate of inflation and is applied to prices and costs. This implies no growth in "real" oil prices which is consistent with oil price performance since 1980 and certainly thus far in 1994.

Further information about the Utah parameters can be obtained from: Mr. John Rogers, Property Tax Division, Utah State Tax Commission, 160 East Third South, Salt Lake City, UT 84134.

Austin, TX (March, 1994) - The Property Tax Division ("PTD") of the office of the Comptroller of Public Accounts for the State of Texas has issued a "Manual for Discounting Oil and Gas Income" for use by appraisal districts in valuing oil and gas properties.

The manual is required by Section 23.175 of the Property Tax Code which was amended in June, 1993 by HB 925 (Craddick) and is intended to specify methods and procedures for determining and selecting appropriate discount rates - the Comptroller's office does not set the discount rate. It is my understanding, however, that PTD will continue the practice of past years of gathering sales information and calculating cost-of-capital discount rates as part of a separate study.

The manual lists three acceptable techniques for estimating discount rates:

- 1) Market Surveys
- 2) Oil and Gas Sales Analysis
- 3) Weighted Average Cost-of-Capital (WACC)

To quote, "Together, these techniques provide a range of discount rates. The appraiser must estimate the risk of each oil or gas property to assign a discount rate from the discount rate range." The clear recognition of basic sources directly related to the activity of the marketplace and of the role of risk

in discounting future oil and gas income is striking. The manual goes into a concise discussion of each method, presents several well-drawn examples, and points out some of the pitfalls that can trap the unwary.

Example: "Atypical income tax deductions, or abnormally high or low overhead can also create an artificially high or low discount rate."

There is a well-written description of the method of WACC calculation which, because of the lack of market data from Texas sales, assumes major importance.

From this appraiser's viewpoint, the manual and the work done by the Property Tax Division fulfills an important role for state oversight agencies - that of defining and documenting methods of appraisal and recommending the means to obtain necessary data to implement the methods but not necessarily specifying the details or actual parameters. If clear ground rules are laid down and the marketplace is the required source of parameters the details should naturally follow. This effort should go a long way toward constraining some of the highly imaginative appraisal parameters that have reportedly been used. Congratulations to Barbara Truesdale and the Property Tax Division on a job well done.

For further information contact:

Property Tax Division
Comptroller of Public Accounts
4301 Westbank Drive, B100
Austin, TX 78746

Austin, TX (December, 1993) - One of the other provisions of BB925 (Craddick) is that the Comptroller of Public Accounts issue projections of oil and gas prices for use by appraisal districts in valuing oil and gas prices. (See September, 1993 Newsletter.)

In a Statement (Vol. 16, No. 12) December, 1993 the Comptroller's office issued price projections that hold the weighted average 1993 oil and gas price constant for 1994 (required by Craddick) and then escalate to a price no greater than 150% of the initial price. In the example issued, oil price increases from \$19.41 in 1994 to a maximum of \$29.12 in 2006, an average increase of about 4.2% per year. Gas price increases from \$1.96/MCF in 1994 to a maximum of \$2.94/MCF in 2004, an average increase of 4.5-5.0% per year. The escalation is higher in the early years. Prices continue at the maximum for the life of the property.

The legislation does not require that an escalation rate for operating costs be defined, however, given that since 1981 "real" oil prices have declined by an leverage of 4.35% per year, the operating cost escalator should be at least equal to the price escalation rate.

Venture, CA (March 9, 1994) - The annual meeting of industry representatives and assessors from the various oil producing countries took place on March 9 in what I have always considered this garden spot of the oil patch. The purpose of this meeting is to exchange views on the marketplace

and to recommend and discuss 1 economic parameters for oil property ad valorem appraisal. This year Western States Petroleum Assn. ("WSPA"), as the sponsoring entity, presented several speakers including Dr. Tom Kerrigan, chief economist for Texaco; Mr. Don McPherson of McPherson Oil Co.; Mr. Roger Glanville, an independent consultant; and yours truly.

The basic theme is that oil prices are down and likely to stay that way: as a result, property values have been substantially reduced - particularly when the costs of future abandonment are included. The presentations included data derived from economic analysis, actual operator experience, surveys, and market studies. In past years the assessors have presented their own market study done by an outside consultant. This year, Mr. Jim Maples, Kern County Assessor, spoke of the desire for fair valuations and assessments but provided no information on appraisal parameters.

The annual market study prepared by this firm and presented at the meeting is now available for distribution. Members may obtain copies from either WSPA or CIPA. Copies are available from RJM&A upon written request.

Politically Correct?

I read in the paper the other day that a congressman from Kansas or Nebraska has decided that, in keeping with the times, farmers should now be referred to as Agro-Americans. Interesting! Does that mean that people in the petroleum industry should be referred to as Oily-Americans? As in "I like your pumping unit. Is it Oily-American?"

Editorial - The Death of "Quality"

I know, you thought this whole thing was editorial but here at RJM&A we are never short of opinions of which the following is one. I think the term "quality" and similar terms used to describe oil properties - as in "high quality, low risk;" etc. is overused and often abused and further has no place in appraisal terminology. It is a term often used innocently to describe a property when other words fail to come to mind; but it is also often used as an excuse to qualify a property for a higher value through the use of a below market discount rate or other manipulation. I have heard the term used many times in the discount rate context but have rarely been able to obtain a rational definition of what "quality" means in that context. When definitions were offered, they consisted of characteristics of the property that were in the cash flow already. This was Rocky's dilemma. The only consistent definition I have found is that a "quality" property is the one undergoing tax appeal.

As noted, "quality" is often cited as the reason for selection of discount rates that are usually below market and for which no other provable or demonstrable basis is offered - often by appraiser's who should know better. This situation always brings to mind the cartoon shown below as representing the relationship between market values and discount rate or other parameters that we are sometimes asked to accept. As appraisers of oil and gas properties, we should not use terms and relationships of values and parameters that do not have meaning or which cannot be demonstrated.

The Soapbox is now Vacant!