Valuation Reports and Security Analysis

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Every professional group in American life seeks to find rules and formulae by which correct decisions can be made easily. Any schoolboy likes to be able to look in the back of the book for the answers to his problems — at least, for the tough ones. There are no answers in the back of the investor's book; no foolproof rules to put money to work in any industry, particularly in the dynamic oil industry, in order to achieve the goals desired by "the typical American investor." We define "the typical American investor" as one who wants to buy something that has the strength of a Government bond; that yields 10 per cent; and that will, at the very least, double in price within six months and one day.

Sometime ago a series of valuation reports were prepared for my firm. They had been prepared for investment guidance a a sufficient number of years previously to permit their conclusions to be tested in the market place. It was disillusioning to find no important relationship between the conclusions of these valuation reports and the subsequent market performance of the common stocks involved. In fact, one of the issues looked upon with the greatest favor because its market price bore an unusually low ratio of about 30 per cent to its then appraised value has had over the years, since the reports were prepared, one of the smallest price gains of any of the major oil issues. It is today selling for about 40 per cent of its appraised value. Of course, the issue's appraised value has increased along with all values in the industry, particularly in the post war period of inflation. This stock entered this period with an abnormally low ratio between market price and appraised value, and this low ratio has continued without making it a good purchase at any time.

This company's stock is not an isolated instance. Other examples over the years taught us not to select issues for investment *primarily* on appraised value. This may seem paradoxical in view of the clear and direct relationship outlined by Lyon F. Terry that exists between lending on a property and its underlying worth as indicated by an appraisal. This generalization does not mean that there is no connection between a stock's underlying asset value and where it sells in the market place. It is clear that such a relationship does exist, but we suggest that appraised value at any given time cannot alone be used as the selecting yardstick, because investment performance after purchase will largely be determined by factors which add new values to those in sight at the time the appraisal is made.

Appraisal Figures and Stock Prices

At present the oils on the New York Stock Exchange are selling at 30 per cent to 150 per cent of appraised values. Such a wide range strongly suggests that there must be many factors other than appraisals entering into market prices. It also raises the basic question whether we should expect a close correlation between appraisal figures and stock prices. An appraisal is an estimate of value based on the assumption of liquidation. An investor normally purchases a security after estimating a company's future based on the assumption that the company is not going to be liquidated. It is fundamentally inconsistent to expect the same tool to measure a company's value on the assumption of liquidation and also measure its worth on the assumption of its continuation as a going concern.

Let us assume the formation of two new corporatoins, each with a million shares subscribed at the same price. Soon after formation one finds 50 million bbl of oil and the other finds 100 million bbl of exactly comparable crude with the same aggregate exploratory expenditure. Under these conditions the market prices for the two stocks ought to have a ratio similar to their underlying value ratios. Actually it would be most unusual to find such an exact reflection of values in market prices. Two newly formed corporations may start off being comparable in every respect, but such a comparison won't continue very long. Every corporation has management, and such management may be poor or good. Managerial policies vary both in their objectives and their effectiveness. In time major and minor differences would develop in these two corporations which inevitably would lead to varying ratios of stock prices to appraised values.

Factors Affecting Stock Price-Appraised Value Ratio

What are these differences that might develop? In the first place, exploration success or the lack of it, particularly in recent years, is a powerful factor in relative market performance of oil equities. Second, financial policies of managements differ and meet with varying responses in the market place. Third, a large proportion of the vehicles available to the investor in the oil industry are securities of concerns that have developed individual patterns of integration into fields other than production. This integration introduces appraisal complications that are hard to resolve. Furthermore, foreign investments and activities further complicate the problem. Finally, there are inherent difficulties in the mechanics of valuation which in some situations make it extremely difficult to calculate into an appraisal figure the factors having the greatest bearing on the creation of new values.

Exploration Success

An appraisal of a property or a company assumes that cash flow directly supports and determines value in liquidation. There is no such direct connection in a going concern. Managements used all, more than, a part of, or none of the cash flow to perpetuate the company in business. Results from

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using this cash flow for exploration vary both in the time and the continuity with which they appear as well as in the worth of the results themselves. The stock market usually does not give very pronounced attention to a liquidating situation in the oil industry. Market prices will tend to be depressed in relation to appraised values where a substantial part of cash flow is unsuccessfully used for exploration. Market prices advance toward underlying values or even exceed them where management establishes, through luck or ability, a sustained success in its exploratory effort. In either case appraised value becomes only a base, a point of departure, from which a purchaser of stocks attempts to assess the future.

This assessing of the future is not always accurately or even intelligently done by the market. This leads to over or under-discounting of the exploratory effort with corresponding sharp changes in the stock price-appraised value ratio. There are decided fashions of interest in the securities market, such as the pronounced Williston Basin fever of the past year. Oil management knows how difficult it is to evaluate a discovery immediately after it is made. A decade ago there was little market response to discoveries until considerably after the facts were available to indicate their importance. Development drilling had proceeded far past the point of indicating a major discovery, for instance, before Velma affected the market action of Skelly stock. Recently the market has frequently been willing to discount a slight staining or fluorescence in a wildcat well. This has led to some amazing incongruities for many discoveries don't pay out. Not too long ago a company announced a discovery as the deepest producer in the world. Instead of accepting the warning that depth influences commercial status, the market quickly added $40 million to the aggregate price of the company's stock. The only difficulty was that the well never paid out.

The ramifications of this sensitivity to exploration sometimes are a serious problem to one who attempts a rational approach to investment selection. Who can state whether an initial $80 million market increase by Kern County Land was the proper response to Wheeler Ridge? How do underlying values aid one in selecting vehicles to share in the bright Canadian oil future? How does one rationalize the marked rise in price of Northern Pacific stock where little oil has yet been found but where prospects are thought to be excellent? Questions of this sort can be enumerated almost without limit. Little help toward answering them can be gotten from appraisals, because market prices for securities frequently move ahead of known facts and figures.

Financial Policies of Management

Exploration requires money; consequently exploration policies may contribute to varying financial policies. Sometimes these financial factors become dominant ones in the pricing of securities. Some companies report small earnings per share and keep dividend payments low. This is partly due to accounting policy, but mostly it is due to the intent to use a large proportion of the annual cash throw-off to explore and develop. This holds down tax liability and permits a simple capital structure to be maintained. The trend of prices in this type of equity is strongly influenced by exploration success or failure. Other companies pursue operating policies and use accounting procedures which lead to more stable profits reports. Usually these companies pay dividends regularly. Frequently they borrow a part of capital needs, and sometimes they ask stockholders to put additional funds into the business. In a few cases the stockholders receive stock dividends pretty consistently as tangible evidence of the managements policy to grow from within.

These policy variations may result in enormous differences in tax position. Full exposure to or relative immunity from the very high tax rates of the past decade lead to completely different results to the investors.

It would be unusual if differing exploratory and financial policies of the two corporations mentioned above did not in time lead to dissimilar capital structures. One might elect to grow through purchasing properties and pyramiding its senior securities, after using up cash reserves. The other might maintain a common stock capitalization reinforced by an ever-increasing cash position. In a period of deflation or adverse market psychology the first company will tend to be adversely evaluated; while in a period of inflation, when debt is said to be an asset, its management will be hailed for its acumen. On the other hand in a period of inflation, investors become intrigued with trying to calculate how much the value of the cash of the second corporation has shrunk; they neglect it and its stock becomes depressed as measured either by other equities or its own appraised value. Examples of both could be enumerated currently. The point is that different capitalization and financial policies make it difficult to maintain a closely recognizable connection between appraised values and security prices, for such policies accentuate the changing moods of investors.

Effects of Integration

Thus far our two corporations restrict their activities to domestic crude production and exploration. If this assumption applied to all issues available in the market place, perhaps appraised value might become more of a dominant and controlling factor than we sometimes believe it is. Integration brings many new problems to the appraiser which are difficult to handle or even to understand. Integration adds manufacturing and marketing and transportation to production, and the economic forces determining whether there is an adequate retrun on the added investment are quite different. Return on nonproducing investment not only varies more widely than production from year to year and from company to company, but such investment complicates capital needs. Requirements for capital to offset obsolescence and to meet growing demand must be made even though the return on the investment may be inadequate or less than could be gotten by putting the same amount to work in production. Refining and marketing is a different business in which only a few concerns have over the last 20 years avoided losses in the tough years and made a really good return in the good years. As a result, integrated companies have consistently sold at lower ratios to appraised values than straight producers. Do not construe these comments as indicating an adverse view toward integrated concerns. Generally speaking, the most conservative and stable investments to be found in the industry are the large integrated concerns. In spite of the prejudice in the financial district against nonproducing assets, particularly refining and marketing, there are many examples of extraordinary accomplishment in this field. Ashland Oil not only earned good money in this activity at a time when most of the industry was not doing so, but its history constitutes an amazing record as a growth situation. Standard of Kentucky, a marketing concern solely, enjoys good investor acceptance whereas the marketing investment of most integrated companies does not. In time the better financial results of recent years from nonproducing activities may lead to a correction of this attitude. This correction is partially under way now where integration includes chemical manufacturing, for chemical earnings are generally considered to be quality earnings.

Foreign Operations

To bring our two companies further into line with the field as the investor finds it, let us put them into foreign operations. After the expenditure of lots of money and years of effort —

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during which time we don't know how the appraiser handled the situation — one became a successful producer in Venezuela and the other in the Middle East. After this success we still don't know how the appraiser values foreign production with all of its ramifications — political and otherwise.

The simple corporations with which we started have become increasingly more complex through (1) domestic production accompanied with widely varying exploratory success; (2) refining, marketing, transportation and chemical manufacturing, each with varying economic characteristics; and (3) foreign production which I believe can be valued only on a very arbitrary basis. It is my contention that the problems of valuation are compounded with this complexity as we attempt to bring all of these activities into a single appraisal figure for the investor's guidance. Suffice it to say I haven't yet found a way to equate horses, raccoons and sailfish into a single meaningful figure.

The Mechanics of Valuations

The inherent mechanical problems of a valuation report increase with complexity of activity. They are quite apparent where a special quality needs to be measured. Still other problems arise from the time factor. An appraisal must largely reflect economic factors obtaining at the time the appraisal is made, whereas the investor whose eyes are directed toward the future may be motivated by the possibility of a change in these factors — especially higher or lower prices. An appraisal of a company owning natural gas reserves committed to low prices under long-term sales contracts can only reflect the contract status, whereas the investor may be discounting the possibility that the strong upward trend of natural gas values generally will in one way or another change realization. Another example arises in the case of poor-quality crude or poorly located crude. A valuation report of the very low-gravity crudes of California three years ago would have indicated a figure completely different from that indicated by an accurate guess of the supply and demand economics for the entire California industry.

Companies are as unique as the men who make or manage them. A "feel" arising from a critical analysis of the management of a company and its policies is, perhaps, the most important single factor in investing. These unique qualities do not lend themselves easily to a dollar common denominator. Some stocks sell on a yield basis and at price-earnings ratios that usually do not depart far from the price-earnings pattern of the general market. They tend to become general market stocks or general market oil stocks. Most of the "Standard Oil" stocks, Gulf and Texas are examples of this group. Other common stocks, of which Amerada is the textbook example, sell on the past record of continuous addition to capital values and the immediate prospects of further additions and only secondarily on a relationship to a guess of market value of assets. Still other stocks are "special situations"; *i.e.* they are vehicles to pursue individual objectives such as tidelands developments, an expanding market for natural gas, the possibilities of the Williston Basin, the California industry, etc.

Investing has been defined as selection of risks appropriate to the needs of each individual investor. One can invest, speculate or gamble. An appraisal report can play a vital role in this basic risk determination and hence of proper initial guidance so that the investor doesn't find himself to be a wildcatter in the market and the speculator find himself to be an unwilling investor. While it would be difficult to overestimate the importance of an appraisal report in this initial step, it is much easier to overestimate its use in other phases of the selection process. Investors do not try to put money to work by buying some of all issues available. Rather they choose a limited number of issues that suit their purposes. Hence, selection of stocks becomes a competitive procedure. Appraisal reports provide varying and sometimes only limited aid in procedure beyond the initial step of risk evaluation. A company's exploratory potential which we have come to refer to as its "unfinished business" and the difficulties of equating different types of assets into a single figure constitute a part of the explanation of this statement.

Other considerations which limit the use of appraisal reports in the competitive aspects of selection arise from the limited availability of formal valuation information. In many cases information is not available for anything approaching an appraisal; yet somehow the securities of these concerns are priced in the market place. Furthermore, policies on disclosure of information to stockholders vary. It is not unusual for a laggard company in this respect to have a low ratio of market price to underlying value. Others achieve the same result by handling their stockholder and public relations in a way that leads people to believe that management is trying to promote market performance.

Recently we were asked to value the stock of a family enterprise for transfer purposes involving tax and other considerations. We were asked to state a figure at which we would be willing to buy a portion of the common-stock equity for a public underwriting. Perhaps our use of the appraisal approach in handling the problem may be of some interest in this discussion.

Appraisal Procedure

The first step in this common-stock appraisal was to secure a complete valuation report of the company's assets. This was found to be approximately $67,000,000 comprising over 55,000,000 of market value of oil and gas reserves, $5,000,000 of undeveloped leaseholds, $2,000,000 of net working capital, and $5,000,000 of miscellaneous assets. Similar valuations were prepared for six oil companies having a listed market which were thought to be comparable to the company being appraised. It was found that the common stocks of these six concerns were priced in the market at discounts ranging from 43 per cent to 55 per cent of appraised values. A discount factor of 40 per cent was applied to the $67,000,000 appraisal figure in order to arrive at an indicated market value of $40,000,000 on an all-common-stock capitalization basis, assuming a division of such capitalization into a sufficient number of shares for an adequate market. Factors entering into this determination included the excellent standing of the management in the oil industry; the company's comparatively small size (the financial markets were then favoring small concerns with a discovery potential); the record of the concern as an oil finder; and the favorable prospects of its undeveloped acreage, for a considerable part of it was well located in areas where important developments were taking place. In short, there was thought to be enough romance in this picture to attract interest but not so much that it would raise doubts.

A similar comparative study was made of the cash throwoff of this corporation and the six listed companies before reserve charges. A further comparison was made of reported net income where accounting procedure permitted. These earnings studies supported quite closely the discounted asset value figure.

Considerable thought was given to the allocation of the $40,000,000 figure to the company's pyramided capitalization. In addition to an outstanding bank debt the owners of the common stock also held other senior securities of a considerable amount. Because of their terms and conditions, these

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issues in a free market undoubtedly would have sold at substantial discounts; and such estimated discounted figures were used in arriving at the proportion of total market value of the company to be allocated to the small common-stock issue.

The indicated aggregate value of the common was determined to be $12,000,000. Since the number of shares involved in the question put to us would have resulted in a very limited and inadequate market, an adjustment of 20 per cent was made for this factor. Selling costs involved in a public underwriting were deducted to arrive at a final value per share to the seller. It was also determined that realization to the seller would have been somewhat less by a private placement than by a public underwriting.

It should be apparent from this short description that judgmen based on a "feel" of the situation was an important factor in the decision.

CONCLUSIONS

Issues cannot be selected either for investment or speculation by the use of valuation reports alone. We would be guilty of a great disservice, however, if we permitted anyone to infer that because they cannot do the complete job in one operation, their aid to the investor is limited. Our experience indicates just the opposite. A valuation report properly prepared and correctly used can help the investor more than any single thing. The biggest problem with which the oil analyst is confronted is getting accurate basic information. A valuation report gives such basic information so that the analyst knows what a company is and what it isn't. With this background he can begin to study managerial policies and determine managerial effectiveness. Only through detailed understanding of the factual side of a company and its management can an opinion be formulated of the direction in which it is headed, and the likelihood of its achieving success. An investor, to be comfortable with a company of his choosing, must know well the economic forces that cause the blood stream to course through its corporate veins. A valuation report contributes immeasurably to this understanding.

Geology is a science which is most effective in the hands of an individual with a special touch in using it to locate oil. Perhaps investing is less of a science than geology, but it is equally as much an art in its application. Both have one important similarity on the human side. The geologist and the investor are said to be smart when they make the right decisions for the wrong reasons. ★ ★ ★

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