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Valuation of closely held and untraded stocks held as collateral by banks in support of loans

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VALUATION OF CLOSELY HELD AND UNTRADED STOCKS HELD AS COLLATERAL BY BANKS IN SUPPORT OF LOANS

by

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CHAPTER I

A VALUATION PROBLEM

It is recognized that one of the primary functions of modern day banking is the extension of credit. Properly administered, the fulfillment of this function is, either directly or indirectly, of importance to the general welfare. Properly loaned money is a source of income to the bank, and hence to the stockholders and employees; it enables the retailer to carry his inventory; the wholesaler to purchase and distribute a variety of products; and the manufacturer to produce a needed finished product. Direct loans to individuals are likewise of vital importance for many reasons. Borrowed funds may enable an individual to meet the demands of an unexpected emergency, to build a home, to invest in a business, etc. Generally, the extension of credit is essential to our everyday way of life and has been largely responsible for the high standard of living which we enjoy.

It is toward one phase of the broad field of credit administration that the efforts of this paper are directed; that is, the area of the secured loan, and, even more specifically, the area relating to loans secured by the pledge of closely held and untraded stocks. The purposes of this study are:

1. To present and briefly discuss the merits and/or faults of the methods currently used for the valuation of closely held and untraded stocks.

2. To develop and/or present a suggested procedure for the valuation of closely held and untraded stocks.

The field of credit administration is not the only one faced with the problem of valuing stocks of closely held corporations for which there is no market quotation indicating true market value. A few other occasions where this problem arises are as follows:

1. To determine whether an individual or business is solvent under the Bankruptcy Act.

2. To determine a firm's profits and net worth in connection with minority stockholders' suits.

3. To set a value on a firm's assets on the occasion of corporate reorganization and mortgage foreclosure.

4. To determine estate taxes and to settle controversies among heirs upon the death of a principal stockholder.[1]

A loaning officer may request, or the borrower may offer, collateral for one or several reasons. Some of these are as follows:

1. Obtain a lower rate of interest.[2]

2. Strengthen a loan risk which the lender feels to be otherwise unacceptable.

3. Offer voluntarily as a matter of custom or special intent.

4. Compensate for an apparent weakness in balance sheet proportions.

5. Compensate for the reasonable uncertainties that may necessarily surround the source of repayment.

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[1] Alfred R. Oxenfeldt, "Valuation of Untraded and Closely Held Securities", The Analysts Journal, August 1953, Vol. 9, No. 4, p. 33.

[2] For a general discussion, see Carlisle R. Davis, Credit Administration, American Institute of Banking, Section American Bankers Association, 1949, pp. 222-23.

6. Expedite and simplify the loan negotiations.

7. Custom.

The American Institute of Banking textbook on Bank Administration stresses that the taking of collateral is not the primary security for a loan.

> "The mere fact that a personal or business loan is secured by the pledge of specific collateral or by the title to or a lien on a specific asset or assets does not necessarily mean that the loan is a safe one or a proper loan for a bank to handle. The primary security for every loan should be the character and the responsibility of the borrower; the availability of recourse to specific collateral for ultimate payment should be only a secondary consideration. The literal meaning of the word collateral is 'accompanying or related, but secondary or subordinate; auxiliary; contributory.' Collateral may contribute to the strength of a loan, but it does not supplant the need for careful investigation and appraisal of the character and financial responsibility of the borrower, for a knowledge of the purpose for which the loan is made, and for an acceptable understanding of the source or sources from which the borrower will make repayment of the loan."[3]

When collateral is requested or accepted to strengthen a loan it is essential that it be correctly valued to be fair to the bank and the borrower. It is the responsibility of the loaning officer to see that an equitable value is reached. Even though the collateral is a secondary consideration it warrants the full, prudent attention of the loaning officer.

The economic strength of the United States has often been characterized by the large, if not gigantic, corporate entity. It is quite true that these "giants" do exist and flourish, and the degree of importance attached to them in regard to our economic life is quite valid. However, it must also be recognized that our free enterprise system allows, needs, and supports a much larger number of smaller entities. It is estimated that at the present time there are over 600,000 corporations operating in the United States, and,

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[3] Bank Administration, American Institute of Banking, Section American Bankers Association, 1952, p. 246.

of this number, only about 4,000 have issues of stocks and bonds listed on some type of organized exchange.[4] Another portion, quite small when compared to the whole, are actively traded over-the-counter. Thus, it is clear that a very large number of corporate securities have no ready indicator of market value such as today's quotations on an exchange.

[4] _21st Annual Report of the Securities and Exchange Commission_, (Washington: United States Government Printing Office, 1956), p. 28.

CHAPTER II

GENERAL CONSIDERATIONS REGARDING VALUATION

Previous to considering the various specific factors which might affect any valuation it is essential that the goals of such valuation be clearly determined. In other terms, the precise nature of the problem to be faced by the loaning officer must be known in order that it may be approached in an organized manner.

Two Possible Problems

A loaning officer might face the following situations, each requiring a different approach:

1. The first situation arises during negotiations for a loan, when the stock to be pledged as collateral is less than the amount necessary for liquidating control. In this instance primary emphasis must be placed on the market value of the stock because in case of default the lender can count only on the sales value of the stock. Where market value is of primary importance the loaning officer must recognize that different people buy stocks for different reasons. Among these are:

A. Dividends

The dividend-paying capacity of the company is usually one of the prime reasons for stock purchase. People purchasing stock with this in mind are generally interested in a steady return through the receipt of dividends.

B. Speculation

Many forms of speculation may be presented as reasons for the purchase of stocks by individuals. Three of these are as follows:

1) Appreciation: This implies that the growth factor is primarily in the mind of the investor, with dividends of secondary importance.

2) Short-term speculation: This form of speculation is of little importance in this paper due to lack of activity in the market.

3) Situation speculation: This is quite prevalent in closely held and untraded stocks. The "situation" relates to expected mergers, consolidations, inventions, new products, expanded and improved services, etc.

C. Necessity

Apparent necessity of stock ownership to demonstrate loyalty and interest in welfare of business.

D. Control

Purchase for control purposes where monetary gain may or may not be obtained through dividends or appreciation in stock value.

E. Psychological values

This relates to the desire of individuals to be a part of something known, accepted, and desired by other individuals.

2. The second situation arises during loan negotiations when the stock to be pledged as collateral is an amount sufficient for liquidating control. Here, liquidation value must be given prime consideration with market value secondary. In case of default by the borrower the bank could liquidate the entity, if an acceptable market bid could not be obtained for the stock. While the bank held the power to liquidate the entity, this would normally be done only after all other avenues of recovery had been explored.

The Time Element

Once the loaning officer knows which of the two situations faces him, he must then determine the period of time that must be considered in the valuation procedure. Two types of notes are commonly used by banks in connection with this type of secured loan: notes payable upon demand of the bank and notes payable at a pre-determined maturity date. Usually the latter type of notes have thirty-sixty-ninety-or one hundred twenty-day maturities.

Information Essential to the Valuation

It is usually recognized that the success of any valuation procedure is largely dependent upon obtaining sufficient information. Various types of data are required to enable a loaning officer to correctly estimate a stock's value. The information desired might well include:

1. Date the business was established.

2. Nature of the business.

3. Names of the present corporate officers and their past personal histories.

4. Information regarding the character of the active management, its integrity and effectiveness.

5. Information giving pertinent highlights of the history of the business.

6. Success of the corporate operations and information relating to the present financial condition.

7. Any derogatory information regarding the entity.

It is essential to obtain financial statements covering several years of operations. It is customary to prefer unqualified audits prepared by certified public accountants. In certain instances it may be necessary to obtain financial statements for a period covering many years. Such might have been the case if a borrower approached a bank in 1946 with statements covering, say, a five-year period which would most likely have shown only abnormal wartime prosperity for the business. A ten-year exhibit would have furnished a fairer view of operations. Even more desired would be statements covering a complete business cycle.

Also of value are agency reports such as those prepared by the Dun and Bradstreet organization, giving background information relating to the history of the business, nature of its operations, and remarks regarding management. Special agency reports are also available which commonly give a more detailed personal history and appraisal of certain individuals connected with the corporation. These special agency reports may also be ordered to attempt to find an answer to any other important questions which may arise. In addition to the above, personal contact with individuals familiar with the operations of the corporation is desirable. Another excellent source of information in many instances would be the bank's own credit files.

Where the corporation whose stocks are to be pledged is not a customer of the lending bank, the bank of account may be requested to furnish essential information from its files.

CHAPTER III

SPECIFIC FACTORS AFFECTING VALUE

I. Management

Of all the factors to be considered in the valuation procedure, management, in many instances, is of primary importance. Like other intangibles, the effectiveness of management is difficult to analyze. The true test of management is the accomplishments of the organization compared with the opportunities presented to the organization. Five broad tests of such accomplishments of an organization's management are as follows:

1. Ability to increase earning power over a period of years relative to the capital invested in the business.

2. Conservatism of financial policies.

3. Popularity of products or services and improvement in competitive position; that is, the ability to maintain or increase the company's share of the available business relative to its competitors.

4. Attitude toward research and the development of new products and processes.

5. Ability to secure full cooperation from employees, stockholders, the trade, and the public in general.[5]

The above criteria are adequate in most circumstances. However,

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[5] For a complete discussion see, Five Tests of Management, Fiduciary Counsel, Inc., New York, 1941, pp. 3-26.

situations sometimes arise where the criteria will have to be coupled with a deeper insight into the management problem.

Special Situations Requiring A More Complete Analysis

Evidence of the "one man" leadership of a corporation requires special attention. Such is the individual who refuses to relinquish certain responsibilities to others and knowingly or unknowingly retards the training of individuals to replace him in case of illness, death, or retirement. The reason individuals dictate a business to this extent is not under consideration in this paper. Of importance is the determination or estimate of what the loss of the "one man" will mean to the corporation and hence to the collateral value.

In case the "one man" is lost to the organization, one of three things must occur: the business must be liquidated; outside management must be found and obtained; or new leadership must be quickly trained, using individuals presently within the organization. In the last two instances the corporation must undergo a trial period while the new management proves the degree of its effectiveness. In these situations the loaning officer must attempt to determine the availability of replacement management, such judgments taking into consideration the abilities of individuals within the organization and the outside management manpower market.

Another difficult problem arises in appraising the management of a newly formed entity. Unless the agency reports or other information reveal that the management is experienced and capable, an effort must be made to appraise the individuals composing the organization's management.

The good executive, it is recognized, has several qualities or characteristics which make him an effective business leader. There is some variance in the degrees to which each top-management executive will possess these characteristics, which are as follows:

Intelligence	Teaching Ability
Experience	Initiative
Originality	Tenacity
Receptiveness	Human Understanding
Personality	Courage

A sense of justice and fair play[6]

The success in measuring the degree to which an individual possesses these characteristics depends largely upon the loaning officer's experience and judgment.

Other problems, in addition to the two presented previously, will be confronted in which the five tests of management will prove to be inadequate. Each situation will require complete analysis before the problem can be understood and appraised.

II. Historical and Economic Factors of Importance

History is a systematic accounting of past events serving two purposes. First, it may explain the existence of a current situation, and second, history may be used as a basis for judgments concerning the future. Both of these are of use in the valuation of stocks coming within the purview of this paper. In utilizing historical evidence the analyst must be alert to information which will affect his valuation. As a time-saving factor the analyst must have in mind previous to his review a systematic method to approach the sometimes voluminous material with which he is confronted.

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[6] Ralph Currier Davis, The Fundamentals of Top Management, Harper and Brothers, New York, 1951, p. 147.

History - The Beginning

The year the enterprise began operations, when related to the current phase of the business cycle, will help measure the growth that has occurred. This, then, may be related to the growth of other similar businesses. As indicated previously, a business formed in the early 1940's or 1950's is usually found to have experienced a steady growth.

Of course the above loses value in the case of a very old firm. A business in existence one hundred to one hundred and fifty years must have gone through many extremes of the business cycle and many different managements. In such cases all that can be done is to note the entire growth of the business as related to the number of years it has been in operation. This may reveal a business which is, seemingly, inherently weak or incapable of growing at an expected or desired rate. Reasons for such weaknesses might include:

1. Long history of poor administrations

The meaning of this is that regardless of how many changes have been made in the area of top management the wrong result has been achieved.

2. Inadequate capitalization

Businesses to achieve growth must have at their disposal sufficient capital resources. There are times when it requires large capital expenditures to maintain a competitive position. Those without funds must, regretfully but necessarily, take a secondary or retarded position.

3. Poor competitive location

This can mean one of two things. First, may relate to competitive production costs, due to location, as in the case of a manufacturing concern, and second, would relate to a poor competitive selling location. A combination of both could exist.

4. <u>Restrictive influences on the active management</u>

An example of this is a company in which the control is vested in a family somewhat disinterested in the success or failure of the business, and this degree of ownership is passed on from one generation to another. The harmful results of this type of condition are self-evident.

5. <u>Limited-growth product</u>

Usually in these cases the limited-growth product is coupled with inadequate research and development. A company manufacturing automatic pens and pencils, but unable to add to its line ballpoint pens or liquid-lead pencils, could remain in business, have operations on a profitable basis, but still not have or indicate the proper growth.

The danger of having a concern with one or more of the above weaknesses is quite apparent. The maintenance of a status of stagnation or slow growth leaves a concern in a very vulnerable position, subject to the deadly pressures of economic recession or rapid technological change. A company must grow to exist. There are dangers to growth also, but they are not so subtle or dangerous as in the stagnant situation. Such dangers as noted above can affect quite rapidly the marketability of an issue.

The Present Position of the Business

Another purpose of the historical review is to determine why the business is at its present position. This attempts to clarify why a business has made progress, lost ground, or maintained a status quo position. It is quite possible for a business to make a rapid growth and still have a basic weakness. Such growth might occur in time of a war emergency. Moreover, invention may give a rapid impetus to a business, particularly one newly formed, which may lead to an accepted product supported by an ineffective and dangerously weak corporate base.

It is also necessary to learn the nature of the growth of a business. If a business is subject to severe fluctuations, then the related stock value probably will be likewise subject to severe fluctuation.

Another enterprise may be found to be geared to general economic conditions, in which case more emphasis will have to be placed on a general economic review, which will be discussed later. It must be recognized that some enterprises are not so subject to the influence of economic ups and downs as others. Those producing a new product, scarce and in strong demand, are not so likely to be influenced by aslowing down of the business cycle. This may be particularly true of certain extractive industries such as gold, tungsten, uranium, or titanium.

<u>Nature of the Business</u>

Of particular interest to the analyst is information relating to the nature of the business conducted by the corporation under review. A stock's marketability is largely dependent upon its earnings and dividend record and future expectations of both of these. This record is, in turn, mainly dependent upon sales of the corporation's services or products.

If the corporation is one engaged in the manufacturing of a product, several factors must be considered which might possibly retard or have a depressing influence on the marketability of the related stock. Some of these are as follows:

1. Product obsolescence.

2. Product subject to seasonal fluctuation due to uncontrollable influences such as weather.

3. Product with limited distribution in respect to area, especially if the area may be considered as an economic reliance unit. Example: Detroit area in Michigan. Purchase of certain goods could be greatly

curtailed in case of layoff, strike, or other work stoppage in the automobile industry.

4. Products with derived demand.

5. Product whose sale is dependent upon trade with relatively unstable countries.

Many of the above factors will also apply to a non-manufacturing enterprise. Care must be used in either instance to note to what extent or degree the product sold or service rendered has any of the above characteristics.

The Related Industry

Not only is it important to analyze the particular business under consideration, but it is also essential to broaden the scope of the investigation to include the entire industry. An industry survey may reveal a weakness which may not have reached the particular corporation under review. If an industry is found to be in a weak position, a weak enterprise within that particular industry might be expected.

The review of a new, fast-growing industry may reveal an expectation of heavy future competition. Such competition in a short time could affect quite severely the position of the enterprise. Why some industries find increasing competition while other industries started about the same time find little competition is a study in itself. A few incentives for individuals or groups of individuals to enter an industry and add to the competition are as follows:

1. High profitability of the business.

2. Ease of entry in regard to:

   A. Experience
   B. Regulation
   C. Capital

3. Amount of outside promotion behind the business.

4. Nature of the business; in particular:

   A. Social acceptance of service or product
   B. Desirable internal business conditions such as:
      1) Hours
      2) Working conditions
      3) General, wide acceptance of conditions by individuals

5. Lack of specialized or technical skill needed.

Examples of industries which might have been affected in a relatively short time by increased competition are motels, drive-in theaters, and service stations.

General Economic Conditions

It is very difficult to organize one's thoughts to cover the breadth of world economic conditions and then apply them to one loan of one individual. Every phase of the economic system has some effect upon the one loan. Yet, every phase is a study in itself.

The loaning officer must combine his past personal experience with a day-to-day follow-up of written and oral commentary of economic highlights.

Beyond this, the loaning officer must recognize that certain corporations have qualities which somewhat immunize it against normally dangerous but ever recurring adjustments in the economic cycle. It must be remembered further that the time-period under consideration is limited, and reviews are regular. This time element allows a greater leeway than, say, a five-year term loan or an even longer mortgage loan.

Thus, we do have safeguards set up to give some degree of protection against the whims of economic forces. However, this does not supersede a continual study of the over-all economic landscape by the loaning officer.

III. Financial Statements

The problem in the analysis of financial statements is twofold. First, we must determine if there are any factors to add or detract from a "base value." A base value is essential in the valuation process. It is a starting point from which all adjustments are made. In this instance the officer is looking for reasons why the base value is low or high in relation to the present market value. The above is, then, the first consideration.

Second, and equally as important, is an allowance for the period of time over which the valuation must carry. The officer must look for favorable and/or unfavorable trends that may have developed which will carry into the period the collateral is held by the bank. These trends may not have had time to be reflected in the stock's present market price. However, it will be necessary to make an allowance in the current market value to carry through the pledged period.

Hence, the two considerations above are presented, both of equal importance. They will be discussed more thoroughly in the following paragraphs.

Statement Information Affecting Current Market Value

First to be noted is the size of the block of stock under consideration and the book value. If the number of shares under consideration is large relative to the total outstanding stock of that issue, then it is possible that more than several buyers might have to be found in case of default. This, however, can work in an opposite manner depending upon the motive of the potential buyer. If he is seeking control or a near-controlling interest, then a large grouping of the stock would be desired.

Book value, although a poor indicator of actual market value as will be pointed out later, is sufficiently accurate to determine if the price of each share is too large to have an effect upon marketability. Stock with a statement book value of $2,000 per share usually has a limited market when compared to another stock issue of similar quality having a book value of $20 per share. As the book value increases, fewer individuals have the means of purchase and hence a reduced number of potential buyers for the stock exists.

Earning Capacity and Its Utilization

As previously mentioned, earnings have a marked effect upon a stock's marketability. Earnings permit the establishment of a desirable dividend-paying record. Also, earnings enable a corporation to expand its facilities so as to increase a stock's value and general marketability.

What the analyst is seeking to determine is what amount has been earned in the normal operation of a corporation. Therefore, it is necessary, in many instances, to make adjustments to the earnings information as presented in the statement of profit and loss. For example, non-recurring income items should be taken out as they are not a reflection of the actual earning power of the corporation. The same may be said of non-recurring expense items.

After an adjusted earnings figure is obtained, the following comparisons and checks should be made:

1. Comparison of adjusted earnings' figures with those for other years will enable the analyst to note trends. Where there is a wide discrepancy between the earnings' figure for two consecutive years the reason for the difference should be found.

2. Comparison of earnings to sales. The reasonableness of the figure should be noted. This is taken as a percentage figure, and should be compared to the results of previous years' operations and to figures of competitors where available.

3. Comparison of expense and other profit and loss items. This review should bring to light the draining of funds by management such as would be noted in an abnormally high salary or bonus figure for executives.

Dividend-Paying Capacity

To the investor dividends are usually of vital importance. He or she is interested in a fair return, with regular payment over the life of the investment. In order to pay cash dividends steadily for a number of years a corporation must earn a steady return by employment of its facilities as will be reflected in the statement of profit and loss.

In regard to dividends the investor looks at two things: the dividends that have been paid in the past, and the earnings and/or dividend policy which will allow dividends to be paid in the future.

The past dividend-paying record is clear-cut. The only problem lies in interpretation of this record. It is best to review the record, keeping in mind the discovery of reasons for possible future changes in dividend payment. The main things to be on guard against are as follows:

1. The payment of too large a cash dividend in proportion to earnings over a period of several years. This may be a clue to a weakening of financial conditions which will not be reflected until some future time. It is quite possible for a corporation to pay a dividend during years of operating deficits. Such dividends, of course, cannot go on indefinitely.

2. A reduction of dividends and an increase in executive take-out, when compared to previous years. In a closely held corporation, a shift in control may be reflected in the above. This shift may be detrimental to non-associated stockholders.

Financial Soundness

When reviewing specific information as presented in the financial statements and supplementary statements, there is a dangerous temptation to overlook the review of the indicators of financial "soundness". A "sound" corporation coming within the scope of this paper has the characteristic of balance. This attribute in some manner would normally come to the attention of the investor. Hence, it is of interest to us.

As just stated, the main attribute of financial soundness is balance. Balance in this instance relates to desirable or acceptable proportions expressed as a ratio, percentage, or dollar amount. The relationship between two or more items as shown below, coupled with the loaning officer's past experience and the use of similar information on related businesses for comparative purposes, will indicate financial soundness or the lack of it.

Mr. Carlisle R. Davis in his American Institute of Banking textbook on Credit Administration brings attention to five basic ratios which are of value in the analysis of financial statements. In regard to these ratios he states:

> "Generally speaking, these particular ratios are of assistance in the analysis of most statements, but there are, of course, instances in which even some of them have little significance. These basic ratios are the current ratio, the debt to worth ratio, the sales to receivables ratio, the sales to inventory ratio, and the profits to worth ratio."[7]

Mr. Davis states the method of calculating these ratios as follows:

> "Current Ratio
>
> The current ratio is computed by dividing the total dollar amount of current assets by the total dollar amount of current liabilities.

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[7]Carlisle R. Davis, Credit Administration, American Institute of Banking, Section American Bankers Association, New York, 1949, p. 108.

"Debt to Worth Ratio

The debt to worth ratio is computed by dividing total debt by tangible net worth. (Tangible net worth is calculated by deducting from the stated net worth all intangible assets and any deferred charges having no value in liquidation.)

Sales to Receivables Ratio

To compute the ratio, the net sales figure (with cash sales excluded) is divided by the trade receivables, that is, the receivables created in the normal course of the sales activity of the business.

Sales to Inventory Ratio

The net sales figure is divided by the inventory amount to obtain the sales to inventory ratio.

Profits to Worth Ratio

To compute the ratio, divide net profit after taxes by tangible net worth."[8]

In summarizing his discussion of the basic ratios, Mr. Davis relates:

"The five ratios described are helpful in the analysis of most statements. In some instances, however, they are of little moment, and other relationships often are of equal or even greater significance. The basic ratios of and by themselves are never conclusive tests. If they are to be of value, the analyst must interpret them by going behind the ratios and by weighing them with other statement relationships. Frequently the trend of a given ratio is of more importance than the single ratio by itself could ever be. The ratios do, however, set up milestones, and when used intelligently, they can be of help to the analyst."[9]

Beyond the use of the above ratios as prescribed by Mr. Davis it is necessary to review other areas which deal more with the desire of an individual to purchase stock than with the specific field of Credit Administration. These items to be presented may be an indicator of present marketability, or the reasons therefor. They may also be used as a reflection of increased or decreased expected acceptance of the stock's marketability in the future. Such indicators of the above are as follows:

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[8]For complete discussion, see Davis, pp. 109-114.

[9]Davis, *op. cit.*, p. 114.

1. Relative amounts expended yearly on research and development as related to product development.

2. Relative amounts expended yearly on research and development as related to sales and promotion.

3. Relative amounts expended yearly on capital expenditures and improvements.

4. Indicators of expansion such as the opening of new branches, purchase of existing non-related enterprises, etc.

5. Changes in capital structure.

One of management's main tasks is seeing that the various operating departments of his business do not tip the scales toward bankruptcy or business stagnation. The above is a partial list of items that might indicated management's effectiveness at maintaining balance, which will enable a desired growth to take place.

CHAPTER IV

SOME PRESENTLY USED VALUATION METHODS

As has been stated, one of the purposes of this paper is to develop a method for the valuation of stocks coming within the scope of this study. There are several approaches to the valuation problem, some with obvious limitations. It must be recognized that no one formula based on tangible calculations can be devised. When dealing with factors such as management the officer is dealing with intangibles, and as a result a wide variance in final judgment is quite possible. Also of importance is that an organized procedure be developed to carry out the valuation so that no vital factor be overlooked. Good procedure and method are of the utmost importance. In the following paragraphs some presently used methods of valuation will be discussed.

Statement Book Value

One method quite frequently employed is that of using book value. This is extremely dangerous. Unless liquidation value is of prime importance in the valuation the interest is in marketability. The degree of marketability is based on people's desire to purchase the stock. This desire, as has been noted, is largely dependent upon final return on investment either obtained through dividends or appreciation of stock values. Book value is not a reflection of the rate of return in either case. The over-all rate of return depends on efficiency, economy, general economic conditions, etc., but not on book value.

Further, the book value of a corporation's stock may have a large variance from true value. Inventory may be over or undervalued, because of obsolescence and imbalance. Accounts and notes receivable may contain a relatively large portion of uncollectables not otherwise allowed for in the statement. The valuation of fixed assets may be in error because of a poorly selected depreciation schedule.

Book value is, then, at very best, of limited usage in the valuation.

Last Sale Price

Because of its extended use, it is obviously felt by some loaning officers that the last sale price is the best representative of present or current market value. Providing sales are made quite regularly, and providing that such sales are true indicators of free trading, then use of this method is particularly justified. However, the obvious weakness is that this procedure would apply to few securities coming within the scope of this paper. Another weakness is the detection of true sales, or sales reflecting the relatively unprejudiced desire of an individual to buy and the unprejudiced desire of an individual to sell. Agreed sales between individuals for reasons of maintenance and control, management incentive, etc. will render this method completely useless.

Liquidation Value

It has been mentioned earlier in this paper that the loaning officer may be faced with a situation whereby the liquidating control of the corporation would be in the hands of the bank in case of the borrower's default. To be stressed once again is the point that liquidation is not an absolute necessity in case of default. Instead, it is a last resort, the bank preferring to sell at the highest price possible sufficient to recover the amount of the borrower's obligation.

Liquidation value should not be used as market value or even as an indicator of market value. It should not be contemplated that a going business will be liquidated. A hassle among stockholders has in certain instances led to liquidation, but these instances are rare and need not be allowed for unless evidence of disagreements are present at the time of the valuation.

CHAPTER V

THE SUGGESTED VALUATION PROCEDURE

During the course of discussion in this paper several things have been noted which will affect or will be a guide in the development of a valuation procedure.

First and foremost, is recognition that the desired value is a reflection of both tangible and intangible factors. Likewise, marketability is a reflection of rational and irrational thought. From the acceptanee of the previous statements, it may be further assumed that the value arrived at in the valuation is subject to controversy. Anything based on intangibles and irrational thought is subject to differing opinions. The loaning officer must attempt to arrive at an "expert guess" developed in an orderly, precise manner by a consideration of all major determinants affecting valuation.

Second, the valuation must usually be considered from the investor's standpoint. To sell a share of stock, in case of default, there must be a buyer, and therefore it is his viewpoint that is of interest to the loaning officer. Information relating to why an individual will purchase stock and why he has stock preference must be used.

Third, there are three specific factors affecting the valuation of any stock. A complete understanding of the ramifications of management, historical and economic data, and financial statements is of the utmost importance. It is the knowledge of these factors which makes the loaning officer's guess an "expert guess".

As an example of how the suggested method might be applied let us assume the corporation whose shares are under review is described as a moderately cyclical, small, closely held manufacturing concern.[10] The amount of stock to be pledged is a minority interest.

The financial statements indicate a five-year average dividend of \$1.50 per share, average earnings of \$3.00 per share and a book value of \$25.00 per share. Average dividends and earnings are then capitalized. The rate of capitalization is determined by the loaning officer's using his past experience and/or information published by Robert Morris Associates, Dow-Jones and other similar organizations.

Mr. D. S. Willcox may be credited with the original development of this valuation procedure in his thesis entitled The Trustee's Responsibilities With Respect to Close Held Corporations. Mr. Willcox states:

> "Ordinarily the rate of capitalization employed will vary according to the type of industry represented, the characteristics of the business under analysis, and the competitive position of the company within the industry. Also to be considered is the economic outlook for the country as a whole and the trend of the company's earnings and dividends over the past several years."[11]

Continuing with the example, the next step is capitalization of dividends at 10% and earnings at 16 2/3% which would seem justified.[12] The capitalization of average dividends at 10%, meaning that a 10% return should be expected over a reasonable period brings a figure of \$15.00. Capitalization

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[10]Information taken from bank credit files. In order to preserve the confidential nature of data the name, type of business, and other information could not be revealed.

[11]For a complete discussion of this method as originally proposed see, Donald S. Willcox, The Trustee's Responsibilities With Respect to Close Held Corporations, 1955, pp. 62-69.

[12]Capitalization rates derived from a study of credit files.

of average earnings at 16 2/3%, or approximately six times earnings, produces a figure of $18.00.

The next step in the valuation procedure is to apply weights to book value and the figures obtained by capitalizing dividends and earnings.

The weights to be used depend upon the relative importance attached to dividends, earnings and book value. At the risk of oversimplification let us attach weights of 3, 2, 1 to dividends, earnings and book value respectively. The minority interest under consideration might justify the selection of these weights. Upon default of the borrower the bank would be putting up for sale a minority interest. A potential investor, therefore, would normally be looking for returns through dividends. Hence, the additional weight would be attached to dividends. This may be further justified by realizing that all other benefits of ownership are subjugated to the desires of the controlling stockholders.

When the weights are attached the result is as follows:

Dividends of 15 given a weight of 3	=	45
Earnings of 18 given a weight of 2	=	36
Book value of 25 given a weight of 1	=	25
Totals	6 into 106 =	17.67

The sum of the products (106) when divided by the sum of the weights (6) gives a valuation figure of $17.67 per share.

In any instance the selection of the weights is left up to the judgment of the loaning officer. Based on his knowledge of the corporation he must attempt to weight each factor--dividends, earnings and book value--in the same way that the potential investor would attach a certain degree of importance to each factor. As an example, two corporations could be described as small, extremely cyclical, manufacturing concerns, but the attachment of different sets of weights could be justified even though the same percentage of the total outstanding stock was to be pledged. There are several reasons which might account for attaching different sets of weights to like situations. These might include:

1. All outstanding stock might be owned by one family. One branch of the family might have sufficient wealth and may have expressed a strong desire to own additional stock of the corporation under consideration.

2. Low dividend policy to avoid taxes, improve financial conditions, etc.

3. Controlled dividend payments due to a loan agreement.

The final step in the valuation procedure is to adjust the "base value" which in this example is $17.67 per share. Adjustments would be made to account for weak management, poor financial condition, valuable patents, etc. In this example a complete review of all available information did not give cause to adjust the "base value" of $17.67 per share upward or downward.

The suggested procedure is sufficiently flexible to take care of the various situations which the loaning officer might face. In the previous example the emphasis was placed on dividends due to the minority interest which was to be pledged. However, the loaning officer might be considering a controlling amount (50% or more) of the outstanding stock of a corporation which would normally necessitate emphasizing the importance of earnings. This is true because upon default of the borrower, the bank would have the power to operate the business until such time as an acceptable bid was obtained. The purchaser or purchasers of the stock would have the same controlling power. A potential purchaser of a controlling interest can reap certain benefits not available to minority stockholders. Most of the benefits are related to earnings; hence, the primary emphasis must be placed on earnings in the valuation.

To illustrate this point further let us consider a corporation which could be described as a small, cyclical, manufacturing concern with average earnings and dividends over a twelve-year period of $5.10 and $3.00 per share respectively.[13] Book value is $63.00 per share. Assume a controlling interest is to be pledged.

Due to similarities related to the nature of the business the same capitalization rates would apply as noted in the example on page 27, namely, earnings at 16 2/3% and dividends at 10%. Capitalization of earnings at 16 2/3% would yield a figure of $30.60 and the capitalization of dividends at 10% would yield a figure of $30.00.

In this example we might be justified in attaching weights of 2.5, 2 and 1 to earnings, dividends, and book value respectively. The result of this action is as follows:

Earnings of	30.60 given a weight of 2.5	=	86.50
Dividends of	30.00 given a weight of 2	=	60.00
Book value of	63.00 given a weight of 1	=	63.00
Totals	5.5 into		209.50 = 38.09

The sum of the products (209.50) when divided by the sum of the weights (5.5) gives a valuation figure of $38.09 per share.

The "base value" $38.09) must then be adjusted. A review of information in this instance revealed that a totally owned subsidiary located in a city

[13] Information taken from bank credit files. In order to preserve the confidential nature of the data, the name, type of business, and other information could not be revealed.

some miles distant was beginning to experience greatly increased sales and high profits. The subsidiary, established three years ago, had operated at a loss until six months previous to the review. The relocation of two nationally known manufacturing concerns in the same area was the main reason for the improved outlook. The earnings picture if extended would justify an increase of $3.50 per share giving a final per share value of $41.59.

Still another situation would be where the amount of stock to be pledged will place liquidating control in the hands of the bank upon default of the borrower. The bank would usually look first to other avenues of recovery before liquidating the entity, but nevertheless liquidation value must be given primary consideration. The procedure is to relate the value as obtained by the proposed method to estimated liquidation value.

For example, taking a fifteen-year average of dividends and earnings for a small, highly cyclical concern engaged in the canning of vegetables yields figures of $.24 and $.30 per share respectively.[14] Book value as of the last statement date was $224.35 per share. Assume that an amount of stock sufficient for liquidating control was to be pledged.

Capitalization of earnings at 12%, dividends at 8%, would give the following results:[15]

Average earnings of $.30 per share capitalized at 18% = $1.67.

Average dividends of $.24 per share capitalized at 12% = $2.00

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[14] Information taken from bank credit files. In order to preserve the confidential nature of the data, the name, type of business, and other information could not be revealed.

[15] Capitalisation rates derived from a study of credit files.

Attaching weights of 3.5 to earnings, 2.0 to dividends and 1 to book value results in the following:

Earnings of 1.67 given a weight of 3.5		5.85
Dividends of 2.00 given a weight of 2		4.00
Book value of 224.35 given a weight of 1		224.35
Totals	6.5 into	234.20 = 36.03

The sum of the products (234.20) when divided by the sum of the weights (6.5) gives a valuation figure of $36.03 per share.

A review of essential data indicated the necessity for adjusting the "base value" figure of $36.03 per share.

A study of the credit file revealed the following:

1. Several expressed the opinion that management was "inadequate".

2. Sales were down considerably over previous years.

3. The financial condition of the corporation had been analyzed and opinions expressed by the analyst indicated as "extremely weak" situation.

The above listed derogatory information would warrant not accepting the stock as collateral.

The next step is to determine or estimate liquidation value. An analysis of the financial statements indicated adjustments of accounts receivable, inventory and fixed assets.

Adjustments are as follows:

	Statement Value	Adjusted Value
Accounts Receivable	$ 10,700	$ 10,000
Inventory	187,000	80,000
Fixed Assets	260,000	130,000
	$457,700	$220,000

The difference between statement value and adjusted value ($457,700-$220,000) is $237,700. This would give a negative liquidating value. Of course, the collateral would not be acceptable.

Still another example showing how the proposed valuation method could be used where the amount of stock to be pledged is equivalent to a liquidation control is as follows:[16]

The corporation under consideration is a medium sized, cyclical corporation and engages in the distribution of industrial parts. Taking a ten year average of earnings and dividends yielded figures of $23.13 per share and $7.00 per share respectively. The book value of the stock is $350.51 per share.

A figure of $138.78 is obtained by capitalizing earnings at 16 2/3%. Capitalization of dividends at 10% gives a figure of $70.00.[17] Attaching weights of 3.5, 2, 1 to earnings, dividends and book value respectively the result is as follows:

Earnings of	138.78	given a weight of 3.5	= 485.73
Dividends of	70.00	given a weight of 2	= 140.80
Book value of	350.51	given a weight of 1	= 350.51
		6.5 into977.04	= 150.31

The sum of the products (977.04) when divided by the sum of the weights (6.5) gives a valuation figure of $150.31 per share. A study of all available information did not necessitate any adjustment to "base value".

To estimate liquidation value in this instance it was necessary to make the following adjustments:

Item	Statement Value	Adjusted Value
Accounts Receivable	$292,400	$250,000
Inventory	282,500	220,000
Fixed Assets	76,700	50,000
	$651,600	$520,000

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[16] Information taken from bank credit files. In order to preserve the confidential nature of the date, the names, type of business, and other information could not be revealed.

[17] Capitalization rates derived from a study of credit files.

Considering the above adjustments the estimated liquidation value would be $209.40 per share. The bank in this instance could extend credit on collateral valued at $209.40 per share.

If the estimated market value as derived by the proposed method, exceeded estimated liquidation value then it would be necessary to determine if the corporation was in sound financial condition and able to survive the extremes of an economic cycle. A decision to the effect that the corporation was not in sound condition would necessitate the use of liquidation value.

The proposed method may well be used in another fashion. When a borrower firmly suggests a value for his stock the proposed method might be utilized to substantiate the customer's statement of value.

For example, in early 1956 a borrower approached a bank offering as collateral for a loan the stock representing a minority interest of a closely held corporation.[18] The borrower indicated that the last sale was at $25.00 a share. The corporation could be described as a cyclical, fairly large manufacturing concern. The financial statements for a ten-year period indicated average dividends of $2.50, average earnings of $3.20, and a book value of $35.15.

Capitalization of dividends at 12% because of the cyclical nature of the business, meaning that dividends should average a 12% return over a reasonable period, brings a figure of $20.83.

Capitalization of earnings at 16 2/3% or approximately six times earnings produces a figure of $19.20.

Applying weights of 3, 2, 1 to dividends, earnings and book value respectively, the result is as follows:

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[18] Information taken from bank credit files. In order to preserve confidential nature of date, the name, type of business and other information could not be revealed.

Dividends	given a weight of 3	=	62.49
Earnings	given a weight of 2	=	38.40
Book value	given a weight of 1	=	35.15
Totals		6 into 136.04 =	22.67

The resultant figure of \$22.67 compares favorably to the last sale price of \$25.00 as suggested by the borrower. If a wide discrepancy exists between last sale price and the value arrived at by the proposed method then an attempt should be made to find the reason for the discrepancy.

Justification

The valuation method as outlined previously in this chapter has several advantages over the methods commonly used today, and these advantages are summarized in the following two statements:

1. The proposed method takes into account tangible and intangible factors present within the corporation which have an effect on value. As an example, management, historical, and certain economic factors are considered which might alter the value of the stock during the life of the loan. Such factors are not considered when book value or last sale price is used to derive stock value.

2. The proposed method allows for both rational and irrational action on the part of the potential purchasers of the stock upon default by the borrower. For example, the size of the block of shares under consideration and the reasons why people would want to purchase the stock are reviewed when the proposed method is utilized. These factors are not taken into consideration when the present methods are utilized.

To further illustrate the effectiveness of the proposed method let us review the following case history.[19] In early 1954 a borrower approached

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[19] Information taken from bank credit files. In order to preserve confidential nature of data, the name, type of business, and other information could not be revealed.

a bank wishing to make use of the bank's credit facilities. He offered as collateral stock representing a minority interest of a closely held corporation. It was agreed that the bank would lend 65% of the book value of the stock. Book value according to the last audit dated December 1953 was $307 per share.

The borrower indicated that the last sale consummated was at a price of "around $300". Periodically the demand was curtailed. Also at regular intervals the loan was reviewed. The review was limited to a percentage expression of the book value of the collateral against total amount outstanding. The bank at no time from the date of the original entry to December 1955 was lending more than 65% of the stated book value of the collateral. In early 1956 the corporation filed a petition of bankruptcy. In the final analysis creditors of the corporation received approximately fifty cents on the dollar and the collateral held by the bank became worthless.

Had other methods commonly used today been employed the result would have quite possibly been the same. Indications are that the primary cause for the failure of the corporation was the increasing inability of management to make decisions.

The use of last sale price would have quite obviously led to the same end. Sales of the stock did occur between the time of the loan and bankruptcy, but they appeared to be geared to book value with little evidence of free, unrestricted action on the part of the buyer or seller.

Liquidation value would have been difficult to employ in the above instance. Even as of statement date, December 1955, it would have been extremely hard to determine that the corporation had a negative net worth. Statement net worth as of December 1955 was $175,000. No evidence was presented in the audit report to indicate the gross discrepancy. In the final analysis the outcome would have been the same - the bank's collateral would have been worthless.

Assuming the proposed valuation method was utilized, the following would most likely have been the result. Retracing our steps back to early 1954 when the borrower first approached the bank the loaning officer had the following information at his disposal:

1. The amount of stock to be pledged is a minority interest.

2. The business could be described as a moderately cyclical, small, closely held manufacturing concern.

3. Statements were available in the bank's credit files for the years 1950 through 1953.

4. Agency reports were also available.

5. A memorandum in the credit files indicated the view of one officer that management had been changed in 1940 and thought to be only "fair" in quality.

The statements for the four-year period 1950 through 1953 indicated average dividends of $9.30 and average earnings of $9.60. Book value in December 1953 was $307.00.

Capitalization of dividends at 10%, meaning that dividends should average a 10% return over a reasonable period, brings a figure of $93.00.

Capitalization of earnings at 16 2/3%, or approximately six times earnings, produces a figure of $57.60.

Then applying a weight of dividends of 3, earnings a weight of 2, and book value a weight of 1, the result is as follows:

Dividends given a weight of	3	=	$279.00
Earnings given a weight of	2	=	115.20
Book value given a weight of	1	=	307.00
			6 into $701.20 = $116.87

The sum of the products (701.20) divided by the sum of the weights (6) would result in a valuation figure of \$116.87. This "base value" would then be subject to other adjustments based on available information. The information available in early 1954 revealed several items which would have necessitated adjustment in the base value. Briefly described, they were:

1. Evidence of only "fair" management.

2. Net profit low in relation to indicated worth in the past ten years.

3. Net profit low when in proportion to sales volume in the last ten years.

4. Dividends exceeding net profit for all years under consideration.

5. Agency report indicated some "slowness" in payments to creditors.

The above indicators of weakness would have justified a still lower final valuation figure than the \$116.87 previously derived by perhaps 25%.

Because of the wide discrepancy between the book value and the value obtained by the proposed valuation method additional investigation would be required. Such an investigation might have revealed the discrepancy between stated book value and liquidation value and verified the weakness of the present management.

After the investigation and further adjustments were made the extending of credit would not have been justified except by the pledging of more acceptable collateral, utilizing a repurchase agreement, etc.

The Periodic Review

The loaning officer's responsibility in regard to the valuation of collateral does not cease when the initial loan is made. Of extreme importance is the follow-up or periodic review.

The periodic review merely consists of the obtaining of up-to-date agency reports, the reviewing of more recent financial statements, and the analyzing of other antecedent data that may have been obtained. Of course, the results of the analysis should be recorded for future reference.

Importance of the Review

The importance of this periodic review cannot be stressed too greatly. An excellent example of what can happen when a predetermined pattern is not followed is illustrated in the preceding case history as noted on page 35.

Loans with a specific maturity date should be reviewed by the officer if a renewal is requested. Demand loans should be reviewed periodically. Any special occurrence, either internal or external, to the corporation should cause an immediate review. Some of the warning signals are as follows:

1. Sharp break on any of the organized securities exchanges.

2. Rumored weaknesses passed by "word of mouth" by individuals familiar with the corporation's operation.

3. Newspaper and other articles indicating either a weakness within the industry or the individual corporation.

4. Significant changes as noted in the fiscal year financial statements.

The purpose of the regular review is to locate and account for any significant changes that may affect the stock value. The time to be spent on each review is, of course, dependent on the thinking of the loaning officer, though it may be dictated by the policy of the institution. It is not reasonable to assume that the same amount of time will be spent on a $1,000 loan that would be spent on a $100,000 loan if both are secured by the same quality of collateral.

CHAPTER VI

SUMMARY AND CONCLUSIONS

One problem encountered by the modern day bank loaning officer is the valuation of closely held and untraded stocks offered or requested as collateral in support of a loan. It is recognized that collateral is not the primary security for a loan, but nevertheless, the full, prudent attention of the loaning officer is expected in the valuation of this type of collateral.

The presently used methods for valuing closely held and untraded stocks, namely, last sale price and liquidation value, appear to be inadequate. Dangers found to be common to nearly all of these methods may be summarized as follows:

1. The failure to recognize and account for certain basic considerations such as the exact nature of the problem, the time element, motives of the potential purchaser upon default of the borrower, etc.

2. The failure to recognize and account for certain specific factors, namely, management, historical and economic factors, and financial soundness.

To overcome the dangers inherent in the presently used methods, as noted above, a method was proposed based, first, on a thorough study of all available information having a bearing upon value. Next, the calculation of "base value" was accomplished by capitalizing average dividends and average earnings, and the consideration of book value. Weights are then applied according to the degree of importance attached to dividends, earnings, and book value.

Once this "base value" is obtained adjustments would be made where thought necessary. Decisions as to adjustments would depend largely on the analysis of available information. It was also recommended that the proposed valuation method could be used to substantiate suggestions by the borrower in regard to value.

The proposed valuation method is flexible which enables its use for the valuation of closely held and untraded stocks under a wide range of circumstances. Generally these include:

1. When less than 50% of the outstanding stock of a corporation is to be pledged.

2. Where the amount of stock to be pledged represents a controlling interest in the corporation.

3. Where the amount of stock to be pledged is sufficient for liquidating control.

The loaning officer's initial valuation does not relieve him of his responsibility. Periodic review of the valuation must be made dependent upon the type of note employed in making the loan. Additional reviews must be made upon notice of significant developments which might affect value.

It is recognized that the success of the valuation is largely dependent upon the skill of the loaning officer, and the amount of quality information available.

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