MUNICIPAL SECURITIES

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At your 1958 conference of Examiners and Assistant Examiners, it was my privilege to participate in the session devoted to a consideration of the bond portfolio with special reference to municipal securities. Let me assure you that I appreciate the opportunity you have afforded me to discuss with you once more the municipal segment of bank asset structure. An invitation to make a few remarks about municipal securities is not uncommon, but rare indeed is the opportunity to reappear at a subsequent occasion. Once is usually enough--at least for most of the participants. So, in these circumstances, I feel that it is incumbent upon me to endeavor to renew your interest and to stimulate your thinking about this very important aspect of bank examination work--the review of the municipal securities portfolio.

A rereading of the remarks at the 1958 conference suggests that the stress placed upon the basic trends in the municipal segment of bank asset structure was entirely warranted. At that time, all insured commercial banks had committed about $15.5 billion or 6.8 percent of their total assets to obligations of States and their subdivisions. Now, the figures are $24.6 billion and 8.3 percent, respectively. In 1958 the amount of municipal debt outstanding totaled about $50 billion, whereas now the corresponding figure ranges between $70 and $75 billion. Furthermore, it continues to be a fact that from one-fourth to one-third of all outstanding obligations of this nature are held in bank portfolios.

Over the foreseeable future, the well-established trends in municipal debt growth and the increase in bank holdings of these obligations show no signs of abatement. The continuing pressure on banks to increase earning power makes these securities with their unique tax exemption features quite attractive as investments. Accordingly, it seems appropriate to repeat again the conclusion voiced several years ago that it will be necessary for examiners to devote an increasing amount of time to the municipal securities account. Questions about the quality of individual credits as well as basic investment policy with respect to municipal securities will continue to demand attention.

For relatively small banks, commitments in municipal securities present a knotty snarl of problems. In the first place, their scale of portfolio operations is not large enough to warrant the employment of highly specialized managerial skills nor to maintain elaborate sources of basic investment data. For the most part, small banks serve small communities and, in providing for the credit needs of the area, these banks are also called upon to help the local units of government. As a result, the typical small bank may find that it has concentrated the bulk of its resources available for loans to individual borrowers and for investment in precisely the same area. Moreover, these small governmental units are largely unknown in the national market for municipal securities. For this reason the credits are unlikely to be included in the rating systems prepared by the investment advisory services.

The insured commercial banks examined by the Federal Deposit Insurance Corporation in the 9th District are predominantly small and their commitments in municipal securities are quite likely to be troublesome to examiners. Here are a few illuminating statistics bearing upon this point. Studies of examination reports, covering substantially all of these banks in the 9th District for 1959 and 1961, show that from 50 to 55 percent of the municipals were not rated by any of the investment advisory services. The corresponding figure for all banks examined by Federal Deposit Insurance Corporation was in the order of 32 percent. However, a study of all municipal bonds offered for sale over the period 1957-61 shows that only 23 percent of the volume was unrated. In other words, your job is complicated by the fact that bank holdings of municipals in this area represent to a very substantial extent the rather small segment of unrated issues. Admittedly, bond ratings will not solve all of the examiner's problems when he reviews the municipal segment of the bank asset structures, but the lack of these ratings will certainly add to his difficulties.

At this juncture, perhaps it would not be amiss to repeat--with a few verbal modifications--the substance of my remarks in 1958 concerning the analysis of municipal credits for purposes of quality determination. Moreover, outright repetition may be justified on the grounds of sound pedagogy. Nevertheless, I lack the heart for such a task, and perhaps none of you would be able to stomach it.

The fugitive literature in the field of municipal securities consists mostly of stereotyped discussions of credit analysis and investment policies. Here you will find repeated from one article to the next, the standards for crude measures of debt burdens; that is, acceptable ratios of debt to assessed value, and the volume of debt per capita as well as tests of the assessment base. Likewise, you will find rules of thumb to govern the schedule of maturities in the investment portfolio of a bank. Stress is placed on the importance of the legal opinion attesting the validity of a municipal obligation, and the need for adequate credit files.

Rather than administer a bromide of the usual nature in this field, today I first propose to present some background information pertaining to credit quality ratings by investment advisory services. The center of reference will be municipal credits. Then, I propose to consider the valuation of securities held in bank portfolios. Justification for exploring these facets of bank investments is the belief that the subject matter will be helpful to you in preparing comments about the municipal portfolio for page 2 of the examination report. Also, this background material, I trust, will lend support to your general discussions of investment problems with the management of banks under examination.

Appraising Credit Quality

Viewed in broad terms, the appraisal of credit quality has been recognized as an appropriate area of commercial endeavor for well

over 100 years. For example, the origins of Dun & Bradstreet, now a leader in the field of credit ratings, can be traced to the Great Panic of 1837, a time of widespread financial difficulties which emphasized the need for adequate financial information to support extensions of mercantile credit. Long before the turn of this century, the accumulation of credit data and its appraisal in terms of generally accepted standards was an essential part of the business scene.

Beginning in the 1860's, information relevant especially to the credit status of corporations has been compiled and published for the use of the financial community. A forerunner of Standard & Poor's Corporation today, Poor's Publishing Company, was the first to discover a market for information pertaining to the finances of corporations in which there was a widespread public interest--at that time mostly railroad companies.

Curiously enough, the appraisal of credit quality in the corporate field appeared many decades after the widespread acceptance of mercantile credit ratings. It was not until 1909 that John Moody, a Wall Street analyst of securities and also a publisher of statistical information in the corporate field, began to rate securities in his manuals of investment data, while the earliest publisher, viz., Poor's, did not commence to rate securities until 1916. In 1922 Standard Statistics Company inaugurated a system of ratings for securities and Fitch did likewise two years later. Thus, by the mid 1920's, four different financial publishers were engaged in the business of appraising the quality of securities.

From the very start, Moody's looked upon investment ratings as especially attractive to commercial bank customers. In the sales efforts which were oriented towards banks, stress was placed upon the usefulness of ratings for managerial purposes. The results have certainly demonstrated that the idea was basically attractive. Incidentally, the manual covering securities floated by governmental units first appeared in 1918, and a very substantial number of credits were rated from the very beginning.

Qualitative ratings for investment credits have always been viewed rather dimly by many in the financial community. Quite apart from any merit there may be in appraising investment credits and giving currency to such judgments with the publication of rating symbols, at the outset some members of the financial community believed that it was simply stupid to sell informed opinions---especially at low cost. By and large, this attitude has tended to vanish as the members of the financial community, especially traders, became increasingly aware of the importance of financial information and informed judgments. Now these opinions are recognized as essential elements needed to support the structure of prices for securities so that the flow of quotations are more or less stable and not characterized by wild fluctuations.

Professionals in the business of appraising the quality of investment credits were inclined to deprecate the adjective ratings published by the investment advisory services. Not without grounds for their objections, these experts insisted that the publishers could not

afford to study the relevant financial data adequately to justify the qualitative determinations ordered by the rating symbols.

Actually, the professionals continue to voice misgivings as regards the adequacy of the analytical efforts to determine investment quality ratings. To illustrate the magnitude of the job in the municipal field alone an analyst usually is obliged to follow credit quality developments on fifteen hundred to two thousand different issuers of securities in the course of a year. When the credit ratings are produced in this volume, they can only be supported with a minimum of analytical work. Furthermore, as matters go in this world, analysts engaged in the business of producing appraisals of securities are not generously rewarded in the financial community. Nor do they have very attractive prospects for advancement. On the contrary, the work tends to be drudgery that young men seek to escape as soon as possible and too often work that old men cannot avoid.

Issuers of securities, distributors--that is, investment banking firms--and investors have occupied ambivalent positions with respect to investment quality ratings. To overcome sales resistance, each of these groups at times have found high quality ratings useful for their purposes. But there have been times when low rather than high ratings were favored by one or more of these groups. For example, the desire to accumulate securities for one reason or another at depressed prices have made relatively low ratings quite useful. Thus, it is evident that the rating

process itself is subject to pressures other than the ones directly relevant to the quality of investment credit. These pressures may be important or negligible in determining the results. Unfortunately, they can only be recognized; they cannot be weighted on any satisfactory basis.

There are many paradoxes in the history of ratings with respect to the quality of investments. A major one is that although the rating of investment quality is obviously of vital importance to the issuer of securities, the latter has seldom been required to do anything in return. As a minimum, one would expect the rating agencies to insist upon the publication of adequate financial information. Instead, the rating agencies have, from time to time, complained in one way or another about the difficulties of securing data needed to appraise credit properly. By now, one might have expected the prerequisites for the publication of a credit appraisal to include an adequate amount of relevant financial data readily available in the public domain.

The rating services have always literally given away their investment credit quality appraisals. To be sure, the ratings have been published in material that was sold to the public. Nevertheless, the ratings, once published, become a part of the intellectual currency in the financial community. The ratings are republished by others in many different forms. Furthermore, they have entered into a great variety of uses, and many for which they are ill suited.

Still another paradox in respect to ratings of investment credits is the use for bank examination purposes. Whereas a much older system of

ratings on commercial credit seldom received any consideration, adjective ratings by investment advisory services are accepted as reasonably satisfactory in determining the quality of investment securities. The bank examiner expects to find each item in the loan account supported by a rather substantial file of credit information. In the examination process, study of this credit file, rather than outside opinion, is determinative in appraising loans. There are obvious reasons for this difference in treatment accorded the two classes of credit appraisals, and a brief review of the history will shed some light on this subject.

Early Use of Ratings in Bank Examination

Obligations of the United States and, in even greater volume, securities floated by private corporations accounted for the bulk of the commercial bank investments in the decade preceding the Great Depression of the early 1930's. Securities issued by the States and their subdivisions were of minor importance. For example, during the 1920's, Federal obligations increased from $3.6 to $4.9 billion, corporates from $3.8 to $6.9 billion, and municipals from approximately $1 billion to almost $2 billion. In other words, about half of the securities portfolio comprised the securities of corporations, three-eighths were Federal obligations and one-eighth were municipals.

Not surprising in view of the statistics, as the decade of the 1920's drew to a close and the signs of financial troubles grew more ominous, attention centered on the quality of corporate securities in

bank portfolios. Among the bank examining authorities concerned with the portfolio quality, the Federal Reserve Bank of New York was a leader. For want of a better measure, this bank used ratings published by the investment advisory services as an indicator of quality of the investment portfolio in the individual member banks. Unfortunately, the index left much to be desired from a technical point of view. More important for our purposes was the growing awareness of the bank examining authorities that the securities portfolio, as well as the loan account, presented a credit quality problem.

As the forces of business depression developed into a panic stage early in the 1930's, the bank chartering and examining authorities in many of the States, as well as the Comptroller of the Currency, turned to the published securities ratings for help in extricating themselves from their difficulties in valuing securities portfolios for bank examination purposes.

Although prevailing price quotations in the market place had long served as a basis for valuing portfolios of securities held by banks, the disorderly markets of the early 1930's upset the usefulness of this method. In accordance with established procedures, bank quality loans were valued at book; but securities, irrespective of quality, were always called upon to meet a market price test. At that

time, the decline in corporate bond prices was especially severe, and virtually no bank was able to show a satisfactory capital margin, after the shrinkage in this segment of the asset structure was taken into account.

Use of quality ratings prepared by the investment advisory services offered the bank examining authorities a method for blunting the market value shrinkage in determining the net sound capital of banks. The rating categories offered a means for differentiating between investment and speculative types of securities. Amortized cost or book values were accepted, as appropriate for the former category; however, only the latter were subject to market value test. Since most bank holdings of corporates tended to be concentrated in the rating bands deemed by the examining authorities to be investment grade, the consequence of this expedience was the stabilization of book asset values.

Still another development in the early 1930's directed the attention of the bank supervisory authorities towards the use of ratings as a convenient means for identifying the quality of securities. The growing number of bank failures, augmented by the substantial group that did not open after the bank holiday in 1933, left the Comptroller of the Currency with the task of liquidating a large volume of securities acquired from failed banks. This liquidating experience demonstrated that banks could ill afford to invest in

credits other than high quality issues. Experience demonstrated that failed banks often held a fair amount of poor quality securities and these usually were difficult to market. Thus, the record testified to the need for quality in bank portfolios--and emphasized the intimate connection between lack of quality and poor marketability.

From the object lessons of the early 1930's came the Banking Act of 1935 which gave the Comptroller of the Currency the power to define investment securities for national banks and to make regulations pursuant to this power which were likewise applicable to State banks, members of the Federal Reserve System. Pursuant to this authority, the Comptroller defined investment securities by incorporating in his ruling a reference to ratings published by the investment advisory services. Specifically, this regulation provided that:

> "Purchase of 'investment securities' in which the investment characteristics are distinctly and predominantly speculative is prohibited. (The terms employed herein may be found in recognized rating manuals and when there is doubt as to the eligibility of a security for purchase, such eligibility must be supported by no less than two rating manuals)".

Thus, the ratings accorded securities became embedded in bank examination procedure with the force of a regulation to hold them in place. Furthermore, this ruling by referring to "two rating manuals" introduced the notion that a concensus among the rating agencies would be needed in determinations of quality.

Notwithstanding the fact that the ratings were recognized in bank examination procedure, at the time there was evidence pointing to the shortcomings of these qualitative judgments published by the advisory services. In some instances, securities rated in the second and third quality bands had defaulted within short intervals after their flotation. Furthermore, there were cases of securities in default where the misfortune occurred so rapidly that the advisory services lacked the time to lower the ratings in their publications. Nevertheless, the bank examining authorities were confronted with a practical problem, and the ratings, with all their weaknesses, were the only tool available for ranking securities as to quality. To this date, the lack of an alternative continues to be the best justification for the use of ratings.

In almost every case, the bulk of investment information requiring study before an opinion can be formed as regards the quality of an investment security tends to overwhelm investors as well as bank examiners. Accordingly, the market for a symbol which will summarize a credit quality judgment of a security is ready-made for any publisher with courage and prestige enough to enter the business. Perhaps the

users of these symbols have reservations about the analytical skills of those who prepare the ratings. Nevertheless, the ratings exist as objective facts and they seldom are obviously bad. Since more than one agency is engaged in the business of rating investment credits, a concensus tends to develop in the financial community, especially with regard to the definitely high grade securities and those obviously lacking investment merit.

Anyone who is disposed to be reasonably objective about the usefulness of ratings for bank examination purposes is forced to the conclusion that they are an essential part of the process. Despite the recognized shortcomings of ratings, up to now no one has offered satisfactory substitutes. To insist that every credit in a bank's investment portfolio requires detailed analysis of the relevant financial information is to advocate the impractical. While there is some merit to the argument that the banking community is abdicating its responsibilities when it submits to the so-called tyranny of ratings, the escape hatch is always available--the individual credits may be analyzed, and, if it is true, the published ratings may be demonstrated to be in error. Troubles there will be, but they tend to localize at marginal cases. More important is the fact that a sizable volume of securities can be covered by the rating system. This is the great advantage of the system for bank examination work.

To be sure, ratings are subjective appraisals of credit quality. Perhaps the day will come when scientific methods can be

used to arrive at these determinations. Meanwhile, there is little chance to use the ratings for what they are worth.

Approximations of Value

The use of ratings for the dual purpose of determining credit quality and approximating values for securities was initiated in 1938. A sharp business recession in the preceding year and the related collapse of bond prices--especially railroad securities--presented bank examining authorities once again with troubles very similar to those which characterized the 1930-33 period. Ratings of securities by investment advisory services had then been widely accepted as a means of identifying credit quality. All that remained to solve the problem was to take the next step, that is, to value so-called investment grade issues which comprised most of the securities held by banks at amortized cost or book value. By avoiding reference to market quotations, bank asset values were stabilized.

Formal solution of the securities valuation problem was included as part of an agreement reached in 1938 among the three federal banking agencies, i.e., the Comptroller of the Currency, the Board of Governors of the Federal Reserve, and the Federal Deposit Insurance Corporation, and the State bank supervisors. Pursuant to this agreement, which was phrased in terms of uniform bank examining

procedures, investment grade securities were defined as those rated in the four highest grades and others were designated as speculative. Furthermore, the agreement provided for the appraisal of investment grade securities at the equivalent of amortized cost or book value. By contrast, speculative securities were appraised on a basis which gave some effect to market quotations, though the full force was tempered by the use of an 18-month average of prices. Subsequently in 1949, the original method of valuing speculative securities was abandoned and market quotations were substituted therefor. At no time did the authorities come to grips with the troublesome cases presented by the unrated issues. The agreement merely referred to "unrated securities of equivalent value".

Owing to the need for protection against the evil consequences of a disorderly market for securities, the bank examining authorities, both State and federal, solved the immediate problem by virtually insulating the asset value of the securities portfolio from prevailing market prices. Since then, the banking authorities have operated within the framework of these rules and major troubles have been avoided. The avoidance of troubles may be ascribed, in part, to the fortunate trends that have prevailed in the economy over the past twenty-five years. Generally, prosperous times and a more or less continued expension in the dimensions of the financial structure have prevented a testing of the rules in all but a few isolated cases, even though the basic situation has changed enormously.

To highlight these changes, consider the differences between the composition of bank portfolios in the mid 1930's and in recent years. Corporate securities held by insured commercial banks in 1936 aggregated $3.3 billion compared with holdings of securities floated by States and subdivisions, which then totaled $2.6 billion. The corresponding 1962 figures were $700 million and $24.6 billion respectively. Furthermore, in the mid 1930's railroad bonds accounted for $1.2 billion of corporate securities. The latter holdings are no longer reported separately, but obviously they are of very minor importance today. These statistics furnish substantial justification for the valuation procedure incorporated in the 1938 Agreement at the time it was adopted by the bank examining authorities. Whether its continuance can now be justified is quite another matter.

Neither good times nor good luck should argue against the focusing of attention on the central question: How to estimate the value of assets for bank examination purposes? The annals of banking history are replete with illustrations of the evils that result when asset values became unrealistic. Certainly there is much to be said for the rule justifying the valuation of the items in the loan account at book figures. For the most part, these assets are short-term obligations subject to frequent renewal and it is comparatively easy to bring them into conformity with higher or lower interest rates as financial conditions change. Assuming reasonably satisfactory credit standards, a bank can always maintain the earning power of the items in

the loan account at a parity with prevailing rates of interest and thereby avoid any deterioration in the capital value of these assets.

Because the yield on an investment is a mathematical function of the coupon rate and maturity, the holders of such obligations always face the prospect of capital depreciation or appreciation. These changes in capital value stem from the fact that basic investment terms are constantly changing in the market. For example, since 1920, yields on prime corporate securities have ranged from more than 6 percent to a low of about 2-1/4 percent. For the past three years, these yields have been fluctuating about 4-1/4 percent; but for the most part of the 1920's, they ranged at or above this figure. More important is the fact that the yields are constantly moving in one direction or another; seldom do they follow the outline of a plateau.

For practical reasons, new offerings of securities are floated with coupons that will result in prices close to par value. Thereafter, when changes take place in basic investment terms, the adjustment for outstanding issues takes the form of an increase or decrease in market prices. Accordingly, it is almost inevitable that book values, if they are closely related to cost, soon become unrealistic.

Assuming that markets for securities were free and fair to both buyers and sellers, the best way to estimate the value of securities portfolios held by banks would be to use prevailing quotations. Unfortunately, in the mid 1930's the markets were quite disorganized and,

as a consequence, factors having virtually no bearing on the investment qualities of an issue, such as forced liquidation, tended to exert an overwhelming influence on prices. This was especially true with respect to the railroad bonds then held in substantial amounts by banks. Today, for quite a different reason, market quotations are an unsatisfactory indicator of investment values in bank portfolios of securities. This is because the municipal segment of bank investments is quite large and there is virtually nothing that resembles a free and open market for municipal securities.

The investment banking machinery designed to float obligations of States and subdivisions is primarily concerned with the marketing of new issues. Almost without exception, these securities are traded in the over-the-counter market; each purchase and sale is effected on a negotiated basis and there is no central reporting of terms upon which securities change hands. To be sure, there is a so-called "Blue list" which publishes bids and offers for blocks of securities obtained from firms engaged in this line of business. Such information, however, does not reveal the actual terms of transactions when and if they take place.

So the problem of estimating an appropriate value for bank investments becomes more and more of a dilemma. While book values may be suitable for loans, they obviously become inappropriate over a period of time when applied to items in the investment portfolio. To be realistic, such estimates require the periodic adjustment of market transactions. But, unfortunately, the market process has not reflected

investment terms appropriately in the past. How can it be expected to do so now and in the future? What are the alternatives available to the bank examining authorities in these circumstances?

To approximate values for the municipal segment of bank investment portfolio, one widely used method is to call upon brokers and dealers for an estimate of prevailing market prices for securities. Sometimes this estimate is furnished on a professional basis and reflects the work of a knowledgeable bond trader, but more often it is offhand and informal in character. Mostly the approximations are prepared by junior employees in securities houses. A minimum of time and skill is devoted to the work and the results at best are very crude approximations of portfolio value. Notwithstanding the importance of the task, most bank portfolios of municipal securities are valued in this manner.

Much more sophisticated than the casual broker and dealer estimates is the municipal bond pricing service now furnished to the investment community by Standard Statistics Company. In effect, this agency first set out to develop a set of basic yield curves for each quality group of municipal securities. For the various groups, these curves are designed to reflect general investment conditions in the market place. To price a given issue, first it is necessary to select an appropriate curve showing the yields at various maturities for the quality of securities under consideration. Then, what may be characterized as synthetic price is calculated on the basis of the

related yield curve. While this explanation of methodology is over-simplified, my purpose is to stress the fact that the process of estimation rests upon assumptions rather than actual price quotations. So the results inevitably depend upon the extent to which these assumptions correspond to actual conditions. Furthermore, the pricing service incorporates certain assumptions as to market behavior as influenced by factors of investment quality. As a consequence, the results also depend upon the validity of credit quality determinations.

As you know, the Federal Deposit Insurance Corporation is one of the bank examining agencies now testing the Standard Statistics Company estimations of value. The estimates, in my opinion, are somewhat better than the formal appraisals by brokers and dealers. However, the methodology deserves much more careful study than it has received heretofore, particularly with respect to implicit contradictions as well as weaknesses stemming from circular reasoning. Furthermore, the factual support for the yield curves appears to be less than satisfactory.

Some students of the problem contend book figures provide a satisfactory estimate of the securities portfolio value because bank resources committed to the investment account, if management is proper, will never be subject to the market place test. In other words, it will not be necessary to withdraw the funds committed to securities prior to maturity of each individual obligation. Admittedly there is an element of truth in the assertion that funds properly allocated for bank investment are more or less permanent in nature. If the funds are needed

to meet an anticipated shrinkage in deposits or an increase in the demands for loans, then they should not be committed to the investment segment of the bank asset structure or the requirements should be anticipated by the selection of maturity dates for the securities.

Managers of bank investment portfolios cannot expect to avoid the inherent instability in the structure of deposit liabilities. Even though the volume of deposits for all banks changes in amount rather slowly over short intervals, at times the changes and shifts experienced by individual banks may be quite sharp. When these changes take the form of a shrinkage in deposits, the bank is obliged to convert resources into cash and this pressure may very well regress against the investment portfolio. Accordingly, it is appropriate for the bank examining authorities to give consideration to the asset values inherent in the investment segment of the bank asset structure, because it may become necessary to convert this resource into cash. Not only is this ample justification for efforts to maintain timely approximations of asset value, but in addition, these approximations are useful in determining the adequacy of capital margins and valuation reserves. The latter serve to buttress the bank against losses that may be sustained from unrealistic asset values based upon book appraisals of the securities portfolio.

In this discussion, I have ignored the fact that individual banks may call upon their correspondents and the Federal Reserve for help in meeting a deposit shrinkage or an expanding demand for loans, and thereby

avoid a liquidation of assets under adverse market conditions. My reason for so doing, is the belief that sound bank supervision would encourage each individual bank to solve its own problems. Furthermore, when it is necessary to shift assets to a correspondent or the Federal Reserve, then there is much to be said for book values that permit such shifts on realistic rather than inflated terms.

Perhaps in passing, it would be well to call attention to the distinction between the securities portfolio valuations appropriate for a life insurance company as compared with the bank. Generally speaking, the former will only face demands for cash when they are indicated by the mortality tables applicable to the holders of insurance policies. Thus, there is an element of stability in the asset structure of insurance companies that, in a very real sense, does not characterize banking. Nevertheless, today the insurance companies are concerned with the need for a margin of protection against shrinkages in book values of investments. To be sure, the arguments to support these margins of protection differ substantially from the ones that would be appropriate in the banking field. Nevertheless, there are stronger reasons in banking to insist upon such margins of protection.

Now, to sum up these observations, in the first place, it seems reasonable to believe that figures more realistic than book values are desireble to value securities held by banks. Secondly, when a more sophisticated approximation of investment portfolio values has been obtained, then it becomes appropriate to consider the implications of

the date. If the bank can absorb the indicated shrinkage in value, it should do so. On the other hand, if there is no shrinkage, a study of the portfolio may suggest that preparations should be made for such an eventuality. This, of course, leads to many difficult questions concerning capital margins and valuation reserves--subjects that are beyond the scope of this discussion; but they are related and important.