MUNICIPAL SECURITY ANALYSIS AND BANK INVESTMENT PROBLEMS

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By

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Directly or indirectly, a very substantial portion of the efforts of a municipal finance officer is devoted to problems touching upon the credit standing of his governmental unit. Financial management and the reflection of it in reports are the more conspicuous aspects of this work. But the finance officer in concentrating attention on management and reports is concerned only with one side of the coin; the reverse side of this same coin shows the investment problem and the analysis of securities.

The background for this discussion of the bank investment problem and the related analytical techniques for judging municipal credit will be sketched by focusing attention on two questions:

(a) To what extent do State and local governments rely on commercial banks for long-term credit requirements, and

(b) How important are the obligations of these governmental units in the asset structure of the commercial banks?

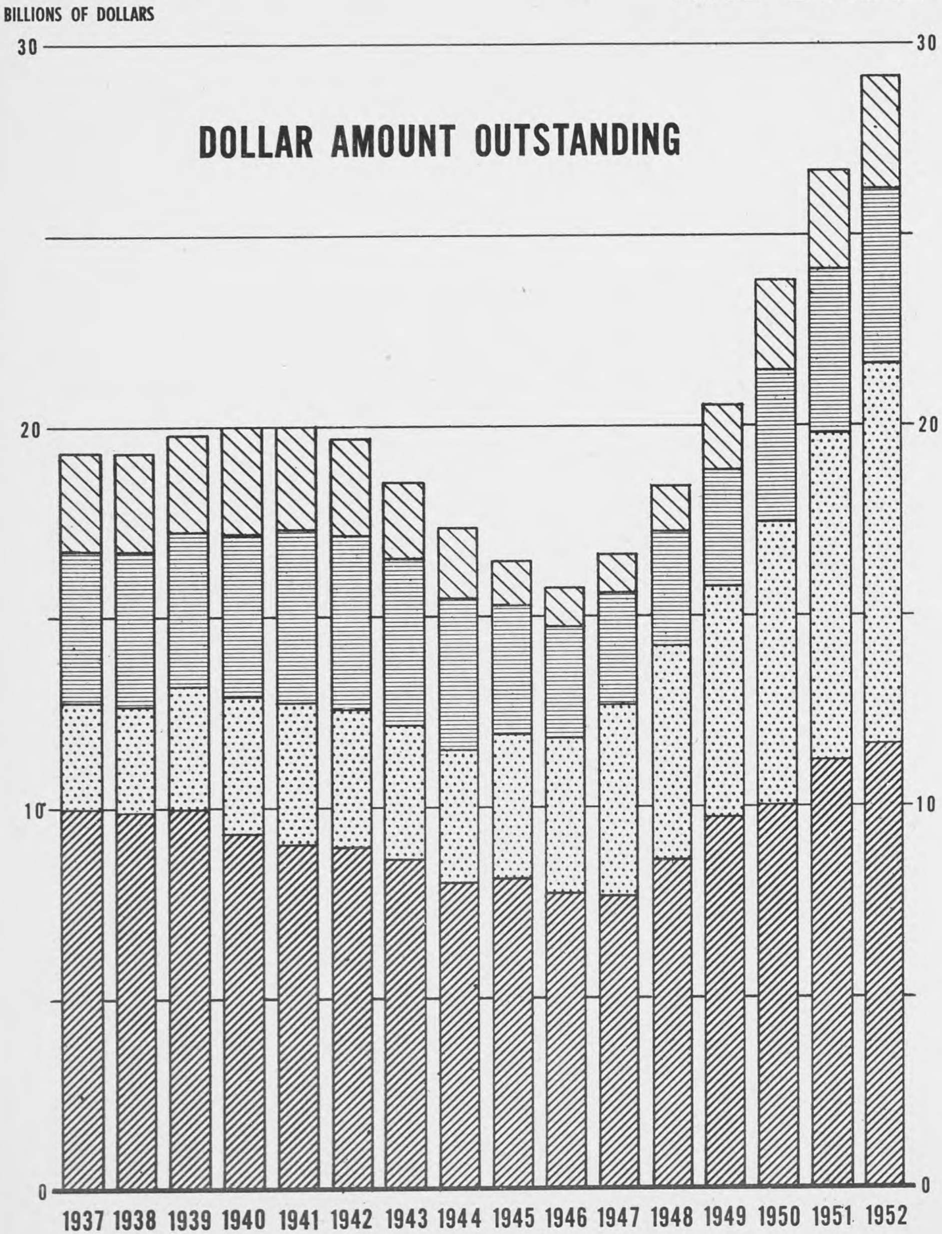
The answer to the first question will suggest the extent to which it is necessary to take banks into account. Some insight as to the nature of the banks' investment requirements will be developed from the answer to the second question. To be sure, a finance officer cannot shape his entire credit requirements to fit the specific investment needs of any one supplier of funds, but it would be foolhardy to ignore the place occupied by banks in the investment market.

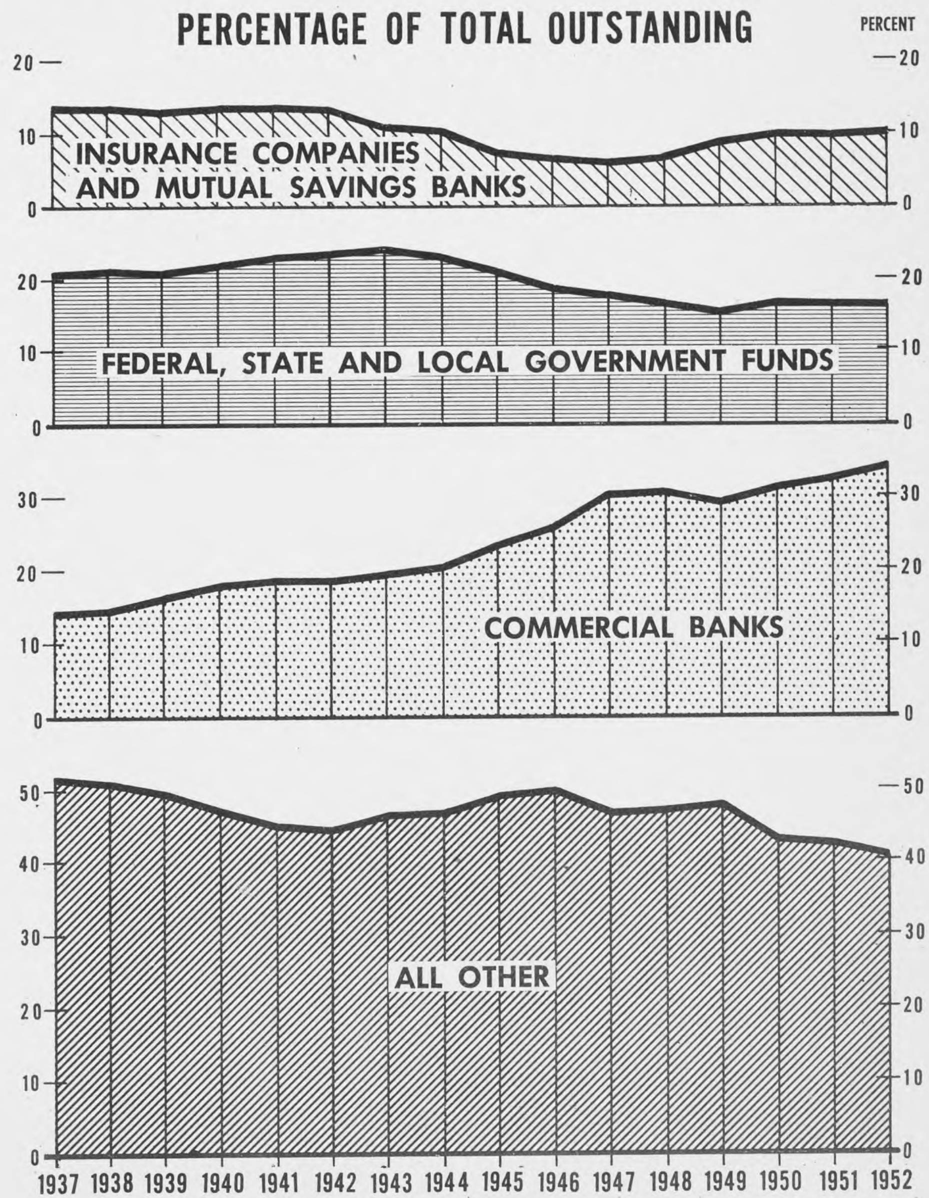
How the technique of security analysis is used in judging credit quality for the purpose of selecting investments will also receive a good share of our attention. The financial report covering the operations of a municipality is of crucial importance in this analytical process. An understanding of security analysis will enable the finance officer to develop his report so that it may be used effectively in solving investment problems. Most important of all, however, it is hoped that a discussion of analysis will encourage continued improvement in the quality of reporting.

Commercial Banks as Suppliers of Credit to Municipal Governments

Some graphic material has been prepared to illustrate the answer to the first question: To what extent do States and other governmental units rely on commercial banks for long-term credit? Information regarding the ownership of securities issued by State and local governments is presented in the accompanying chart. The data covering the period 1937-1952 were obtained from the 1952 report of the United States Secretary of the Treasury. Columns in one of the chart panels depict the dollar amount of securities outstanding. Each of the columns is broken into segments indicating the major classes of investors. The relative amount of securities held by each ownership segment is presented in the adjacent chart panel.

OWNERSHIP OF SECURITIES ISSUED BY STATE AND LOCAL GOVERNMENTS





From these data you will note that the volume of outstanding municipal securities has now increased by nearly $10 billion above the pre-war level of approximately $20 billion. Moreover, the commercial banks have grown in stature as holders of these securities over the years. The increase in the dollar volume of their holdings is quite impressive. At the present time the banks have in their investment accounts more than one-third of all outstanding municipal securities. This position has been attained through a period of steady progress from the pre-war level of about 15% of the total. Furthermore, the trend continues to point sharply upward.

As one point of reference it is interesting to observe that during World War II the commercial banks never held as much as one-third of the outstanding Federal obligations. To be sure, this involved a much larger amount than is comprised by the fraction of municipal securities currently held by the banks. Nevertheless, States and other subdivisions of government today are leaning very heavily on the commercial banks for credit.

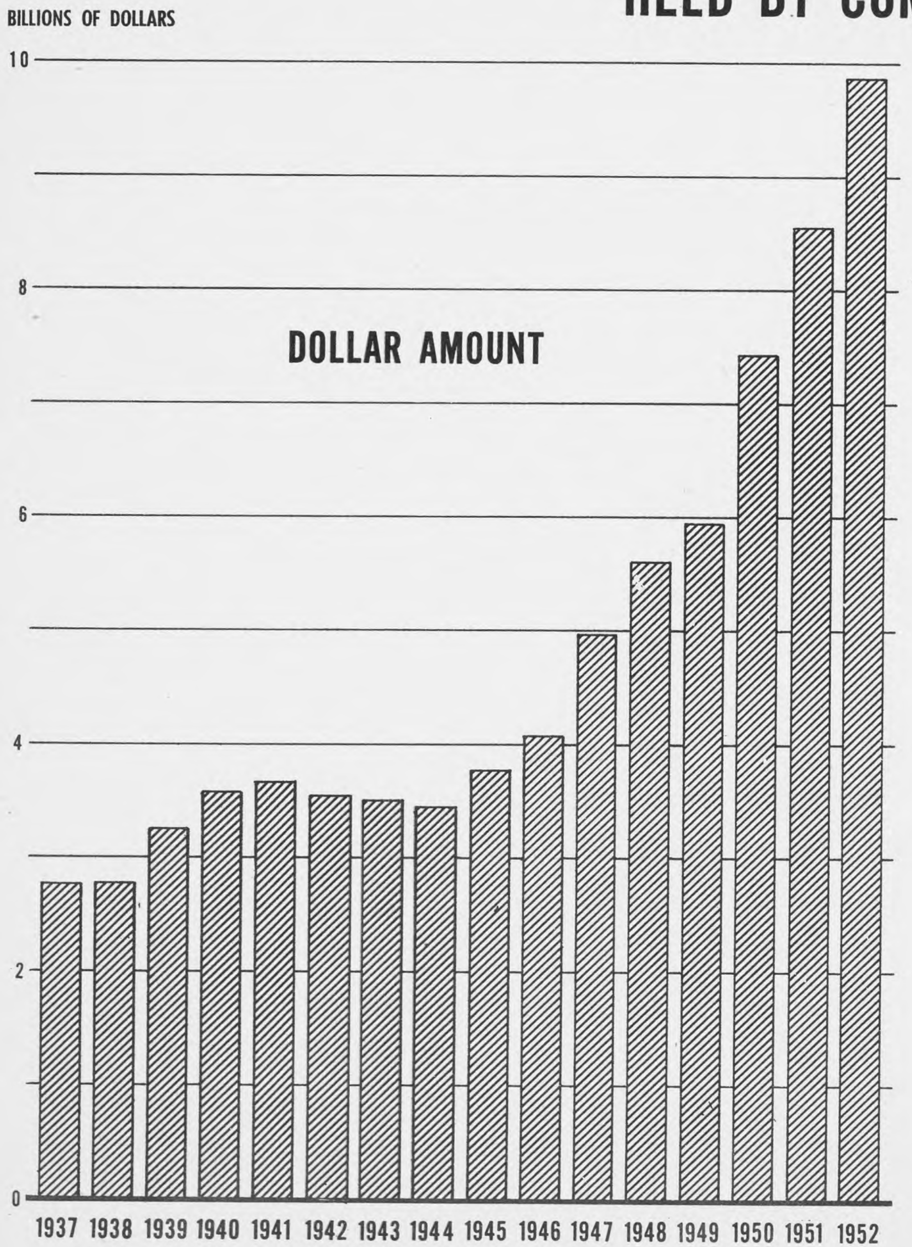
Changes in the relative importance of the different classes of investors supplying municipal credit are worthy of careful study by the finance officer. Here attention has been concentrated on the role of the commercial banks, but the shrinkage in the importance of other investor groups should not be ignored. The long-run significance of these trends, however, is an intricate subject which may have an important bearing on the entire economy.

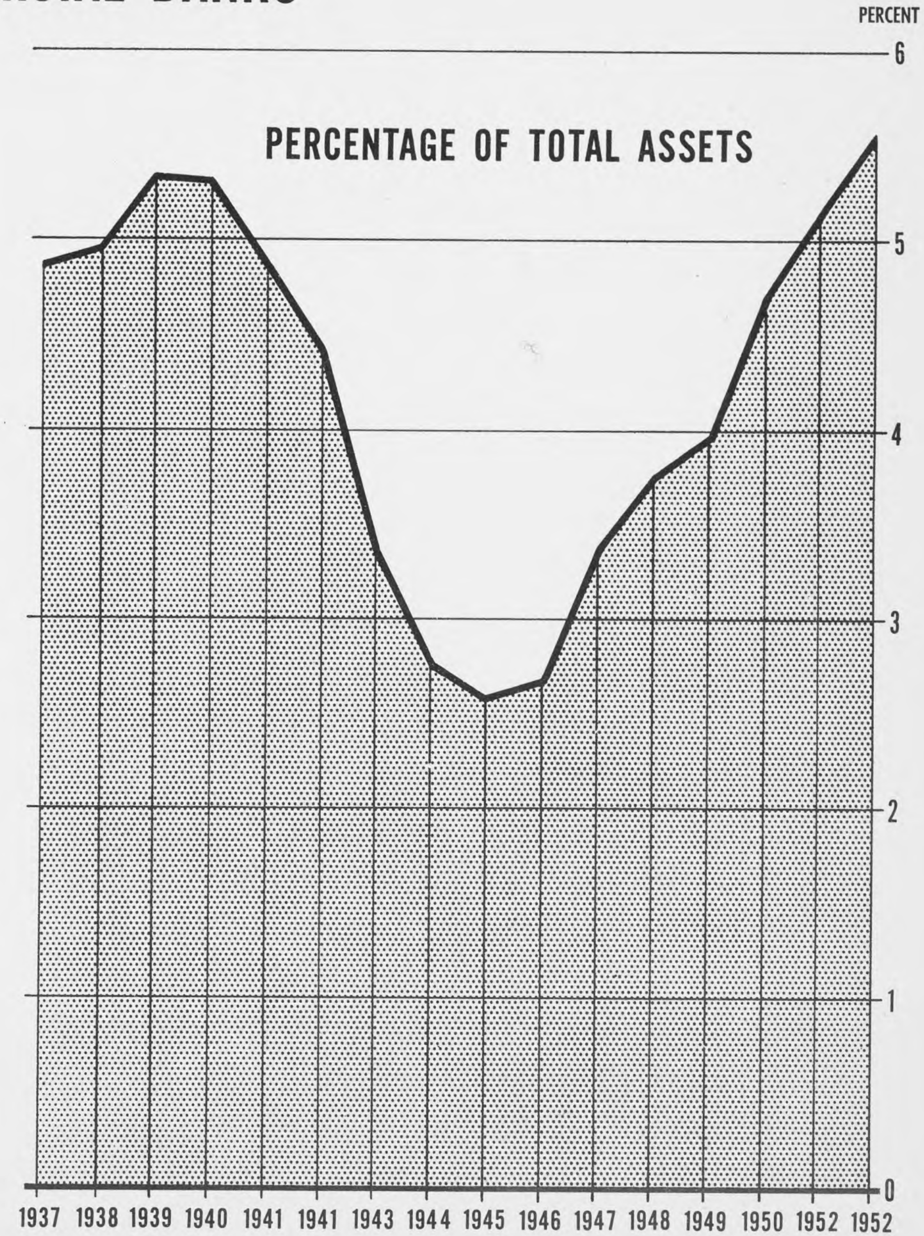
Reliance by States and other subdivisions of government upon the commercial banks for credit makes it important that finance officers understand their investment requirements and limitations. Commercial banks may well be described as a unique class of investors. Qualitywise and in other respects, the commercial banks have rigid investment requirements. Specifically, their need for readily available credit information is more exacting than others who invest in municipal securities.

Municipal Securities in Commercial Bank Portfolios

Now let us look at our second question: How important are municipal securities in the asset structure of the commercial banks? The accompanying chart presents data for the period 1937-1952 regarding the securities of State and local governments held by commercial banks. This information was compiled by the Federal Deposit Insurance Corporation. Both the dollar amount of the holdings and the percentage of total resources committed to these securities have been pictured.

SECURITIES OF STATE AND LOCAL GOVERNMENTS HELD BY COMMERCIAL BANKS





With holdings which now aggregate almost $10 billion, commercial banks have increased their investments in the obligations of States and local governments by almost $7 billion over the level in the years before World War II. You will recall from the preceding chart that the volume of outstanding municipal securities exceeds the pre-war level by about $10 billion. Thus it appears that an amount equal to about $7 billion of the $10 billion increase in outstanding debt volume has found lodgment in the commercial banks. This is a development which certainly is worthy of sober thought.

The rapid post-war growth in commercial bank holdings of municipal securities has given rise to much comment in the financial press. From the chart, however, you can see that in relative terms the size of the portfolio is not without precedent. Prior to World War II banks committed about 5% of their total resources to municipal securities. In the war years, the commitment declined to a low of about 2½% of total resources. Since then, however, the recovery has been rapid and now the percentage has returned to the pre-war level. However, commercial banking resources have grown to about $185 billion, and 5% of the total comprises a municipal portfolio approximating $10 billion.

There is no reason to believe that 5% is a standard for the amount of commercial bank resources to be invested in municipal securities. As a matter of fact, the proportion may very well climb higher, just as in recent years it has declined to a much lower figure. This ratio depends really on banking considerations and not upon historical precedent--in part upon the availability of funds in the commercial banks which may be committed to investment securities, and in part upon the extent to which this class of obligations measures up to the investment requirements.

Bank Portfolio Management

A look at our subject from the viewpoint of those charged with responsibility for the management of bank investments will be the next step in this discussion. The quality of municipal securities deemed to be suitable for bank investment purposes will be considered first. This will be followed by a few remarks on bank requirements for a schedule of maturities in the investment portfolio and for the marketability of the securities. Finally, some consideration will be given to diversification of items in the portfolio.

The qualitative standards for investment securities held by the commercial banks are very high. These high qualitative standards stem from the nature of commercial banking. Banks hold the liquid resources of the communities they serve in the form of deposits credited to their customers. As a practical matter, most of the deposits are payable upon demand, although some are subject to time restrictions on withdrawals. If economic tragedy is to be averted, the affairs of commercial banks must be so managed that depositors can be paid when they request their deposits.

In managing the resources of a bank, experience has demonstrated that part of the assets may properly be invested in securities. These investments, however, are viewed as a ready source of cash should the need arise. As a consequence, they cannot be subject to value deterioration. While high investment quality by itself may not be sufficient to prevent the erosion of asset values, it is one of the ingredients which together with other elements will preserve values.

Other classes of investors are not subject to the same pressures as those which impinge on banks to find securities of top quality. Obligations of ordinary, or for that matter, even marginal quality frequently offer attractions to non-bank investors, such as private individuals. Elements of uncertainty which may not have been properly discounted in market prices often furnish private investors an opportunity for profit. But the risks inherent in these situations are such that the opportunities can never be attractive to the commercial banks.

At times municipal finance officers may feel that commercial banks are unduly apprehensive about the quality of securities in the municipal portfolio. Bank investment managers, like municipal officials, are obliged to maintain a public viewpoint. To them, the bank investment situation cannot be viewed as a private affair. The interest of the public generally is at stake and there is no alternative but to commit bank funds to securities which measure up to the high qualitative standards which will avoid misfortune for the community as well as the individual bank. In the matter of quality there is no room for compromise. To do so is a certain step in the direction of misfortune.

Next, let us turn to a consideration of maturity schedules and marketability for the items in the municipal portfolio of a bank. In each individual commercial bank there is a characteristic ebb and flow of funds. At times funds tend to accumulate. Then, in other periods, they shrink.

This fluctuation in the amount of bank funds is reflected chiefly by changes in the deposits, loans, and in reserves.

Because the managers of bank investment portfolios are especially conscious of the ebb and flow in deposits and requests for loans, they endeavor quite systematically to build into their investment programs certain features which will make cash available to them at the proper time. This is accomplished by selecting bonds whose maturities are expected to coincide with the time when an outflow of funds is anticipated. Each bank has its own rate of turn-over in deposit accounts as well as a pattern of activity in the demand for loans. Accordingly, the schedule of maturities is adjusted in conformity with these anticipations.

The fact that deposits in a commercial bank ordinarily do not remain undisturbed for a long period of time is one of the important reasons why managers of bank investment portfolios do not look with favor upon securities which mature in the distant future. A rapid turn-over of investment funds through the maturity schedule provides the commercial bank with a steady in-flow of cash. If the funds are needed to meet withdrawal of deposits, they are available. Should they not be needed for this purpose, the portfolio manager may, of course, reinvest them.

High quality investments in a bank portfolio are not a substitute for appropriate maturity dates. Irrespective of quality, it is a mathematical fact that changes in the prevailing rate of return on any class of investments cause proportionately greater fluctuations in the capital value of long-term than short-term issues. To avoid the risk of loss in capital values, therefore, it is a well-recognized tenet of bank investment policy that holdings should be confined to securities which will mature within the next few years. A bank portfolio of short-term obligations, for example, maturing within a period of five years, has an inherent value-sustaining element that is absent in long-term issues.

While it is possible to convert a portfolio of municipal securities into cash through sales in the market that, as a general rule, is not practical. For the most part, transactions in municipal securities involve more or less extensive negotiations between buyers and sellers. To be sure, the market for many of these obligations is broad and active. But there is a vast number of issues and formal or organized exchanges have not developed for trading municipals.

There are certain classes of investors other than banks, namely, private individuals or pension funds, who need not be concerned with maturity schedules. They can anticipate their requirements over long periods of time. Very frequently, they need investments which will remain undisturbed. But commercial banks have an entirely different problem. They need short maturities, not long ones.

A few other basic considerations in the management of a bank investment portfolio are deserving of consideration. The principle of risk diversification is one that frequently receives considerable attention. It is certainly desirable to build up a portfolio from items which represent as broad a credit base as possible. Diversification, however, does not mean that a bank portfolio will include a scattering of commitments over a large geographical area. It entails a far more sophisticated approach in the selection of securities. As a matter of fact, diversification frequently is achieved by confining investments chiefly to the obligations of municipalities with a strong and well-diversified economic background.

Income from municipal securities is not subject to Federal income taxes. This tax exempt feature is especially attractive to banks because they derive earnings chiefly from interest on loans and investments. However, it is not consistent with sound practices for a bank to maximize its tax-free income by concentrating investments in municipals affording the highest yield. When bonds are selected for inclusion in a portfolio, yield is one of several important considerations. Other factors, such as quality and maturity, also are important.

Municipal Security Analysis

Knowledge of municipal security analysis techniques, and of the part analysis plays in the investment process may be useful to the municipal finance officer. Viewed narrowly, his activities in this area are limited to the preparation of reports. Good financial reporting, however, links security analysis and bank investment in municipals. Analysis furnishes a rational basis for guiding decision when it is necessary to select investments among the many alternatives available in the market.

To cover the subject of municipal analysis systematically and in detail is far too ambitious a task for this occasion. But it is practical to sketch the broad outlines. You fill find exhaustive treatments of the subject in the standard textbooks covering the field of investments.

Municipal security analysis is not a cut-and-dried procedure and there are no pat answers to the basic questions. It is an empirical and practical technique designed to help determine the suitability of a security for investment. Security analysis is scientific in the sense that it is based on observation and orderliness of study. Ultimately, however, analysis is an art because it involves a chain of decisions each of which rests upon qualitative judgments. Although it is necessary to review the basic information in any case systematically, there is no established formula to be followed in analysis. The final answer is a composite judgment supported by many intermediate determinations. Facts to support these determinations frequently are inconclusive. Far too often they are impossible to obtain.

Later on, some reference will be made to the application of recognized investment standards in the process of municipal security analysis. These standards are useful for measuring the significance of data. They have grown out of experience. Nevertheless, they should not be thought of as immutable yardsticks.

Appreciation of municipal security analysis techniques will increase the effectiveness of a finance officer in managing a debt. If he knows something about analysis, it will be much easier for him to assemble and make available to the public generally the kind of information required by managers of investment portfolios. Moreover, the finance officer will be able to anticipate the extent to which the obligations of his governmental unit will be appropriate for bank investment purposes. The fact that some municipal issues cannot be expected to attract bank funds will not come as a surprise to him because he will understand the reasons. Undoubtedly there have been times when a municipal finance officer's lack of knowledge regarding the technique of security analysis has reacted adversely for the credit standing of his municipality.

The purpose of municipal security analysis is to answer one simple question: Will the municipality pay its obligations in accordance with the terms of each individual bond issue? There is no attempt to appraise the goodness of credit in any absolute sense. Sufficient for the purposes of the portfolio manager is an informed opinion on the prospects for investment performance.

The reason for narrowing the question to the outlook for a given bond is not hard to see. Nor is it enough that in the long run the credit of a governmental unit will be satisfactory. Delays in payment of interest or principal on a specific issue, even for a short time, will make the obligation unsuitable to certain investment programs. This is especially true for banks.

Municipal security analysis involves the sifting and appraising of economic and financial information. It tries to identify the controlling factors with respect to a particular security. In the process of analysis the obligation is assumed to be valid. Determination of legality has developed into a highly specialized branch of the law. As a practical matter, investment analysts are obliged to rely upon the experts in determining the legal characteristics of each bond. After the analyst has satisfied himself that the obligation under consideration is valid, he then sets about to isolate the crucial elements bearing upon investment standing.

A review of the economic background of the governmental unit issuing bonds is basic in the analysis of municipal securities. Of necessity the scope of this review is quite broad. It encompasses such topics as the natural resources of the area, population change and industrial development. To be of maximum usefulness it is necessary to cover the past record of development as well as the future prospects. Sometimes it is easy to trace the essential features of the economic background in analyzing municipal credit. More frequently, however, the analyst is confounded by the mass and complexity of details. Up to now, most reviews have tended to be historical and subjective in character.

Some excellent economic studies of areas have been prepared by research workers in universities. In these studies the data have been selected with discrimination and the results have been organized and expressed clearly in well-written reports. A municipal finance officer may obtain guidance from these studies in analyzing the economic background of his area. Moreover, he has an intimate knowledge of his own community, and with a little guidance he can open up a storehouse of economic information for use in analytical work.

Facts regarding the debt structure of an issuer play an important part in answering the central question in municipal security analysis. Both the size and composition of the debt are significant. Of importance likewise is the trend in the amount of debt and the prospects for future change. By itself, fluctuation in the amount of debt is a neutral fact. But it may become significant when joined with others in the analytical process. During years of expansion, a growing debt may be bearable. On the other hand, in a period of disintegration, trouble will arise if the shrinkage of debt is not commensurate with the decline in economic strength.

The municipal finance officer can help the analyst by assembling the data on debt structure and presenting this information in its proper frame of reference.

The report on the current financial operations of an issuer is a primary source of information for municipal security analysis. Also, this report is of major concern to the municipal finance officer. Information on the amount and composition of income and the principal items of expenditure is furnished by this report. Its usefulness in answering the central question in security analysis depends upon the quality of the accounting which supports it and consistency in the manner of its preparation over a period of years. When the reports reflect good accounting practices, an analyst has a basis for confidence in his judgment. On the other hand, shaky accounting or carelessness in reporting tends to weaken confidence even in situations which otherwise may be satisfactory.

In studying the margin for financial protection of debt service, the crucial question in security analysis is brought to sharp focus. Rephrased, the question is this: Has the obligor covered the expenses of operation by a margin adequate to maintain debt service even in periods of adversity?

The work of an analyst is greatly simplified when the financial reports are designed to show in clear-cut fashion the principal elements to be considered in judging the margin of debt service protection. In preparing these reports, there is no formula of universal applicability. Form depends on the individual circumstances in each case.

In municipal security analysis it is essential both to earmark the important facts and to measure their significance in terms of recognized investment standards. For example, the general property tax has long been relied upon as the principal source of income for municipalities. Moreover, the ratio of debt to assessed value is generally accepted as an indicator of debt burden for obligations supported by the general taxing power of the issuer--the so-called full faith and credit securities. The rationale of this debt ratio measure has been well-established in the financial literature. Comparison of the ratio in a given case with standard debt ratios for the area helps to guide judgment as to the investment quality of the obligation.

As illustrative of the complications in municipal security analysis, however, it should be noted that sometimes the ratio of debt to assessed value is an unsatisfactory measure for judging the quality of a general obligation. When the obligor relies only to a very limited extent upon the general property tax as a source of income, the debt ratio measures nothing that is important. Also, there are instances of assessed values which have become so thoroughly distorted that any computation based upon them can only be misleading.

To demonstrate the quality of an obligation supported by the general credit of the issuer, there is need for evidence that the local government has a margin of unused taxing power supported by adequate economic resources. When analysis indicates that the debt burden measure is not appropriate in a given situation, then it is necessary to adopt the broader approach in order to appraise credit quality. For municipal finance officers, considerations such as these emphasize the versatility of the analytical process.

Turning now from the analysis of general obligations to another category of bonds, namely, the ones issued to finance activities of a business type, such as electric utilities--for these issues it is easy to find well-recognized investment standards for judging credits in the field of corporate security analysis. To be sure, the unit of government conducting business activities may enjoy certain tax advantages. But these features are taken into account in the process of analysis and the results are tested by the established rules for judging efficient operations and debt service coverage.

By contrast, when municipal security analysis is applied to obligations whose credit rests on the pledge of income from a specific tax, the problem of judging quality is likely to be quite stubborn. Occasionally these cases are further complicated by a general pledge of credit that is difficult to evaluate. In some instances it seems virtually impossible to appraise the margin of protection for the bondholders.

In this brief sketch of municipal security analysis, the process of sifting pertinent facts has been outlined and some stress has been placed upon the selection of appropriate investment standards for appraising the data. Broad experience in the field of analysis furnishes the only basis for classifying obligations into homogeneous groups for which standards may be developed. Before a standard is applied in a given situation, it is necessary to arrive at a judgment as to its appropriateness. This judgment rests almost solely upon experience.

Many short cuts have been suggested from time to time in order to simplify municipal security analysis. Occasionally these short cuts have served the purpose very well although that can be demonstrated only by the conventional procedure for analysis. Nevertheless, there have been times when the answers produced by the short cuts were exceedingly misleading. As a matter of fact, easy and quick answers in security analysis are not likely to be good ones even though they would be very desirable.

This concludes a very brief review of municipal security analysis which was designed merely to highlight the major points in the process. The review has served its purposes if it reminds the finance officer that the analytical work rests upon his reports. Good security analysis requires his wholehearted cooperation as an essential prerequisite.

Summary and Conclusion

To sum up then, the chief purpose of this discussion has been to explain why municipal finance officers should concern themselves about bank investment problems and analytical techniques for determining the investment qualities of municipal securities. There may be a tendency to overlook the importance of these considerations.

Facts were presented to show the role of banks as suppliers of credit to States and other units of government and the place occupied by their obligations in the asset structure of the commercial banks. These banks now furnish about one-third of the credit extended to municipalities through ownership of securities, whereas in 1937 this proportion was only a little more than 15%. The amount of municipal obligations in bank portfolios has increased from a level of about $3 billion at the end of World War II to approximately $10 billion. However, the proportion of bank assets invested in municipals now has returned to the 5% level which prevailed over the pre-war years.

Following the development of this factual background, your attention was centered briefly on a few of the basic principles in managing a bank investment portfolio. Stress was placed upon high quality as a requisite for bank assets. In addition, there was a brief comment regarding the maturity schedule for bank investments as an element in managing funds. Also, some consideration was given to other factors such as the distribution of risks.

So that you would have a better understanding of the purposes served by your financial reports in the bank investment process, municipal security analysis techniques were reviewed briefly. This review was developed around the basic question which analysis seeks to answer, namely: Will the obligation under study be paid according to its terms?

The municipal finance officer is in a strategic position to facilitate the investment process. With properly designed reports, he can convey a feeling of confidence in the judgment which investment analysts reach in the course of their work. This is only one of the many facets of financial management, but it is vital nonetheless.