THE MUNICIPAL SEGMENT OF THE BOND PORTFOLIO

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In this portion of the program which is devoted to bank investments, with special reference to the municipal segment of the portfolio, the objective will be to outline the subject matter from the viewpoint of bank examiners and to discuss at some length the bank investment problems characteristic of your District. To launch this discussion, my remarks first will furnish some background data on developments in this part of bank asset structure since the end of World War II. This presentation will be followed by a brief consideration of statistics pertaining specifically to the investment holdings of Tenth District banks.

A review of bank investment policy as regards municipal securities and the procedures for testing the credit quality of individual securities will constitute the backbone of this discussion. By following this course, it is my hope that we shall stimulate inquiries about subject matter directly relevant to your work. In the field of municipal finance changes are now taking place rapidly. Certainly it is time for us to take stock of the current situation. It may very well be that steps can be taken both in this District and in the Washington Office that would be of help to you in working with bank portfolios.

FIRST PART

Growth and Shifts in Bank Investments

National and Tenth District Trends

Attention will be centered entirely on the post war period in this discussion. For all practical purposes the situation in the thirties

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and during the war can only be of academic interest to you. The post war period now covers more than a decade and, so far as you are concerned, the recent trends are the important ones. These should be familiar to you so that you can better judge the position of an individual bank under examination.

Over the post war period the notable development in bank investments was a substantial shrinkage in holdings of United States Government obligations and an extremely rapid increase in municipal securities. The total assets of the insured commercial banks increased from approximately \$150 billion to \$200 billion. Nevertheless, holdings of Federal obligations declined from approximately \$83 billion to \$56 billion while the municipal portfolios expanded from about \$4 billion to \$14 billion.

Measured in terms of dollar amounts, the decline in Federal obligations completely overshadows the growth in the municipals. But from the point of view of the bank examiner, the rapid increase in municipal holdings presents a new complication in a situation that is already difficult. First of all, it is necessary to come to grips with the investment policy questions that are incidental to the shift of funds from Federal to municipal obligations. Certainly more troublesome in terms of work volume than policy questions are the determinations with regard to credit quality for the great number of individual issues of municipal securities held by banks. The accuracy of these determinations is especially important in times such as the present when the economy appears to be balanced at a high level of business activity.

little expansion in municipal portfolios held by the insured commercial banks during the calendar year 1956. However, the banking statistics tabulated for June 1957 suggest that the growth trend has once again reasserted itself. This is not surprising in view of the high volume of municipal offerings and the sharp readjustment upward in the interest coupons of these securities. Moreover, the prospects for growth in the volume of municipal offerings suggests that the banks will be called upon to absorb an increasing volume of these securities. Accordingly, any lull in the expansion of municipal portfolios should be viewed as an interlude in a long-term upward trend. From the viewpoint of the bank examiner, it should be seized as an opportunity to encourage banks to strengthen their municipal investment accounts.

In 1946 the Tenth District insured commercial banks held approximately \$162 million of municipal obligations as compared with \$600 million reported for June 1957. Municipal portfolios expanded substantially in all of the Districts over this period but the rate of growth here was among the most rapid for any of the Districts in the United States. Relative to total assets, these banks had invested 2.9 percent in municipals in 1946 as compared with 7.5 percent in 1957.

Using the statistics on the growth of municipal portfolios as a measure of work volume, the figures show clearly that examiners of State nonmember banks have a much bigger job today than years ago in handling this segment of bank assets. Between 1946 and 1957, these portfolios increased from about \$25 million to \$152 million and the totals amounted to 2.5 percent and 8.4 percent, respectively, of bank assets.

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Municipal holdings increased over the period in all of the States comprising this District. Kansas now stands out as a State whose banks hold in the aggregate the largest volume of municipals. Both in absolute and relative terms the expansion has been noteworthy. At the beginning of the period the portfolios in this State amounted to approximately \$9 billion, or 2.2 percent of total assets, as compared with recent totals of \$90 billion and 12.1 percent, respectively.

The State-to-State variation in the size and growth rate of the municipal segment of bank investments in this District suggests that the problem here, as elsewhere, tends to be quite local in character.

Examiners in some areas have a sizable task when they come to the municipal segment of the asset structure of the bank under examination. In other areas the job is not large and there is little variation from year to year, or for that matter, even from decade to decade.

SECOND PART

Key Questions for Portfolio and Securities Analysis
Investment Policies

Bond Portfolios

The skill with which management allocates funds to the various segments of the asset structure is a major factor in shaping the strength and earning power of a bank. To be sure, in many cases these allocations are the result of drift rather than conscious decision. Moreover, there are times when management can exercise virtually no control over the allocations. But mostly these are exceptional situations and should be recognized as such.

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When the examiner considers a bank's holdings of securities, his questions first should cluster about the reasonableness of the allocation of funds to this type of commitment. In a well managed bank there will be recognized guides for answering the important questions that arise in channeling funds into or away from the investment account. Since the ultimate objective of the examiner is to form a sound judgment concerning the quality of management, he should be alert to evidence that a bank has created the machinery that raises the pertinent investment questions automatically and produces good answers.

Probably the most important questions about the investment accounts of a bank under examination are brought to focus with inquiries regarding the composition and size of the bond portfolio. Owing to their unique characteristics, the examiner first should look carefully at the holdings of Federal obligations. The proper selection of these issues will build elements of strength into the asset structure of a bank that can be achieved in no other way. Other items in the portfolio composition, Federal agency obligations, the securities of States and their subdivisions, and the bonds of private enterprise, when combined in proper balance, furnish earning power and stability to the bank's asset structure.

Since the examiner's approach to his work is essentially quantitative, it is inevitable that he will ask questions such as these:

Has this bank committed a reasonable amount of its assets to the investment portfolio? and has the total been properly distributed over the various alternative investment opportunities? Most commonly the size of the portfolio is judged in relative terms, as a percentage of the total assets

invested in securities generally, or some category of bonds. There is a tendency to compare these ratios from bank to bank, or to compare the ratios of an individual bank with the averages for all others of its type, e.g. national, State member of the Federal Reserve, or State nonmember aggregated on a geographical basis. To be sure, these comparisons are helpful, but departures from the average in an individual case should be explained before they are condemned.

Since our primary concern now is with the municipal segment of bank investments, some attention should be given to the reasons why banks buy these securities. Many times an understanding of these reasons will go a long way towards accounting for features of a portfolio that otherwise might appear to be objectionable. Because of local situations occasionally banks may be obliged to depart from what otherwise would be considered sound investment principles in managing their holdings of municipal securities.

To illustrate: A relatively large commitment by a bank in the obligations of a governmental subdivision, that is, the city or county where the bank is situated is not usually deemed to be consistent with sound investment practices. Words such as "concentration of risk" and "lack of diversification" frequently are used to high-light such departures. Nevertheless, there is an obligation on the part of the bank to serve the credit needs of borrowers in the local community—including the governmental units. Sometimes these needs are sufficiently powerful to warrant commitments that otherwise would be excessive.

What are some of the circumstances that mitigate the weaknesses in an investment portfolio because of heavy commitments in local issues? In the first place, bank management is in a good position to follow the finances of nearby governmental units and to make certain that the units follow sound financial policies. Sometimes there are offsetting bank balances that considerably reduce the exposure to possible losses. Then, again, the bank can do much to protect itself in these circumstances by care in choosing the selection of maturities of bonds held for investment.

The peculiarities of tax laws go a long way towards explaining unusual situations in investment portfolios. Municipal securities are tax-exempt, that is, the interest coupons are not subject to Federal income taxation and in certain States holders acquire special tax benefits. It is understandable that banks would act to take advantage of the favorable treatment accorded these securities taxwise, and as a consequence the overall portfolio may deviate from what would appear to be the precepts of sound policy. From the examiner's point of view, it is clear that he should not ignore good investment policy because management assures him that tax advantages result from so doing. Nevertheless, he would be unrealistic if he did not pay attention to tax considerations. In order to achieve tax benefits it may be necessary for a bank to stress certain investment vehicles at the expense of others.

Investment Policy Statements

The Federal Deposit Insurance Corporation examination report form now has a question in Section H concerning the bank's statement of investment policy. The purposes of this question are twofold: To find out

whether the bank in its investment activities is guided by a consistent group of principles; and secondly, whether the policy guides are adequate.

As a product of the inquiries necessary to answer the investment policy question in the examination report, it is expected that the examiner will direct the attention of management to elements of strength and weakness in policy, and encourage the remedy of defects.

Questions for Discussion

- 1. What are the essential elements of a bank investment policy?
- 2. Is it necessary for a bank to have a definitive policy statement?
- 3. Are there guides for allocating funds to the investment account?
- 4. Is there provision for appraising alternative investment opportunities?

Examiners' Comments and Suggestions

In the course of your work with the municipal segment of the investment portfolio, it seems to me that your comments can best be brought to sharp focus on page 2 of the examination report. This section affords an opportunity to verbalize the result of review and analysis. Since the section devoted to general comments is the part of the examination report that is most likely to be read carefully by the officers and directors of a bank, it provides your best channel for communication.

Much of the analytical work in the investment field tends to become quite complicated. Basically, however, the principles are simple

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and they may readily be expressed in nontechnical language. Care in phrasing comments on investment policy can greatly increase the effectiveness of the bank examination report as a tool for supervision.

The most effective comment, in my judgment, is one which develops a good point completely. As a practical matter, the examiner is limited to a few paragraphs of comment. He should remember that there will always be another examination and succeeding reports will afford the opportunity to cover other facets of the investment program. Thus, in the course of several examinations comments on page 2 may be used to inform and educate management as well as to encourage them to improve investment policy and practices.

Problems in Testing Bank Portfolios

Generally speaking, the tests used in assaying the quality of a bank's investment portfolio are the same as the ones applicable to any other segment of its asset structure. No item is appropriate for inclusion among the earnings assets of a bank unless it measures up to high qualitative standards. In addition to the qualitative test, it is essential that each earning asset possess the degrees of liquidity that judgment indicates as appropriate in terms of the bank's total situation.

In reviewing the bond portfolio of a bank under examination, the principle objective is to form a comprehensive judgment as regards the quality and the liquidity of discrete items. This judgment may be supported by quantitative tests. Nevertheless, the end result is a value judgment rather than a summary of mathematical ratios.

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Qualitative Standards

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Both to analysts and bank examiners, the effort to define the characteristics of a security deemed to be suitable for bank investment has presented serious difficulties. There is no simple definition, nor can the securities be identified by mechanical tests. The identification of securities in this category is a judgment process and the essence of bank quality investments is freedom from potential loss.

Only securities that measure up to high qualitative standards are suitable for inclusion in the municipal segment of a bank's investment portfolio. The reasons for this guide to investment selection are readily understandable. In the first place, such securities are the only ones that are free from the dangers inherent in default. And the nature of bank capitalization is such that losses stemming from defaults quickly become unmanageable.

Sometimes it is argued that examiners place too much stress on potential default in commenting on individual municipal issues. Admittedly, the ultimate loss record on municipal securities has been quite low. However, technical defaults even in good times are not uncommon and banks cannot handle assets successfully if they do not behave in accordance with the terms of the contract. Delays in the payment of interest and forced refunding of issues on the due date may prove to be disastrous because banks are not designed, that is, capitalized to assume much investment risk.

Liquidity Considerations

It is a fact that the facilities for converting the municipal segment of a bank's investment portfolio into cash by sale in the market

place are poorly developed. Generally speaking, dealers in municipal securities are primarily concerned with the flotation of new issues. There is, to be sure, a secondary market over the counter for obligations of the large and well known issuers of these securities. But even trading in well known names is complicated by the fact that the bulk of the obligations mature serially. As a consequence, in the event of liquidation it is necessary for the seller to find a buyer who wants both the specific credit and the particular maturity date on the security offered for sale. These limitations narrow the market drastically and tend to widen the spread between bid and asked prices. Finally, all transactions are negotiated privately between individual buyers and sellers rather than effected by brokers on an organized exchange.

By fitting a selection of bank quality municipal obligations into a desirable pattern of maturities, however, it is possible to obtain a dependable source of cash in-flow from a municipal portfolio. Sound investment practice calls for a maturity pattern that is consistent with the anticipated cash requirements. Thus, it is possible for a bank to avoid selling in an unorganized market.

As yet, no one has suggested a better plan for scheduling the maturities of the items in a bank's municipal portfolio than a simple maximum term such as five-to-seven years. All of you, I am confident, are familiar with this arrangement. For example, if an appropriate term for the municipal portfolio in a given case is five years, then one-fifth of the investment account is committed to securities maturing in each one of the succeeding years. Depending upon the situation confronting the bank, the

proceeds from each year's maturities are reinvested—or used for other purposes. This program assures independence from the market place. In addition, it enables the bank to average its rate of return on the municipal investments. The return becomes the moving average of the rate prevailing over the period covered by the investment program.

Generally speaking, the record shows that banks have not managed their investment accounts with unusual skill. While it is difficult to prove, it seems to me that the mediocre record can be explained largely by the fact that bankers endeavor to anticipate price fluctuations for securities. In short, there is present a disposition to speculate on trends in the rate of interest. This is probably one of the most difficult of all speculations. The logic of the situation suggests that bankers would be better advised to accept the interest rate, whatever it may be, and endeavor to average the rate of return by adhering to a so-called rollover plan for managing the funds invested in the municipal portfolio.

Market Depreciation in Municipal Securities

Along with the increase in the general level of interest rates that has characterized the past few years, there has been a sharp decline in market prices for outstanding fixed income bearing securities. This development has been a surprise to many observers whose experience in the financial markets was limited to the long period of stable and relatively low interest rates prevailing from the middle of the 1930s to the early years of this decade. Since the coupon and maturity of a bond is fixed at the time of issuance, and since securities are always priced on a basis which is competitive with the alternative investment opportunities—

taking quality and the other basic characteristics into consideration--an increase in market yields on bonds forces a decline in prices for outstanding issues.

Consider the case of a community enjoying a premier credit rating that floated at about par value a block of municipal bonds with a 15-year maturity and a 2 percent coupon in 1954. Today those same securities in order to sell on a competitive basis would be priced in the market to yield about $3\frac{1}{4}$ percent, or a price approximating 87 percent of par. Should the community float a new block of bonds today, the adjustment would be in the coupon rate and not the price. In other words, the bonds would be offered at par, but with a $3\frac{1}{4}$ percent coupon.

Thus, the immediate effect of an increase in interest rates following a long period when bonds have been floated with relatively small coupons, is to introduce a substantial amount of depreciation in quotations for the outstanding securities. The amount of the depreciation depends, of course, upon the difference between the coupon and the prevailing yield on comparable investments and the due date of the bond. The depreciation disappears as the low coupon securities approach the due date because at that time they are paid at par value.

According to the manual of examination policies, it is necessary for you to estimate the market value of all securities in the investment portfolio. Quotations for Federal obligations and corporate issues traded actively on the organized exchanges are readily available, and this requirement presents no problem to the examiner. The same cannot be said for the municipal segment of the investment portfolio.

When reliable price quotations are not readily available, the manual gives the examiner the option to substitute book values in his estimate of the market value for the investment portfolio. But that option is limited to situations wherein the bank is not relying substantially upon investments as a source of cash. In any problem situation, and certainly whenever the bank is relying on its municipals for liquidity, the examiner has no alternative but to make the best estimate of market values.

What, then, can the examiner do to arrive at a satisfactory
market value estimate? None of the alternatives are particularly
satisfactory, but let us consider them in order. If the bank holds
securities that are well known in the national market, then it may be
possible to find offerings of these securities for sale at specified prices.
Publications such as the Blue List that circulate among traders of
municipal bonds are a source of this information. The quotations do not
reflect actual transactions because they are negotiated in each case. But
the quotations suggest price levels in general terms.

More than likely, however, the examiner will find that some or maybe all of the securities in the municipal portfolio are obligations of small and little known issuers. The degree of uncertainty in judging the price structure for these credits is far greater than in the large, well known issues. Such bonds are seldom offered for sale and the information is unlikely to be found in public records. As a matter of fact, the best information on the price structure for these issues can only be obtained from active traders. Such individuals are in the best position to form a judgment as to the value of the portfolio. To do so, however, it is

necessary to obtain their opinion on a professional basis as experts, and not as traders seeking to drive a hard bargain.

easing the burden placed upon the examiner resulting from the requirement that he ascertain the market value of the municipal portfolio. In Richmond the Federal Reserve has retained the services of a local investment house on a professional basis to estimate the value of municipals held by banks under examination. These dealers are recognized as unusually well informed on the credits in the area. Compensation presumably is sufficient to cover the expenses for the work, and it is hoped that the results will produce figures that are more satisfactory than either arbitrary book values or estimates based upon the fragmentary data in the hands of examiners. Possibly this plan would have some application in the Tenth District.

The amount of market depreciation from book value in the investment account for some banks has caused much concern to examiners. Obviously market depreciation is not an element of strength in the asset structure of a bank. Whether it should be the cause of serious concern, however, depends upon the likelihood that the bank will be obligated to sell securities in a depressed market.

A sizable valuation reserve can be a source of consolation when a bank experiences a substantial amount of depreciation in the investment portfolio. This reserve furnishes the means for absorbing losses in the event that securities are sold at prices below book value. The terms of the 1938 agreement among the supervisory authorities regarding the appraisal of securities for purposes of bank examination, you will recall,

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include a provision for the retention of capital gains on the sale of securities to build up valuation reserves. The recent experience with market depreciation may be useful to examiners when they seek in the future to encourage the retention of these capital gains for valuation reserve purposes.

Questions for Discussion

- 1. At what rate should valuation reserves be accumulated?
- 2. What is the relationship between valuation reserves and a bank's capital accounts?

Adequate Credit Files

Examiners have always been expected to test credit files pertaining to the bank's investment portfolios for the purpose of determining whether an adequate amount of information is at hand. It is commonplace that the quality of credit files bearing on investment securities varies tremendously from bank to bank. Furthermore, banks often rely on the information held by correspondent banks or others for data pertaining to the items in the securities account. Not infrequently a bank will hold the securities of small and unknown obligors without any pertinent credit information at hand.

Questions for Discussion

- 1. What should the examiner do when he finds poor credit files?
- 2. Is an examiner justified in classifying a security as unsuited for bank investment when information is lacking?

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Determining Credit Quality of Municipal Issues

The basic question to be answered in determining the credit quality of a municipal issue can be phrased in simple terms: Will the obligor be able to service the debt according to its terms and at the same time provide a sufficient margin of protection so that bondholders may consider themselves well protected against the possibility of default either as to principal or interest payments? When the examiner sets out to answer this question in a specific case, he is confronted with many practical difficulties. So that he may finish his job in a reasonable length of time, the examiner is disposed to adopt simple mechanical tests to determine the investment quality of issues in the investment portfolio.

Bank examining authorities have for a good many years relied to some extent on the adjective ratings published by investment advisory services as indicators of credit quality. The use of published ratings was first recognized in the so-called 1938 agreement among Federal and State banking authorities as regards examination practice with respect to securities. To understand the present situation, it is well to recall the occasion for the 1938 agreement. At that time, the market quotations for municipal securities had declined sharply. These securities were held in substantial amounts by the banks and the practice of valuing portfolios for purposes of bank examination at prevailing market prices resulted in hypothetical losses. The margin of capital accounts in many banks suffered greatly when these shrinkages in the book value of securities were taken into consideration.

Bank examining authorities in 1938 recognized that many banks with substantial amounts of market depreciation in the investment

portfolios would not be obliged to incur actual losses because the securities would not be sold at prices then prevailing. Accordingly, the terms of the 1938 agreement abandoned market values and substituted amortized cost or book values, whichever were lower, for the valuation of securities deemed to be suitable for bank investment purposes. To implement this agreement, however, it was necessary to develop standards for identifying investment grade securities. The problem was solved by so classifying any credits in the four highest rating bands and all others of like quality. Since there were four investment services then publishing ratings, the agreement contemplated that a majority opinion as to quality would prevail.

Ratings are still used by the bank examining authorities, but it is a fact that now the primary problem of credit quality centers in the municipal rather than the corporate field. Unfortunately, the investment advisory services publish ratings only for a comparatively small portion of all of the municipal securities outstanding. So these ratings are not very useful to examiners when they classify portfolios. Furthermore, there are only two services that publish municipal ratings in convenient form, namely, Moody's and Standard & Poor's. As a consequence, the examiner is confronted with a knotty problem when he finds that the services disagree as to classification of a credit.

Credit Analysis Techniques

Difficult though it may be when the examiner does not have published ratings to serve as a guide in judging credit quality, there is no alternative but to employ the techniques of the securities analyst.

These techniques help him by outlining the steps to be taken in order to arrive at a definitive judgment on credit quality. But the work is time-consuming and requires a substantial amount of information.

A starting point in the analysis of a credit is first a judgment concerning the strength of the economy supporting the obligor. This calls for a study of a variety of data indicative of strength or weakness. It ranges from natural resources, through growth and shift in population, to evidences of wealth and income.

The appraisal of management is a second important feature of credit analysis. Whether a municipality handles its affairs generally and its finances in particular in a workmanlike or a slipshod manner has an important bearing on credit quality. Management is difficult and illusive to measure and the relevant data are not easy to find.

The structure of debt and the sources of income and expenditures are essential facts in appraising credit quality. To judge this feature of a credit it is necessary, in addition to the accumulation of the pertinent information, to have standards for comparing a given credit with others in order to bring out elements of strength or weaknesses.

Mechanical Tests of Credit Quality

Financial ratios have proved to be valuable tools in analytical work. They are indicators of sound or unsound conditions and are useful in forming a judgment. As a practical matter, however, the central fact of credit analysis is judgment rather than the manipulation of arithmetic. To attempt to classify securities on the basis of ratios or sets of ratios is a mistake.

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Questions for Discussion

- 1. What are points of reference to be used in applying debt burden measures such as the ratio of debt to assessed value and per capita debt?
- 2. How can debts be related to categories of income and expenditure?

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