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By

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PART I

The rapid expansion over the past few years in the dollar amount of municipal securities held by the banks has attracted the interest of practical bankers as well as professional students of banking. As revealed by statistics covering all insured commercial banks in the United States, the holdings now have increased to a record total. Both the amount and the rate of growth in these portfolios have raised a question of fundamental importance: Should the expansion in the municipal holdings be viewed as indicative of a new development in bank investment policy?

This background of growth in municipal portfolios furnishes the starting point for the two discussions which will be devoted to municipal securities as bank investments. In the course of the present discussion it will be my purpose, first, to center attention on the role of municipal investments in the portfolios of commercial banks over the past 15 or 20 years, and secondly, to inquire into the factors which have contributed to the recent expansion in the amount of municipal securities held by the banks.

In tomorrow's session, data pertaining to the recent growth in bank holdings of municipal securities will be analyzed in more considerable detail. The object of that analysis will be to study recent changes which may have taken place in bank investment policy. That portion of our discussion will conclude with some general comments on municipal securities as bank investments. Attention will be called

to a few important rules or guides which will be helpful to portfolio managers in conducting their day-to-day activities.

Record of Bank Investment in Municipals--1934-1951

Municipal bonds have always been recognized as sound investments for banks. This is readily understandable. On the one hand, the credit base supporting the obligations of States and their subdivisions is indeed a broad one. If the amount of debt is moderate--and this is usually the case--and general economic conditions are healthy, then the investment quality of these securities is truly impressive. The credit of the entire area is certainly stronger than that of any individual borrower within its confines. Bankers are aware of the broad base which supports municipal credit, and accordingly, these obligations have always been considered an important investment medium for bank funds.

To be sure, all municipal securities are not of uniform quality. Over the years, however, bankers have developed certain standards which enable them to select the municipal credits best suited for their own investment requirements. These standards have grown out of experience with municipal obligations. When these standards are observed, the record shows that the performance of municipal securities investment-wise has indeed been good.

There is, moreover, another aspect to the role of municipal securities as bank investments. Just as the bank in an area serves the credit needs of its private customers, so also may it be expected to

furnish credit for the neighboring units of government. These governmental units perform a wide variety of services for the citizens. Most of the services require capital investment, and as a consequence it is necessary for the governmental units to borrow funds.

Historically these units of government have been given taxing powers in order to provide funds for debt service. In recent years, however, the public desire for improved facilities such as up-to-date schools, better highways and housing have led to many innovations in public financing. For example, special units of government have been created--the so-called authorities--to finance the construction and operation of these facilities. One of the important sets of problems growing out of municipal securities stems from the sheer number and variety of these borrowers.

While the banks cannot be expected to provide all of the financing required by the subdivisions of government, they do constitute an important source of credit. To be sure, their extension of credit is limited by the relative demands for bank funds as well as bank investment standards. Sound municipal securities that measure up to bank requirements for quality and maturity always will have a place in the investment portfolio.

Turning now from this general discussion regarding municipal securities in the bank portfolios, let us consider in some detail the data regarding the bank holdings of municipal obligations over the period 1934-1951. This period covers the economic recovery since the Great Depression of the early 1930's. It extends through World War II

and the subsequent period of economic readjustment. The current developments in bank holdings of municipals stem from this background.

Dimensions of the municipal portfolios held by the insured commercial banks in the United States during this period are given in the following Table I. The dollar amount of these holdings and the percentage of total assets comprising municipal securities are presented for the years 1934-1951. In all, the data cover something more than 13,000 insured commercial banks. These range from banks situated in the large metropolitan centers to the ones in remote agricultural areas.

Table I

State, County and Municipal Obligations
Held by Insured Commercial Banks

December 31	Amount in billions	Percent of total assets
1934	$2.4	5.1%
1935	2.6	5.2
1936	2.7	4.9
1937	2.6	4.7
1938	3.0	5.3
1939	3.3	5.2
1940	3.6	5.1
1941	3.7	4.8
1942	3.5	3.7
1943	3.3	2.9
1944	3.4	2.5
1945	3.9	2.5
1946	4.3	2.9
1947	5.1	3.4
1948	5.5	3.6
1949	6.4	4.1
1950	8.0	4.8
1951	9.0	5.1

A study of the data showing the amount of municipal obligations held by the insured commercial banks discloses a rather persistent growth trend over the entire period beginning with 1934. A few minor interruptions in the expansion of the portfolios have occurred, but these, in the main, have been of relatively short duration.

In the half decade prior to World War II, the bank holdings of municipals ranged in the vicinity of $2½ to $3 billion. Another half billion dollars was added to these totals in the early war years. Then for a time a slight decline occurred in the holdings, largely no doubt because the flotation of these securities was discouraged owing to wartime restrictions on capital expenditures by local governments. At the same time retirements of debt were progressing according to schedule.

The amount of municipal securities in the bank portfolios has, expanded very rapidly during the post war years. By 1949 the total was almost double the amount of pre-war holdings. Growth in these portfolios has been exceedingly rapid during the past three years, and by the end of 1951 the amount had reached the $9 billion level. It is this very rapid expansion in the dollar amount of securities found in the municipal portfolios and the unprecedented total today which have given rise to questioning with regard to the possibility of recent changes in bank investment policy. But it is necessary to refine and extend the analysis very considerably before one would be in a position to conclude that the recent expansion in the dollar amount of municipal portfolios signals a fundamental change.

Bank assets generally have expanded nearly fivefold over the period 1934-1951. Accordingly, a rather substantial growth in municipal bond holdings would not be surprising. Such a growth would be necessary if the municipal portfolios were to retain their historical position in the composition of total banks assets.

In the pre-war period municipals accounted for about 5% of total assets of the insured commercial banks. During the war years this ratio declined very sharply to about 2½%. Then in the post war period the percentage began to move upward, and by 1951 it had regained its pre-war level. Thus, it is clear that in relative terms the municipal portfolios today are of no greater size than they were at the beginning of the period now under consideration. This is true notwithstanding the fact that the amount of securities in the portfolios has practically trebled. Portfolios have grown at a rate which is in step with the expansion of the banking system generally.

In connection with this discussion of the increase in bank holdings of municipal securities, it is appropriate to give some attention to the growing importance of Federal taxes on income and to the large volume of new municipal flotations in recent years. These two elements are of importance to an understanding of developments in the municipal bond holdings of banks.

The growth of Federal taxes on income over the period 1934-1951 is one of the important facets of municipal securities as bank investments. The income from such obligations is exempt from Federal taxation and as a consequence of increasing rates these securities

become progressively more attractive. However, the subject of taxation, and especially bank taxation, is an exceedingly complex one. Generalizations are not helpful because as a practical matter each bank has an individual problem. Taxation is a subject which is beyond the scope of these discussions.

Since 1934, and especially in the past few years, municipal securities have been in very abundant supply. As a consequence, bank investment officers have found that the available volume of securities offering tax exemption has grown at precisely the time when they have been casting about to find securities of that nature. This aspect of municipal financing is deserving of more detailed consideration.

New Municipal Offerings over the Period 1934-1951

At the outset of this portion of our discussion it should be emphasized that new municipal flotations are not composed of securities all of which are suitable for bank investment purposes. In some instances, whole issues are unsuitable whereas in other instances only certain maturities in a serial issue may be suitable for a bank's portfolio. The remainder would be appropriate for other classes of investors. In general, the top quality, near-term maturities are deemed to be proper for bank investment.

Data presented in the accompanying Table II reveal that over the years prior to World War II the volume of new municipals offered annually was in the vicinity of $1 billion. The offerings of municipal securities tended to dry up during the war years and actually declined

to about one-half of the pre-war level. Following the war the volume of the offerings expanded very rapidly and the totals have hovered in the vicinity of $3 to $3½ billion in each of the past four years.

The reasons for the recent expansion in the volume of municipals are not obscure. In the course of the war local governments felt many pressures to reduce or completely defer their building programs. This meant that plans for schools, public roads, and other improvements were temporarily shelved. By the end of the war, however, these pressures were removed and there was a tremendous expansion in all building programs. The total population of the Nation had grown and there had been important shifts to new regions. The great increase in the volume of municipal securities floated in the market reflects primarily this pent-up demand for new public facilities. More recently new demand has been stimulated by the public desire for better facilities as well as additions.

Notwithstanding the fact that the volume of municipal flotations has continued at an unprecedented rate for the past few years, it is doubtful that the subdivisions of government are well on the road toward satisfying all of their capital requirements. Even a very cursory study of the facts suggests that the rapid expansion in community facilities has as yet made comparatively small inroads on their backlog of capital requirements. In view of this backlog as well as growth and replacement needs, it seems reasonable to expect that the amount of these flotations over the years to come will continue at figures close to the ones which have recently prevailed. On the supply side, there-

fore, banks seem virtually assured of a rather substantial volume of new municipal offerings for many years.

Analysis of the data regarding the types of securities comprising new municipal offerings furnishes some clues as to the character of obligations available to banks in developing their portfolios. The classifications, to be sure, leave much to be desired but they do shed some light on the general problem. The data in Table II covering the total amount of municipal flotations also reveal the principal type of securities composing the totals. The data were obtained from compilations by the Bond Buyer.

Most conspicuous is the fact that the bulk of the flotations continue to fall within the category of full faith and credit obligations. You will note that the obligations of this traditional type continue to be dominant. Accordingly, the investors in municipal securities now, as in the past, can make their selections from a volume of securities that belong to a type of investment with which they have always been familiar.

From the viewpoint of long-term trends in the data, one of the interesting facts is the decline in obligations floated to finance public relief. This type of financing was exceedingly important during the recovery period following the Great Depression and constituted an important source of municipal bond issues. Securities of this type now have virtually disappeared.

Information with respect to three other major types of financing stands out clearly in a study of these data. These classes in-

clude the so-called revenue or enterprise type of debt, veterans' aid, and housing.

Veterans' aid financing accounted for a very substantial flotation of municipal securities in the immediate post war period. However, it is only of passing interest. These securities for the most part were floated by the States.

It can be seen from the data that flotations designed to finance housing projects are of growing importance. They have, to be sure, appeared for a number of years. The flotations are expanding and it seems reasonable to anticipate a very considerable growth in municipal financing of this nature.

Data with respect to the growth of so-called revenue or enterprise debt suggest a very rapid rate of growth. This category of securities unfortunately is not too clear-cut. It may include obligations that are dependent solely upon revenues of a specific project for debt service. On the other hand, there are securities also known as revenue bonds in which the debt service depends little if at all on the enterprise for which the obligation was issued. In short, the boundaries of this category are far from distinct.

Table II

NEW STATE AND MUNICIPAL BOND ISSUES
By Type of Issue
1930 - 1951

(in millions of dollars)

Year	Total	Refunding 1/	Revenue	Relief	Veteran's Aid	Local Housing
1930	$1,383	$ 43				
1931	1,252	62				
1932	937	87				
1933	1,128	44		$385		
1934	1,175	146		221		
1935	1,196	403		131		
1936	1,156	429		104		
1937	984	194		67		
1938	1,229	110	$150	41		
1939	1,099	242	64	51		
1940	1,498	428	100	49		$ 22
1941	1,229	549	70	27		22
1942	576	223	89	20		89
1943	508	352	46	5		61
1944	712	476	42	1		13
1945	819	321	58	2		3
1946	1,204	206	115	9	$ 39	19
1947	2,354	63	369	1	685	4
1948	2,990	187	500	-	650	66
1949	2,995	105	661	3	261	143
1950	3,694	121	546	2	645	59
1951 2/	3,278	98	682	1	82	389

From these data it is apparent that the manangers of municipal portfolios have had an abundant supply of securities available in the market place. The offerings have appeared, moreover, at a time when there was a very active interest on the part of banks in securities with the tax exemption feature. Furthermore, over the years there has been a

1/ Includes revenue refunding
2/ Preliminary

considerable change in the types of issues available for investment purposes. Some of these types, such as securities issued to finance relief and veterans' aid, are no longer coming to the market in volume. On the other hand, new types are appearing in increasing amounts, particularly local housing authority bonds and the so-called revenue issues.

Summary and Conclusion

The amount of municipal securities held in the portfolios of commercial banks is now higher than at any time of record. Viewed in relative terms, however, the volume of municipal securities has only recently attained its pre-war level. This is measured by the amount of municipal securities held by the commercial banks expressed as a percentage of total assets.

Owing to the fact that the trend in Federal taxes on income has been upward for many years, bank investments which offered shelter from income taxes have been exceedingly attractive. Following World War II the flotation of municipal securities which provided tax exempt income expanded in volume.

Changes have occurred in the types of securities comprising new municipal flotations as some needs of the communities were met and others arose. While it is extremely difficult to generalize on the effect of these changes from a bank investment viewpoint, the data do suggest that issues presenting complexities such as are inherent in the so-called revenue flotations are of increasing importance. The bulk of the securities, however, still remain in the traditional category of full faith and credit obligations.

Based upon this first discussion of recent developments with respect to municipal securities, it is apparent that the banking system as a whole cannot be said to have embarked upon new and unprecedented investment policies in connection with their municipal portfolios. In the main, this preliminary analysis of the data suggests that the pattern of municipal investment remains substantially unchanged.

Municipal Bonds as Bank Investments

PART II

In our previous discussion attention was focused on the growth in the volume of municipal securities held by the insured commercial banks over the past few years. A review of the data for the period since 1934 shows that the dollar amount is now approximately three times as great as it was at the beginning of the period. Relative to total assets, however, the portfolios are no larger now than they were prior to World War II. Accordingly, viewed in their entirety, the facts suggest that the recent expansion of the municipal portfolios is not indicative of any fundamental change in the traditional investment policy of the banks.

Then, you will recall, we shifted attention to a consideration of one of the important reasons why banks have in recent years been interested in municipal securities as earning assets: namely, the attractiveness of income sheltered from Federal taxes. Municipal securities are unique in this respect. They afford complete shelter from income taxes. But it should be emphasized that income tax rates have been a factor of importance for many years.

Finally, the data regarding the flotation of new municipal securities over the period 1934-1951 were reviewed. These figures re-

vealed that the annual amount of offerings in recent years has reached unprecedented totals. In broad outline these were the principal features of the picture.

The Pattern of Municipal Portfolios in the Banking System

In the course of the present discussion it shall be our purpose to inquire further into the nature of changes which have occurred in the bank holdings of municipals during the past two or three years. Detailed study of the facts may shed some additional light on the developments which have taken place in the banking system. Careful study of these developments may contribute to a better understanding of municipal bonds as bank investments today.

As a starting point, let me direct your attention to the following Table III which covers 13,110 banks distributed according to the relative size of their municipal portfolios in 1949 and 1951. These data were selected from the information available on all insured commercial banks in the United States. The banks in question were the ones for which comparable information could be obtained in the two years 1949 and 1951. The period was chosen because it was during this interval that the greatest volume of municipal securities was added to the holdings of the banks. As a matter of fact, the increase amounted to $2,600,000,000, or more than the total amount held by the insured commercial banks in any year prior to 1938.

Table III

Distribution of 13,110 Insured Commercial Banks
on Basis of Municipals to Total Assets
as of December 31, 1949 and
December 31, 1951, Respectively

1949	1951	Percent of Municipals to Total Assets
315	302	20.0% & Over
442	545	15.0% - 19.9%
1,126	1,343	10.0% - 14.9%
2,632	2,887	5.0% - 9.9%
6,773	6,376	0.1% - 4.9%
1,822	1,657	0.0
13,110	13,110	

You will recall from our previous discussion that in 1949 the banks held about 4.1% of their total assets in the form of municipal investments, and in 1951 about 5.1%. Thus, in the aggregate municipal securities over the two year period increased only one percentage point relative to total assets. Nevertheless, for purposes of study it is relevant to show the extent that individual banks varied from the average first in 1949, then in 1951. So the data have been arranged by the relative size of the municipal portfolios in the banks. At one extreme, there are the number of banks with no investment in municipals or amounts so small that they are deemed to be negligible. At the other extreme, you will find the number of banks with portfolios which amount to 20% or more of the total assets. The other categories range in 5% intervals between these two extremes.

The overall impression conveyed by the data concerning the number of banks in the various size groups of municipal portfolios is

simple and clear-cut. Notwithstanding the substantial dollar increase in the municipal holdings during the period under consideration, the distribution of banks throughout the system by relative size of portfolio remains substantially unchanged.

A detailed study of the information presented for the 13,110 banks in Table III discloses some interesting changes in portfolio policy. For example, in 1949 there were 1,822 banks with practically no investment in municipal securities. By the end of 1951 this figure had dropped to 1,657. On both dates the bulk of the banks held municipal securities in amounts ranging up to 5% of their total assets. The number in this category declined, however, from 6,773 in 1949 to 6,376 in 1951. The amount of decline was about equal to the increase in the number of banks in the next size group. The latter figures suggest that the important increases during the period occurred among the banks with portfolios ranging up to 5% as of the end of 1949.

In Table IV, the dollar amount of municipals held by banks appearing in each portfolio-size category is compared for the two year-end dates, first 1949 and then 1951. Again the data are arranged by the same size groups of municipal portfolios. Here is, indeed, a graphic picture of the change which occurred over the period. The largest dollar and percentage increase in municipals was in the 5% to 10% group. But equally important from our viewpoint is the fact that over the entire distribution there was little change in the relatively large or very small portfolios.

Table IV

Distribution of Dollar Amount of Municipals
Held by 13,110 Insured Commercial Banks
as of December 31, 1949 and December 31, 1951,
on Basis of Municipals to Total Assets Respectively

1949	1951	Percent of Municipals to Total Assets
$ 370,938,500	$ 460,528,800	20.0% & Over
378,880,400	598,959,900	15.0% - 19.9%
1,137,605,000	1,478,069,000	10.0% - 14.9%
2,310,904,400	4,090,007,600	5.0% - 9.9%
1,894,571,800	2,049,389,000	0.1% - 4.9%
387,200	204,800	0.0%

These tabulations afford some basis for concluding that by and large there have been no drastic changes in bank investment programs. Banks, to be sure, have increased their holdings. This has been noteworthy among the banks which at the beginning of the period had portfolios of moderate size. But these increases, in turn, have been within ranges that one would definitely classify as moderate.

Among these 13,110 banks for which comparable data could be obtained regarding the municipal holdings both at the close of 1949 and again in 1951, analysis revealed that 8,813 of these institutions reported increases in their municipal portfolios over the period. The accompanying Table V shows the total amount of municipals held by these banks, and the dollar amount of increases in municipal holdings. In each instance the data have been classified by the same relative-size groupings of municipal portfolios found in the preceding tables.

The data in Table V show very clearly the changes which have occurred in the past few years. Most noteworthy, of course, is the fact

that for the banks in the smallest category--namely the ones whose portfolios amounted to less than 5% of the total assets--the increase over the period 1949-51 was almost identical with the size of the portfolios in 1949. For the next size group, namely, 5% to 10%, the increase was about half as large as the portfolios at the beginning of the period. Finally, the banks with portfolios that fell within the range of these two categories, namely, up to 5% and 5 to 10%, accounted for over four-fifths of the total increase of $2,845,000,000. This gross dollar amount of increase was, of course, reduced somewhat by the banks outside of the 8,813 showing net decreases, with the result that the net increase is in the order of $2,600,000,000 for all banks.

Data for the remaining three size groups of municipal portfolios, namely, for banks holding from 10% to 15% of their assets in municipals, 15% to 20%, and those with 20% or more in assets of this type are shown in Table V. However, increases in these categories are indeed quite small. Furthermore, the increases are unimpressive when they are compared with the portfolios in 1949.

Table V

Data on 8813 Insured Commercial Banks
Reporting Increases in Municipal Portfolios
1949-1951

Municipals held as of 12/31/49	Amount of Increase 1949-51	Percent of Municipals to Total Assets as of 12/31/49
$ 190,227,200	$ 39,748,400	20.0% & Over
239,223,300	58,393,200	15.0% - 19.9%
769,392,200	206,566,800	10.0% - 14.9%
1,861,052,200	895,188,400	05.0% - 09.9%
1,579,513,100	1,573,783,300	00.1% - 04.9%
274,900	71,388,000	00.0%

More intensive study of the data presented here suggests that a very large portion of the increase in the portfolios of moderate size is accounted for by rather large banks. In fact, among the banks in 1949 having portfolios up to 10% of total assets--you will recall that we stated above that they accounted for over four-fifths of the gross increase--there are 72 banks out of some 5,600 which account for one-half of all the increase. It is not surprising to find that many of the country's largest banks are included in this small group. Furthermore, it is important to note that these banks even after the substantial additions still kept the portfolios of municipal holdings within the framework of their previous investment pattern.

From our analysis of these data it is clear that the bulk of the recent increases in municipal holdings by the commercial banks has taken place in institutions that have already had a background of experience in managing this type of investment. To an almost negligible extent, you will note, the increases occurred among banks without some investment in municipals. On the other hand, banks with the relatively large portfolios accounted for very little of the aggregate increase in dollar holdings.

The facts suggest that bankers who have been managing the bulk of the municipals in bank portfolios will continue to do so, though it is a fact that the dollar volume of securities to be handled will be substantially higher. Thus, it is appropriate for us to restate once again a few of the principles and guides which may be helpful to managersof municipal portfolios in banks.

The Trend in Yields from Municipal Securities

It is commonplace to observe that yields on investments have declined in recent years. This is true in every subdivision of the investment market. But the decline in the return on municipal securities has been especially drastic. The trend is shown in the accompanying Table VI which covers a period beginning in the 1920's and extending up to the present.

Table VI

Municipal Bond Yields
1925-1951

Bond Buyer's Index of 20 Long-Term Bonds (at January 2)

1925 - 4.16	1934 - 5.48	1943 - 2.17
1926 - 4.23	1935 - 3.81	1944 - 1.77
1927 - 4.13	1936 - 3.25	1945 - 1.62
1928 - 3.87	1937 - 2.62	1946 - 1.42
1929 - 4.17	1938 - 3.16	1947 - 1.85
1930 - 4.23	1939 - 2.78	1948 - 2.36
1931 - 4.12	1940 - 2.59	1949 - 2.19
1932 - 4.87	1941 - 2.14	1950 - 2.07
1933 - 4.61	1942 - 2.24	1951 - 1.66

The sharp downward trend in yields on municipals over the past 25 or 30 years reflects to some extent the growing attractiveness of tax-exempt income. It is not possible to convert these yields into equivalent taxable income return for any investor whether it be a banking institution or a private individual. That can be done only with full knowledge of each tax situation.

As indicated by the historical summary of yields, the return on municipals affords little or no margin of protection against failure of the investment. When the return is in the order of $1\frac{1}{2}\%$ to $2\frac{1}{2}\%$,

there is no opportunity to accumulate any reserve which will buttress the investor against temporary or permanent stoppages of interest payment or a loss of principal. The investor certainly cannot afford to take any chances on collecting the amount due him.

In the main, the record of investment performance of municipal securities has been good, but the record is not entirely without blemish. Even in good times there are some issues which fail to pay interest on the due date, default on principal, or refunding on unsatisfactory terms when the obligation matures. Such unfortunate contingencies--difficult to anticipate--are equally difficult to provide for. As a consequence, the manager of a bank portfolio has no alternative but to follow standards of issue selection which insure that only the best quality of obligations is acquired. By so doing the question of default is completely avoided.

Some Guides in the Selection of Municipal Securities for Bank Investment

The qualitative standards for bank commitments in municipal securities are high. With this principle there can be no successful compromise. Nor is the manager of an investment portfolio faced with the necessity of compromising. There is at all times a large volume of outstanding issues in the investment field that possess the desired qualities.

What then determines the standing of a security with respect to its bank quality? In essence, it is the margin of protection against

failure of the obligation to pay interest on the due date and principal when the bond matures. Where there is little or no margin of protection, the issue is not of bank investment grade though it may be well suited for other investors. Banks have before them a wide area of the investment market from which issues may be selected. The volume of high quality issues is large and the compromise of investment standards is entirely unnecessary.

The traditional type of municipal security carries with it the pledge of the full faith and credit of the obligor for payment. The obligation is supported by the general taxing power of the issuer. Heretofore the debt service on full faith and credit obligations has been dependent largely upon the general property tax. In recent years, however, this tax has been declining in importance and obligors, as a result, have turned to other sources of income to cover their operating expenses and to service debt. As long as these other sources are adequate, the credit will remain sound.

Fundamentally, the investment quality of a full faith and credit obligation depends upon the economic strength of the issuer. Accordingly, the starting point in analyzing credit quality is always a study of the economic background in order to ascertain the issuer's ability to support the debt. In the past a simple test of the debt burden has been the ratio of the outstanding debt to assessed value. This, of course, assumes that assessed value is a representative measure of the issuer's economic resources. There are a great many

other important related facts deserving of attention, such as the record of tax and debt payments and the prospects for favorable or untoward developments in the area. If the bank investor confines his acquisitions to securities issued by communities where the economic background is strong and the debt is relatively light, there can be little question as to the soundness of the investment. Difficulties will arise only when the volume of debt grows out of bounds relative to debt-paying ability.

While the bulk of the municipal securities presently flowing into the investment market continue to be full faith and credit obligations, you will recall from our discussion yesterday that there is an increasing vomume of issues whose debt service is dependent solely upon revenues derived from some special project. In their simplest form, these securities are in the nature of enterprise debts. To analyze these credits, it is necessary to follow the methods and techniques applicable to any corporate enterprise. While it may be difficult to estimate the revenues and expenditures of a project, the fact remains that it can be done with some degree of precision. Since there is no pledge of the full faith and credit of a subdivision of government, it is necessary to judge the credit entirely on the basis of anticipated financial performance. Whether such securities are suitable for bank investment purposes depends upon the margin of protection disclosed through the analysis. Where the margin of protection is large and reasonably certain, there can be no doubt as to its suitability for

bank investment purposes. However, it is extremely difficult to make the necessary estimates of income and expenses. If the estimated margins of protection are narrow, then the security has no place in a bank portfolio.

Between these two categories of securities, namely, the full faith and credit obligations and the revenue debts, there is growing at the present time a new group of securities which for want of a better term may be described as hybrid issues. These obligations partake of some of the qualities of both of the other groups. But unfortunately the distinctions are not clear-cut. There is an almost endless variety of special features in these issues which tend to differentiate them from obligations that can be fitted into the other distinct categories. Sometimes these hybrid issues carry pledges of the full faith and credit of an issuer; at other times they do not. But in any event, only limited reliance is placed upon such a pledge. Furthermore, certain of these issues are dependent upon the yield of some special tax, or there is some segregation of a portion of the income of an obligor for the purpose of servicing the debt. There seems to be no limit to the variety of differences in the terms of these obligations.

To the analyst of municipal securities, the problem of determining the credit quality of these hybrid issues is always bewildering, and at times becomes almost hoplessly baffling. Each issue depends upon its total situation. There are no standard tests to guide investment decision. Quite frequently it is very difficult to weigh the

importance to be attached, for example, to the pledge of full faith and credit. This is especially true where debt burdens are already high as measured by any standards. Then, in other cases it is practically impossible to estimate the amount of revenues. In judging these situations the analyst has no alternative but to apply the recognized standards of quality to each issue. If the margins appear to be adequate, then the security, regardless of its name or its classification, is deemed appropriate for bank investment.

Maturities Suitable for Bank Investment Purposes

By an appropriate selection of maturities, the manager of a municipal portfolio in a bank can greatly strengthen his holdings. It is an elementary fact that one can anticipate the next two or three years in any given situation much more accurately than the next five or ten years. Accordingly, a great many issues, if their maturities are sufficiently short, may be deemed appropriate for bank investment even though the projects are subject to long-run uncertainties.

There are other considerations that should not be ignored in connection with a discussion of maturities. Suffice it to observe that in devising a total maturity schedule for an investment portfolio, attention should be given to the rate at which the deposit liabilities of a bank turn over as well as the turn-over rate of the entire asset structure. Thus, a maturity schedule for municipal securities can only be developed by relating it to the overall maturity needs of the bank.

Summary and Conclusion

The great increase in the amount of municipal securities held by the insured commercial banks, you will recall, furnished the starting point in our discussion of municipal obligations as bank investments. Then your attention was directed to the fact that in relative terms this great increase in dollar amount of holdings was in line with the growth of other bank assets. As a matter of fact, it has been only during the past two years that the banks regained the level of assets invested in municipal securities which prevailed for many years prior to World War II.

Further analysis of the data regarding the municipal portfolios of the commercial banks suggested that the expansion in this segment of assets has brought about very little change in the overall picture. By and large, the increased holdings have centered in the banks whose portfolios are relatively moderate in size. Banks acquiring municipals without a recent previous experience with these investments were indeed few in number. The banks with relatively large portfolios have not greatly increased their commitments.

Accordingly, there seems to be ample justification for directing attention to the rules that have been used successfully in the past by managers of bank portfolios. Foremost in this connection is the necessity for selecting issues with adequate margins of protection because the standards for bank investment are definitely high. Since municipal obligations pledging the full faith and credit of the issuer

for payment of interest and principal continue to predominate in the marketplace, the measures for judging their credit quality are of major importance to the securities portfolio manager.

The growing importance of the so-called revenue or enterprise type of obligation has greatly increased the difficulties of security analysis. However, the quality of such issues can be appraised by following the technique well-known to the student of corporate issues. To be sure, it is difficult to assemble the necessary data and to appraise it correctly, but the pattern of analysis has long been established.

Most difficult in judging credit quality is the analysis of the so-called hybrid type of municipal obligations. These securities possess some of the elements of full faith and credit obligations as well as some of those which are not so identified. Unfortunately, each case requires individual treatment. In any event, when the analyst is sure that the margin of protection is adequate, the security can certainly be deemed to be one of investment grade.

Finally, it should be emphasized that there is no easy solution to the many difficult problems besetting the manager of the municipal portfolio in a bank. His analytical task is difficult. Furthermore, it is necessary for him ever to be alert to new developments and to make certain that he is adhering to sound investment principles.