The Case for Broadening the Financial Options Open to State and Local Governments —Part I

STANLEY S. SURREY

General Discussion

The exemption from income tax of the interest on state and local obligations remains a feature of our income tax despite the persistent publicizing through the years of its adverse effects on the equity of that tax.

The two main legislative efforts to alter the situation were in 1943 and 1969, and both failed. But the difference in approach that developed in the quarter-century separating these efforts is highly instructive. In 1943 the effort was a frontal one, simply to eliminate the exemption. In 1969 the focus of the effort was to find an alternative method of aiding state and local governments that would materially lessen the use of tax-exempt securities.

We thus have come to recognize the tax expenditure character of this exemption in its provision of Federal financial assistance through the tax system to state and local governments. The reliance of those governments on that assistance and their need for it is fully accepted. Any effort to alter that exemption in order to improve the equity of the tax system must therefore cope affirmatively and successfully with finding a replacement for the assistance if the effort is to be effective. The events of 1969 illuminate the difficulties this requirement presents.

Mr. Surrey is Jeremiah Smith Jr. Professor of Law, Harvard University, Cambridge, Massachusetts.

Inequity and Inefficiency of Tax Exemption

The criticisms of the exemption – both in terms of its effects on the tax system and its inefficiency as a method of furnishing the financial assistance – were recognized by the House Ways and Means Committee which initiated the effort in 1969 to change the situation:

> Capital outlays of state and local governments for such projects as schools and other public buildings, highways, water and sewage systems, and antipollution facilities have doubled during the past decade. In order to market an increasing volume of securities to finance these public projects in competition with a growing volume of private borrowings, state and local governments have been offering higher yields, and the differential between tax-exempt and taxable securities of comparable quality has been narrowing. Historically, the ratio of yields on tax-exempt issues to taxable issues has been as low as 60 percent, but in recent years it has been close to 75 percent.
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> The ratio of yields has varied in response to the general availability of credit, the demand for credit and the proportionate demand by state and local governments to the total market demand for credit. As a result, high volume individuals and institutions otherwise subject to high tax rates who constitute a major portion of the market for tax-exempt state and local securities have been receiving significantly larger tax benefits than needed to bring them into the market. Recent estimates place the annual saving in interest charges to state and local governments at $1.3 billion, but the annual revenue loss to the Federal Government has been estimated at $1.8 billion.[1]

On the tax equity side, the exemption permits upper bracket individuals and commercial banks to escape their share of the tax burden. While in a sense the bondholders could be considered as paying a "tax" to the state and local governments, in the form of lower interest rates, that "tax" allows them to avoid a far higher federal tax and the bondholders therefore are willing to enter on the exchange.

On the efficiency side – and this is another way of reflecting the tax inequity – the exemption gives less in aid to those governments in the form of lower interest rates than it costs the Federal Government in revenue – perhaps a 30 percent wastage. Moreover, it

[1] *Report* of the House Committee on Ways and Means, Tax Reform Act of 1969, House Rep. No. 91-413 (1969) p. 172-173. The estimates used by the Committee are the tax effects that would occur if outstanding bonds, at their present interest rates, were made taxable. A more appropriate measure is what would be the effects of the present system compared to the consequences under taxable bonds and the interest changes that such taxation would involve. Clearly the latter involves some guesswork. Under Treasury data, as of 1969, the revenue loss under the latter approach was estimated at $2.63 billion and the interest savings at $1.86 billion.

seems to many that, as the need for capital funds on the part of those governments appears to be inexorably becoming ever greater, the method of assistance, i.e., whatever lowering of interest rates the exemption could achieve, is equally as inexorably painting those governments into a corner. They are forced to sell more and more bonds to buyers who really are not the obvious buyers of those bonds but who are only tempted to do so because of the exemption. High bracket individuals normally should be basically buying equities and banks should be making business loans. To tempt them away from those natural pursuits into buying more and more tax-exempt bonds, and to seek to draw other individuals and financial institutions in the same direction, will require higher interest rates on the bonds to make the exemption worth more. At the same time, natural buyers of bonds, such as private pension trusts, state and local retirement funds, and educational and charitable institutions, are shut off by the tax exemption since, being tax-exempt themselves, the interest exemption is useless to them.[2]

While state and local governments sought in 1969 in debate and maneuver to deny or downgrade these problems, they also at times gave evidence of recognizing the difficulties that lie ahead.[3] Moreover, the Treasury Department and the Bureau of the Budget have clearly described those difficulties.[4] Thus, Undersecretary Walker stated in March, 1970:

> State and local borrowing demands are growing faster than the supply of long-term investment funds from investors in high income tax brackets. The price of this imbalance is reflected in the interest rate on tax-exempt bonds. The value of tax exemption to each borrower declines as the total volume of tax-exempts increases.
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> Tax-exempt interest has at times been an effective means of revenue sharing – the investor pays the tax to the state or local borrower, by accepting a lower interest rate, rather than to the Federal Government. But the efficiency of this type of revenue sharing declines as borrowings increase and tax-exempt rates rise relative to taxable rates.

[2]See generally Surrey, "Federal Income Taxation of State and Local Government Obligations," 36 *Tax Policy*, May-June 1969; Healy, "The Assault on Tax-Exempt Bonds," 36 *Tax Policy*, July-August, 1969.

[3]See Healy, supra note 2, at p. 5-6.

[4]See Remarks of Hon. Charls E. Walker, Under Secretary of the Treasury, on "New Federalism in the 1970's – the Financial Dimension," before the Tenth Annual Washington Conference on Business-Government Relations, March 23, 1970; Remarks of Hon. Robert P. Mayo, Director of the Budget, before the Municipal Finance Forum of Washington on "The Federal Government and State and Local Finance," July 9, 1969.

Affirmative Aspects of the Exemption Device

At the same time, as these negative aspects of the exemption are steadily becoming more apparent, two affirmative aspects of the exemption device as a method of aiding state and local governments are very clearly being underscored. Those governments in the 1969 debate pointed out two essential attributes:

— The assistance provided by the exemption is freely available to them, for any project they choose, without any control being exercisable by the Federal Government.

— The assistance is open-ended as far as the Federal Government is concerned, since the assistance depends in this respect solely on the amount of obligations issued.

Thus, whatever may be the limitations imposed by the financial markets, bond ratings or the like, the exemption vis-a-vis the Federal Government has the effect of a blanket, automatic, no-strings attached, open-ended Federal grant-in-aid to the issuing governments. Governors and mayors are given blank checks by the Treasury Department to fill in and return at their option. It is no source of wonder why those governors and mayors like these aspects of the tax expenditure exemption approach and seek to preserve it as a form of Federal aid. In the case of other grants-in-aid they come to Washington very much as supplicants or negotiators; the tax aid is theirs to command.

The House Ways and Means Committee in 1969 recognized this factor and sought to duplicate these attributes in its alternative for the exemption. It provided that if a state or local government *elected* to issue a *taxable* bond, the Treasury Department would be required to pay periodically to the issuing government, as interest payments fell due, from 30 percent to 40 percent of the interest payment (from 25 percent to 40 percent for bonds issued after 1974). It was understood when the bill passed the House that the percentage would be changed to a flat 40 percent. The Secretary of the Treasury was to proclaim the figure for each quarter and the percentage that was in effect when a bond was issued would be applicable throughout its life. There would be a permanent legislative appropriation to cover the cost of the subsidy, of the same character as the appropriation applicable to the interest on Federal bonds. The cost to the Treasury of the interest subsidy would be met by the revenues arising from the tax on the taxable bonds and other obligations that taxpayers would hold in place of exempt bonds. The payment of the

interest subsidy was to be automatic, with no Federal review of a bond – no inquiry as to the advisability of the project for which it was issued or the issuer's ability to pay.

In its essentials this alternative would seem to duplicate the affirmative attributes inherent in the tax exemption route. The alternative direct subsidy would also have been a blanket, automatic, no-strings attached, open-ended aid. But the alternative was never discussed on its merits.

A variety of pressures – the chaotic monetary situation in mid-1969; the influence of investment houses seeking to preserve their present business in tax-exempts and the dependence of state officials on political contributions from some of these sources; the lack of understanding of the House proposal in responsible state and local quarters; the attitude of the Administration, stretching from opposition to hands-off but not encompassing support or even full explanation of the proposal and the issues; the coverage under the minimum tax and the allocation of deductions proposals of interest on any future tax-exempt bond that might be issued, and of outstanding interest under the minimum tax – all combined to prompt a mass lobbying effort by state and local officials concentrated on the Senate Finance Committee.

The arguments and debating points used were erroneous or specious[5] but that quality did not detract from the effect of the massed character of the effort. The alternative simply disappeared under the attack. The Senate Finance Committee stated:

> The House report noted that tax savings for individuals and corporations from the purchase of tax-exempt bonds generally is greater than the differential between the interest yields on tax-exempts and taxable bonds. As a result, it has been estimated that the interest savings to state and local governments was $1.3 billion in 1968 but the tax revenue loss to the Federal government was $1.8 billion.
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> While there may be a problem here, the committee, because of its concern that any action with respect to state and municipal bonds could have a deleterious effect on the market for these bonds, and because of the high interest costs which are now being paid on new issues of such bonds, concluded that any action possibly having an impact on state and local government bond prices would be particularly unfortunate.[6]

[5]See generally Surrey, "The Tax Treatment of State and Local Government Obligations – Some Further Observations," 36 *Tax Policy,* Sept.-Oct. 1969, pp. 8-15. But see Healy, "Further Comments on Proposed Capital Financing Alternatives," 37 *Tax Policy,* Jan.-Feb. 1970.

[6]*Report* of the Senate Committee on Finance, Tax Reform Act of 1969, Senate Rep. No. 91-552 (1969) p. 218.

But the problem remains. The difficulties state and local governments face in meeting their capital needs and the increasing limitations of the tax expenditure type of assistance furnished by the exemption are still evident. Studies indicate both the dependency of the tax-exempt market on purchases by commercial banks and the likelihood that in the decade ahead the economic environment will be one in which commercial banks are not likely to be massive buyers of state and local bonds. The adverse effect of the exemption on tax equity – the indefensible escape from tax liability that it permits – still persists. Moreover, these factors work perversely; the more inefficient the tax exemption mechanism becomes as a method of assistance as the interest rates rise on the exempt bonds the more inequitable the exemption becomes as a part of the income tax. All concerned appear to recognize these facts and to be seeking a solution. Thus, the Treasury has said, speaking through Undersecretary Walker:

> What then is the answer? I am confident it must be something other than making continued demands upon an overburdened tax-exempt market. We will be actively engaged in developing a more effective alternative to that approach during the coming months, and I would certainly welcome the thoughts and suggestions of state and local officials. To work together toward more effective solutions is just what the President's New Federalism is all about. All of us have a vital stake in coming up with workable solutions, so that the needed expansions in our public sector facilities can take place – and be financed in the most economic and efficient manner.[7]

Chairman Mills has said:

> A House provision granting state and local governments a subsidy if they voluntarily agree to issue taxable bonds was deleted by the Senate and the Senate conferees insisted on this deletion. I regret that the pending bill does not include this subsidy provision. In my opinion, it is a useful device which would provide considerable opportunity for a state and local government to expand the markets for their securities without involving additional cost to them. However, in view of the present chaotic state of the market for state and local bonds and the present psychology of investors, apparently any change in the area of state and local government was frowned upon even where the change tries to help state and local governments as was the case of the subsidy provision. Accordingly, we had no choice but to agree to the deletion of this provision.[8]

A prominent representative of state and local governments has said:

[7]Supra note 4, at pp. 21-22

[8]Congressional Record, Dec. 23, 1969, H13037.

> Undoubtedly, the debate over tax exemption will continue for some time until some decisive action occurs to resolve the issue once and for all ... We are seriously considering new sources of supplemental funds but caution that too much is at stake to rush headlong into "solutions" that could only cause a new crop of problems. The real solution to the state and local financial crisis lies in fitting a number of pieces of a very complex problem together.[9]

The solution, it is clear, will have to provide Federal assistance on terms that resemble the affirmative attributes of the assistance available through the tax exemption. The solution therefore must permit freedom of choice by state and local governments as to both the use to which the aid money will be put and the quantity of aid available. The solution may also have to permit resumption of the issuance of tax-exempt bonds as a fallback if the solution turns out to be less useful than the exemption device.

This is not to say there is inherent logic in these requirements for a solution. Over 90 percent of the annual assistance now received by state and local governments from the Federal Government comes, through grants and other mechanisms, in ways that do not involve these attributes. There is no inherent reason why financing assistance to state and local governments to raise capital funds should be on a different basis. The answer instead lies in history and the attitude currently taken by these governments. Even though the tax exemption assistance works very inefficiently, in that there is a large wastage of the Federal revenue loss involved, it does produce some assistance to these governments compared to the alternative of loss of tax-exemption per se. And, apparently, the harmful effect of the tax exemption on the equity of the Federal income tax is not regarded by these governments as their worry or a reason for them to give up the assistance they now obtain, no matter how inefficient. Hence these governments are in a position to place requirements on alternative solutions. The realities of the situation are accepted by those seeking alternative solutions, as is evidenced by the Ways and Means Committee proposal. What remains unclear is whether the state and local governments will cling to the present system despite its great inefficiencies for them, regarding it as still better than simple taxability of their bonds, or will join in the search for alternative solutions.

[9]See Healy, supra note 2, p. 12. Mr. Healy is Executive Vice President, National League of Cities.

More Effective Methods of Financial Assistance

The range of alternatives to be explored is considerable. It includes:

— an interest subsidy paid by the Treasury on taxable bonds issued by state and local governments, i.e., the alternative of the House Ways and Means Committee in 1969, with such improvements as further study may evolve and the use of such marketing techniques for the taxable bonds as may be appropriate as, for example, a State Development Bank which would issue its taxable obligations and in turn buy the obligations of the cities and other issuers in the State. A flat subsidy rate of 50 percent may be appropriate. At any event, in the light of the present scale of direct Federal aid to state and local governments, around $28 billion, there is little logic in restricting the interest subsidy on taxable bonds to a level which would represent a financial break-even point for the Treasury. It would seem preferable to set the direct subsidy on taxable issues at a level which would assure that the degree of wastage in the tax subsidy given by the Treasury through any remaining tax-exempt issues was held to a reasonably tolerable level. A 50 percent subsidy may be the minimum needed to accomplish this objective.

— a form of National or Urban Development Bank which would issue its own taxable bonds and in turn lend its funds to state and local governments at a subsidized interest rate. The Administration has already offered in several areas proposals which embody this approach. One is the proposed Environmental Financing Authority which would stand ready to purchase waste treatment bonds of state and local bodies already in receipt of Federal project grants, with the EFA financing these purchases by issuing its own taxable obligations.[10] Another is the proposal that conservation, water waste disposal and similar loans made to rural communities by the Farmers Home Administration and sold to private investors with a Federal Government guarantee should be regarded as taxable obligations with a portion of the interest then paid by the Federal Government.[11] As

[10]Budget Message of the President, Fiscal Year 1971, p. 31 (Congressional Record, Feb. 2, 1970, S968).

[11]H. R. 15979, House Rep. No. 91-1112. The House Ways and Means Committee Report states:

Studies by the Treasury Department and the Bureau of the Budget have indicated that it is costly to the Federal Government to use federally insured

a further example, the Medical Facilities Construction and Modernization Amendments Act of 1970 authorizes HEW to purchase obligations of public hospitals and medical facilities and sell the obligations on a guaranteed and taxable basis. HEW would pay an interest subsidy to the public issuer of the obligation in an amount necessary to bring the net interest cost to the public issuer down to the level of the interest costs paid by private non-profit borrowers subsidized under the Federal legislation in this area.[12] While Federal control over the issuance of the state and local obligations would in effect exist in these instances, that control is already present since the projects involved for which the state and local funds are sought must themselves obtain Federal approval in order to receive project aid. The proposals in effect provide separate "development banks" for the areas involved; the hospital proposal was described in Senate debate as "a sort of public hospital urbank."[13]

— the proposal that state and local obligations where purchased by state and local pension or other retirement funds should carry an

> tax-exempt obligations to finance loans to local governmental units. The studies indicate that while the tax exemption makes it possible to resell the insured loans at a lower interest rate than would otherwise be possible, the loss of tax revenue resulting from the exemption more than offsets the benefits of the lower interest payments.
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> Additionally, it was concluded that the sale of bonds which are both tax exempt and insured by the Federal Government would give these bonds a competitive advantage over both State and local securities which are tax exempt but not federally insured, and also Federal securities which are subject to Federal income tax. As a result, the sale of such bonds could well have increased interest rates on other bonds, particularly those issued by States and localities and hampered their ability to finance other vital public needs . . . .
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> The proposed legislation will not increase interest rates to the local communities involved in the federally insured loans since these communities can continue to obtain loans at present law interest rates of not over 5 percent, which are below the current market rates on good quality, long-term, tax-exempt bonds. Moreover, the bill does not in any way interfere with the right of local governments to issue tax-exempt obligations.

[12]H.R. 11102, as amended in the Senate, Cong. Rec. April 7, 1970, S5237-5242. The amendment replaced a provision under which the Treasury would have guaranteed tax exempt bonds issued by public hospitals. The Treasury objected strongly to the original provision as adding to the pressures on tax-exempt securities and as favoring one type of tax-exempt bond over other types, thereby forcing the latter to move to higher interest rates. See letter of Sec. Kennedy, Cong. Rec., April 7, 1970, S5239; remarks of Under Secretary Walker, supra note 4, at p. 18-19. See also supra footnote 11. The Treasury favored the amendment.

[13]Congressional Record, April 7, 1970, S5241.

interest rate competitive with taxable obligations, with a portion of the interest subsidized by the Federal Government. This is really a limited version of the 1969 approach. It is difficult to see, however, why only some buyers of state and local bonds should be so subsidized and others not so treated, so that this alternative is not as desirable as an across-the-board subsidy.

These alternatives do have one important difference from the present tax expenditure approach. Under that approach, neither its cost – the revenue lost by the exemption – nor the amount of assistance given appear in the Budget. Under the alternatives, the financial assistance, presumably through an interest subsidy, would show up in the Budget as a direct expenditure or in the accounts of a Development Bank. Naturally, over time this would be a sizeable figure. The representatives of state and local governments have observed this and have wondered if the growing cost would be tolerated by the Federal Government.

> "(It) would not be unreasonable for a Congressman or a budget director to question the rationale for continuing a very costly subsidy program . . . It is also interesting to note that the present $1.86 billion savings from tax exemption is an amount substantially in excess of most congressional appropriations for urgently needed individual urban programs. From the hard cold logic of experience, city officials doubt that they would continue to receive from Congress a direct automatic unrestricted subsidy of the necessary magnitude for state and local bond issues. This is further borne out by the unhappy experience of local governments abroad whose capital projects depend upon the permission of the central government.[14]

Of course, the present tax expenditure assistance through the tax exemption is just as costly, perhaps even more so because of the wastage, but the cost is effectively hidden. This then really gets to the heart of the problem. A representative of state and local governments has said, "The core of this problem is the distrust of state and local officials of central government power, particularly when it is allied with the power of the purse string."[15]

The crucial question may well be whether the state and local governments place a large value on the hidden character of the present method of financial assistance, a value which offsets the limitations earlier described that are inherent in that assistance. This would be unfortunate, for it could block exploration of more

[14] See Healy, supra note 5, p. 8-9.

[15] See Healy, supra note 5, p. 10.

effective, though open, alternative methods of assistance outside of the tax system. It would also in the final analysis be unrealistic. For if the Constitution does not guarantee the tax exemption – and I believe most lawyers do not think that it does – then that exemption and method of aid are also subject to Federal control. As I said elsewhere:

> I wonder how many governors or mayors really believe the perpetuation of the present exemption is anything more than a legislative matter – how many would really settle for letting the Supreme Court decide the issue, winner take all?[16]

Indeed even apart from this aspect, since direct Federal grants are now far in excess of the assistance obtained from tax exemption – a ratio of around $28 billion to $2 billion annually – the states and localities must already place their faith in the rationality of the Congress for over 90 percent of the annual overall Federal assistance they now obtain. It does seem wrong to base solutions in the area of financing assistance to state and local governments on the assumption that the Congress, made up of elected representatives from the states, will act in bad faith to injure those states and their cities and localities.

It is to be hoped, therefore, that alternative methods are not to be discarded because of their openness. As a result, more effective methods of financial assistance could then be found which would at the same time permit a reform of the income tax that would materially lessen or end the inequitable effects of the present exemption.

In essence, it would appear that the tax-exemption device has been utilized to the full extent of its potentiality as a method of providing financial assistance to state and local governments. No more can be gained [by them] for further exploitation of this approach. At this juncture, therefore, the task becomes that of broadening the financial options open to state and local governments in raising capital funds. Such a broadening of financial options can only be helpful to those governments. It would also improve the equity of the Federal tax system. Thus, whether one approaches the situation from the aspect of Federal tax reform or from the aspect of improving the financial position of state and local governments, the end result would be of benefit to all governments.

[16] See Surrey, supra note 5, p. 10.

The Case for Broadening the Financial Options Open to State and Local Governments —Part II

FRANK E. MORRIS

The "Efficiency Index"

Institutions are usually not reformed until they have ceased to perform effectively. At this point, we propose to turn to an examination of the past performance of the tax-exempt bond market with the objective of establishing a basis for judging the adequacy of the tax-exempt market as the sole financing vehicle for state and local governments in the decade ahead.

We have developed two standards for measuring the performance of the tax-exempt market in the postwar years. The first of these measures is labeled the "efficiency index". The market is defined to be operating at 100 percent efficiency, in the terms of this index, when all of the benefits of tax-exemption accrue to the issuing state and local governments. Supporters of tax-exemption like to say that the tax equity argument is greatly exaggerated; since the bond investor pays his taxes at the time when he decides to accept a lower yield than he would accept on a similar taxable bond. The problem is, of course, that in the current market their marginal tax rate is only 20 percent. Their claim to have paid their taxes would be literally true only if tax-exempt bonds are so scarce that they are of interest only to investors in the highest individual tax bracket and are offered at rates which would give this class of investor the same

Mr. Morris is President, Federal Reserve Bank of Boston, Boston, Massachusetts.

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after-tax yield as comparable taxable bonds. This most improbable situation we would define as a condition of 100 percent efficiency for the tax-exempt market. With the present set of tax rates and corporate bond yields, it would mean a yield on municipal bonds of about 2¼ percent. From the standpoint of the U. S. Treasury, in a condition of 100 percent efficiency, there would be no tax equity problem as far as new issues were concerned and no wastage of the subsidy given through tax-exemption.

Just as we define 100 percent efficiency as a situation in which all of the benefits of tax-exemption accrue to the issuer, we similarly define a condition of zero efficiency as one in which all of the benefits of tax-exemption accrue to the buyer of the security. In this equally improbable situation a tax-exempt buyer, such as a pension fund, would find that municipal bonds were offering a comparable yield to similar corporate bonds. Any tax-paying investor would find all of the benefits of tax-exemption accruing to him.

The two end points of the scale, 100 percent efficiency and zero efficiency, are equally improbable, but they do provide us with a constant scale for measuring the changing efficiency level of the tax-exempt market over a period of years.

The calculated efficiency level of the municipal bond market from 1945 to date is shown on the accompanying chart. In computing the figures we have made an allowance for the fact that municipal bonds, in general, are less liquid than corporate bonds. We have assumed that an equating yield would be one in which the yield on a municipal bond was 104 percent of the comparable corporate yield.

In our zero efficiency case, for example, if the corporate yield were 8 percent, the corresponding municipal yield would be 8.32 percent. The 4 percent liquidity adjustment is purely a judgment estimate on our part. We would need an actual market test to determine the precise differential, but we have little doubt that a taxable municipal, in the typical instance, would have to bear a somewhat higher yield than a correspondingly rated corporate bond.

There is no inherent reason why municipal bonds must be less liquid than corporate bonds. The source of the liquidity problem is purely institutional and relates almost entirely to the size of the bond issue. Corporate bonds typically are sold in large amounts with single maturities. Municipal bonds are customarily sold in small amounts with serial maturities.

The typical municipal issue is $10 to $20 million in aggregate amount split up into 20 serial maturities. This means that there are actually 20 different maturities of $500,000 to $1,000,000 in size. It is a physical impossibility to maintain an adequate secondary market for bond issues of that size. A liquidity differential could only be eliminated by consolidating the many small serial offerings into many fewer and much larger issues of centralized issuing authorities either at the state level, the Federal level or both.

Volatility of Commercial Bank Participation

Anyone examining the performance of the municipal bond market must be struck by its extreme dependence on the commercial banks as investors. There are only two major classes of municipal bond buyers — commercial banks and high-bracket individual investors. Between them they held almost 77 percent of the outstanding total of municipal bonds at the end of 1969, with more than 46 percent held by banks and somewhat over 30 percent by individuals.[1]

The basic vulnerability of the municipal bond market lies in the fact that the extent of commercial bank participation is highly volatile. Most banks tend to look upon municipal bonds as a good source of earning power for marginal funds; that is for funds remaining after their loan demand has been satisfied and their minimum liquidity requirements have been met. Loans have the prime investment priority; and when funds get tight, bankers adjust by reducing the flow of funds into securities, both U. S. Government and state and local government securities.

The extent of the swings in bank participation in the municipal bond market may be seen in the following figures. Of the total increase in state and local government bonds outstanding in the relatively easy money year of 1965, the commercial banks absorbed 70 percent. This figure dropped to 41 percent in the tight money year of 1966. When the pressures on the banks moderated in 1967, the figure rose to 116 percent, the banks in that year buying substantially more than the total incremental supply. Their participation dropped slightly in 1968 to 92 percent and then collapsed to less than 17 percent in the very tight money year of 1969.

[1]All of the statistics in this paper relating to the ownership of municipal bonds are taken from the Flow of Funds Accounts published by the Board of Governors of the Federal Reserve System.

When the banks pull out of the market, rates must rise sharply enough to induce the other major buyer, high-bracket individuals, to take up the residual supply. The market is isolated by tax-exemption from the great bond buying potential of the pension funds. These structural characteristics have made the municipal bond market more volatile than the other bond markets, they have produced strong contra-cyclical swings in the volume of state and local bond offerings and, in our judgment, they have rendered state and local investment programs much more sensitive to monetary policy than would have been the case if these issuers had a broader market in which to sell their securities.

Turning to the efficiency index, we find that the index reached its highest point in early 1946 at 59 percent. This peak level for the index primarily reflected the scarcity of supply of municipal bonds following the Great Depression and World War II. After 1946, state and local governments began to issue bonds in substantial volume again, and the efficiency index trended irregularly downward, reaching a low point for the postwar period of 18 percent during the tight money phase of mid-1953.

During the first seven years of the postwar period, 1946 through 1952, the average level of the efficiency index was about 37 percent and bank participation in the market was of moderate proportions. Banks absorbed a net amount of municipals during this period equal to about 43 percent of the increase in the amount outstanding.

The next eight years, 1953 through 1960, were years of a relatively restrictive monetary policy; commercial bank deposits grew slowly, bank participation in the municipal market declined (they absorbed only 18 percent of the incremental amount of bonds), and the efficiency index dropped from the 37 percent average of the earlier period to an average level of 26 percent.

The next eight-year period, 1961-1968, was one in which the performance of the municipal bond market improved substantially. The Federal Reserve was following an expansionary policy during most of this period, bank assets were growing rapidly, and, except for a brief period in 1966, commercial banks dominated the municipal bond market to an unprecedented degree, absorbing almost 80 percent of the total incremental supply. At the end of 1960, banks owned only about 25 percent of the total of outstanding municipal bonds; by the end of 1968 this percentage had almost doubled to 48 percent. The efficiency index moved up sharply,

averaging 40 percent for the entire eight-year period and reaching a peak of 51 percent in early 1967.

The Indifference Index

Since the commercial banks play such a dominant role in the municipal bond market, another useful measure of the efficiency of the market is an index which describes the current level of municipal bond yields as a percentage of the indifference level for commercial banks relative to corporate bonds.

Given the prevailing marginal tax rate for banks, the indifference level of municipal bond yields would be that level at which banks should be indifferent as between purchasing a municipal bond or a correspondingly rated corporate bond. This index is also shown on the accompanying chart. By and large, it traces essentially the same pattern for the postwar years as the efficiency index, although in an inverse fashion.

In 1945 and 1946 the prevailing yields on municipal bonds were so low that they were not attractive alternatives to corporate bonds for commercial banks. As the new supply of municipal bonds came into the market, however, the indifference index moved sharply upward, reaching a peak of 174 percent in July 1953.

From that point through the end of 1961, the bank indifference index fluctuated between 150 percent and 170 percent. It trended downward thereafter until 1967, reaching a low point in early 1967 at an index level of 124 percent. Since early 1968 it has been moving upward and established a postwar peak level of 175 percent in December 1969. There are many influences operating on the municipal bond market, but the influence of the commercial banks is so dominant that one could gauge the state of the market very accurately with this simple measure — the size of the gap between the indifference rate and the market rate.

Dependence on Commercial Bank Participation

We think that this statistical analysis of the past supports the generalization that the performance of the municipal bond market in the 1970's will depend almost entirely, as it has in the past, on the degree of commercial bank participation in the market. Will the 1970's be a period, such as 1961 through 1968, when the commercial banks were able to absorb almost 80 percent of the incremental

supply and the market operated at a 40 percent efficiency level? Or will it be more like the 1953-61 period, when the commercial banks were in a relatively tight position, when they absorbed less than 20 percent of the incremental supply and when, as a consequence, the municipal bond market operated at an average efficiency level of only 26 percent?

We think most economists and most bankers who have thought about the problem would argue that the latter alternative is by far the more probable. We are not given the power to see very far into the future with any kind of precision, but on the basis of what we know today, it seems most probable that the decade of the 1970's will be characterized by strong expansionary forces. This would seem to be dictated, in part, by the dynamics of our population change, in part, by the urgent need to rebuild our cities, and, in part, by our commitment to high levels of employment.

We will need a rapid growth rate and a high level of business investment if we are to avoid high levels of unemployment, since the labor force will be growing at an unprecedented rate over the next decade. The burgeoning young adult population of the United States, which is the primary cause of the rapid growth expected in the labor force, will, in their capacity as consumers, be demanders of vast amounts of capital for housing and consumer durable goods, while making only a relatively modest contribution to the flow of savings. As a consequence, most economists expect that the decade of the 70's will be a period of a chronic excess demand for capital.

This is not the sort of environment in which the municipal bond market functions well, simply because it is an environment in which commercial banks are not likely to be massive buyers of municipal bonds. Not only is loan demand likely to be too high to permit this, but there is, in addition, an urgent need in the banking system to rebuild liquidity. Our banking system has not been as illiquid as it is today since 1929; and bankers learned in 1966 and again in 1969, many to their dismay, that municipal bonds are not liquid instruments.

Of course, it is theoretically possible to shift the mix of public policies which prevailed in the 1960's toward a much more restrictive fiscal policy so that an expansionary economy could be kept in bounds with a less restrictive monetary policy. This is a mix which would be much more favorable to the municipal bond market.

Unfortunately, there is nothing in our recent experience which

would lead one to expect such a change in the policy mix. If this analysis is correct, state and local governments are likely to be facing, in the 1970's, capital requirements of a magnitude which their traditional financing vehicle, the tax-exempt bond market, is not likely to be able to handle in any reasonably efficient manner.

This is not a unique judgment on our part; it has been voiced privately by a number of leading New England bankers and it was recently voiced in public by a leading New York bank economist, Tilford Gaines. Mr. Gaines, Vice President of the Manufacturers Hanover Trust Company, made the following statement before a recent meeting sponsored by The National Industrial Conference Board.[2]

> "It seems quite unlikely that the banking industry will be able to underwrite as large a part of tax-exempt bond financing as they did during the 1960's. Other demands upon their limited resources, and the constraints imposed by conservative balance sheet considerations, probably will continue to limit bank acquisitions of tax-exempt bonds as they did last year. This prospect raises quite troubling questions for local financing. Ultimately, the question will have to be confronted as to whether or not tax-exemption of local securities does not so limit their market as to suggest the adoption of financing through other, perhaps taxable obligations. . . . Other innovations might very well be subjects of discussion as the full magnitude of the shortage of funds available for tax-exempt local financing becomes more apparent."

State and Local Governments' Need for Financial Options

State and local governments are, in our judgment, urgently in need of some long-term financing options in addition to the traditional tax-exempt market. The primary factor which gives the large business corporations in the United States such great financial flexibility is the multiplicity of their financial options. If a large corporation finds that its commercial bank is short of funds and unreceptive to its financial needs, it can turn to the commercial paper market or the bond market, it can issue common stock, convertible debentures, debentures or preferred stock with warrants; and the larger ones even have the capacity to finance some of their requirements in foreign markets.

In contrast, the options open to state and local governments are extremely limited. If the municipal bond market is unreceptive, state and local governments have only the options of financing through

[2]The National Industrial Conference Board's West Coast Financial Conference, Century Plaza Hotel, Los Angeles, California, April 29, 1970.

short-term notes or postponing the project. The short-term note market is a rather limited option, not only because of legal restrictions, but also because the principal market for short-term notes is the very same commercial banking system which constitutes the key element in the market for municipal bonds.

Federal Interest Subsidy

Specifically, we would propose that two additional major financial options be opened to state and local governments: the first would be an option to sell taxable bonds with a 50 percent Federal interest subsidy; the second would be an Urbank option, along the lines to be discussed by Peter Lewis at this conference, which would be designed to accommodate the more marginal issues.

The only thing wrong with the interest subsidy proposed in the House bill of 1969, in our judgment, was that it was too small. Instead of the variable subsidy of 25 percent to 40 percent of interest costs which the House bill provided, the bill should have proposed, in our judgment, a flat subsidy of at least 50 percent; for a subsidy of at least 50 percent is the minimum needed to assure that only those tax-exempt issues will be marketed which will represent a tolerable use of the subsidy granted in the form of tax-exemption. This action would tend to confine purchase of future tax-exempt issues to very high bracket individuals, since the issues would not be particularly attractive to any others.

In the market of May 1970 (on the basis of our efficiency index calculations) with a 50 percent interest subsidy on taxable issues, any tax-exempt issue marketed would be of only marginal interest to banks or other corporations and would be of interest only to individuals in marginal tax brackets above 50 percent. In a market such as we had this May, a 50 percent interest subsidy would curtail the supply of new issues to the extent that the Bond Buyer's Index would drop to about 4.30 percent. At that level of market rates on municipal bonds, both the tax equity problem and the wastage involved in the present form of subsidy through tax-exemption would be substantially reduced and the efficiency index would rise to 54 percent. Of course, if the interest subsidy were 60 percent, the supply of newly issued tax-exempt bonds would contract even further; and in the market of May 1970 the Bond Buyer's Index would drop to about 3.40 percent and the efficiency index would rise to around 82 percent.

In approaching the determination of the precise amount of interest subsidy to be granted on taxable issues of state and local governments, the Congress gave a degree of weight to the break-even point for the Treasury which seems to us to be all out of perspective. After all, the Budget proposed by the President for fiscal 1971 calls for the massive total of $27.6 billion in grants and aid to state and local governments. This is an increase of $7.4 billion, or more than 36 percent, from the actual figure for fiscal 1969 — just two years ago.

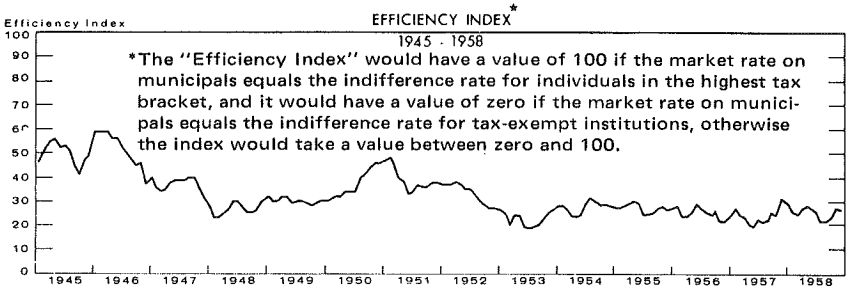
In the light of this scale of aid to state and local governments and the very high probability that it will grow substantially in the future, there seems to be little logic in restricting the interest subsidy on taxable bonds to a level which would represent a financial break-even point for the Treasury. It would seem more logical to us to set the subsidy on taxable issues at a level which would assure that the degree of wastage in the subsidy given by the Treasury through tax-exemption was held down to a reasonably tolerable level. A 50 percent subsidy would be the minimum needed to accomplish this objective.

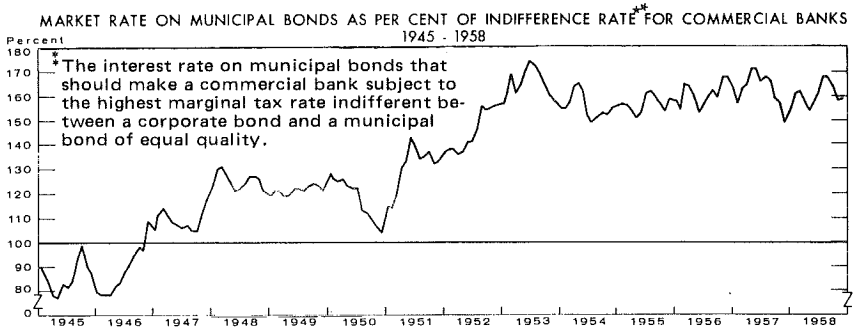
If state and local governments had at their command the three long-term financing options which we have discussed — the tax-exempt bond market, the new taxable bond market which would be oriented primarily toward pension fund investors, and the Urbank — the typical financing procedure would be for a state or local government to ask underwriters for bids on both a taxable and a non-taxable basis, or some combination of the two.

In addition, if the project is eligible for Urbank financing, that option could also be entered into the calculations, with the state or local government accepting the option which offers the lowest interest cost. With this sort of financial flexibility, state and local governments ought to be able to obtain an adequate share of the national credit pool in the 1970's. In the process, they are likely to find that, with their dependence on commercial banks greatly reduced, state and local governments will be much less vulnerable to cyclical tides in the availability of money than they have been in the past.

In our judgment, barring a radical change in the mix of fiscal and monetary policies, the present, very narrow municipal bond market will only serve state and local governments tolerably well in the 70's if, contrary to expectations, the decade turns out to be one of chronic economic stagnation. Unfortunately for state and local

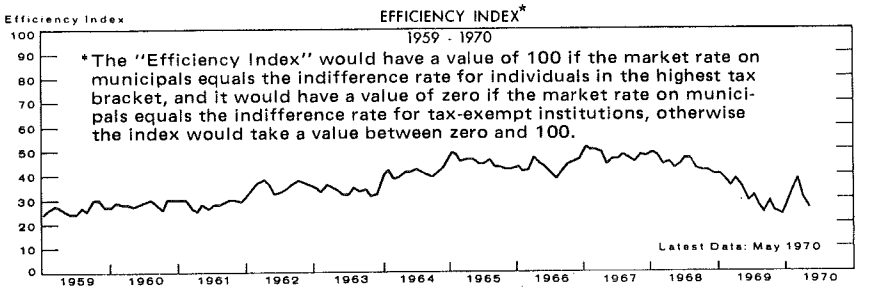
governments, at least in their capacity as sellers of bonds, this is not the sort of economic outlook for the 1970's to which many economists would attribute a very high probability – and it is not the sort of outlook that the American people or their political leaders are likely to accept.

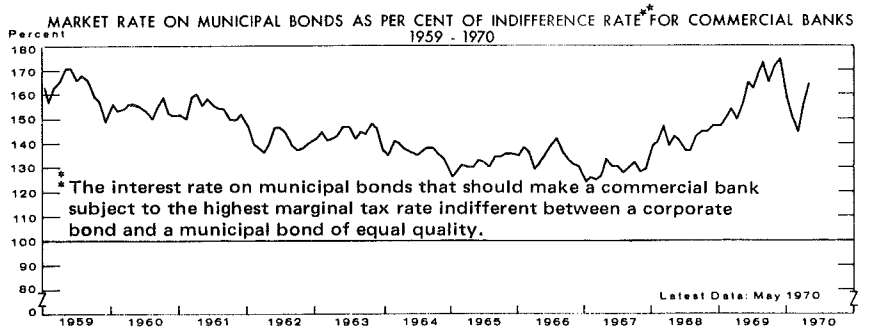




Calculations done by Research Department, Federal Reserve Bank of Boston, based upon Bond Buyer Index, Moody's Index of Aa Corporate Bonds and maximum tax rates for individuals and corporations.

Prepared by: Charting Section, Research Department, Federal Reserve Bank of Boston





Calculations done by Research Department, Federal Reserve Bank of Boston, based upon Bond Buyer Index, Moody's Index of Aa Corporate Bonds and maximum tax rates for individuals and corporations.

Prepared by: Charting Section, Research Department, Federal Reserve Bank of Boston

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for Highest Tax Bracket		Indifference Rates for Tax-Exempt Institutions	Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1945									
Jan.	1.62%	2.76%	.94	.38	.17%	1.80%	2.87%	46%	90%
Feb.	1.53	2.73	.94	.38	.17	1.76	2.84	49	87
Mar.	1.46	2.72	.94	.38	.17	1.75	2.83	52	83
Apr.	1.38	2.73	.94	.38	.17	1.76	2.84	55	78
May	1.35	2.72	.94	.38	.17	1.75	2.83	56	77
June	1.43	2.69	.94	.38	.17	1.73	2.80	52	83
July	1.40	2.68	.94	.38	.17	1.73	2.79	53	81
Aug.	1.46	2.70	.94	.38	.17	1.74	2.81	51	84
Sep.	1.64	2.70	.94	.38	.17	1.74	2.81	44	94
Oct.	1.72	2.70	.94	.38	.17	1.74	2.81	41	99
Nov.	1.56	2.68	.94	.38	.17	1.73	2.79	47	90
Dec.	1.51	2.68	.94	.38	.17	1.73	2.79	49	87
1946									
Jan.	1.34	2.62	.8645	.38	.37	1.69	2.72	59	79
Feb.	1.30	2.56	.8645	.38	.36	1.65	2.66	59	78
Mar.	1.29	2.54	.8645	.38	.36	1.64	2.64	59	78
Apr.	1.30	2.56	.8645	.38	.36	1.65	2.66	59	78
May	1.37	2.58	.8645	.38	.36	1.66	2.68	56	82
June	1.39	2.59	.8645	.38	.36	1.67	2.69	56	83
July	1.47	2.59	.8645	.38	.36	1.67	2.69	52	88
Aug.	1.54	2.62	.8645	.38	.37	1.69	2.72	50	91
Sep.	1.65	2.68	.8645	.38	.38	1.73	2.79	47	95
Oct.	1.71	2.70	.8645	.38	.38	1.74	2.81	45	98
Nov.	1.69	2.69	.8645	.38	.38	1.73	2.80	46	97
Dec.	1.90	2.69	.8645	.38	.38	1.73	2.80	37	109
1947									
Jan.	1.81	2.65	.8645	.38	.37	1.71	2.76	40	105
Feb.	1.90	2.64	.8645	.38	.37	1.70	2.75	36	111
Mar.	1.95	2.64	.8645	.38	.37	1.70	2.75	34	114
Apr.	1.90	2.63	.8645	.38	.37	1.70	2.74	35	111
May	1.85	2.63	.8645	.38	.37	1.70	2.74	38	108
June	1.83	2.64	.8645	.38	.37	1.70	2.75	39	107
July	1.81	2.64	.8645	.38	.37	1.70	2.75	39	106
Aug.	1.83	2.64	.8645	.38	.37	1.70	2.75	39	107
Sep.	1.82	2.69	.8645	.38	.38	1.73	2.80	40	105
Oct.	1.90	2.79	.8645	.38	.39	1.80	2.90	40	105
Nov.	2.06	2.85	.8645	.38	.40	1.84	2.96	35	111
Dec.	2.24	2.94	.8645	.38	.41	1.90	3.06	31	117

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for Highest Tax Bracket		Indifference Rates for Tax-Exempt Institutions	Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1948									
Jan.	2.37%	2.94%	.821275	.38	.55%	1.90%	3.06%	27%	124%
Feb.	2.47	2.93	.821275	.38	.54	1.89	3.05	23	130
Mar.	2.45	2.90	.821275	.38	.54	1.87	3.02	23	131
Apr.	2.37	2.87	.821275	.38	.53	1.85	2.98	25	128
May	2.31	2.86	.821275	.38	.53	1.84	2.97	27	125
June	2.24	2.85	.821275	.38	.53	1.84	2.96	30	121
July	2.27	2.89	.821275	.38	.54	1.86	3.01	30	122
Aug.	2.37	2.94	.821275	.38	.55	1.90	3.06	27	124
Sep.	2.41	2.93	.821275	.38	.54	1.89	3.05	25	127
Oct.	2.42	2.94	.821275	.38	.55	1.90	3.06	25	127
Nov.	2.38	2.92	.821275	.38	.54	1.88	3.04	26	126
Dec.	2.26	2.88	.821275	.38	.54	1.86	3.00	30	121
1949									
Jan.	2.16	2.81	.821275	.38	.52	1.81	2.92	32	119
Feb.	2.20	2.80	.821275	.38	.52	1.81	2.91	30	121
Mar.	2.18	2.79	.821275	.38	.52	1.80	2.90	30	121
Apr.	2.15	2.79	.821275	.38	.52	1.80	2.90	32	119
May	2.14	2.78	.821275	.38	.52	1.79	2.89	32	119
June	2.20	2.78	.821275	.38	.52	1.79	2.89	29	122
July	2.16	2.75	.821275	.38	.51	1.77	2.86	30	122
Aug.	2.12	2.71	.821275	.38	.50	1.75	2.82	30	121
Sep.	2.14	2.69	.821275	.38	.50	1.73	2.80	29	123
Oct.	2.16	2.70	.821275	.38	.50	1.74	2.81	28	124
Nov.	2.12	2.68	.821275	.38	.50	1.72	2.79	29	123
Dec.	2.09	2.67	.821275	.38	.50	1.72	2.78	30	121
1950									
Jan.	2.06	2.65	.84357	.42	.43	1.60	2.76	30	128
Feb.	2.03	2.65	.84357	.42	.43	1.60	2.76	31	126
Mar.	2.01	2.66	.84357	.42	.43	1.60	2.77	32	125
Apr.	2.03	2.66	.84357	.42	.43	1.60	2.77	32	126
May	2.00	2.69	.84357	.42	.44	1.62	2.80	34	123
June	1.99	2.69	.84357	.42	.44	1.62	2.80	34	122
July	2.01	2.72	.84357	.42	.44	1.64	2.83	34	122
Aug.	1.83	2.67	.84357	.42	.43	1.61	2.78	40	113
Sep.	1.84	2.71	.84357	.42	.44	1.63	2.82	41	112
Oct.	1.79	2.72	.84357	.42	.44	1.64	2.83	44	109
Nov.	1.74	2.72	.84357	.42	.44	1.64	2.83	46	106
Dec.	1.72	2.72	.84357	.42	.44	1.64	2.83	46	104

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

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	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1951									
Jan.	1.61%	2.71%	.91	.5075	.25%	1.39%	2.82%	47%	115%
Feb.	1.59	2.71	.91	.5075	.25	1.39	2.82	48	114
Mar.	1.74	2.82	.91	.5075	.26	1.44	2.93	45	120
Apr.	1.95	2.93	.91	.5075	.27	1.50	3.05	40	130
May	2.00	2.93	.91	.5075	.27	1.50	3.05	38	133
June	2.19	2.99	.91	.5075	.28	1.53	3.11	33	143
July	2.15	2.99	.91	.5075	.28	1.53	3.11	34	140
Aug.	2.02	2.92	.91	.5075	.27	1.50	3.04	37	134
Sep.	2.01	2.88	.91	.5075	.27	1.48	3.00	36	135
Oct.	2.06	2.93	.91	.5075	.27	1.50	3.05	36	137
Nov.	2.05	3.02	.91	.5075	.28	1.55	3.14	38	132
Dec.	2.09	3.06	.91	.5075	.29	1.57	3.18	38	133
1952									
Jan.	2.09	3.05	.92	.52	.25	1.52	3.17	37	137
Feb.	2.07	3.01	.92	.52	.25	1.50	3.13	37	138
Mar.	2.09	3.03	.92	.52	.25	1.51	3.15	37	138
Apr.	2.04	3.01	.92	.52	.25	1.50	3.13	38	136
May	2.06	3.00	.92	.52	.25	1.50	3.12	37	137
June	2.13	3.03	.92	.52	.25	1.51	3.15	35	141
July	2.15	3.04	.92	.52	.25	1.52	3.16	35	141
Aug.	2.24	3.06	.92	.52	.25	1.53	3.18	32	146
Sep.	2.31	3.07	.92	.52	.26	1.53	3.19	30	150
Oct.	2.38	3.08	.92	.52	.26	1.54	3.20	28	154
Nov.	2.38	3.06	.92	.52	.25	1.53	3.18	27	155
Dec.	2.38	3.05	.92	.52	.25	1.52	3.17	27	156
1953									
Jan.	2.43	3.09	.92	.52	.26	1.54	3.21	26	157
Feb.	2.55	3.14	.92	.52	.26	1.57	3.27	24	162
Mar.	2.65	3.13	.92	.52	.26	1.56	3.26	20	169
Apr.	2.65	3.29	.92	.52	.27	1.64	3.42	24	161
May	2.78	3.41	.92	.52	.28	1.70	3.55	24	165
June	2.99	3.50	.92	.52	.29	1.75	3.64	19	170
July	2.98	3.42	.92	.52	.28	1.71	3.56	18	174
Aug.	2.91	3.39	.92	.52	.28	1.69	3.53	19	172
Sep.	2.90	3.43	.92	.52	.29	1.71	3.57	20	169
Oct.	2.75	3.33	.92	.52	.28	1.66	3.46	22	165
Nov.	2.62	3.27	.92	.52	.27	1.63	3.40	25	160
Dec.	2.60	3.28	.92	.52	.27	1.64	3.41	26	158

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

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	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1954									
Jan.	2.50%	3.22%	.91	.52	.30%	1.61%	3.35%	28%	155%
Feb.	2.42	3.12	.91	.52	.29	1.56	3.24	28	155
Mar.	2.40	3.03	.91	.52	.28	1.51	3.15	26	158
Apr.	2.47	3.00	.91	.52	.28	1.50	3.12	23	164
May	2.50	3.03	.91	.52	.28	1.51	3.15	23	165
June	2.48	3.06	.91	.52	.29	1.53	3.18	24	162
July	2.32	3.04	.91	.52	.28	1.52	3.16	29	152
Aug.	2.26	3.03	.91	.52	.28	1.51	3.15	31	149
Sep.	2.31	3.04	.91	.52	.28	1.52	3.16	30	151
Oct.	2.34	3.04	.91	.52	.28	1.52	3.16	28	153
Nov.	2.32	3.04	.91	.52	.28	1.52	3.16	29	152
Dec.	2.36	3.04	.91	.52	.28	1.52	3.16	28	155
1955									
Jan.	2.40	3.06	.91	.52	.29	1.53	3.18	27	156
Feb.	2.44	3.10	.91	.52	.29	1.55	3.22	27	157
Mar.	2.44	3.13	.91	.52	.29	1.56	3.26	28	156
Apr.	2.41	3.13	.91	.52	.29	1.56	3.26	29	154
May	2.38	3.15	.91	.52	.29	1.57	3.28	30	151
June	2.41	3.14	.91	.52	.29	1.57	3.27	29	153
July	2.54	3.14	.91	.52	.29	1.57	3.27	24	161
Aug.	2.60	3.20	.91	.52	.30	1.60	3.33	24	162
Sep.	2.58	3.22	.91	.52	.30	1.61	3.35	25	160
Oct.	2.51	3.19	.91	.52	.30	1.59	3.32	27	157
Nov.	2.46	3.18	.91	.52	.30	1.59	3.31	28	154
Dec.	2.57	3.22	.91	.52	.30	1.61	3.35	26	159
1956									
Jan.	2.51	3.19	.91	.52	.30	1.59	3.32	27	158
Feb.	2.44	3.16	.91	.52	.30	1.58	3.29	28	154
Mar.	2.57	3.13	.91	.52	.29	1.56	3.26	23	165
Apr.	2.71	3.30	.91	.52	.31	1.65	3.43	23	164
May	2.68	3.34	.91	.52	.31	1.67	3.47	25	160
June	2.55	3.35	.91	.52	.31	1.67	3.48	29	153
July	2.65	3.39	.91	.52	.32	1.70	3.53	27	156
Aug.	2.80	3.50	.91	.52	.33	1.75	3.64	25	160
Sep.	2.94	3.63	.91	.52	.34	1.81	3.78	24	162
Oct.	2.95	3.69	.91	.52	.35	1.84	3.84	26	160
Nov.	3.16	3.76	.91	.52	.35	1.88	3.91	21	168
Dec.	3.22	3.85	.91	.52	.36	1.92	4.00	21	168

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for Highest Tax Bracket		Indifference Rates for Tax-Exempt Institutions	Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1957									
Jan.	3.18%	3.89%	.91	.52	.36%	1.94%	4.05%	24%	163%
Feb.	3.01	3.83	.91	.52	.36	1.91	3.98	27	157
Mar.	3.10	3.80	.91	.52	.36	1.90	3.95	24	163
Apr.	3.13	3.79	.91	.52	.35	1.89	3.94	23	165
May	3.27	3.83	.91	.52	.36	1.91	3.98	20	171
June	3.41	3.98	.91	.52	.37	1.99	4.14	19	171
July	3.40	4.10	.91	.52	.38	2.04	4.26	22	166
Aug.	3.54	4.21	.91	.52	.39	2.10	4.38	21	168
Sep.	3.54	4.26	.91	.52	.40	2.13	4.43	22	166
Oct.	3.42	4.28	.91	.52	.40	2.14	4.45	25	159
Nov.	3.37	4.29	.91	.52	.40	2.14	4.46	27	157
Dec.	3.04	4.08	.91	.52	.38	2.04	4.24	31	149
1958									
Jan.	2.91	3.81	.91	.52	.36	1.90	3.96	29	155
Feb.	3.02	3.77	.91	.52	.35	1.88	3.92	25	161
Mar.	3.07	3.78	.91	.52	.35	1.89	3.93	24	162
Apr.	2.97	3.78	.91	.52	.35	1.89	3.93	27	157
May	2.92	3.78	.91	.52	.35	1.89	3.93	28	154
June	2.97	3.78	.91	.52	.35	1.89	3.93	27	157
July	3.09	3.83	.91	.52	.36	1.91	3.98	25	161
Aug.	3.36	3.98	.91	.52	.37	1.99	4.14	21	168
Sep.	3.54	4.20	.91	.52	.39	2.10	4.37	21	168
Oct.	3.45	4.21	.91	.52	.39	2.10	4.38	23	164
Nov.	3.32	4.21	.91	.52	.39	2.10	4.38	27	158
Dec.	3.34	4.18	.91	.52	.39	2.09	4.35	26	159
1959									
Jan.	3.42	4.22	.91	.52	.39	2.11	4.39	24	162
Feb.	3.36	4.24	.91	.52	.40	2.12	4.41	26	158
Mar.	3.30	4.23	.91	.52	.40	2.11	4.40	28	156
Apr.	3.39	4.32	.91	.52	.40	2.16	4.49	27	156
May	3.58	4.46	.91	.52	.42	2.23	4.64	25	160
June	3.72	4.56	.91	.52	.43	2.28	4.74	24	163
July	3.71	4.58	.91	.52	.43	2.28	4.76	24	162
Aug.	3.58	4.58	.91	.52	.43	2.28	4.76	27	157
Sep.	3.78	4.69	.91	.52	.44	2.34	4.88	25	161
Oct.	3.62	4.76	.91	.52	.45	2.38	4.95	30	152
Nov.	3.55	4.70	.91	.52	.44	2.35	4.89	30	151
Dec.	3.70	4.74	.91	.52	.44	2.36	4.92	27	156

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for Highest Tax Bracket		Indifference Rates for Tax-Exempt Institutions	Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1960									
Jan.	3.72%	4.77%	.91	.52	.45%	2.38%	4.96%	27%	156%
Feb.	3.60	4.71	.91	.52	.44	2.35	4.90	29	153
Mar.	3.56	4.62	.91	.52	.43	2.30	4.80	28	154
Apr.	3.56	4.58	.91	.52	.43	2.28	4.76	28	156
May	3.61	4.61	.91	.52	.43	2.30	4.79	27	156
June	3.55	4.60	.91	.52	.43	2.29	4.78	28	155
July	3.51	4.56	.91	.52	.43	2.28	4.74	29	153
Aug.	3.34	4.44	.91	.52	.42	2.22	4.62	30	150
Sep.	3.42	4.41	.91	.52	.41	2.20	4.59	28	155
Oct.	3.53	4.44	.91	.52	.42	2.22	4.62	26	159
Nov.	3.40	4.47	.91	.52	.42	2.23	4.65	30	152
Dec.	3.40	4.50	.91	.52	.42	2.25	4.68	30	151
1961									
Jan.	3.40	4.48	.91	.52	.42	2.24	4.66	30	151
Feb.	3.31	4.40	.91	.52	.41	2.20	4.58	30	150
Mar.	3.45	4.33	.91	.52	.41	2.16	4.50	26	159
Apr.	3.50	4.37	.91	.52	.41	2.18	4.54	25	160
May	3.43	4.41	.91	.52	.41	2.20	4.59	28	155
June	3.52	4.45	.91	.52	.42	2.22	4.63	26	158
July	3.52	4.53	.91	.52	.42	2.26	4.71	28	155
Aug.	3.52	4.57	.91	.52	.43	2.28	4.75	28	154
Sep.	3.53	4.59	.91	.52	.43	2.29	4.77	29	154
Oct.	3.43	4.56	.91	.52	.43	2.28	4.74	30	150
Nov.	3.41	4.54	.91	.52	.42	2.27	4.72	30	150
Dec.	3.47	4.56	.91	.52	.43	2.28	4.74	29	152
1962									
Jan.	3.34	4.55	.91	.52	.43	2.27	4.73	32	147
Feb.	3.21	4.56	.91	.52	.43	2.28	4.74	35	140
Mar.	3.14	4.53	.91	.52	.42	2.26	4.71	37	138
Apr.	3.06	4.49	.91	.52	.42	2.24	4.67	38	136
May	3.11	4.43	.91	.52	.41	2.21	4.61	36	140
June	3.26	4.44	.91	.52	.42	2.22	4.62	32	146
July	3.28	4.49	.91	.52	.42	2.24	4.67	33	146
Aug.	3.23	4.49	.91	.52	.42	2.24	4.67	34	144
Sep.	3.11	4.46	.91	.52	.42	2.23	4.64	36	139
Oct.	3.02	4.41	.91	.52	.41	2.20	4.59	38	137
Nov.	3.04	4.40	.91	.52	.41	2.20	4.58	37	138
Dec.	3.07	4.38	.91	.52	.41	2.19	4.56	36	140

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for			Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
					Highest Tax Bracket				
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations	Tax-Exempt Institutions		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1963									
Jan.	3.10%	4.37%	.91	.52	.41%	2.18%	4.54%	35%	142%
Feb.	3.15	4.36	.91	.52	.41	2.17	4.53	33	145
Mar.	3.05	4.34	.91	.52	.41	2.16	4.51	36	141
Apr.	3.10	4.35	.91	.52	.41	2.17	4.52	35	142
May	3.11	4.36	.91	.52	.41	2.17	4.53	34	143
June	3.21	4.36	.91	.52	.41	2.17	4.53	32	147
July	3.22	4.39	.91	.52	.41	2.19	4.57	32	147
Aug.	3.13	4.40	.91	.52	.41	2.20	4.58	35	142
Sep.	3.20	4.41	.91	.52	.41	2.20	4.59	33	145
Oct.	3.20	4.43	.91	.52	.41	2.21	4.61	34	144
Nov.	3.30	4.44	.91	.52	.42	2.22	4.62	31	148
Dec.	3.27	4.46	.91	.52	.42	2.23	4.64	32	146
1964									
Jan.	3.22	4.49	.77	.50	1.07	2.34	4.67	40	137
Feb.	3.14	4.46	.77	.50	1.07	2.32	4.64	42	135
Mar.	3.29	4.47	.77	.50	1.07	2.33	4.65	38	141
Apr.	3.28	4.49	.77	.50	1.07	2.34	4.67	39	140
May	3.21	4.50	.77	.50	1.08	2.34	4.68	41	137
June	3.20	4.51	.77	.50	1.08	2.34	4.69	41	136
July	3.18	4.50	.77	.50	1.08	2.34	4.68	42	135
Aug.	3.19	4.49	.77	.50	1.07	2.34	4.67	41	136
Sep.	3.23	4.48	.77	.50	1.07	2.33	4.66	40	138
Oct.	3.25	4.49	.77	.50	1.07	2.34	4.67	39	138
Nov.	3.18	4.49	.77	.50	1.07	2.34	4.67	41	135
Dec.	3.13	4.50	.77	.50	1.08	2.34	4.68	43	133
1965									
Jan.	3.06	4.48	.70	.48	1.40	2.42	4.66	49	126
Feb.	3.09	4.46	.70	.48	1.39	2.41	4.64	48	128
Mar.	3.18	4.48	.70	.48	1.40	2.42	4.66	45	131
Apr.	3.15	4.48	.70	.48	1.40	2.42	4.66	46	130
May	3.17	4.49	.70	.48	1.40	2.43	4.67	46	130
June	3.25	4.52	.70	.48	1.41	2.44	4.70	44	133
July	3.27	4.56	.70	.48	1.42	2.46	4.74	44	132
Aug.	3.24	4.59	.70	.48	1.43	2.48	4.77	46	130
Sep.	3.35	4.63	.70	.48	1.44	2.50	4.81	43	134
Oct.	3.40	4.66	.70	.48	1.45	2.52	4.85	43	134
Nov.	3.46	4.69	.70	.48	1.46	2.54	4.88	42	136
Dec.	3.54	4.80	.70	.48	1.50	2.59	4.99	42	136

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for Highest Tax Bracket		Indifference Rates for Tax-Exempt Institutions	Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1966									
Jan.	3.52%	4.83%	.70	.48	1.51%	2.61%	5.02%	43%	135%
Feb.	3.65	4.90	.70	.48	1.53	2.65	5.10	41	138
Mar.	3.72	5.05	.70	.48	1.58	2.73	5.25	42	136
Apr.	3.56	5.10	.70	.48	1.59	2.76	5.30	47	129
May	3.65	5.10	.70	.48	1.59	2.76	5.30	44	132
June	3.77	5.16	.70	.48	1.61	2.79	5.37	43	135
July	3.95	5.25	.70	.48	1.64	2.84	5.46	40	139
Aug.	4.12	5.38	.70	.48	1.68	2.91	5.60	38	142
Sep.	4.12	5.58	.70	.48	1.74	3.02	5.80	41	136
Oct.	3.96	5.50	.70	.48	1.72	2.97	5.72	44	133
Nov.	3.87	5.46	.70	.48	1.70	2.95	5.68	45	131
Dec.	3.86	5.48	.70	.48	1.71	2.96	5.70	46	130
1967									
Jan.	3.55	5.30	.70	.48	1.65	2.87	5.51	51	124
Feb.	3.52	5.18	.70	.48	1.62	2.80	5.39	50	126
Mar.	3.55	5.23	.70	.48	1.63	2.83	5.44	50	125
Apr.	3.60	5.26	.70	.48	1.64	2.84	5.47	49	127
May	3.89	5.42	.70	.48	1.69	2.93	5.64	44	133
June	3.96	5.63	.70	.48	1.76	3.05	5.86	46	130
July	4.02	5.72	.70	.48	1.78	3.09	5.95	46	130
Aug.	3.99	5.76	.70	.48	1.80	3.11	5.99	48	128
Sep.	4.12	5.87	.70	.48	1.83	3.17	6.10	46	130
Oct.	4.29	6.01	.70	.48	1.88	3.25	6.25	45	132
Nov.	4.32	6.23	.70	.48	1.94	3.37	6.48	48	128
Dec.	4.43	6.35	.70	.48	1.98	3.43	6.60	47	129
1968									
Jan.	4.29	6.29	.70	.528	1.96	3.09	6.54	49	139
Feb.	4.31	6.27	.70	.528	1.96	3.08	6.52	48	140
Mar.	4.54	6.28	.70	.528	1.96	3.08	6.53	44	147
Apr.	4.34	6.38	.77	.528	1.53	3.13	6.64	45	139
May	4.54	6.48	.77	.528	1.55	3.18	6.74	42	143
June	4.49	6.50	.77	.528	1.55	3.19	6.76	44	141
July	4.33	6.45	.77	.528	1.54	3.17	6.71	46	137
Aug.	4.21	6.25	.77	.528	1.50	3.07	6.50	46	137
Sep.	4.38	6.23	.77	.528	1.49	3.06	6.48	42	143
Oct.	4.49	6.32	.77	.528	1.51	3.10	6.57	41	145
Nov.	4.60	6.45	.77	.528	1.54	3.17	6.71	41	145
Dec.	4.82	6.66	.77	.528	1.59	3.27	6.93	40	147

PERFORMANCE MEASURES OF THE MUNICIPAL BOND MARKET, 1945-70

Date	Bond Yield Indexes		Highest Marginal Tax Rates		Indifference Rates for			Efficiency Index	Market Rate as % of Indifference Rate for Commercial Banks
					Highest Tax Bracket		Tax-Exempt Institutions		
	Municipals	Corporates	Individuals	Corporations	Individuals	Corporations			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1969									
Jan.	4.85%	6.73%	.77	.528	1.61%	3.30%	7.00%	40%	147%
Feb.	4.98	6.77	.77	.528	1.62	3.32	7.04	38	150
Mar.	5.26	6.95	.77	.528	1.66	3.41	7.23	35	154
Apr.	5.19	7.02	.77	.528	1.68	3.45	7.30	38	150
May	5.33	6.96	.77	.528	1.66	3.42	7.24	34	156
June	5.76	7.12	.77	.528	1.70	3.49	7.40	29	165
July	5.75	7.24	.77	.528	1.73	3.55	7.53	31	162
Aug.	5.98	7.23	.77	.528	1.73	3.55	7.52	27	168
Sep.	6.26	7.36	.77	.528	1.76	3.61	7.65	24	173
Oct.	6.09	7.53	.77	.528	1.80	3.70	7.83	29	165
Nov.	6.35	7.58	.77	.528	1.81	3.72	7.88	25	171
Dec.	6.82	7.93	.77	.528	1.90	3.89	8.25	23	175
1970									
Jan.	6.65	8.15	.735	.504	2.25	4.21	8.48	29	158
Feb.	6.36	8.13	.735	.504	2.24	4.20	8.46	34	151
Mar.	6.03	8.06	.735	.504	2.22	4.16	8.38	38	145
Apr.	6.49	8.03	.735	.504	2.21	4.14	8.35	30	157
May	6.96	8.24	.735	.504	2.27	4.25	8.57	26	164

SOURCES

Column 1: Bond Buyer Index (20 bonds), average level during the month (except for 1945, when the index was only compiled at the beginning of each month): Board of Governors of the Federal Reserve System.

Column 2: Moody's index of yields on Aa (the rating thought to be closest to the quality represented in the Bond Buyer Index) corporate bonds, average level during the month: 1945-63 from Section 12 of *Supplement to Banking and Monetary Statistics,* 1964 – May 1970 from various issues of the *Survey of Current Business.*

Column 3: Maximum marginal tax rate for individuals: 1945-65 from Joseph Pechman, *Federal Tax Policy* (Brookings Institution, 1966), Table A-2 (p. 244); 1965 tax rate prevailed until April 1, 1968 when the 10% surcharge took effect, lasting until January 1, 1970, when the surcharge was reduced to 5%.

Column 4: Maximum marginal tax rate for corporations: 1945-61 from Pechman, *op. cit.,* Table C-15 (p. 289); 1962-65 from *Statistics of Income. . .1965, Corporation Income Tax Returns* (U.S. Department of the Treasury, Internal Revenue Service), p. 7; 1965 tax rate prevailed until January 1, 1968, when the 10% surcharge went into effect, lasting until January 1, 1970, when the surcharge was reduced to 5%.

Column 5: The interest rate on municipal bonds that should make an individual investor in the highest tax bracket indifferent between a corporate bond and a municipal bond of equal quality. Calculated by raising the after-tax yield on Aa corporate bonds by 4%, to take into account the greater liquidity of corporate bonds. That is: (1.04) *times* (Column 2 *multiplied by* (one *minus* Column 3)).

Column 6: The interest rate on municipal bonds that should make a corporate investor subject to the highest marginal tax rate indifferent between a corporate bond and a municipal bond of equal quality. Calculated the same was as Column 5, only using the maximum corporate tax rate, rather than the maximum individual tax rate. That is: (1.04) *times* (Column 2 *multiplied by* (one *minus* Column 4)).

Column 7: The interest rate on municipal bonds that should make a tax-exempt institutional investor indifferent between a municipal bond and a corporate bond of equal quality. Calculated by raising the rate on Aa corporate bonds (Column 2) by 4%, to adjust for their greater liquidity.

Column 8: An indicator of the relative efficiency of the tax-exemption feature of municipal bonds. The index would have a value of 100 if the market rate on municipals equalled the indifference rate for individual investors in the highest tax bracket, and it would have a value of zero if the market rate on municipals equalled the indifference rate for tax-exempt institutions, and otherwise the index takes on a

value between zero and 100. Calculated as follows: (the indifference rate for tax-exempt institutions [Column 7] *minus* the market rate on municipals [Column 1]) *divided by* (the indifference rate for tax-exempt institutions [Column 7] *minus* the indifference rate for individuals in the highest tax bracket [Column 5]); the result is then multiplied by 100 to put the series in percentage terms.

Column 9: Calculated as (Column 1) *divided by* (Column 6), and multiplied by 100. This is for commercial banks subject to the highest marginal tax rate.

Calculations for the series in Columns 5 through 9 were done by the Research Department, Federal Reserve Bank of Boston.

DISCUSSION

ARTHUR LEVITT

I want to compliment our host for having arranged this symposium on state and local financing. It is a vital and critical subject these days and therefore deserves broad attention. Many of our individual responsibilities start in our community and in our state. Many of our unfilled domestic needs can only be met at the local level. Many of our social programs can only succeed if they are strongly supported by state and local governments. In most instances these obligations and responsibilities can only be fulfilled through financial support of some kind, either through taxes or borrowings.

As Comptroller of the State of New York, I am deeply concerned with the burden our citizens are asked to shoulder. Our latest budget showed $6.5 billion in tax revenues and $7.2 billion in expenditures. The general obligations of the State of New York now total about $3.5 billion dollars which include bond anticipation notes of $700 million dollars, tax anticipation notes of one billion dollars, and bonds of $1.8 billion dollars. The issues of public authorities increase at the rate of a billion dollars a year and now total about $7 billion dollars.

Consequently, I am sympathetic to any proposal that will enable the State of New York to enhance its market financing efficiency. I have no preconceived notions that any new financing proposal be either through the tax-exempt or taxable route. I join in the search for an alternative solution. I do, however, feel that it must meet several prerequisites. Any new financing proposal should help to lighten the burden of our taxpayers. It should also improve the underwriting, distribution and secondary market for our issues.

Professor Surrey is indeed well qualified to present the argument for ending Federal income tax exemption of state and local bonds. During the past 10 years he has been the most articulate and persistent critic of this exemption.

In his paper, he quotes the House Ways and Means Committee, the Senate Finance Committee and the Treasury, but I suspect that practically all of their statements are taken from or stem back to Mr.

Mr. Levitt is Comptroller, State of New York.

Surrey's prolific writings and testimony on the subject.

The argument which he and Mr. Morris have presented relies upon the formula that as the volume of state and local borrowing rises, the saving in interest costs to those governments *declines* in relation to the assumed alternative cost of borrowing in taxable form, while the loss of potential income tax revenue to the U. S. Treasury *increases* with the growing value of tax exemption to the investors who buy municipal bonds. Thus, they contend, the Federal Government subsidizes state and local governments by the amount that the Federal Government's revenue loss exceeds the interest savings obtained by state and local governments through tax-exempt borrowing.

I question whether the 1969-70 slippage in interest savings realized by tax-exempt borrowing is attributable only to the growth of the capital requirements of the states and their municipalities. I suggest that some significant part of this slippage was caused by the attempts to erode the value of exemption in the 1969 income tax reform bill.

I am not convinced that the issuance of subsidized taxable bonds, as reviewed by Mr. Surrey in his paper and proposed by him and others several years ago, will actually improve the financing position of state and local governments. I doubt whether such bonds will lighten the burden of the taxpayer or, in fact, facilitate a substantial volume of municipal financing. Indeed, I am not alone with these feelings.

Last year, when credit markets were tight and many municipalities found it difficult to borrow in the open market, Congress had under consideration a bill approving the issuance of taxable municipal bonds but decided not to approve such a proposal. The primary reason for the inaction by Congress was that the beneficiaries of the bill — the state and local governments — were opposed and made their views known. It was the state governors, the mayors, and other local officials who convinced Congress that this was not in the interest of municipalities. It is rather strange to see others say to the overwhelming number of municipal borrowers who opposed the issuance of taxable municipal bonds, "You don't know what is good for you."

We are told that tax-exempt bonds have a limited investor following while taxable municipal bonds would enjoy a broad institutional investor interest. Presumably, this is because most of the non-bank institutional investors are either tax exempt or are not fully taxable. At first glance, this argument seems to have some

merit. The argument, however, fails the test of the actual trend in our financial markets. Let me briefly focus on the portfolios of the major non-bank institutions.

- I think that we can eliminate from our discussion mutual savings banks and savings and loan associations. They are primarily institutions financing mortgages. Moreover, in periods of tight money, these institutions are themselves disintermediated and therefore at that time would be of no help in the financing of state and local governments.
- Corporate pension funds are not committing a large percentage of their net new funds into fixed income obligations. In 1969, these funds invested 86 percent of their $6 billion of net new money in equities. Thus only $1 billion went into fixed income obligations.
- Public retirement systems are also increasing their net new investments in stocks and slowing down their purchases of fixed income obligations, which to be sure, continue to be large. In 1969, $2 billion or 35 percent of net new funds flowing into public retirement funds,was invested in stocks as compared with a minimal amount at the start of the 1960's. In addition, portfolio objectivity might well be compromised if public retirement funds were once again to become large investors in municipals.
- Life insurance companies invested much less in fixed income securities than the data suggest. In 1969, they bought net $1.6 billion of stocks. They bought $2 billion of mortgages, many with equity or revenue sharing "kickers." They bought net $1.7 billion of corporate bonds which were largely acquired through private placements and with equity "kickers." State and local governments cannot offer these inducements.
- Mutual funds concentrate their investment activity in stocks and will hardly be attracted to taxable municipals.
- Educational and charitable institutions do not in the aggregate have a significantly large net new inflow of funds to be an important source of funds to municipalities.

Admittedly, during periods of tight money and high interest rates, state and local borrowers experience some difficulties in financing their requirements in the open markets, which deserve to be ameliorated. However, this is not a problem singular to state and local governments. During these periods the availability of funds is

sharply curtailed for mortgage borrowers, small business and consumers. Indeed, I suspect the tax-exempt feature on municipal securities enables state and local governments to successfully withstand some but certainly not all of the credit rationing pressure which these other borrowers are forced to accept. Let me illustrate this by commenting on the portfolio preferences of the largest investors in municipals – the commercial banks and individuals.

How do commercial banks and individuals act in periods of tight money and credit ease? I think all of you will probably agree with me that when there is reasonable price stability in the U. S., adequate funds are available in the banking system to finance the requirements of municipalities. For example, from 1961 through 1965, commercial banks bought net 72 percent of the [net] new municipal bonds offerings. In 1967 and 1968, banks purchased net 95 percent and 81 percent respectively of the new municipal issues. In contrast, in periods of tight money, bank purchases of municipals falls off sharply as, for example, in 1966 and 1969. However, let me point out that municipals were much more strategically situated in the portfolios of the banks during periods of tight money than other investments. In 1966 when the banks bought net almost $2 billion of municipals, they liquidated over $3 billion of U. S. Government issues. In 1969, while banks purchased only about $700 million of municipals, they sold nearly $10 billion of U. S. Governments.

The Market for Tax-Exempts

The argument that banks are "unnatural investors" in tax-exempts is entirely fallacious. Commercial banks are both investors and lenders. While I am not a commercial banker, my dealings with banks clearly show that they have liquidity requirements which can be partly met through investments in tax-exempts. Moreover, banks have a wide range of responsibilities. They certainly should not be regarded or allowed to be merely lenders to business. They have an important stake in the welfare of their community and their state. Banks hold a variety of deposits and make a variety of loans affecting not only the national but, in many instances, the local economy. It is, therefore, natural and, I think, encumbent upon banks to take on active roles in the financing of state and local governments. I continue to remind the banks of this responsibility at every opportunity.

Whether the investor groups named by Mr. Surrey – private

pension trusts, state and local retirement funds and educational institutions – would move aggressively into the municipal taxable bond market is a real question. I do know that prior to the stock market break of 1969 and 1970, privately trusteed pension funds were investing largely in stocks and were openly scornful of bonds. I also know that state and local retirement funds are moving to invest increasing proportions of their funds in equities, in the hope of offsetting the erosion of capital caused by continuing inflation. Furthermore, these public pension funds are under constant pressure to put a high proportion of their funds into mortgages, a form of investment which is well suited to their purposes.

Since the category of investors chosen by Professor Surrey to take up municipal bond issues in taxable form would yield very little in revenues to the Treasury, being themselves exempt from income taxation, the assumption is that taxable investors would take up the presently taxable securities displaced by the newly taxable municipal bonds.

Incidentally, I must challenge the implication that commercial banks should not buy municipal bonds. I contend that bank support of state and municipal projects can be just as important to the economies of their communities as any loans they make to private business borrowers.

Concerning the role of the individual investor in the municipal market, let me first point out that their net purchases in periods of price stability is very small. During 1961-1965 their net purchases averaged only $1.5 billion annually, or 25 percent of the net new municipal bonds. In 1967 and 1968, the net new commitments in municipals by individuals were virtually zero. In contrast, in 1966 and 1969 individuals bought net $2.6 billion and $4.8 billion, respectively. It should be noted that individuals also purchased an unprecedented volume of U. S. Governments, Federal agencies and corporate bonds in both of these years and are continuing to do so this year. Thus, I really doubt that in years in which the institutional supply of funds falls far short of the demands for credit, municipalities could attract an enlarged volume of funds from individual investors by offering a taxable obligation, just as other credit demanders. It seems more likely that the tax-exempt feature is a distinct advantage at such times. As tax-exempt rates move above deposit rates, new investments in tax-exempts broaden to include not only individuals with high but also with moderate means and income. Tax-exemption is the only unique feature which state and local

governments can offer to these investors. There is certainly available to these investors a wide range of taxable instruments of all maturities and quality.

Those who favor the issuance of taxable municipal bonds neglect to focus on the aggressive demanders of taxable money and whether municipalities could really displace them. There are first the demands of our Federal Government and its various agencies. Their combined net market demands totalled $7.1 billion in 1967, $11.5 billion in 1968, and nearly $2 billion in 1969, and according to some unofficial estimates may total $15 billion in 1970. Does anyone really believe that taxable municipal obligations could outbid the U. S. Government?

At the same time, it is also unlikely that taxable municipals could effectively compete with the large and well-rated business corporations for funds. Such a struggle would most likely escalate the level of taxable interest rates which in turn would increase the burden of taxpayers, both directly to service municipal debt and indirectly through higher consumer and mortgage financing costs.

Recent history has clearly shown that most large business corporations do not curtail their external financing because of higher interest rates. It is quite the opposite. There is a direct correlation between the increase in interest rates and the increase in business external financing.

I do not dispute the need for improving the flow of money to state and local governments. The need is critical especially in this period of social unrest. However, I feel that the issuance of taxable municipal bonds is not the most efficient way. Much more fundamental measures should be undertaken to rectify the current imbalances.

Need for a Surplus in Federal Budget

First of all, we should recognize that the problem in today's credit markets cannot be resolved by merely improving the marketability of credit instruments and by transferring local and regional credit demands into national obligations. The problem lies in the alignment of our limited supply of new savings with the burgeoning demands for credit. This alignment is mainly the responsibility of our national policymakers encompassing both the monetary and fiscal arm of our Federal Government and, to a lesser extent, of state and local officials.

A large volume of financial resources would be freed for the financing of state and local governments if our Federal Government would reduce its demands on the credit markets by operating at a substantial budgetary surplus and by reducing the financing demands of its various agencies. Our Federal Government cannot discharge its responsibilities to municipalities by merely subsidizing taxable municipal issues, and at the same time increase its demands for credit thereby raising the level of interest rates through its own budgetary deficits.

My experience with fiscal administration clearly suggests that our people deserve to have priorities clearly contained in the budget of all their governments. In that way a clear evaluation can be made of both the benefits and costs of governmental programs. No less should be asked of our national policy leaders.

I also call upon the Federal Reserve to re-examine its techniques of monetary restraint. It, too, should be aware of the social priorities in our economy when restrictive measures are implemented. I suspect that improved measures of restraint can be formulated which would take these priorities into consideration. In any event, the credit crunch of 1966 and the super crunch of 1969 and 1970 should at a minimum suggest the need for improved monetary techniques.

In summary, adequate financing for state and local governments is a pressing issue. States can do much to maintain their market standing. I, for example, will continue to strive for budgetary practices in New York State that will yield our citizens the highest return for their tax dollar, and for borrowing policies that will maintain the high credit rating of my state.

In the final analysis, however, adequate access to the credit markets for municipalities can only be assured through meaningful national stabilization policies. I call upon the Administration in Washington to shoulder this responsibility squarely and with a deep sense of urgency.

Mr. Morris has produced a very well documented review of the relative experience of state and local governments in the bond market since the war. While his study fully supports Professor Surrey's argument, I want to comment on it separately because Mr. Morris puts his emphasis on the practical problems of financing state and local governments' capital requirements during the "Sad Seventies" rather than on ending tax exemption as a primary goal in itself.

In fact, Mr. Morris would raise the proposed Federal subsidy to the rate of 50 percent of interest paid on municipal debt. They say

every man has his price, and naturally as a state official I am the more attracted by a proposal of substantial additional aid to the state budget.

Nonetheless, I must hold to my position that the acceptance of this kind of Federal aid would — whatever the original intent — inevitably lead to some considerable degree of Federal control over state and local fiscal discretion. In fact, I argue that the greater the proportion of subsidy, the greater the likelihood of Federal control being exercised over the use of that subsidy. As I understand it, this is essentially the situation in Great Britain, where a high proportion of local financing is accomplished through rolling over short-term paper under central government guaranty, and where entry to the long-term bond market is very definitely scheduled only by central government permission.

I do not quarrel with Mr. Morris' statistical observations, although I think his allowance of 4 percent is far too low for what he calls the "liquidity adjustment". He correctly identifies the major cause of this liquidity differential as the use by local governments of serial maturities.

We all appreciate that this is a deterrent to marketability, especially in the secondary trading of bonds after they have been issued, but I believe that it is more than compensated for by the automatic amortization of debt which is accomplished by using serial maturities as opposed to term maturities.

Secondary Market for Municipal Bonds

My bank advisors tell me that, in another sense, the secondary market for municipal bonds is at least as broad as that for corporate bonds and far broader than that for long-term U. S. Treasury bonds. This is so, because hundreds of investment bankers participate in the secondary market for municipal bonds on a local, regional or national basis, whereas the secondary market for corporate bonds in any size is made by half a dozen New York firms specializing in this field.

I am told that as a rule any decent-sized block of municipal bonds which is put out for a bid will attract anywhere from half a dozen to 50 or 60 bids and that this simply is not true in the corporate and especially in the Treasury markets.

A Broader Approach to Credit Control Needed

Mr. Morris hits hard on the argument that the fate of the municipal market is determined very largely by the varying participation of the commercial banks. It is true that in 1969 under a central bank policy of credit restraint the commercial banks were not able to add to their holdings of municipals, and so the state and local governments were denied credit while major business corporations were able to obtain all the credit they needed.

I suggest that the Federal Reserve itself produced this result by so limiting the ability of the commercial banks to attract time deposits that they could not compete for funds; as a result something more than $13 billion flowed out of bank deposits, of which a high proportion went into the commercial paper market where it was employed by major business corporations.

A broader approach to credit control would have assured some continued flow of commercial bank funds into the municipal bond and note market.

Both Professor Surrey and Mr. Morris appear to ignore the fact that if state and local governments should move into the taxable bond market, taxable rates themselves would be driven to higher levels, and this would affect private business and the Treasury as well.

The second concept introduced by Mr. Morris, namely the "indifference rate" for commercial banks, is of course the obverse of his efficiency index for tax-exempt borrowing.

Recent Treatment by IRS

Judging by my recent experience, the indifference rate for commercial banks has been very significantly raised not only by the attacks on exemption of municipal bond interest which we have already discussed, but also by the less favorable treatment of discount amortization on bonds held by banks and finally by the recent vacillation of the Internal Revenue Service in regard to offsetting interest paid by banks against interest on municipal bonds.

Last week, for the State of New York, I had to arrange temporary loans totalling $688 million to be evidenced by notes maturing from two to nine months. For many years the State of New York has relied heavily upon our commercial banks for such temporary loans.

Two weeks ago I was warned that because the Internal Revenue

Service had raised new questions about the interpretation of Code 265 (2), our commercial banks were finding it difficult to appraise the rate of interest which should be required on our State notes. I was warned that unless the uncertainty could be cleared up, I might have to pay "insurance rates" at least ¼ percent higher than would be required for the new underwriting under less complex circumstances.

I took it upon myself to express to the Secretary of the Treasury my urgent hope that a ruling could be issued immediately, which I thought would be a reasonable request since the matter had been under consideration for a long time.

In response, the Treasury tried to be helpful, first by giving oral assurances to the banks and then by issuing a "statement" indicating that no penalties would be assessed for at least a couple of weeks, or until the ruling itself should be ready.

This indication was not satisfactory to the banks, and as a result the State paid at least ¼ of 1 percent, and probably more, in higher interest rates on $688 million of its notes, a not inconsiderable added burden for our taxpayers.

I mention this not in a complaining spirit, but because it is just one more example of the tribulations under which the municipal market has had to function, because of direct and indirect Congressional attacks and Internal Revenue regulations.

Finally, Mr. Morris argues that the voluntary conversion of municipal borrowing to taxable form would so restrict the supply of tax-exempt bonds coming to the market that the cost of borrowing in tax-exempt form would drop to a very low level in relation to taxable rates and thus raise the "efficiency index" to an acceptable percentage. I think it is more likely that the offer of alternative forms of borrowing would tend to equalize the net costs to local governments at whatever rate of subsidy the federal government should choose to pay.

However that may be, I am sure that the present holders of municipal bonds, who have suffered terrible losses — probably averaging 40 percent on bonds issued in the early 1960s — would welcome any measure which would help to restore their capital values. This inevitably would raise the charge that certain taxpayers were obtaining "windfall profits"; and presumably there would be attempts to recapture for the Treasury any profits so realized. The resulting complex regulations and administrative problems would be just another cost of the proposed swingover to subsidized borrowing.

In conclusion, I do not seek to minimize the problems facing state and local governments in financing their capital requirements; it would be foolish to say that they do not exist. However, I do believe that if we could halt the incessant sniping at tax exemption, and if the commercial banks were allowed to compete for funds, the tax-exempt market would continue as an efficient section of our financial structure.