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CHAPTER 5

The Secondary Market for State and Local Government Obligations

THE primary marketing of state and local government securities might be thought of as their sale by the issuing governmental units to the initial investors through the officers of the investment banking community. Secondary marketing, by residual definition, is the sale of such securities by one investor to another investor, usually through the intermediary services of a security dealer. Secondary markets arise out of the fact that borrowers generally need longer undisturbed use of funds than investors, on the average, are willing or able to grant.

ECONOMIC FUNCTION OF SECONDARY MARKET

The principal economic function of a secondary market in securities thus is to reconcile the needs of investors with the needs of borrowers. Borrowers need to have funds available to them for the long periods of time that are required for most capital expenditures projects. Repayment of debt is generally scheduled in such a way as to fit the expected revenues of the borrowing governmental units. While the maturities of debts may embrace a period of time less than the life of the capital projects they finance—the standards of conservative business finance—these maturities may be spaced out so as to allow some margin in the coverage of debt service, figured on the basis of cash flows.

Some investors—life insurance companies are classic examples—can wait for ultimate repayment without worrying about access to the funds they have invested. But this situation is far from usual. The principal investors in state and local government securities have, almost without exception, potential need for access to the funds they invest before the ultimate maturity of the securities they have purchased. Individuals, as we pointed out in Chapter 3, are the leading buyers of such obligations. Individual life and fortune are subject to many unpredictable hazards. An elderly investor may find tax-exempt bonds to be an excellent outlet for his funds because of his particular tax status. But if he dies unexpectedly, or

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even if his only misfortune is that of suffering reverses with his other investments, his holdings may have to be sold. When individual ownership is through the vehicle of a trust, with a life interest for one person and a remainderman's interest for another, tax-exempt obligations may be prudent for the life estate but serve no investment purpose for the remainderman. The period of the life estate cannot be forecast; it is as uncertain as life itself.

Commercial banks take an understandable interest in the marketability of the securities in their portfolios. Commercial banks' loans and other needs for funds are quite unpredictable, as recent experience has demonstrated. A commercial bank may find it quite expedient to sell off investments well in advance of maturity, if it can do this without excessive cost or losses. Fire and casualty insurance company investments represent, to some extent at least, reserves against contingencies of underwriting hazards; marketability on short notice is, therefore, an important consideration to them. Casualty companies are particularly concerned, since they appear to suffer considerable variations in their underwriting experience. Thus all the leading investors in state and local government securities have an interest in the existence of a good secondary market for their securities.

But what is a "good" secondary market? Is it a large one, i.e., one in which the volume of transactions is considerable? Is it one in which there is "reasonable equality of opportunity," i.e., one in which all kinds of securities can be handled? Is the quality of a secondary market a function of price, i.e., one in which a fairly large volume of securities can be offered without a sharp effect on price? Is it one in which the costs of marketing, the margins taken by the marketing intermediaries, are reasonable so that turnover is not prohibitively expensive? Does it have to provide good trading facilities for odd-lot as well as round-lot sales?

Investors have a direct interest in the existence of a secondary market for the state and local government securities they own; borrowers have an indirect or derivative interest. This is particularly true of borrowers who must come to the market repeatedly. After a new issue is out, the investment bankers who marketed it (and other investment bankers, for that matter), the investors who bought the issue, and the borrowers who issued it, all watch the performance of the issue on the secondary market. This interest is avid

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even for investors who do not plan to sell. If a newly issued security "stands up" relatively well—i.e., declines less in price than comparable issues decline or advances more than comparable issues—then each of these interests is pleased. Whenever a borrower comes to the market, the recent performance of his securities in the secondary market foreshadows more closely than any other signal the kind of bids he will get on his new offering.¹ Some issuers attempt to support the secondary market for their securities. The sinking funds maintained by some public bodies are used for this purpose; retirement and pension funds have been used as market support vehicles. The school building authorities in Pennsylvania require rental contracts equal to 120 per cent of debt service, apparently not so much to protect investors as to make possible a secondary market in these obligations.² The 20 per cent is apparently used for such purchases.

Simple logic would raise some doubts as to the effectiveness of such measures, quite apart from their appropriateness. If a public body supports its own securities from its capital funds, it only increases the amount of new money that must be raised later on. While this is true, some investors (and therefore investment bankers) take a kindlier view of new offerings of an issuer where known policy is to support its own obligations in the secondary market. In the end such policies may have the net effect of lowering the borrowing costs of such public bodies; some investment bankers seem to believe that they do have this effect.

ORGANIZATION OF SECONDARY MARKET IN STATE AND LOCAL GOVERNMENT SECURITIES

The secondary market in state and local government securities is an "over-the-counter" market. Because transactions in this market are shrouded in secrecy, the size and character of this market is not known except in a fragmentary way. The only systematic study of the over-the-counter market was made by a group from Wharton School at the University of Pennsylvania, financed by the Merrill Foundation, and advised by a committee of the Investment Bankers

¹ For example, see the comments of the Public Housing Administration on the secondary market for obligations to which it gave contracts; 8th Annual Report of the Housing and Home Finance Agency, 1954, pp. 366-67.

² Letter of Willard M. Wright, Jr., Manager of the Municipal Department of Kidder, Peabody & Co., Philadelphia office, to the *Bond Buyer*, March 1, 1958.

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Association. This study undertook an ambitious program of data collection, most of which was centered around the months of September, October, and November 1949.³

The secondary market for state and local government obligations is almost wholly contained within the organizational structure of the new issues market. The bankers who underwrite a new issue are usually the same firms which maintain a continuing secondary market interest in this security. The continuity of interest is probably less than is true in the case of negotiated corporate underwritings but some connection often remains. The number of firms who maintain "positions" in state and local government securities appear to be quite large. *Blue List* advertisers number more than 600 firms of which slightly more than 50 are commercial banks.⁴ While a large proportion of these firms are local in their operations, the minimum advertising contract in this vehicle is sufficiently costly to suggest that few firms are likely to maintain *Blue List* listing purely for prestige reasons.

The Wharton study estimated that transactions took place in at least 4,000 different state and local government issues during the three-month interval from September through November 1949.⁵ The number seems high; it is possible that in some cases different serial maturities of the same issuers were counted separately. If so, the number of *issuers* whose obligations were traded at least once in the three-month period would be considerably less. As a basis of comparison it might be recalled that anywhere from 20,000 to 25,000 state and local governmental units probably have debt securities outstanding.⁶ At the time of the Wharton study the *Blue List* was showing 900 issues daily.⁷ Near the end of 1955, the number of issues which show in the *Blue List* had risen to over 2,000.

A large fraction of the secondary market in state and local government securities is a dealer-to-dealer market. This, of course, is quite characteristic of all over-the-counter markets. A dealer who cannot supply a customer with the type of security desired from

³ Friend et al., *Over-the-Counter Securities Markets*, *op.cit.*

⁴ *Blue List* directory of advertisers, October 1955.

⁵ Friend et al., *Over-the-Counter Securities Market*, *op.cit.*, Table 2-6, p. 57, and discussion, pp. 58-62.

⁶ Chapter I. National Quotation Bureau had a record of 8,700 issues in 1949. See Friend et al., *op.cit.*, Table 2-3, p. 53.

⁷ Friend et al., *op.cit.*, p. 59. In the tabulation made by Hoffman, each serial was counted as one issue.

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his own inventory ("position") will acquire it from another dealer. One function of the *Blue List* is to permit dealers to service their customers from the whole range of offerings made by all other dealers. Since the Wharton tabulations of dealer-to-dealer transactions combines both new issues and secondary market transactions, the basis of comparison is not too precise, but they show that 40 per cent of these combined transactions were of such a nature.⁸

THE ROLE OF DEALERS IN THE SECONDARY MARKET FOR STATE AND LOCAL GOVERNMENT OBLIGATIONS

In terms of institutional organization, the secondary market largely overlaps the market for new issues. As we noted before, most underwriting houses have a continuing interest in the securities they sell; one of the most tangible forms of such interest is to "make a market" in these securities. The process of "making a market" is that of offering to be either a buyer or a seller; to bracket transaction prices with a bid price and an ask price. But to "make a market," a dealer must take a "position," that is, be willing to be long or short of a security. Short positions are dangerous in this market; finding the specific issue and maturity of a given issuer to cover is hard except for a few issues which are widely traded. As a result, dealers tend to have net long positions which they "offer" (or hold unoffered for investment) and if they have no inventory of a security for which they get an inquiry, having been sellers, they generally know how to locate such securities.

Underwriters are not automatically dealers, but a majority of them maintain trading departments. A few firms specialize in "making market," with trading being more important to them than underwriting.

However, trading is not the sole reason why dealers maintain "position." The reasons for maintaining a dealer "position" include the following cases. A new issue, when offered, may stay in investment banking ownership after the initial offering syndicate or account has been broken up for either of two very good reasons. If the security offering is a great success, dealers may buy for their own account and hold off the market for a little while expecting to reoffer later in the secondary market at a better price. At the other extreme, if an offering has not gone well, the syndicate ac-

⁸ Friend et al., *op.cit.*, Table 4-20, p. 183.

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count may be dissolved and the securities divided up among the participants. These will be offered in the secondary market sooner or later. Quite apart from new offerings, dealers like to maintain an inventory of merchandise. They are often buyers from investors in order to supply themselves with an inventory. The securities in the portfolios of investment bankers are not all for sale; some are retained for investment purposes. Most investment banking firms find it desirable to keep firm capital invested in some fashion, whether the firm be a partnership or a corporation. For the reasons developed in the preceding chapter, the more desirable alternatives for most investors are either equities or tax-exempt securities. In other words, U.S. government securities, corporate bonds, and other debt forms, the interest on which is taxable income, are not particularly desirable forms of investment for firm capital. Equities can sometimes promise capital gains. Income from tax-exempt securities is just that: tax exempt. Furthermore, for the technical reasons developed in the following chapter, the short-term high-coupon tax-exempt obligations often have special appeal to dealers in state and local government obligations if they can be moved along before thirty days have past.

For these and other reasons, the volume of dealings among dealers is considerable. In general this volume of inter-dealer transaction appears to be more than just a speculative churning about; it seems to serve real market and economic functions. The services of the secondary market to ultimate investors are improved by virtue of a free and active market among dealers. Investors can get access to a much wider range of buyers and a much wider range of security offerings through the interdealer transactions.

Dealer operations of the routine sort in United States government securities apparently produce less profit than position speculation. A dealer who maintained the minimum inventory with which he could do business might make his rent and overhead, but his profits would be slim. We have little evidence about the results of dealer speculation in state and local government securities, but such as we have does not suggest the existence of a parallel.

In some periods dealers make large inventory profits; in other periods they incur large inventory losses. Since inventories seem to lag behind prices more often than leading them, it would not be unreasonable to conclude that dealers, in the postwar decade, have

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had at least as many losses as profits on inventory holdings. Since turnover margin, which we treat later in this chapter, gets mixed up with capital gains and losses, the point might be hard to support even if earnings records were available to us—which they are not. It must be recognized that dealers have more incentives than merely successful inventory speculation for the maintenance of positions.

SIZE OF SECONDARY MARKET IN STATE AND LOCAL GOVERNMENT OBLIGATIONS

The size of a secondary market is usually thought of as the gross volume of transactions, of the "amount of business done." Our evidence on size has been borrowed almost wholly from other sources, mainly the Wharton study. This study gives us data for one three-month period; our knowledge of changes in the level of activity is fragmentary. But it is quite clear that the secondary market for state and local government obligations is far less important than the new issue segment. It is less in gross volume; it is less, almost certainly, in terms of gross revenue produced for dealers; it is less important as an economic function. But, while smaller than the new issues market by any such tests, it is still of considerable importance.

The estimates made in the Wharton study of activity agree quite closely with such other evidence as can be brought to bear. The Wharton estimate was that \$1,056 millions of resales of state and local government securities occurred during the three-month interval covered.⁹ During the same period the respondents reported \$1,152 millions of new issue sales of state and local government security offerings. The volume of new issues, both long-term and short-term, reported by the *Bond Buyer* for the comparable interval amounted to \$1,100 millions. With the new issue sales from the two sources so close, the figures for secondary market sales may well be a fair representation of size at that time. Two elements of these figures deserve special attention. The activity figures compiled by the Wharton survey suggest that the degree of activity (rate of turnover?) in the secondary markets for state and local government securities, while considerably less than for marketable U.S. Treasury securities, is quite a bit higher than for corporate bonds. This is shown in Table 24.

⁹ Friend et al., *op.cit.* Table 3-2, p. 116.

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TABLE 24

Amount of Bonds^a Resold in Over-the-Counter Market Compared with Amount Outstanding

	Resold ^b		Annual Rate of Resale to Outstandings (per cent)
	(quarter year Sept.-Nov. 1949)	Outstanding ^c (Dec. 31, 1949)	
U.S. Treasury marketable securities	24,444	152,500	64
State and local government securities	1,056	20,875	20
Corporate bonds	782	56,534	6

^a Including short-term debt securities.

^b Wharton over-the-counter survey cited above in note 8.

^c *Survey of Current Business*, May 1956, "Debt Changes in 1955," pp. 6-14.

This comparison suggests that state and local government securities are only about one-third as active as those of the U.S. Treasury. This comparison, however, is far from valid since the federal marketable debt in 1949 was roughly one-half in maturities of less than three years; the comparable proportion of under-three-year state and local government obligations probably was less than one-fifth. Short-term securities are presumed to be rather active in the secondary markets; they are used by their holders more for liquidity purposes. But even with allowance for the differential rates of secondary market activity for the short-term and the long-term securities, the rate of activity for longer-term federal government marketable securities probably is greater than that for state and local government obligations, but not by a very large margin.

Corporate bond turnover appears to be even slower than that of state and local government securities. This comparison, however, is subject to a number of qualifications. A large fraction of corporate long-term bonds was originally marketed by direct placement and with investors such as life insurance companies who are notoriously infrequent sellers in the secondary markets. If the secondary market turnover of corporate bonds could be compared with those publicly offered, the turnover ratio obviously could be

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as much as a half higher. But even after application of such a correction, the secondary market turnover of state and local government obligations appears to be considerably above that of corporate bonds but below that of Treasury securities.

The Wharton tabulations also suggested that the secondary market in state and local government securities was somewhat more concentrated among nonregistered brokers and dealers, including banks, than was true of new issues. This is shown in Table 25.

TABLE 25
New Issue Sale and Resales by Registered
and Nonregistered Brokers and Dealers,
September to November 1949

	<i>New Issues</i> (millions of dollars)	<i>Resales</i>
Registered brokers and dealers	797	548
Nonregistered brokers and dealers (including commercial banks)	355	508
Total	1,152	1,056

Source: Friend et al., *op.cit.*, Tables 3-3 and 3-4 (percentages in 3-3 applied to 3-4).

A series approximating secondary market offerings was derived from *Blue List* totals. The *Blue List* is to the municipal bond market roughly what the *National Quotation Service* is to the over-the-counter market for corporate stocks and bonds. The series was derived by subtracting the amounts left unsold in major accounts (as reported weekly by the *Bond Buyer*) from the total offerings shown by the *Blue List* for the same date. The logic of this computation is that the total of issues offered in the *Blue List* less the amounts of new issues unsold in major new issues should equal secondary market offering (except for new issues not in major accounts; probably a small amount). The results are shown in Chart 7.

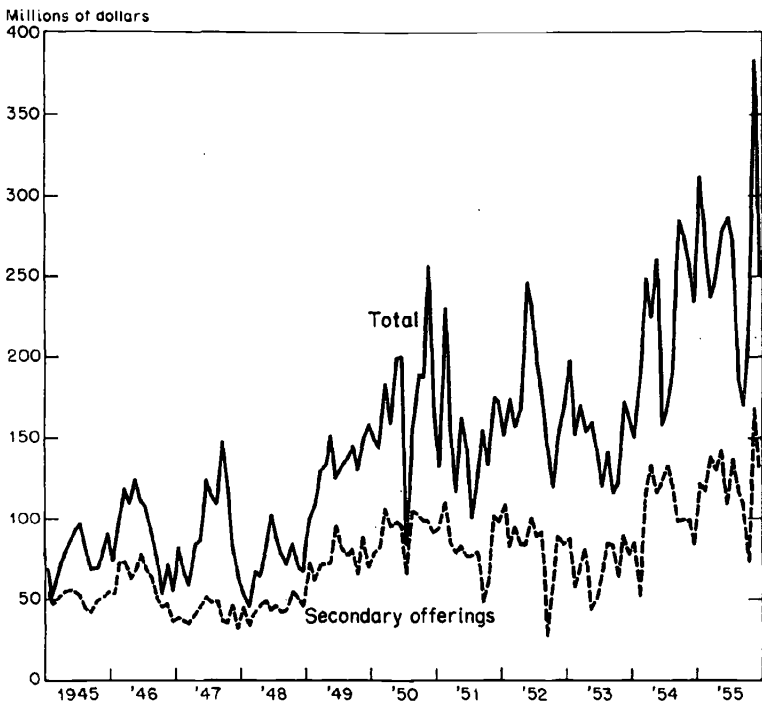
While interesting as an exhibit, this series is only a rough approximation of the time pattern of secondary market sales of state and local government securities. In the first place, the number of

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small new issue offerings which are not counted as "major" accounts but which are advertised in the *Blue List* undoubtedly is of modest importance. And since such offerings presumably were more frequent in the later part of the decade, this fact probably added an upward cant to the series. Second, even a cursory examination of just a few issues of the *Blue List* indicates clearly that many of the listings of securities, even if no longer in the "new issue"

CHART 7

State and Local Government Securities Reoffered in the Secondary Market



Source: Total offerings shown in *Blue List* corrected for new offerings.

category, are of recently offered securities. In the majority of cases such recently new issues are offered by dealers who were members of the reoffering syndicate; sometimes, but not too often, they are shown by dealers who were not original underwriters. While the bonds of an unsuccessful syndicate are generally shown only by the

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members of the reoffering group, the bonds of a successful offering may be shown by other dealers.

It seems quite evident that dealers "free-ride" on one another's successful and popular offerings and try to improve on the concessions granted outside dealers by holding these bonds for a slightly higher price after the syndicate books have been closed. To some extent, this may be done by the members of buying groups themselves. Furthermore, it appears that all new issues, whether or not considered successful initial offerings, tend to churn around in the market a bit before they find their way into the portfolios of ultimate investors.

If these data are a fair representation of secondary market offerings, some interesting conclusions follow. In the first place, the secondary market for state and local government securities appears to have been relatively much more active in the early postwar period than later on. The data show also that secondary market offerings have represented a sharply dwindling proportion of the total offerings in the market of state and local government securities during the postwar decade.

This is quite natural. In the early postwar period there was something very much like a shortage of tax-exempt securities. As Chapter 6 shows, during 1946 the value of tax exemption was given a premium even greater than the marginal tax rate applying to corporate income. Under such circumstances holders who could not take much advantage of tax exemption, such as the life insurance companies and mutual savings banks, had a strong price incentive to sell what they owned in the secondary market. This they did, as the ownership estimates indicate.¹⁰ Since then there have been far fewer circumstances in which differential tax situations offered so strong an incentive for a redistribution of ownership.

Since 1953, and particularly in 1954 and 1955, the secondary market in state and local government securities has received a boost from the practice of "tax-swapping." This practice is followed mainly by banks, but in certain circumstances other investors can advantageously swap.¹¹ A tax swap is an almost simultaneous purchase-sale in which an investor sells securities in order to establish

¹⁰ See Appendix A and Chapter 3.

¹¹ Commercial banks are permitted to deduct security losses from current income after offset against capital gains.

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either a capital gain or loss, and simultaneously buys similar securities. Tax-exempt securities do not furnish quite as satisfactory a vehicle for tax swapping as is true of taxable obligations since the advantage may be used only when the market has declined during a given tax year. But in churning markets, tax exempts furnish a good tax-swap vehicle, hence the interest of commercial banks in these bonds even if they are not dealers and cannot use the full coupon as a tax deduction.¹² Tax swapping probably tends to swell the volume of secondary bonds shown on the *Blue List* as indicated in Chart 7: dealers may "offer" bonds which are still owned by bank customers but are not a true part of dealer positions. Because tax swapping in municipal obligations takes time and often involves large amounts, such showings are a necessary marketing device.

CHARACTER OF ISSUES IN THE SECONDARY MARKET

Our knowledge of type of issue in the secondary market is limited; it comes from only one source, a scanning of the *Blue List*. This is a fair representation of securities offered in the national market but it probably misses most of the more local issues. In the national market some types of issues seem to appear more frequently and in greater volume than other types. Toll road bonds, for example, appear frequently on the *Blue List* and a number of dealers advertise the "making" of a market in these obligations. Evidence as to volume is negligible, but dealers report that the more speculative of these issues enjoy rather sizable if volatile markets. Toll road issues, for obvious reasons, are marketed before construction of the projects which they finance. The revenue-producing prospects of these projects are all surveyed extensively by engineering and special market survey firms which concentrate on projects of this type. These advance estimates have suffered the inevitable fate of forecast: they have often been quite wrong. The prices of all public authority revenue obligations depend to some extent on the degree to which their service requirements—interest and principal—are covered. News of these projects affects the prices of the bonds which financed them. Even during construction and before there has been a test of revenue production, news of the rate of construction, of how costs are matching advance estimates and of the adherence

¹² And then only if turned over each thirty days or less.

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to the timetable of construction, all affect the prices of such securities.

It appears that investors in these obligations include many who take a quite speculative view of the results. Bad news may loosen the affections of some investors and increase the market supplies of the underlying securities. But low prices also appear to bring out some speculative interest. In other words, the volume of transactions in each issue of revenue obligations in the secondary market seems to be subject to special factors. Overall, the rate of turnover of revenue obligations appears to exceed that of publicly offered corporate obligations; at least the frequency of their appearance on offering sheets would so indicate.

The obligations of housing authorities issued under contract with the Public Housing Administration (which are in effect guaranteed by the federal government) seem to turn up on the *Blue List* quite frequently. As is true of all new issues, the frequency of listing jumps considerably when new offerings of these obligations appear on the market. But even between financing dates, the volume of housing authority bonds with PHA contracts on the *Blue List* is generally a bit larger relative to volume outstanding than is true of state and local government obligations generally.

A scanning of the *Blue List* also shows that well-known names and issuers tend to dominate; state issues and those of the large cities are shown in sizable volume. This indicates, as we had already surmised, that the issues of small governmental units appear only infrequently in the national security markets. Dealers all testify that there is a tendency for issues to gravitate toward the home market in secondary dealings. At time of original sale, the obligations of a small governmental unit, if it be judged to have high credit quality, can be sold on the national market. But if such securities appear on the secondary market, knowing dealers look for bids on such issues at or near the place of issue. It seems quite certain that a significant part of the secondary market for state and local government obligations is purely local in nature. The typical advertisement of regional houses is "wire offerings" or "offerings wanted." Everyone understands that these offerings would be of securities of governmental units close to their location. While the Wharton survey tried to cover all nonregistered brokers and

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dealers,¹³ they surveyed only the banks with formally recognized dealer departments. Just as small banks without formal dealer departments often buy the issues of small local government units, they undoubtedly furnish a kind of informal secondary market for such issues.

BUYERS AND SELLERS IN THE SECONDARY MARKET

On most points our knowledge of the secondary market is fragmentary; on one it is almost completely blank: the identity of the investors who sell in the secondary market and those who buy in it. There is some presumption that institutional investors buy a large fraction of their holdings from the new issues markets. The gross purchases of fire and casualty insurance companies, which are shown in detail in officially deposited reports, at least those of the 1953-1955 period which we examined, appear to be almost wholly from the new issues market. And very few sales were shown. But aside from such fragments we know little about participation in this market. It is not impossible that the secondary market is supported mainly by individuals and smaller institutional investors, but we have no facts with which to buttress such a presumption.

PRICES IN THE SECONDARY MARKET FOR STATE AND LOCAL GOVERNMENT OBLIGATIONS

Buyers and sellers are interested in the level of secondary market prices relative to that of the new issues market and the general level of security yields. Sellers are also concerned about the discount from prevailing yields they must accept as a kind of marketing or selling cost. Our knowledge on the second point, while far from complete, is considerable. But a judgment of the first point should be based on a detailed examination of transaction prices, something that was beyond the scope of this project.

It is widely believed (though research has not yet confirmed the point) that prices of corporate bonds, and probably for corporate equities (at least corporate preferreds), are somewhat higher in the secondary market than in the new issues market. In other words, the investor who buys from the new issues market presumably can share in the full economic underwriting profit of converting a new

¹³ Though with a rather small response; see tables cited in note 8, above, and comments on coverage and response, Chapter 3.

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issue into a "seasoned" one. A similar judgment appears to be true of the relative prices of large revenue bond issues in term form. In the case of most successful underwritings, the bonds soon appear in the secondary market at a premium over the offering prices. This, of course, is not true of unsuccessful offerings. But since successes outnumber the failures, there is a presumption that a buyer of new issues should get better bargains than if he waited to buy in the secondary market.¹⁴

To some extent the same phenomenon can be observed in the sale of general obligation serial bonds of the larger issuers. Soon after the successful sale of a large state and city issue, some of the bonds may start appearing in the *Blue List* marked up a bit from the original offering price (yield marked down). But this market observation does not quite settle the basic question about relative yields and prices in the secondary as over against the primary or new issues market. If an investor buys prudently from the new issues market and if the relative credit quality of the issue he has bought is unchanged, can he expect to be able to resell his holdings later at about the same relative yield, less the prevailing turnover cost, or can he expect an improvement due to seasoning, or a further discount due to obscurity or other factors?

We are unable to answer that question satisfactorily, but the testimony of a number of market observers suggests the following: the holder of a small or obscure issue must expect to face a rather substantial marketing cost and probably some relative discount from the new issue price he paid. Buyers with modest investment needs who are discerning of quality can often get superior yields in buying such issues from the secondary market. But if a given issue appears in ample supply in the secondary market it probably means that the yields on such an issue are a bit higher than for comparable quality in other issues. In such a case, the governmental unit whose issues appear in large volume on the secondary market may find that its own new issue costs are somewhat higher relative to its basic investment quality than is true of the issues of a governmental unit for whose issues there is some scarcity value. To be specific, most of the dealers interviewed were of the opinion that

¹⁴ This is without recognition of the fact that a large investor could not cover his requirements in the secondary market without driving up prices far beyond the initial quotations. Our hypothetical "buyer" should be thought of as a small investor.

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New York City bonds sold at yields higher by 15 to 25 basis points (from $\frac{1}{6}$ to $\frac{1}{4}$ of 1 per cent) than the bonds of other cities of comparable quality which were not in such regular supply in the secondary market. It was also agreed that the bonds of governmental issuers having some scarcity value tended to command something like a premium on the secondary market. In other words, there is no clear evidence that yields on the secondary market are clearly above or below those for comparable credit quality on the new issues market. The differential is one that should be treated as a marketing cost rather than a generalized price differential.

One price aspect of the secondary market seemed to be clear; no appreciable volume of offerings could be marketed by the usual mechanics of secondary market offerings. If a large block of state and local government securities comes into the secondary market, it is common to negotiate the formation of a buying syndicate, very likely to publicize the issue with something like an official offering circular or statement, and to use the marketing mechanics that prevail for new issues. Furthermore it is interesting that private holders marketing such large blocks often seem to negotiate such secondary sales even if the securities were originally marketed by competitive bidding.¹⁵

Judgments about prices in the secondary market must be qualified by still one more consideration: we do not know the extent to which publicly announced prices such as in the *Blue List* or on offering lists are the prices at which transactions take place. *Blue List* prices are suspect; the same issue may be quoted at several different prices over a fairly wide range—what is more, these differentials may persist for several days. Presumably buyers will seek out the lowest price, but the margin within which bargaining can take place apparently is fairly wide.

Ambiguity about prices is complicated by one of the trading customs prevailing in this market. Most state and local government securities, or at least those in serial form, are quoted in terms of yield rather than price. But in new issue offerings the concessions

¹⁵ The secondary sales of state and local government revenue bonds included in the *Issuer Summaries* published by the Counsel for Defendants in the anti-trust case against certain investment bankers shows that in the period of mid-1933 through 1949, 15 secondary offerings involving \$81,664,000 were sold by negotiation whereas only 3 secondary offerings involving an amount of \$10,263,000 were sold by public sealed bids.

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allowed dealers are quoted in common fractions: eighths, quarters, etc. Thus on a new issue offering, one dealer may buy a given serial of a given security from another on the basis of a quoted yield less the concession: i.e., the ten-year maturity of a given issue may be sold on a "2.50 yield basis, less $\frac{3}{8}$." This practice has spread to the secondary market for state and local government obligations. The *Blue List* quotes almost all serial issues in yield terms, a few in dollar terms, but never in a combination form.¹⁶ But the dealer-to-dealer price is usually such a combination. Assume a given security is offered on the *Blue List* on a 2.65 yield basis. The trader for a firm interested in buying this security will call the offering firm and bid "2.65 less a point." Bargaining usually follows, and the final transaction may take place at some such price as "2.65 less $\frac{5}{8}$ ths." This form of quotation, however, does not seem to apply to transactions with nondealer customers.

THE MARKETABILITY OF STATE AND LOCAL GOVERNMENT OBLIGATIONS

The literature of investment management is replete with judgments about the relative "marketability" of various types of securities. The folklore of the capital markets makes much of this concept. But the concept of "marketability" has never been reduced to terms that give it explicit content, to something about which an operational research project could be planned.

The popular ideas of marketability seem to apply primarily to the secondary market. Certain judgments seem to be a part of the common folklore: i.e., that the securities of the United States Treasury are highly marketable; that real estate properties are often not very marketable; and that equipment trust obligations, while of high quality, have limited marketability. The character of the comments makes it reasonably clear that several ideas are implicit in the common meaning of marketability. In the first place, extreme price volatility seems to be contrary to the commonly accepted meaning of marketable; price stability seems to be regarded as a necessary prerequisite to marketability. For example, many corporate equities, although they can be sold readily in large quantities, are subject to rather wide price swings. They are not con-

¹⁶ This is not true of the National Quotation Service lists; in them the combination form of quotation, though not common, is sometimes encountered.

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sidered marketable by many investors when selling would cause realization of losses.

Then there is a quantity aspect to marketability. Some securities can be sold easily in limited quantities, but large quantities seem to drive prices down; in other cases large offerings do not seem to depress prices quite as much. Economists might be tempted to identify this behavior as a reflection of the elasticity of demand: an inelastic demand marks the first case and elastic demand the second one. But the concept of elasticity does not seem to offer much help in accounting for the differences among observed cases. The matter is more one of the rationality of market behavior. To a considerable extent, securities of a type such as state and local government obligations are homogeneous in character. They all have the common characteristic of offering tax exemption. While quality and other differences among securities are material, none of them seem so considerable that they could not be ironed out by differential pricing. Thus, large offerings of an issue of tax-exempt securities might tend to depress the entire market for tax-exempt obligations but why should it depress the quotation for this one particular issue unduly?¹⁷ To the extent that tax-exempt securities are a homogeneous commodity, the price effects of increased supply should affect the whole market but not just the one issue. But tax exempts are not homogeneous. The appearance of an unusual volume of a given issue on the market depresses the quotations for that issue. This concentrated pressure on one area may also be a general market factor but one so diffuse that its influence cannot be traced.

In this sense, it appears that small holdings of state and local government securities are reasonably marketable.¹⁸ But the market is not geared to accept individual issues in large volume without recourse to special procedures which are rather costly. Most investor's portfolios are rather widely diversified and, except for term revenue bonds, few investors have large holdings of individual issues and individual maturities. In the amounts individual issues

¹⁷ Judges of market quality will be quick to point out that enlarged issue of securities by an issuer reduces the quality of this issuer's obligations and therefore should increase his costs relatively. This would be true on the new issues market, but it is not true of the secondary market. The sudden appearance of a large volume of securities of a given issuer on the secondary market does not change the amount *outstanding*.

¹⁸ This is not true of odd lots. (An odd lot is less than five bonds or a block of bonds that is not a multiple of five.) Odd lots are salable but at a high cost.

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are held, most holdings are reasonably "marketable." Indeed, it appears that the investment practice of diversification is not only useful for the purpose of spreading credit risks but it also tends to make portfolios more marketable.

MARKETING COSTS FOR STATE AND LOCAL GOVERNMENT SECURITIES IN SECONDARY MARKET

The other element in marketability is that of relative marketing cost. The cost of "getting in and out" or the cost of turning over a portfolio position certainly has a real bearing on the judgment of the investor and the speculator. Even though the cost of marketing new equities issues is high, the cost of buying and selling equities on established exchanges or in the bigger over-the-counter markets is moderate; listed or actively traded equities are considered "marketable" even though subject to considerable price volatility. If we apply this standard to state and local government obligations, they can still be judged reasonably marketable. The margin taken in the secondary marketing process is not far different from the margin applying to new issue sales, and the margins for state and local government bonds do not appear to be much different from those prevailing in secondary market sales of corporate bonds.

But there is one important difference: the cost of marketing a tax-exempt obligation absorbs relatively more income. This higher cost may deter the ordinary investor from buying these obligations if he anticipates that shifting his investment position prior to maturity may be expensive. Our evidence on this point is as follows: the Wharton study developed quite a bit of data on the margins taken in over-the-counter trading in state and local government obligations.¹⁹ Unfortunately the estimates prepared in this inquiry combined the margins on over-the-counter transactions in recently offered issues with those of a true secondary market nature. This inquiry found that the average cost of marketing a state and local government obligation was about 1.0 per cent. This represents the margin between the initial seller and the nondealer investor in which case the security might have gone through the hands of two dealers. This 1.0 per cent margin for tax exempts compares

¹⁹ Most of this evidence may be found in Chapter 6 of Friend et al., *op.cit.* The specific data cited in this paragraph were taken from Tables 6-17 (p. 344), 6-18 (p. 346), 6-19 (p. 346), 6-21 (p. 351), and 6-26 (p. 358).

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with a margin of 0.8 of one per cent for corporate bonds, of 2.0 per cent for preferred stocks, and of 4.6 per cent for common stocks on the over-the-counter market. The average margin for the individual dealer was 0.7 of one per cent; this margin was 0.8 of one per cent for transactions handled as a principal and 0.2 per cent for transactions handled on an agency basis. Transactions with customer banks involved a margin of only 0.3 of one per cent; those with other financial institutions 1.5 per cent; while, surprisingly enough, those with individuals amounted to only 0.6 of one per cent. The explanation of the high rate for other financial institutions probably grows out of the fact that these sales were mainly of newly issued term revenue bonds on which the marketing margin is quite wide.

The testimony of dealers suggests that margins for round lots in the secondary market are in fact somewhat higher than the combined margins shown by the Wharton tabulations. The margins mentioned in interviews were about as follows:

P.H.A. contract guaranteed notes	4-month maturity, 10 to 15 basis points
P.H.A. contract guaranteed notes	one-year maturity, 5 to 15 basis points
High-grade tax warrants	6-month maturity, 10 to 20 basis points
Housing Authority bonds (PHA contract)	long-term, $\frac{1}{2}$ to 1 point (per cent)
New York City bonds	long-term, $\frac{1}{2}$ to 1 point (per cent)
Small high grade issues	long-term, $\frac{3}{4}$ to $1\frac{1}{2}$ points (per cent)
Small intermediate grade issues	long-term, 1 to 3 points (per cent)
Toll road bonds—good quality	long-term, $\frac{1}{2}$ to $1\frac{1}{2}$ points (per cent)
Toll road bonds—intermediate quality	long-term, $1\frac{1}{2}$ to 4 points (per cent)

While these margins certainly do not bind investors into their existing holdings, they are a deterrent of some importance to portfolio fluidity. Furthermore, our evidence—the Wharton study and the interview of money market dealers—probably failed to reveal the margins that exist in the marketing of truly local issues, those that do not come into the national markets or of odd lots.²⁰ Secondly, the income from tax-exempt securities being somewhat below that prevailing on alternative forms of investment, the cost of changing investment position is not immaterial. This can be shown in the following tabulation which is based on the median points

²⁰ The cost of marketing an odd lot may amount to two or three full points.

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of the margins shown on the previous page and using the average yields prevailing for such obligations in mid-1956.

	<i>Income Foregone in Marketing: Equal to:</i>
P.H.A. contract guaranteed notes	10 days interest
4-month maturity	income
P.H.A. contract guaranteed notes	18 days interest
one-year maturity	income
High-grade tax warrants	15 days interest
6-month maturity	income
Housing Authority bonds (PHA contract)	4 months interest
long-term	income
New York City bonds	4 months interest
long-term	income
Small high-grade issues	6 months interest
long-term	income
Small intermediate grade issues	8 months interest
long-term	income
Toll road bonds—good quality	3 months interest
long-term	income
Toll road bonds—intermediate quality	6 months interest
long-term	income

The cost of marketing small local issues might, if we had the facts, amount to as much as one year's interest income. In other words, investors cannot afford to shift investment positions without strong and compelling reasons. These margins suggest that speculation in state and local government securities, except for dealers for whom marketing costs are largely a matter of overhead, is awkward and costly.