Treasury-Federal Reserve Study of the Government Securities Market

PART I

1. Report on Consultations
2. An Organized Exchange or a Dealer Market?

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Foreword

Early last spring the United States Treasury Department and the Federal Reserve System initiated a joint inquiry into the functioning of the Government securities market. It was hoped that the study would point the way toward improvement in the market's mechanisms and to the prevention of speculative excesses in the market.

The objectives of the current inquiry differ from those of the 1952 examination of the market's functioning conducted by the Federal Open Market Committee. The 1952 study had focused upon the role of the Federal Reserve Open Market Account in the Government securities market, with the effects of the Federal Reserve open market operations on the market's performance and also on money markets generally, and with procedures and practices in Federal Reserve open market operations that would help in carrying out appropriate monetary policies.

The present report summarizes the informal consultations conducted by the Treasury-Federal Reserve study group with individuals associated with or informed about the functioning of the market. These consultations were designed to obtain a broad cross section of opinion on underlying forces shaping activity and price changes in the Government securities market during the period of economic recession-revival 1957-58, as a basis for possible improvement of the mechanisms and functioning of the market. We wish to express our sincere thanks to all who cooperated either by personal discussion or by making contributions through written communication. A copy of the outline for study guidance, together with a list of participants in the consultation program, is included in this report immediately following the report on the consultations.

Also published in this report is a special technical study concerned with the question whether an organized exchange might better serve the public interest in effectuating the purchase and

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sale of Government securities. This question was raised in the hearings of the Joint Economic Committee earlier this year on the President's Economic Report. The objective of this special study is to illuminate the central issues in this important question with a view to facilitating further consideration of it.

A second part of the present study will be a factual and analytical report on the performance of the Government securities market in 1958, with special reference to the build-up in market speculation prior to midyear and its liquidation during ensuing months of declining securities prices and rising interest rates. This report will be based on a group of special statistical surveys covering major lenders to, or participants in, the Government securities market, including larger commercial banks, nonfinancial business corporations, savings banks and insurance companies, agencies of foreign banks, New York Stock Exchange members, and Government securities dealers. The almost universal cooperation received in response to the survey requests has been especially helpful.

Suggestions received through informal consultations with market participants and observers, together with the findings from the factual record of last year's market performance, have indicated the need for certain supplementary studies of specialized and technical focus. Although these studies are primarily conceived of as working documents for the use of Treasury and Federal Reserve officials, they will be published as a third part of the study.

ROBERT B. ANDERSON,
Secretary of the Treasury.

WM. McC. MARTIN, JR.,
Chairman, Board of Governors of the Federal Reserve System.

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1. Report on Consultations

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Report on Consultations

This report summarizes the views of participants in and observers of the United States Government securities market as these views were expressed to the Treasury-Federal Reserve study group in informal discussions and written comments. Those who were consulted—identified in Appendix B to this report—provided the study group with information on market functioning in general and on the factors associated with the speculative build-up and decline in 1958. They also presented informed judgments on the adequacy of the market mechanism as it now exists and on various suggestions for improving it.

No effort is made in this report to evaluate the observations and opinions expressed by individuals consulting with the study group. Each consultation took its own course in accordance with the professional specialty and personal preference of the individual consultee; study group members, however, did endeavor to elicit opinions on a number of selected subjects and problems.

GENERAL OBSERVATIONS

For the most part, the discussions with the consultees were concerned with relatively technical matters concerning the functioning of the Government securities market, its financing, the influence on it of Treasury and Federal Reserve practices, and the merits of various alternative approaches for market improvement. Throughout the study, however, views were expressed on some of the broader influences that are operative in the market, particularly fiscal, monetary, and debt management policies. This introductory section summarizes these more general views.

The opinion was almost universally held among those consulted that Federal fiscal policy was an overriding influence in the market for Government securities in 1958 and has been the single most important factor depressing the market in recent

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months. A growing awareness after mid-1958 of the large expected deficit in fiscal year 1959, when economic recovery and expansion were in progress, helped to engender inflationary expectations that tended to turn investors away from fixed-dollar obligations in general and Government bonds—the most riskless and lowest yielding obligations—in particular. Apart from concern over the inflationary implications of the Government deficit, knowledge that the Treasury would find it necessary to enter the market frequently both for large amounts of new cash and to refund a heavy volume of maturing securities in a period when interest rates were rising and bond prices falling led investors to adopt a cautious policy in acquiring Government securities.

Consultees differed in their appraisal of the gravity of this problem. Some were of the opinion that it was temporary, being largely a result of the sharp and unexpected turnaround in economic activity in 1958, and that the return of balance or near-balance in the Federal budget in fiscal 1960 would be conducive to a substantial improvement in the market; others took a more pessimistic view, fearing continuing long-term growth in budget expenditures, chronic deficits, or insufficient surpluses, and consequently an economic environment adverse to ownership of Government securities. A number of consultees contended that a study of the market mechanism was misdirected, for there was presently nothing wrong with the market that would not be largely cured by budget surpluses.

While generally critical of fiscal policy, a number of consultees also thought that in recent years there had been too much reliance on monetary policy for economic stabilization, with the result that financial markets had been subjected to unduly wide swings in credit availability and interest rates. Shifts in monetary policy, together with the growing sophistication of market participants about the market effects of monetary policy, had been partly responsible for wide fluctuations in the prices of Government securities. Some thought that this had repelled potential investors in Governments. Another result was said to be an open invitation to speculate "on a sure thing" at turning points in the economic

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cycle when monetary policy changed direction. Other consultees, while recognizing these problems, were of the opinion that such price and interest rate movements were to be expected in a free market and that the responsibility of the Federal Reserve was to pursue its broad monetary objectives under the law. These involve counter-cyclical actions that necessarily accentuate interest rate variations over the business cycle. In general, although the timing, magnitude, and techniques of Federal Reserve actions were criticized by some consultees, there was general approbation of the broad objectives of monetary policy.

As market participants have become more knowledgeable about monetary policy, they have also become highly sensitive to possible indications of changes in monetary policy in view of the importance of expectations in affecting market behavior. For this reason, some discussants were highly critical of speeches and public statements by Federal Reserve and Treasury officials, which they characterized as disruptive market influences, particularly around times of Treasury financing operations. Strong criticism was also directed at the alleged use of press channels as a means of providing information to the market; it was noted that the effects of seemingly "inspired" or "authoritative" press stories are frequently adverse to the market.

A related opinion was that constant official references to the dangers of inflation had had the perverse effect of reinforcing inflationary expectations and had consequently contributed to the reluctance of investors to purchase fixed-income obligations in general and Government securities in particular. A majority of the market participants who commented on the question seemed to believe that official statements and speeches should be held to a minimum and that actions and statistics should be permitted to speak for themselves. A minority view was that policy actions frequently need to be explained and that Treasury and Federal Reserve officials should endeavor to inform the public regarding what it is they are trying to accomplish by their actions.

There was a diversity of views among the consultees regarding the proper role of debt management policy in different phases of

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the business cycle. If the Treasury takes advantage of a period of slack demands for long-term funds and declining interest rates to extend the maturity of its debt, it is in the position of encouraging and relying upon speculative activity, yet, to the extent that its offerings of long-term bonds keep longer term interest rates from falling, it may interfere with the recovery process. On the other hand, if the Treasury attempts to issue longer term bonds when interest rates are rising, it encounters difficulties in its financing operations, causes undue increases in interest rates, or risks spoiling the market for other borrowers.

Recognizing that these considerations might indicate that it was never appropriate to sell long-term bonds, many discussants suggested that the Treasury had to grasp the opportunity whenever it appeared; however, a number of them emphasized the dangers of overselling long-term bonds in periods when the market appears highly receptive, as in 1958. The importance of timing was stressed, and it was suggested by some that in recession periods, the most appropriate time to issue longer term bonds was in the earlier rather than the later stages of the downswing in interest rates.

In discussions of the increasing difficulty the Treasury has encountered in marketing intermediate- and long-term bonds, reference was made to two aspects of this problem. First, the Government has itself created long-term instruments that compete very effectively with Treasury bonds. FHA and VA mortgages, the most important in volume, carry a virtual guaranty of the United States Government. Attention was called to the growing volume of Government agency issues, such as public housing, FNMA, farm credit, and shipping obligations. Although principal and interest are not always guaranteed by the Government, many investors regard these securities as having virtually the same riskless character as direct Treasury obligations. Since, however, they yield a considerably higher interest return, they put Treasury bonds at a disadvantage in the eyes of investors.

Secondly, according to some observers, investors increasingly appear to be re-appraising the relative attractiveness of Treasury

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bonds and private long-term obligations. It was noted by a number of the consultees that those features of Government bonds that have traditionally permitted them to be sold at a lower interest yield than other bonds are their freedom from credit risk, greater marketability, and absence of call provisions. It was suggested that investors may be re-evaluating the significance of these features. The excellent record of corporate business in meeting its interest and repayment obligations in recent decades, and especially through the three postwar recessions, may have led investors to revise their notions as to the degree of additional risk attaching to corporate as compared with Treasury bonds. It was suggested that the market may be in the process of adjusting to a narrowing of this risk differential, and the possibility that it has not yet fully adjusted may be responsible in part for recent difficulties in Treasury financing.

On the question of marketability, some observers were of the opinion that the wide swings in Government bond prices in recent years had also lessened their relative advantages over other types of obligations, for greater price stability may be one of the features that investors expect in Government bonds. The role of Treasury securities as investments is based in part on their use for portfolio adjustment purposes, but if prices are unstable and the market is relatively thin, this advantage lessens. At least one discussant questioned, in this connection, whether Treasury bonds are to any extent more marketable than publicly issued corporate bonds, claiming that under current conditions he is able to move corporate bonds in the market as readily as Governments.

In view of these possible changes in investors' attitudes, the question was raised whether selling Treasury bonds successfully was simply a matter of paying a high enough interest rate to attract investors. Views on this question were mixed. Some discussants stated that if the price were attractive, the Treasury could sell long-term bonds. Others thought that a higher interest rate was not a sufficient condition for selling more long-term bonds; they claimed that the result was likely to be a corresponding upward movement in yields on competing obligations, with little or no net gain in the relative attractiveness of Treasury bonds to investors.

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The consultees typically reviewed in broad terms the factors which they thought were responsible for the sharp advance and decline in prices of Government securities during the 1957-58 period of recession and recovery. Some suggested that the results of the Treasury-Federal Reserve questionnaires would provide a much better documentation of the events of the period than they could offer, and most indicated that their own opinions were based only on general impressions or observation of a limited part of the market. Most consultees therefore confined their comments to key highlights centering on the special circumstances of the June financing.

Market advance, November 1957 to April 1958. It was generally agreed that the major advance of Government securities prices began with the November 1957 reduction in the Federal Reserve discount rate. One dealer reported, however, that even before the discount rate action, clouds on the business horizon had created expectations of a market turnaround, and that this had been a market factor which had helped the distribution of Treasury offerings of notes and bonds during the summer and early fall of 1957. Most agreed, however, that market concurrence in these expectations did not become general until the discount rate reduction in November. In the economic setting at the time, this action provided a dramatic signal of changes in the business and credit outlook that recalled to the minds of market professionals the substantial run-up in bond prices recorded in the previous business recession of 1953-54.

A number of discussants noted that, in the face of these expectations of rising bond prices, the offering of the Treasury's 3⅞ per cent bond of 1974—announced almost immediately after the November discount rate reduction—encouraged speculative participation. When these speculative expectations were soon confirmed, and the 3⅞ per cent bond, as well as the 4 per cent issues offered prior to the discount rate change, moved rapidly to substantial premiums, speculative interest in the market received further stimulus.

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The few observers who commented more than generally on the late 1957 phase of the advance in bond prices noted that market interest in this early stage was confined largely to professionals—dealers, some institutions, and some stock brokerage houses—plus a few knowledgeable individuals. Commercial banks, although aware of the market opportunities then available in bonds, generally lacked the excess reserves and the portfolio liquidity to participate substantially at that time, it was said.

In reviewing the market build-up after the turn of the year, respondents brought out a number of influences which they thought had contributed to the further advance of securities prices and to the encouragement of speculative activity:

1. Current statistical measures on business activity, credit demands, and bank reserves suggested that business recession and monetary ease might persist for some time and thus contribute to further advances in bond prices.

2. With the freeing of more reserves through monetary actions, commercial banks became active buyers of intermediate-term Treasury securities, helping to push prices higher despite a sizable volume of new intermediate- and long-term Treasury offerings.

3. Market price increases on the two new Treasury bonds issued in the February refunding provided striking evidence of the profit opportunities in Treasury bond offerings during a recession.

4. Anticipations of continued advances in bond prices led investors to bid actively for the new intermediate-term Treasury issues offered for cash in February and April, and the secondary market performance of these issues further confirmed bullish expectations concerning bond prices.

5. Lags in the timing of Federal Reserve counter-cyclical actions in open market operations, discount rates, and reserve requirements tended to generate expectational rumors that additional System actions to ease credit might be taken.

6. Because many of the investors who were buying Government bonds hoped to obtain the tax advantage of long-term capital gains, a large share of the new securities that were acquired were not resold in the market and were not expected to become available until after the required six-month holding period for capital gains purposes.

7. Some investors who bought bonds on margin early in the period of market advance subsequently used the appreciated value of these bonds as margin for credit purchases of other Treasury offerings, thus pyramiding the use of credit in the market.

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Treasury's June financing. In appraising the particular build-up of speculative interest prior to and during the June refunding period,[1] some consultees expressed the view that the conditions which encouraged speculation in that operation represented a combination of circumstances not likely to occur again. Others were much less confident of this fact and seemed to believe that a similar episode could recur under comparable circumstances in the future. Notwithstanding this disagreement as to the likelihood of a similar future speculative crisis, there was considerable agreement concerning the special factors which led to the June 1958 experience.

Bond price expectations. Consultees reported a general market consensus prior to the June financing that bond prices would continue to rise and that the Treasury would offer a long-term bond as one option in the exchange. Reflecting this consensus, prices of June "rights" (the maturing issues) moved to premiums. In addition to the general economic and credit outlook, several specific factors reinforced investor confidence in rising bond prices. One was the Treasury's call of two optional bonds for refunding in September; another was a press conference statement by the President suggesting that economic conditions justified even lower long-term interest rates.[2] Since the spread between short- and long-term interest rates was unusually wide at the time and since corporate bond offerings in the capital markets were expected momentarily to slacken from their active pace, this indication of official concern over long rates added support to the expectation then prevalent that they would fall further.

These expectations provided a speculative inducement to institutions as well as to individuals, and to cash buyers as well as to credit buyers of Government securities.

Commercial banks were mentioned by a number of the consultees as an investor group particularly active in acquiring "rights" prior to the June refunding. Many of the bankers who lengthened

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[1] In June the Treasury offered a 3¼ per cent 27-year bond for cash and, in exchange for a note and two bonds maturing June 15, offered an 11-month certificate at 1¼ per cent and a 6⅔-year bond at 2⅝ per cent.

[2] No conferee mentioning this statement noted that it had been clarified on the same afternoon.

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portfolios by exchanging into the 2⅝ per cent bond expected at a later point in the recession, it was stated, to sell bonds in order to increase portfolio liquidity.

In addition to its general attractiveness to banks in a period of declining loan demand and low short-term interest rates, the 2⅝ per cent bond reportedly appealed to both banks and nonfinancial corporations because it was expected to carry a higher secondary market premium than the 1¼ per cent certificate, the other exchange option in the June refunding. Many holders of "rights" were thus encouraged to exchange into the bond, even though they ultimately wanted a liquidity instrument, on the assumption they could immediately and profitably swap into the certificate in the secondary market.

Speculative purchases of June "rights" by individuals based on credit were reported to have been mobilized largely through the promotional efforts of some stock brokerage firms, especially smaller houses that are less knowledgeable about the Government securities market. It was claimed by one observer that these firms had been alerted by banks and money brokers to the possibility of speculative gains in the June refunding. Stock brokerage houses were said to be purchasing for their own account as well as soliciting customer interest in speculative purchases based on credit secured from banks and corporations.

Ready availability of credit. A number of consultees alleged that aggressive efforts of lenders, especially banks, to obtain higher interest earnings on short-term funds were the prime stimulus to speculation in the June "rights." Although others were less willing to assign so much responsibility to lenders, all agreed that extreme liquidity among lenders combined with very low yields on short-term Treasury securities provided a powerful incentive for lenders to seek better yielding alternatives for short-term money. Because rates obtainable on repurchase agreements against "rights" approximated the 2⅜ to 2⅞ per cent coupons on the maturing securities, in contrast to a yield of about ⅝ per cent on 90-day bills at the end of May, repurchase agreements on "rights" presented a very attractive medium for placing short-term funds. Borrowers, mean-

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while, were able to carry speculative positions on credit with no net interest cost.

Various participants in the consultations were critical of the Federal Reserve System for creating a degree of ease in bank reserve positions during the spring of 1958 that they regarded as excessive. This, it was said, provided the financing to support speculation. Several indicated a belief that, beyond a certain point, further ease in bank reserve positions serves no counter-cyclical purpose; it merely drives short-term rates to unreasonably low levels and encourages a lowering of credit standards as banks search for higher yields. An alternative view, which agreed that short-term yields below one per cent were neither necessary nor desirable, stated, nevertheless, that monetary ease was not overdone in the spring of 1958. What the low rates suggested, according to this view, was that Federal Reserve open market purchases and Treasury debt management operations had reduced the supply of shorter term Government securities available to the public, thus contributing importantly to the decline in short-term rates.

Banks were not the only institutions mentioned as willing lenders to speculators in this period. It was reported that nonfinancial corporations were also actively seeking short-term investment outlets, and some other institutions had large blocks of money available for temporary investment. Corporate treasurers, for example, reported that in addition to their June tax and dividend accruals, funds were available from inventory liquidation, cut-backs in capital outlays, and, in several important instances, the proceeds of recent long-term securities offerings in the capital market.

Consultees differed as to the relative importance of commercial banks and nonfinancial corporations as sources of funds to finance speculative purchases of June "rights." Some alleged that much of the speculation in "rights" was financed by corporate repurchase agreements, whereas others stated that the amount of credit available from this source was actually a very limited part of the total. Most said that banks were important lenders to speculators, both in the form of repurchase agreements and collateral loans.

Nearly all of the consultees ascribed a major role to money brokers in the financing of speculative purchases of "rights" for

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and through stock brokerage firms, although it was pointed out that such firms also obtained credit directly from banks. Several money brokers were said to have been involved in the June operation, but comments focused on one in particular. This broker reportedly adapted the repurchase contract to the financing of speculative purchases for individuals by capitalizing on the know-how which banks and corporations had developed in making repurchase agreements with Government securities dealers, as well as by utilizing his own contacts made in regular Federal funds trading. As this broker described his operation, orders from individuals to purchase "rights" and to finance them were received without solicitation both directly and through other stock houses. He executed delayed delivery sales to such individuals, who at the time apparently put up no cash or no more than a sum equal to the market premium on the "rights." He purchased the "rights" from dealers and sought out sources of funds among corporations and banks outside New York, making repurchase agreements with them against the "rights" in his own name.

There was general agreement that the individuals involved in buying of June "rights" on credit, although to a large extent newcomers to the Government securities market, were for the most part well-to-do. The one active money broker reported that many of the transactions he arranged were motivated initially by tax considerations of interest only to taxpayers in high income tax brackets.[3]

Market decline. Consultees differentiated two general phases of the decline. Initially there was an apparent technical reaction to the refunding. This gave way, later, to a more fundamental decline in Government securities prices.

Factors in the decline. Many consultees stated that, although a fairly active speculative interest in "rights" had been observed prior to the June refunding period, announcement of the size of the exchange into 2⅝ per cent bonds represented a distinct

[3] The tax advantage was based on the ability to deduct from current income premiums paid for securities maturing within the tax year, such as the "rights" in the June refunding. Although the taxpayer also establishes a taxable short-term capital gain to the extent of any premium on the new issue upon exchange, he is able to come out ahead insofar as he can offset this with capital losses on other transactions during the tax year.

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surprise to the market. This news posed a question whether the market might not be faced with a serious technical problem in absorbing the large volume of intermediate-term securities. Moreover, as several observers noted, questioning of the technical situation deepened as participants in the market became aware that corporate repurchase agreements in these and other securities would have to be refinanced to the extent that they represented the temporary investment of accumulated reserves for payment of June tax liabilities. (Ordinarily part of these funds would have been invested in a tax anticipation obligation but such an issue with a June 1958 maturity was not outstanding.) Additional market pressure stemmed from the need to make cash payment on June 18 for the Treasury's new 3¼ per cent long-term bond.

It was reported that these technical difficulties might have been successfully taken in stride by the market had there been no change in the general outlook for bond prices. According to several observers, however, some uncertainty had already begun to develop among professionals closest to the Government market even before the refunding. In addition, statistical evidence began to be reported which suggested that the business downswing might have been bottoming out. Lower weekly figures on net free reserves at member banks in early June were also raising questions whether the Federal Reserve might not have shifted the emphasis of its policies.

As stressed by nearly all consultees, these developing market uncertainties were highlighted by several press reports concerning the business outlook and the prospects for Federal Reserve policy. These reports appeared when adjustments to midmonth technical problems were still in process and seemed to have been based on interviews with officials. Because of the technical vulnerability of the market at the time, it became quite clear that should these newspaper articles contain any real substance, speculative positions in bonds might soon become untenable. Even before mid-June, bond prices had turned down slightly, reflecting some selling pressure generated when speculative positions in "rights" that had been financed temporarily and without margin on corporate repurchase

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agreements had to be refinanced and margins supplied. Following the press reports, downward price pressures became stronger.

In the initial phase of the market decline, there was considerable market uncertainty whether bond price changes reflected a basic shift in direction of interest rates or merely a temporary technical reaction following the refunding. In this period selling came largely from weak positions—speculators who had bought on margin and investors who wanted a shorter term security but had taken 2⅝ per cent bonds merely to capture a quick gain. These pressures on the market were intensified by the liquidation of the position of the major money broker who had acted as principal in repurchase agreement arrangements between banks and nonfinancial corporations on one side and ultimate buyers on the other. Selling in this period was absorbed largely by commercial banks who continued to buy bonds at declining prices and by the Treasury which near the end of June initiated a program of market purchases of 2⅝ per cent bonds of 1965.

As price declines persisted, evidence began to accumulate, it was reported, that the movement was more than a mere technical reaction. Banks therefore became less willing buyers and in some cases more active sellers. Appearance of bank liquidation set off further selling by those holding securities on margin and the weight of this more general selling, in turn, caused some liquidation by institutional investors. Among those selling Treasury bonds in the late summer were investors who revised earlier plans for holding securities for six months in order to establish long-term capital gains and now hoped only to avoid or minimize losses.

The influences that were mentioned as being operative in extending the market decline beyond the dimensions of a technical adjustment included: (1) the growing realization that the turning point of the recession had occurred; (2) the mounting evidence that the budget deficit in fiscal year 1959 would be very large and would require the Treasury to enter the market frequently and heavily; and (3) the international crisis in the Near East, which involved the landing of American troops in Lebanon.

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Treasury and Federal Reserve intervention. A number of the dealer consultees stated that their experience in the market in the summer of 1958 was among the most difficult in their careers. It was claimed that in such a crisis, if the Treasury and Federal Reserve had remained aloof, the market would have been even more demoralized.[4]

Almost all consultees took a favorable view of the efforts of the Treasury to relieve some of the pressure on the market in June and early July by purchasing over $600 million of the 2⅝ per cent bond. The intervention, it was said, helped to bolster dealers' confidence and encouraged them to continue attempting to move securities from sellers to buyers. It was noted that the Treasury intervention also helped to offset the effect of selling due to margin calls and that some buyers began to appear when it was known that the Treasury was purchasing.

Although the Treasury action was generally praised, there were differences of opinion regarding the techniques used. Some consultees thought the purchases should have been more aggressive and in larger volume. Others thought that the purchases by the Treasury should have been spread out over a longer period of time and should have been in smaller blocks of securities. According to the latter view, the large-scale purchases, on a declining price trend, had the effect of relieving, first, speculators and relatively large investors.

Among those who commented on the Federal Reserve intervention in the market in July, opinion on its justification was divided.

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[4] In June and early July 1958, the Treasury purchased almost $500 million of the new 2⅝ per cent bond for retirement plus about $130 million for Government investment accounts. The Federal Reserve intervened in mid-July in order to correct what appeared to be a disorderly market. It was announced on July 18 that "In view of conditions in the United States Government securities market, the Federal Open Market Committee has instructed the Manager of the Open Market Account to purchase Government securities in addition to short-term Government securities." Over the next five days the Account purchased $1.2 billion of securities, largely "rights" and "when-issued" certificates involved in another Treasury financing then in process, but also a small volume of longer term securities. Before and after these purchases, the Account reduced bill holdings substantially.

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It was argued, on the one hand, that aloofness by the Federal Reserve in the existing crisis atmosphere would have been more upsetting to the market. Others claimed that the market was not disorderly and that intervention was unjustified.

Dealers differed in their definitions of a disorderly market that called for Federal Reserve intervention and on their recommendations as to the technique of intervention. One dealer claimed that a disorderly market—which he characterized as a market in which bids were not forthcoming in response to a price decline of any magnitude—was almost inconceivable. Another definition stated that a market is disorderly when rapid price reductions tend to feed on themselves, inducing further offerings instead of bids, and an element of panic is present. Under this definition, it was said, the market was disorderly on July 18, when the Federal Reserve announced its intervention. Still another dealer stated that a disorderly market exists when institutions begin to liquidate large blocks of securities even though they have no need to do so. On the basis of this definition, he saw no need for intervention by the Federal Reserve.

A number of those who criticized the intervention felt that inaction would have been preferable to what was actually done. Most consultees thought that the Federal Reserve statement announcing intervention had misled the market. They claimed that the market was led to believe that Federal Reserve purchases would continue for a longer period than a few days, would involve a greater proportion of longer term securities, and would be in greater volume. The abrupt cessation of purchases by the Federal Reserve came as a shock and, according to some observers, set off another wave of selling. Although much of the criticism was thus directed at the way in which the statement announcing Federal Reserve intervention was worded, it was also acknowledged that when a decision is made to abandon temporarily a customary practice, as was done on July 18, there was a public duty to inform everyone concerned, whereas intervention without a statement would have been evident, in the first instance, only to dealers from whom the trading desk purchased securities.

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Among those who favored the intervention, there was disagreement on the technique. A minority of those who commented were of the opinion that purchases should have been more aggressive in order to bid up prices and halt the decline. A larger number of comments reflected the view that it was not feasible to attempt to turn the tide in such circumstances.

FUNCTIONING OF MARKET

The views of consultants on market functioning are treated in two parts: first, a general review of opinions on the role of speculation in the market, and second, a more detailed summary of views on various aspects of making markets, with particular emphasis on the role of dealers.

Role of speculation in market. Virtually all consultees at some point in their general discussion of market functioning made special reference to the role of speculation. Although the subject of speculation was highlighted by the unusual circumstances of the June 1958 refunding, opinions on speculation were generally based on its more fundamental and continuing market aspects.

Few of the consultees attempted any very precise definition of speculation. Most viewed it in much broader terms, however, than the type of buying on thinly margined credit by newcomers to the market that was given so much publicity in the June 1958 refunding. From the opinions expressed, it was clear that speculation was viewed generally as any positioning of a Government security, financed on credit or otherwise, which anticipates subsequent resale of the issue at a profit. Considered in these terms there was general agreement that speculative activity is an essential ingredient to an effectively functioning securities market since it lends continuity and facilitates the sale and distribution of new issues. Several discussants noted that, not only in the June 1958 refunding but also in all other 1957 and 1958 offerings of intermediate- and long-term securities, the successful extension of Treasury debt was aided by speculative activity. The point was also made that the main effect of speculative purchases in May and June was to delay a fall in Government securities prices that was inevitable because of the turnaround in economic activity;

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thus, it was said, the Treasury refunding in June was more of an immediate success than it would have been in the absence of speculation.

Many consultees cautioned against overstressing the need for measures to prevent a recurrence of speculative developments such as those of 1958. They expressed concern that measures stimulated by this one episode, which many regarded as unlikely to be repeated, might undermine the effectiveness of the existing market mechanism. A few discussants argued that when viewed in proper perspective the June crisis had little fundamental significance and was merely an incident in the normal workings of the free market process in which speculators incurred losses and gained experience. Other discussants thought that a logical case could be made for attempting to differentiate between useful market speculation and excessive speculation, but most were doubtful as to how this differentiation could be accomplished in practice.

Making of markets. This subsection reviews the opinions of consultees on the adequacy of dealer service in making markets and on dealer practices and inter-dealer trading arrangements, including the role of Government securities brokers. It also covers views on the question of entry of new firms into the present dealer market.

Dealer service to large customers. Consultants who are customers of dealers expressed general satisfaction with their current ability to transact business through dealers. Most stated that, with a little patience, they can complete orders of reasonable size at reasonable prices. Moreover, although they recognized that the absorptive capacity of the market is sometimes weak—particularly in times of crisis like the summer of 1958—few consultants attributed responsibility for these market defects to dealers. In fact, virtually all consultants had high praise for the dealers' ability to operate in unfavorable market circumstances over which they have no control. Several consultees pointed out that even in the months of most rapid price decline in the summer of 1958 a relatively large volume of trading was completed. They suggested, in fact, that some complaints of market thinness in recent periods reflect customer unwillingness to accept realistic prices at which securities will be moved.

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A few consultees expressed a more negative view, indicating a belief that dealers have become less willing to make markets in certain maturity areas. Also, throughout many of the discussions there was at least a tacit recognition that the ability of the customer to trade has declined relative to most previous years because of the special pressures under which the market has been operating since last June. The intensity of this belief seemed to vary, depending to some extent upon the sector of the market in which the particular customer's business is mainly conducted. For example, corporate treasurers, whose trading centers in the short-term area, reported no particular concern over any reduction in the volume of trading on which dealers would make good at quoted prices. On the other hand, a consultant who deals mostly in long-term bonds reported that in this sector dealers have become little more than brokers, seldom being willing in practice to undertake substantial transactions at quoted prices.

In dealer comments on the allegation of market thinness, a distinction was made between different types of customers. On the one hand, it was stated, there are customers who work closely with a dealer, placing their problems in his hands and giving him time to work out trades at agreed prices or spreads. On the other hand, there are customers who are sharp traders and seek to accomplish their ends by hitting bids of various dealers without giving thought to resulting price consequences. In periods of rapid price change, dealers are wary in quoting firm prices to the latter type of customer, who therefore is likely to complain of inadequate service, while customers of the first type may still be accommodated to their satisfaction.

Nondealer consultants were asked whether in their transactions with dealers they were ever conscious of a conflict of interest arising out of the fact that dealers carry investment positions of their own. Invariably the response was that they are wholly satisfied with the ethical standards maintained by dealers and feel no sense of having been put to a disadvantage in transactions with dealers. A number of customers indicated that because of the high degree of competition in the Government securities business, in-

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dividual dealers have no alternative but to quote the best prices to customers.

Consultees also agreed, however, that in a free market a dealer must look to his own self-interest or go out of business. There was a consensus that no dealer's capital would be sufficient for him to try to operate against market trends at turning points, as specialists on the stock exchange are expected to do. In support of this view, it was pointed out that prices of Government securities, in contrast to stock prices, all move together at times of general change and that the dollar volume of potential offerings in the Government market is much too large for dealers as a group to attempt to absorb into their portfolios.

Customers of dealers who commented stated that they were opposed to any restrictions on the size of dealers' positions, and showed no concern over the possible disadvantage to investors arising from the efforts of dealers to liquidate long positions in a declining market. They expressed general confidence in the techniques dealers now use to limit their position exposure. They also implied that the weight of dealer liquidation in a decline would have little influence on the ultimate level to which prices moved. One consultant noted, however, that dealers are the most important segment of the market in the influence they have on investor thinking, since much of what many investors know about current market developments is learned through contacts with dealers.

Handling small transactions. Considerable stress was placed by discussants on the fact that the present organization of the Government securities market is geared to the efficient servicing of large orders from banks, savings institutions, nonfinancial corporations, and other relatively large investors. Concerning the adequacy of service in smaller transactions, consultants made two observations: one, that odd-lot orders from individuals are typically processed through their own banks and receive prompt service at reasonable prices; and, two, that the volume of orders from individuals is very small, because customers generally prefer savings bonds if their incomes are modest, and usually prefer equities and tax-exempt State and local government securities if they are in higher income tax brackets.

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Consultees from several nondealer banks indicated that they carry small trading positions in Government securities for the express purpose of accommodating small orders from customers. Such banks settle only the net of their customer trading operations through Government securities dealers. Representatives of banks that carry no trading position in Governments indicated a general willingness to process customers' orders in Treasury issues at little or no charge, and bank dealers stated that the processing of odd-lot orders is considered to be a part of the banking service they offer. Reviewing the character of the service provided by banks through their various customer relationships, many of the consultees were of the opinion that the charges on small-lot orders fall below costs, resulting in less expensive service than could be expected for orders of similar size in other financial markets.

Nonbank dealers expressed little interest in odd-lot orders. It was observed that transactions of small investors require exactly the same type of processing as large orders and therefore are much more costly per dollar of trading. One nonbank dealer reported that because of the higher cost of small orders, he has recently introduced "an odd-lot" charge, and even this does not always cover the full costs of such transactions. It was pointed out that when small-lot orders come to nonbank dealers through banks, such orders are readily handled in order to obtain the good will of the bank for its other business. For this reason small-lot transactions processed through banks are usually handled expeditiously, and frequently at regularly quoted market prices with no special odd-lot markup.

Inter-dealer trading. Trading of securities between dealers is done both directly and through Government securities brokers, but the bulk of it is done directly. Until a few years ago, trading agreements among dealers provided a basis for inter-dealer trading.

Trading agreements were described as commitments between dealers that each will make good to the other at quoted prices on a certain volume for any issue at any time on either side of the market. Agreements have typically been bilateral and have varied as to the size of the commitment liability—both between dealers

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and in different maturity sectors of the market. The standard trading commitment was for 100 bonds ($100,000). Agreements of this "100-bond" type were quite common among dealers a few years ago, but during the periods of market decline which have developed periodically in the interim, agreements have generally been abandoned.

Dealers were asked whether it would be desirable to re-introduce trading agreements; their answers varied widely. Some dealers were strongly in favor of returning to agreements, arguing that commitments of this type force all dealers to quote realistic prices and give a more accurate reflection of the true condition of the market. Other dealers were equally opposed to trading agreements. They argued that commitments of this type are subject to abuse, for they generate an excessive amount of inter-dealer trading and divert dealers' attention from customer business. Also, such agreements may lead to exaggerated price fluctuations as a single inter-dealer transaction reverberates around the market from one dealer to the next. Those who favor trading agreements countered these objections with the contention that prices could not move very far without eliciting offsetting responses from other dealers and customers. An intermediate point of view, expressed by some dealers, was that trading agreements have little impact on prices and are not very important, since the bulk of market transactions are of much larger size than the minimum amounts involved in these trading commitments.

Some dealers attributed the reported increase in activity of brokers in the Government securities market to the abandonment of trading agreements. The brokers, on the other hand, were not inclined to relate their functioning so closely to the presence or absence of trading agreements, claiming that their activity varies mainly with the volume of retail transactions by dealers, which in turn is related to the direction of market price movements.

There are five broker firms in the market, of which three, it was reported, do the bulk of the business. As they described their operations, brokers act as agents almost exclusively between dealers, taking no positions but matching bids and offers of securities which dealers wish to transact with other dealers. Broker activity is con-

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centrated almost entirely in the note and bond sector of the market. Brokers also provide a quotation service which dealers utilize in keeping in touch with the prices and yields being quoted by competitors. The amount and price of each transaction completed by the brokers is ordinarily reported immediately to all dealers. The compensation of brokers consists of a commission, usually 1/64th ($15.63 per $100,000 of bonds), on each transaction.

It was pointed out that the typical transaction handled by brokers is relatively small and that brokers account for only a small share of total inter-dealer trading. Similarly, dealers maintain direct contact with each other in order to keep abreast of prices, but occasionally find it desirable to use a broker as an intermediary in following other dealers' quotations.

In explaining their role in the market, brokers indicated that the service they provide is useful to dealers when they wish to undertake transactions without showing their hands to other dealers, either because they find it useful to conceal their operations from competitors or because they wish to sound out competitors' reactions. Brokers emphasized that they themselves are indifferent to the particular purposes of dealers who use their services; they regard it as their primary task to seek out buyers or sellers to complete orders placed with them.

Dealers disagreed in their opinions on the usefulness of brokers. Most of them felt that brokers perform a real function by helping to link individual dealer markets together and also by providing more precise price quotations. A minority view was that the broker is a disturbing influence who aggravates price swings by circulating rumors about market transactions; brokers, however, insisted that their reports to dealers are confined to the factual details of their transactions.

Other dealer practices. Two other dealer practices commented on by some consultees deserve mention because they had been identified in the financial press during the summer of 1958 as possible disruptive influences in the Government securities market. These are (1) delayed delivery sales contracts, and (2) short-selling.

Delayed delivery contracts had been used in sales of June "rights"

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by some dealers to stock exchange firms, which in some cases sold to individuals on a delayed delivery basis. In this way buyers established a speculative position, while the dealer financed the position directly, if it was a bank dealer, or secured financing along with the regular dealer position, if it was a nonbank dealer.

Most dealers were opposed to this practice as a matter of policy insofar as it was used to facilitate speculative commitments. It was also pointed out, however, that delayed delivery contracts serve a useful purpose in the functioning of the market; dealers make sales on one day, dated for delivery a few days later, for a wide variety of reasons. When, for example, corporations and others have large blocks of funds becoming available from capital market financing, they may begin to buy Government securities several days before the new money becomes available in order to spread out the market impact of the transactions. Another example was the use of delayed delivery sales of new Treasury issues to institutional investors. In the February 1955 refunding, some of these dealer contracts to sell 3 per cent bonds of 1995 ran as long as four months.

Only a few consultees discussed short selling, and these felt that the practice had not been a disruptive influence in the market during the summer of 1958. Those who commented more generally on the nature and role of short selling pointed out that the practice is too costly to be undertaken for more than relatively short periods and sufficiently risky that it is typically confined to the small group of professionals who are closest to the market. The cost of a short position is usually greater in interest-bearing securities than in stock, for the interest during the period while the short position is maintained as well as the charge for borrowing securities (usually ½ per cent) must be covered.

Those who commented on the broader market aspects of short selling appeared to view the practice as essential to the effective maintenance of continuous markets. As they explained it, in the absence of short selling, arbitrage of opportunities arising from yield spreads and hedging of risk exposure on long positions become difficult. Also, dealers find it necessary to sell short in order to provide service to customers who wish to buy securities the dealer

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does not have in position at the time. Considerable comment was made to the effect that short selling in the present market is seriously hampered by the relatively limited facilities to borrow securities. Several dealers thought the functioning of the market would be improved if means could be developed for pooling securities which could be borrowed, perhaps including even securities held by public agencies.

Entry of new firms into dealer market. Most of the consultees who commented on the question of new entrants into the dealer market were of the opinion that more firms would be desirable, but few were explicit in stating why. Those who were explicit indicated that they thought more firms, by increasing aggregate dealer positions and trading and providing a wider variety of viewpoints, would help to broaden the market. One observer pointed out that in the existing market there are in effect only six major dealers who operate in volume in all maturity sectors. A few were of the opinion that more dealers would not add to the breadth of the market but would create more intensive competition for the existing volume of business.

When queried why there had not been more new entrants into the dealer market, consultees mentioned as the principal deterrent the small supply of qualified specialists to staff new firms. One banker stated that in his opinion the most logical candidates for entry were the established and well-capitalized firms already operating in other financial areas, particularly the underwriters of corporate and municipal securities. Discussants representing firms of the latter type stated that they have periodically reviewed the pros and cons of entering the Government securities business, but have been discouraged mainly by the scarcity of experienced personnel. Moreover, they noted that in recent years the expansion of their other business has been so rapid that personnel needs even for existing operations have been pressing.

Other consultees explained the hesitancy of already established firms to enter the Government securities market on the basis of the variability of profits and the need to take large positions relative to the size of firm capital. Partners and officials in established firms are reluctant to risk any large share of the firms' total capital

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in a market in which they are inexperienced. Also, with the capital presently tied up in other business, resources available for entering the Government market are not large. For this reason, as one consultant noted, in the few instances where firms have traded in Governments in a small way, the Government portfolio has often been managed as a residual operation, serving as a liquidity reserve subject to cutbacks when other operations of the firm required funds.

Government securities brokers explained their unwillingness to become dealers in terms of their limited capital, lack of inclination, and satisfaction with their present function, which involves service to dealer customers without the assumption of risks. They also noted that to become dealers they would find it necessary to give up their activity as brokers.

Some consultants suggested that the intensity of competition, narrowness of price spreads, and variability of profits might be responsible for the lack of new entrants. The point was also made, however, that profit opportunities in the Government securities market over time are quite adequate to attract new entrants.

Pros and cons of an organized exchange market. In considering the functioning of the Government securities market and the ways in which that functioning might be improved, the consultees were asked to comment on the feasibility of an organized exchange market for Government securities as a replacement or supplement to the present dealer market.

The respondents were virtually unanimous in the view that the present type over-the-counter market is preferable to an exchange market for Government securities. Even if confined to bonds, with bills and other short- and intermediate-term securities traded as at present, an organized exchange market was regarded as an unsatisfactory alternative.

In support of this view, consultees pointed out that in the present market incoming bids and offers are not simply matched but rather transactions involving large blocks of securities are "worked out" by dealers over a period of time with relatively small impact on market prices. Such transactions frequently involve a chain reaction of purchases, sales, and swaps, each of which is based on a

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relatively firm expectation regarding price such as would be unlikely in an exchange market.

Dealers maintain a close working relationship with prospective buyers and sellers and are in a position to seek them out when attempting to lodge a large sale, to satisfy a large purchase, or to execute a swap transaction. Furthermore, they are able to perform these functions without disrupting the market and causing big movements in price. In an auction market, it was claimed, the publicity surrounding such potential transactions would cause wide price fluctuations and this in turn would make for a thinner market. Even with wider price fluctuations, it was said, large transactions could not be effected as quickly as at present.

It was also pointed out that the Government securities market differs from other markets in that typically many investors, particularly banks, are altering their portfolios in the same way at the same time. In periods of credit restraint, most banks are likely to be net sellers of Governments and are also likely to be shortening the average maturity of their holdings. The reverse general movements occur at times of credit ease. At such times dealers must move securities to and from nonbank holders, many of whom must be sought out by dealers.

In further support of the present type of market, it was observed that Government bond trading had moved away from the exchange in the late thirties when volume became substantial. To attempt to reverse this natural evolution, it was said, would be retrogressive. It was noted that there is a growing tendency for large transactions in corporate and municipal bonds and even corporate stocks to be handled off the existing exchanges. Frequently large blocks cannot be moved on the exchanges without sizable price effects.

It was pointed out that, in any case, there is a distinct difference between the stock market and the market for Government bonds, which stems from the difference between the two types of security. Stocks are issued by many different companies and are subject to diverse influences, so that some are likely to be rising in price while others are falling. In the case of Government bonds, in each maturity sector prices generally move together and yields are related in a relatively smooth curve.

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These differences, it was reported, would make it extremely difficult if not impossible for specialists to operate as they do currently in the stock exchanges. Doubts were expressed by a number of consultees whether specialists could be found who would be willing and able to raise the necessary capital and take the types of risks to which specialists are exposed in the stock exchanges.

The view was expressed by some discussants that small-lot trading, reflecting perhaps purchases and sales by individuals rather than institutions, might be handled successfully on an exchange, if a reasonable and standard system of commissions were introduced. Others pointed out that trading by individuals is quite small and, unless special action is taken to attract more individual investors to Government securities, the volume of trading would be insufficient to make the matching of bids and offers a practical possibility. The view was also expressed that individual investors are adequately served by banks using the present market.

The representatives of the New York Stock Exchange pointed up the functions that an exchange market could fulfill for retail transactions, while most wholesale transactions continued to be carried out in the dealer market. They made this development dependent, however, upon a greatly enhanced interest by individuals in Government bonds as a result of the introduction of a tax-exempt security or otherwise, and of a system of commissions providing an incentive to securities salesmen and brokers to handle Government bonds. It was also made dependent upon a willingness by the Federal Reserve Banks to use the exchange for those operations in longer term securities the Banks undertake as agents. It was further indicated that a greater volume of such activity in longer bonds would be necessary. It might also be necessary to require that all member firm transactions in Government bonds be effected through the exchange facilities.

Pros and cons of a dealer association. The role of a possible association of Government securities dealers was discussed in relation to several of the issues which the respondents were asked to consider. A need was expressed to find a means to identify and publicly distinguish primary dealers in Government securities, who perform a unique function in making markets. Also, such identification

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would be necessary in order to implement many of the suggestions that had been put forward for additional privileges and responsibilities for such dealers. Among the privileges that might be extended to dealers in order to improve the functioning of the market, the possibility was suggested of preferential financing by money market banks or by the Federal Reserve, and of facilities for borrowing securities to facilitate short sales. Another privilege that was considered was special treatment for dealers in downpayments on subscriptions and allotments of new issues of Government securities. It was felt that this would assist in the marketing of new issues.

As a *quid pro quo* for such privileges, it was suggested by some of the dealers that those who wish to be regarded as primary dealers should commit themselves to minimum amounts of purchases and sales at quoted prices in transactions with customers and/or other dealers. While not all dealers would need to commit themselves to buy or sell minimum amounts at quoted prices throughout the entire maturity range, it was felt that a willingness to do so in some maturity area would be a necessary condition for identification as a primary dealer and therefore access to the privileges noted above. It was also noted that if restrictive regulations such as margin requirements for purchasing or carrying Government securities were found to be in the public interest, it would be necessary to grant preferential treatment to dealers, and for this purpose too they would need to be unambiguously identified.

Three types of solution to the problem of giving unambiguous public recognition to primary dealers were discussed by the consultees. The possibility of establishing through legislation a formal organization (similar, for example, to the National Association of Securities Dealers) received little favorable comment. The contrast between the large number of firms involved in other securities markets and the small number of primary dealers in the Government market was pointed out. Moreover, most discussants expressed opposition to enabling legislation that would give statutory sanction to a formal dealer organization on grounds that Congressional action in this highly specialized and complex field might

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introduce rigidities that could impair the smooth functioning of the market and discourage the entry of additional dealers.

A second type of solution was that the primary dealers might at their own initiative undertake to form an association, perhaps under the aegis of the Federal Reserve and/or the Treasury. Such a group, it was thought, might itself provide the basis for identification and recognition. The principal objections to this suggestion were that it might well run afoul of the anti-trust laws and encounter problems in establishing criteria for identification of dealers.

A third viewpoint was that a basis for identification was already at hand in the present relationship between the Federal Reserve trading desk and primary dealers. Such dealers had to be identified under present practices. It was suggested that this basis for identification could be strengthened by the requirement that those who wish to be regarded as primary dealers undertake a commitment to provide to the Federal Reserve each day firm quotes to buy and sell minimum amounts of securities. Dealers so recognized could form an informal trade association, which might perform some useful functions, but this would not be essential to solve the identification and recognition problem.

A number of other possible benefits from an association of dealers were brought out in the discussions. It could serve as a basis for discussion of mutual problems and for advice to the Treasury. It might provide a means for maintaining and protecting a unified set of ethical standards and trading practices, although little criticism was expressed concerning existing standards and practices. One dealer suggested that a function that might be appropriate for a dealer association to undertake was the establishment of a jointly owned central brokerage, quotation, and odd-lot service for all dealers.

As a group, consultants other than dealers did not react strongly one way or the other to the suggestion for a formal dealer association. They recognized the possible need to "build a fence" around dealers under some circumstances, but they saw no great need for an association. Also, there was apparently no fear of lessened competition or collusion on the part of dealers, were they to form an association.

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FINANCING THE MARKET

This section summarizes the views of consultants on the nature and adequacy of dealer financing, reports their opinions on some of the broader uses and implications of repurchase agreements, and digests their comments on suggestions for adopting margin standards on credit purchases of Government securities and for introducing limits on the uses of repurchase agreements.

Dealer financing. Because dealers typically finance the bulk of their positions in Government securities through borrowing, the questions of credit availability and its cost are of prime importance to their effective functioning. It was generally observed that the collateral loan from money market banks—the traditional means of financing dealers' inventories—has in recent years been overshadowed by repurchase agreements with banks outside New York and with nonfinancial corporations. Because most dealers regard bank financing in New York for the bulk of their needs as inadequate or too costly, they have developed a wide network of other suppliers of funds.

Money market loans. Discussants indicated that two of the large New York City banks generally stand ready to finance dealers with call loans. These loans are made at a preferential rate, below the call rate on other security loans but usually above the Federal Reserve discount rate and quite often above the yield available to dealers on much of the short-term inventory of Government securities they must finance. It was noted that several other large New York City banks will also at times make call loans to dealers at preferential rates. The frequency and volume of such loans from these banks depend largely on the current reserve position of the lender, however, and funds from these sources are not continuously available, as at the two banks noted above. The repurchase contract is rarely used in dealer borrowing from New York banks.

Opinion among the consultees varied as to the present adequacy of money market bank financing of dealers. While some dealers reported that, to the extent they rely on New York City banks, they are fully satisfied, the majority stated that for the most part they turn to New York banks only as lenders of last resort. Several

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dealers and other consultees identified the need for improved financing as one of the key problems requiring attention in the Government securities market today. Those who reported that financing by money market banks is inadequate indicated both that rates charged are too high and that credit availability at the preferential rate is insufficient at times of need. Bankers, particularly those from cities other than New York, were generally agreed that the level of rates on New York call loans to dealers has led dealers to seek cheaper sources of financing in other areas.

The dealers that reported no problem in obtaining all of the credit needed from money market banks (even in periods of money stringency) were principally large organizations, although one smaller dealer who has been in the business for some time also reported full satisfaction with New York lenders. The most serious allegations of inadequate financing came from smaller dealers.

Notwithstanding their general success in obtaining lower cost money from out-of-town banks and corporations under repurchase arrangements, most dealers expressed preference for borrowing from money market banks when the New York loan rate is no more than ¼ to ½ of a percentage point above the prevailing rate on repurchase contracts. Several dealers explained this preference in terms of the handling and clearance charges on repurchase contracts. It was also suggested that the preference reflects dealer opinion that New York banks have a better understanding of dealer problems and are more likely to assume the responsibility of a customer relationship. This latter relationship permits greater flexibility in the management of loans, including such accommodation as ready substitution of collateral and less rigid loan maturities. For the most part, it was reported, banks outside New York and corporations enter into repurchase contracts with dealers as a convenient means of investing idle funds temporarily.

The fact that banks in the money center have not been more willing to make regular loans to dealers at lower rates was explained in terms of size of dealer deposits and the nature of their loan demands. Because the capital of Government dealers is largely tied up in positions, their average deposits with banks are relatively smaller than those of other financial institutions such as stock

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houses and underwriting firms. Moreover, loan demands of Government dealers tend to be volatile and to be largest when the reserves of New York banks are under most pressure. Concentration of dealer loan demands at such times is likely to force the bank lender into the Federal Reserve discount window. Finally, a preferential rate generally acceptable to dealers would probably be lower than what banks could earn by investing directly in short-term securities.

Repurchase agreements. The consultees generally noted that, in their search for cheaper financing outside the money market banks, dealers have shown remarkable ingenuity in adapting the repurchase contract mechanism to meet both their own and their customers' needs. Several respondents pointed out, however, that the repurchase agreement is not new but was widely used in the bankers' acceptance market during the 1920's.

A typical repurchase agreement from the standpoint of a dealer was described as follows: a dealer sells securities—to a bank, non-financial corporation, or other customer—and simultaneously makes a commitment to repurchase an equivalent amount of those securities at a later date. This purchase and sale is undertaken at prices or yields to provide a specific rate of return to the customer for the period of time between the sale and repurchase date. In some cases, substitution of securities is permitted in the repurchase agreement. At the termination of the period, the dealer sells the securities or arranges new financing.

Discussants indicated that banks outside New York and non-financial business corporations have been active on the investment (lending) side of repurchase arrangements with dealers. Although the repurchase agreement instrument offers investment advantages to any institution with substantial sums of money available for temporary placement, the consultees were generally of the opinion that its use is largely concentrated in a limited number of commercial banks and nonfinancial corporations.

The banker consultants that reported repurchase activity with dealers indicated that virtually all of the agreements were short term, often overnight, and involved short-term securities, but contracts of one-to-two-day maturity involving longer term issues were

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also mentioned. Banks outside New York that were represented in the consultations and that make repurchase agreements with dealers reported generally that they do so strictly for reserve adjustment purposes, although some stated that they feel some responsibility for helping dealers through tight credit situations, particularly at times of Treasury financing.

Discussants from nonfinancial corporations indicated that they view the dealer repurchase contract as an alternative to the purchase of short-term money market obligations in the management of corporate liquidity positions. They also stated that because investing is not the primary business of their companies, liquidity and the timely availability of funds to meet corporate payments are over-riding objectives of their portfolio policies. Repurchase agreements meet these objectives particularly well; they make it possible to tailor investment maturities precisely to the dates on which cash is needed.

As described by the treasurers, corporate repurchase agreements are usually short term, extending for only a few days. In addition, however, some corporations enter into longer term contracts which run on occasion for several months.

The longer term contracts are arranged to provide funds on dates further in the future when predictable cash needs will be large, for example dividend and tax payment dates. Such contracts may be undertaken when the date of the cash requirement is not matched by the maturity date of an outstanding Treasury security. If a security with a longer maturity were purchased and the amounts involved were large, sale at the time of cash need might depress prices appreciably. By making a repurchase contract with a dealer, the corporate treasurer transfers this market risk to a professional whom he regards as better equipped to deal with it.

Sometimes corporate treasurers will anticipate tax and dividend dates by bidding in the auction for the new three-month Treasury bill of the nearest maturity. As the tax or dividend date approaches, however, such bills typically develop a market scarcity; hence, dealers offer the corporate holders precisely tailored repurchase agreements backed by other short-term issues in exchange for the scarce bills. For this reason, the volume of a corporation's repur-

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chase agreements to meet peak cash needs tends to grow as the date of need approaches.

Several corporate treasurers indicated that in addition to providing precise maturity tailoring, repurchase agreements may also be undertaken in preference to outright investments when the yield differential makes this attractive. One treasurer stated further that in periods of considerable market uncertainty he might choose a repurchase agreement in preference to an outright investment in order to avoid the risk of unfavorable market fluctuations.

Corporate treasurers reported that as a general rule they accept no securities under repurchase agreement which they would not be willing to hold as a regular investment. In addition they indicated that they confine their repurchase agreement operations to a relatively few dealers, in whom they have complete confidence. For these reasons they see little or no risk to their corporations in their repurchase agreement arrangements. Although all of the corporate treasurers interviewed apparently receive periodic reports on dealers' capital positions, none seemed to feel the need for more detailed information on dealer operations. They had confidence that any exposure to capital entailed in total dealer commitments would be kept within reasonable bounds by the dealers. The treasurers were warm in their praise of the service rendered by dealers in providing an investment outlet in the form of repurchase agreements, reporting that without the close working relationship now prevailing corporations might hold in total a smaller share of the outstanding Federal debt.

Allusion was made in dealer consultations to the use of repurchase agreements where the underlying collateral is a long-term bond. Repurchase agreements of this type were apparently entered into during the period of bond market advance in the first half of 1958. It was reported that, since the summer of 1958, corporate lenders have shown less willingness to enter into repurchase agreements against longer term securities and that, to the extent they still are willing, margin is more likely to be requested.

Dealers invariably placed stress on the importance of repurchase agreements as a method of financing their inventories and indicated that without the funds obtained in this way they could not maintain

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as effective a market as they do. In their discussion of the repurchase agreement mechanism, however, a few dealers took great care to differentiate the character of short-maturity repurchase agreements from that of "investment" or longer maturity repurchase agreements, disassociating the latter type from the question of dealer borrowing. As one dealer viewed it, the longer term contracts arise when corporations seek an investment maturing on a specific date. To accommodate this need, the dealer sells securities to the corporation and undertakes a contract to purchase such securities from the corporation on the date of the cash need. In this case, the repurchase agreement does not represent current borrowing to carry a position; rather, according to this line of distinction, it is a corporate investment, linked to a fixed-date purchase contract with a dealer.

Dealers active in making this type of contract to repurchase securities at a future date appear to have followed different approaches, however, in their selection of securities involved in the contract. Some dealers appear to lay great stress on keeping the maturity date on the contract and that on the securities as close as possible, in order to minimize the impact of possible changes in the market value of the securities over the life of the contract or to keep the refinancing need manageable at the termination of the contract. These dealers carefully estimate the risk of market loss inherent in the remaining period to maturity of the securities. A few dealers appear to be more willing to arrange contracts in which the maturity of the underlying securities is relatively long term.

Suggested improvements in dealer financing. Despite their general success in obtaining repurchase contracts, the majority of dealers stated that the market would function better if money market banks supplied credit more cheaply and more readily and if more money market banks participated in dealer financing. Some smaller dealers observed that rates paid to carry short-term issues cut heavily into profits and limit their operations. They also alleged that the task of financing their positions (shopping around the country for financing by telephone) is extremely time consuming.

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One dealer, in commenting on bank attitudes toward financing dealer positions, pointed out that money market banks have no economic need for the liquidity of dealer call loans because they can adjust their reserve positions in the Federal funds market or at the Federal Reserve Bank discount window. As a result, he noted, such banks are interested in dealer call loans only when the loan rate is sufficiently high to provide a good return relative to other short-term outlets for funds.

Bankers generally indicated that money market banks would be more willing to serve as a backstop in dealer financing if they could be assured more flexibility at the Federal Reserve discount window whenever the volume of dealer loans necessitated borrowing of bank reserves. Some bankers indicated that this might be handled if New York banks were to give dealers a line of credit on five-to-seven-day loans, with the understanding that loans of this type would be readily accepted for rediscounting at the Federal Reserve without prejudice to the ability of the banks to borrow for other purposes. Several dealers, although indicating a willingness to make five-to-seven-day repurchase contracts, stated that, in their bank borrowing, they would find it difficult to be tied in for so long a period.

Another type of solution advanced was to increase the availability of dealer repurchase assistance from the Federal Reserve. Some dealers merely suggested that the Federal Reserve be freer in making repurchase agreements on its own initiative, showing a little less concern over the resulting impact on reserve availability and on published reserve statistics. A related suggestion was that dealers be allowed to make repurchase agreements with the New York Reserve Bank at their initiative up to fixed amounts.

The point was also made that action by money market banks to finance dealers at lower rates than now prevail might heighten rate competition in the market in view of the fact that corporations and other investors would continue to seek short-term obligations. It was regarded as unlikely that willingness of money market banks to provide a larger share of dealer financial needs would enable them to regain deposits from corporations and others employing short-term funds in repurchase agreements with dealers.

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Other uses of repurchase agreements. From the detailing of repurchase agreement practices in the consultations, a general consensus emerged that although the ingenuity of Government securities dealers was mainly responsible for the expanded use and refinement of the repurchase agreement form in recent years, the significance of the repurchase agreement extends beyond its use as a source of funds for dealers. A striking example of other uses of the repurchase agreement instrument involving a money broker was provided by the speculation in "rights" at the time of the June 1958 refunding.[5] Two other important adaptations of the repurchase agreement mechanism which were also discussed are the use of the repurchase agreement in one type of interbank transaction in Federal funds, and the development of the so-called "reverse repurchase agreement" or "sell-back."

At the New York City banks represented in the consultations, repurchase agreement operations are generally limited to interbank trading in Federal funds. Bankers who reported using repurchase agreements in this way stated that these operations are undertaken principally as an accommodation to correspondent banks. The out-of-town correspondent bank prefers the repurchase agreement form to an unsecured Federal funds loan because the repurchase agreement makes transactions allowable in larger blocks than would be possible on a direct loan, since such transactions are not subject to the 10 per cent of capital limit on loans to a single borrower.

Considerable difference of opinion was expressed among both bankers and dealers as to the desirability of the repurchase agreement practice known as the "reverse repurchase agreement." In this type of operation the dealer enters into a repurchase arrangement with a bank but, in contrast to the usual repurchase agreement, the bank in this case is the seller of securities (borrower of funds) and the dealer is the buyer. The dealer, however, is not the ultimate supplier of funds in the reverse repurchase agreement, for he offsets his bank agreement by making an ordinary repurchase agreement as an offset. In effect, the dealer in this case serves as an intermediary.

[5] See section on the Treasury's June financing, p. 8.

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Bankers expressed divergent views as to the desirability of this practice. Several reported that they had made reverse repurchase agreements, but some of these stated that they had later discontinued the practice on the grounds that it seemed to be an indirect method of paying interest on demand deposits.

Several dealers also expressed doubts about reverse repurchase agreements. One or two of these indicated, however, that they sometimes use "sell-backs" as a means of obtaining scarce securities in demand by customers. Other dealers voiced a strong conviction that reverse repurchase agreements are an acceptable practice. One stated that the reverse repurchase agreement serves a useful market function in matching up a potential bank seller of short-term securities with a willing corporate buyer.

Corporate treasurers expressed no special concern about the reverse repurchase agreement, although one suggested that it is desirable to arrange such transactions through dealers in order not to complicate the customer relations of banks with pressure from large corporate depositors seeking reverse repurchase agreements.

Views on need to limit repurchase agreements. Views differed among the consultees on the essential nature of repurchase agreements, as well as on the credit standards that ought to be followed in the use of repurchase agreements. While some bankers generally viewed the repurchase agreement as just another form of loan arranged to finance the dealer's inventory of securities, others regarded it more as an investment, while corporate treasurers looked upon their repurchase agreement arrangements as a form of investment quite similar in nature to other securities transactions. Corporate treasurers consider themselves not to be lenders but investors of funds at their own convenience. Dealers were generally inclined to support the corporate treasurers' view, but as noted earlier, tended to differentiate repurchase agreements of longer maturity from those of only a few days.

In general, bankers tended to stress that credit standards should be equally as stringent on repurchase agreements as on loans of similar maturity. They were almost unanimously opposed to repurchase agreements made against long-term securities on little or no margins. They also spoke with disfavor of agreements made

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through money brokers where the lender has little knowledge of the identity of the ultimate borrower.

Corporate treasurers felt that there was little or no risk involved in repurchase contracts with dealers. They have confidence in the integrity and financial soundness of the dealers, and, in most cases, confine their repurchase agreements to a limited number of dealers and to short-term securities.

In reviewing the terms asked by lenders on credit extensions against June 1958 "rights," those consulted reported a general impression that some loose credit practices had been followed. Two practices were singled out for particular comment, (1) the willingness of some nonfinancial corporations and banks to make loans or repurchase agreements with money brokers who were in effect merely agents for unknown borrowers (buyers), and (2) the practice of making loans or repurchase agreements at little or no margin against "rights" without requiring any added margin following the exchange of the "rights" to an intermediate-term bond. Bankers were generally of the opinion that on exchanges of the latter type sound credit practice requires that more margin be obtained. It was also stated that in many cases the individuals involved, being unfamiliar with the Government securities market, did not know and were not informed that lenders would require margins when the "rights" were exchanged for bonds.

There were no specific proposals put forward for official action to limit corporate repurchase agreements. As noted above, many though not all of the discussants were of the opinion that the 1958 experience would have a lasting effect on the repurchase agreement practices of corporations. The view was widely expressed that as a result of this experience, corporate investment policies had been re-examined. Although there was no evidence that the over-all use of repurchase agreements by corporations had diminished significantly, it was reported that the specific uses of the repurchase agreement instrument by corporations were being reviewed more carefully. Corporations are more likely in the future, it was said, to confine repurchase agreements to primary dealers and to accept only relatively short-term securities. Furthermore, they are less likely to enter repurchase agreement contracts requiring the ex-

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change of securities in a Treasury refunding. It was also observed that any action that might be taken to encourage banks to require adequate margins on loans would also have an effect on corporations, which would be likely to adopt similar standards.

Other consultees noted, however, that market participants had short memories and perhaps reliance cannot be placed on the lessons of 1958. Furthermore, there are enough new corporate treasurers coming into office so that a repetition of 1958 was possible.

Many discussants suggested that repurchase agreements needed to be reported more systematically and that consideration might be given either (1) to requiring listed corporations to report regularly to the New York Stock Exchange or the Securities and Exchange Commission or (2) to establishing a regular report from corporations to the Treasury or the Federal Reserve. This involved the question whether repurchase agreements should be reported as loans or not. Some of the consultees expressed the fear that such reporting, particularly if repurchase agreements were required to be treated as loans, might discourage corporations from undertaking repurchase agreements, in view of the fact that corporate treasurers generally are not empowered to make loans. One banker felt that this would not be undesirable if banks took further steps to satisfy the financial needs of dealers. The corporate treasurers consulted generally expressed willingness to cooperate in supplying information on repurchase agreements, although some question was raised as to the reaction of their companies if repurchase agreements were treated as loans.

Views on need for stricter margin standards. Most of those consulted felt that it would be undesirable to impose statutory margin requirements on purchases of Government securities, although there was general agreement that abuse of existing credit standards was undesirable and should be prevented. The events of 1958, it was said, were so unusual that they do not justify the imposition of regulatory margin requirements. It was claimed that such requirements would discourage participation in the market and would hinder the normal speculative activity that is regarded as necessary for the success of Treasury financings and for the efficient func-

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tioning of the market for Government securities. A few consultees were favorable to legally required margins but recognized that dealers would need to be given preferential treatment.

Most of the respondents thought that, insofar as banks are concerned, the question of adequate margin standards on collateral loans and repurchase agreements was a supervisory problem and could be handled by a letter from the bank supervisory authorities suggesting appropriate margins for nondealer borrowers.

It was pointed out that higher margins than were practiced in 1958 not only would dampen a speculative build-up, but also would lessen margin calls, such as had contributed to the market decline in the summer of 1958.

ADEQUACY OF STATISTICAL INFORMATION

There was recognition among those consulted that the Government securities market is relatively under-reported. As one dealer put it, this is the only major market that does not report its volume to the public. Respondents felt that the Federal Reserve and the Treasury were entitled to whatever statistical information about the Government securities market they need to carry out their responsibilities. On the question of publication of statistics, however, a wide range of views was expressed.

Reports to Treasury and Federal Reserve. Consultees who considered the matter took it for granted that the authorities should have regular information on dealer positions, activity, and borrowings. Many were of the opinion that regular confidential reports on repurchase agreements by corporations should also be obtained. One respondent suggested that the Federal Reserve and Treasury establish regular reports from a sample of corporations and financial institutions, including banks, on the amount, maturity, and type of instrument involved in repurchase agreements. Such information, if it had been available in 1958, would, it was claimed, have forewarned the Federal Reserve and the Treasury regarding the speculative build-up. The corporate treasurers who were interviewed all expressed a willingness to report on their securities holdings and repurchase agreements.

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Reports to public. Opinions differed on whether more adequate public information would have lessened speculation in 1958. It was thought by some that with more adequate information, dealers would have been alerted and might have discouraged other participants in the market from taking speculative positions. Others felt that publicity might have had the effect of attracting additional speculation. It was also observed that many of the speculators and some of the stock brokerage houses through which they dealt were inexperienced in this market and would not have been influenced by statistical reports on such technical matters as repurchase agreements and dealer positions.

On the question of publishing aggregate dealer positions, perhaps by maturity range, there was a wide variety of opinion both among dealers and among the other discussants. Some felt that, as a matter of record, dealer positions should be published. Many others noted that, because of rapid changes, such reports, if not current, would be of no direct use to market participants and, in fact, might be misleading. The variability and complexity of dealer positions and borrowings would lessen the significance of reports relating to a single day, as is true now, it was said, of the weekly reports as of Wednesday on New York and Chicago bank loans to dealers.

A number of dealers, and some of the other consultees, feared that publication of aggregate positions currently might be harmful to dealers. Publication of positions in the aggregate might at times enable some dealers to extract specific information about operations of other dealers, in view of the relatively small number of dealers in the market and the knowledge they have about potential transactions from customers who shop around before buying or selling. Such information, it was claimed, might also induce potential buyers and sellers to take advantage of apparent weaknesses in dealer positions.

The question of publishing statistics on aggregate credit to dealers was not discussed in detail by many of the consultees. A number of them were of the opinion that such information would be useful and that the weekly banking statistics now published ought to be supplemented by information on corporate lending to

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dealers. As noted earlier, it was proposed by some that corporations be required to report repurchase agreements to the stock exchange, treating them as loans, while others expressed the fear that this would discourage corporations from extending repurchase agreements.

The question of including a sample of corporations in the Treasury's monthly survey of ownership of Government securities received some favorable response, but the view was also expressed that such statistics would be misleading if they did not separate securities held under repurchase agreements from other holdings. Most corporate treasurers interviewed were of the view that additional information would be of no direct benefit in their operations but had no objection to publication of aggregate holdings of securities and repurchase agreements.

TREASURY FINANCING TECHNIQUES

Discussion of Treasury financing covered a wide range of topics, including the present attitude of investors toward Government bonds. In this connection suggestions were put forth for making bonds more attractive to both institutional and individual investors. Comments were also submitted on current Treasury practices in issuing securities, and there was considerable discussion of methods for facilitating the distribution of Government securities at times of financing operations.

Attracting investors into longer term Treasury bonds. As far as sales to financial institutions are concerned, some observers felt that the existence of Government underwritten mortgages and Agency issues may require the Treasury to confine its bond issues to different maturity ranges. One observer thought it might be necessary to sell only issues maturing within 15 years, while another recommended that a consol (perpetual bond) would have features enabling the Treasury to compete for the funds of institutional investors.

The general question whether selling more Treasury bonds was simply a matter of paying the necessary market rate received considerable attention. Although there was no consensus on this

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matter, as noted in the first section of this report, the consultees pointed to a number of specific areas in which higher yields might attract additional buyers to Treasury bonds.

This would require a more careful analysis of the characteristics of the various financial institutions and a greater effort to tailor new issues to the needs of the various sectors of the institutional market. For example, some institutions, such as pension funds and smaller life insurance companies, are not usually organized to service mortgages or to carry out the analysis appropriate to the purchase of corporate securities below the highest grade. The Treasury could, it was claimed, price securities that would find a market with such institutions more easily than with large insurance companies that are able to earn a higher average yield on other investments.

Along the same lines, it was proposed that the Treasury make arrangements to increase the frequency and closeness of its contacts with financial institutions and nonfinancial corporations so that it would be in a better position to tailor its issues to the needs of potential buyers. The question was raised whether the Treasury's present consultation procedure with market participants was fully adequate for this purpose.

It was also suggested that the Treasury adopt a system of securing advance commitments from institutions to take down given amounts of Government bonds. In this way, it was thought, the Treasury could compete more effectively with private borrowers when it offers large blocks of securities to institutions, which tend to commit their estimated cash flows in advance. A related idea was that the Treasury put out frequent and regular issues of bonds in relatively small amounts. This would help to attract institutions, which could then plan for and schedule their purchases of Treasury bonds. A counter-argument on this point was that it was preferable that Treasury bond issues be less frequent. It was said that in a declining market—when the principal difficulties are encountered—buyers who know that another issue will be along soon are more likely to back off and wait.

In discussion of the market for Treasury securities among individuals, there was virtually unanimous agreement among the con-

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sultees that under current conditions only equities and tax-exempt securities have an appeal to wealthier individual investors. The important role of savings bonds as an instrument for systematic saving by individuals of more moderate means was recognized, and some observers thought that a higher rate on these bonds would make them considerably more attractive to individuals and would result in a significant increase in sales.

In considering ways to place more Treasury bonds in the investment portfolios of individuals, the consultees expressed a wide range of views on two types of proposals: (1) enlisting the services of the established securities industry through the payment of commissions and (2) attaching a degree of tax exemption to United States Government securities.

Payment of commissions. A number of discussants observed that the United States Treasury, which endeavors to market enormous quantities of securities each year, has no salesmen with the means and incentive to place its securities with individuals. They observed that, as far as individual investors are concerned, securities are "sold, not bought." The natural solution to this problem, they claimed, was to utilize the existing network of investment firms and to pay commissions to their salesmen for selling bonds to individuals. In many cases this type of proposal was linked with the suggestion that some form of tax exemption be introduced.

Not all the consultees agreed with this proposal. Some argued that if the Treasury provided a bond that was really appealing to private investors, it would not have to be "sold." Others thought it would be too costly or that there were dangers of commission splitting or other abuses. Also, it was recognized that the introduction of a system of commissions would pose dangers for the voluntary savings bond program and might redound unfavorably on the reputation of investment bankers, who would appear to be exacting a price to do what commercial banks, corporations, and others are doing free as a service to the Treasury.

A number of consultees made the point that if a commission system were adopted, it should apply only to sales to individuals and not to sales to institutions.

Tax exemption. Most of the discussants who considered the

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matter of tax exemption appeared to believe that it was necessary in some form if significant amounts of Treasury bonds were to be placed with individuals in the middle and upper income brackets. Objections that were voiced to this proposal were that it would narrow the tax base and would create difficulties for State and local government financing.

A number of specific suggestions were made as to the design of a tax-exempt Government security. One proposal from representatives of an investment banking firm was based on the assumption that to attract individual investors a bond would have to be marketable, carry tax exemption, and have a maturity of at least 20 years in order not to compete with savings bonds. To keep such a bond out of the hands of speculators and in the portfolios of long-term investors, it was recommended that tax exemption apply only to the original investor. If sold by him, it would lose its tax exemption. Thus, investors could liquidate if they needed the funds, but it would be one of the last items in his portfolio that an investor would dispose of. Such a bond, it was claimed, could be successfully sold by the existing network of securities salesmen if they were compensated for their sales efforts.

In most cases it was proposed that individuals be limited as to the amount of tax-free securities they might purchase; a figure of $25,000 was mentioned by several discussants. Most of the proposals simply called for an exemption of interest earnings; in one case it was proposed that, up to a given limit, funds placed in such bonds be exempt from the income tax or, at least, from the first bracket.

Another suggestion was that the Treasury issue a long-term bond designed to capture capital gains that had accrued in the stock market. Individuals who realized capital gains would be permitted to purchase such a bond in lieu of paying a capital gains tax. The bond might be nonmarketable and redeemable only at 75. In this way the capital gains tax would be excused only so long as the gain remained invested in the special Treasury bond. At the death of the purchaser, the bond would be redeemable at par.

Practices in issuing securities. Under this heading, consultees discussed the pros and cons of the practice of permitting commercial

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banks to use tax and loan account credit on subscriptions to new issues for their own account and for their customers. Consideration was also given to various other current practices, such as subscription and allotment procedures and use of rights in exchange issues. In addition, the consultees commented on the problem of underwriting and market stabilization at times of Treasury financings and in this connection they discussed the role of the Treasury trust accounts in the market and the pros and cons of a possible stabilization fund. They also considered establishment of Treasury bills with daily maturities.

Tax and loan accounts. Consultees agreed that the practice of permitting commercial banks tax and loan account credit on subscriptions for their own account and for customers was not entirely satisfactory as an underwriting technique in periods of declining prices or uncertain market conditions. Nevertheless, except for some refinements in the technique, discussed below, no practical alternative was offered.

It was recognized that some method was necessary to assist in the distribution of large blocks of new issues of Government securities and also to prevent Treasury financing operations from causing wide swings in bank reserves—as would happen if payment for new issues were made directly to the Treasury's account at the Federal Reserve Banks. Under the present system, however, banks have an incentive to pay better than the going market price (accept lower interest rate) on new issues carrying the tax and loan privilege because of the value to them of the deposits so created for the period between payment for the issue and withdrawal of the deposits by the Treasury. The principal motivation to banks during periods of credit restraint is to acquire the deposits rather than to acquire and hold the new securities, although a number of the bank representatives spoke of the responsibility their institutions feel to help in underwriting new issues. In any case, the result is that issues carrying tax and loan privileges tend to be promptly sold by some banks, which puts pressure on their prices in the secondary market.

In these circumstances banks, acting as investment advisers, are in the position of having to recommend that their customers refrain from subscribing to new issues and wait to acquire them at a higher

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yield later. In this way, buyers in the secondary market share with the banks their gain from the tax and loan account privilege.

Opinion among the consultees was divided on whether the immediate decline in price on tax and loan issues was a deterrent to investors. It was observed that sophisticated investors understood the process, but less sophisticated investors and the general public interpreted the immediate decline in price as indicating lack of success of the issue. The corporate treasurers who considered the matter apparently were not disturbed by the practice and were accustomed to making their purchases in the secondary market.

There was some indication that banks have recently backed away from bidding for issues carrying the tax and loan privilege because in some instances the value of the tax and loan credit has tended to be offset by the immediate price drop, and this has influenced bidding on subsequent issues.

It was noted by one of the bank representatives that as banks sell issues acquired with tax and loan credit, dealers perform effectively the task of secondary distribution. It would be desirable, he said, to make it possible for dealers to participate more actively in the underwriting and distributing job in the first instance. In this connection, it was also suggested that dealers be permitted some form of tax and loan account payment.

A few discussants suggested that the practice be improved by confining tax and loan account credit to only a fraction of banks' own subscriptions while permitting full credit for customer subscriptions. This would introduce an incentive to act as salesmen for new issues. It was noted by others that the bank-customer relationship does not lend itself to salesmanship by the bank to the customer. Also, such a practice might encourage bank purchases for customers with an understanding that the bank would buy the securities back.

Subscription, allotment, and refunding procedures. On the matter of subscriptions and allotments in Treasury cash offerings, a number of consultees made the point that because of their special role in the market, Government securities dealers ought to receive preferential treatment on allotments and deposits. The general view was also stated, though not developed, that greater effort

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should be made to give preferential allotments of securities to purchasers who are likely to be relatively permanent rather than transitory holders of the new security.

With respect to ways of preventing excessive speculation such as occurred in 1958, a number of discussants suggested that on exchange issues in which more than one new security is involved the Treasury should announce that it might allot to investors less than they subscribe for on one or the other issue in order to limit the amount issued in accordance with its views on what the market could reasonably be expected to absorb.

Some consultees recommended that the use of "rights" be abandoned entirely in the case of bonds and that maturing issues simply be retired out of the proceeds of new issues. It was noted that by the time a bond approaches its maturity date it is no longer likely to be held by long-term investors and that rights values may attract speculators but do not help to place the new bonds with long-term investors.

The suggestion was put forward that the Treasury adopt a system of advance refundings, as had recently been done in Canada, as a means of inducing long-term investors to remain in Treasury issues. It was pointed out that advance refunding would reduce the heavy concentration of maturities in specific periods.

Views on market stabilization techniques. It was noted that the Treasury finds it necessary to issue large blocks of securities in a short period of time and that, in contrast to corporate and municipal obligations, there is no underwriting mechanism to stabilize new issues and assist in their distribution to ultimate investors. As one means of achieving this objective, a special Treasury fund was suggested. Such a fund would operate to smooth the market during Treasury financing operations, if necessary, by purchasing the maturing or new securities in moderate amounts in order to facilitate distribution. As outlined by its advocates, it would attempt to deal with relatively minor "ripples" rather than to stem the "tides" representing basic market trends or to correct a disorderly market. It was thought that this could be a two-way fund; that is, it could sell previously purchased securities as market conditions permitted.

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The reactions of the consultees to the idea of a fund were mixed. Some were strongly in favor, others thought it deserved study, and still others were strongly negative. The differences in opinion did not appear to be related to the particular business of the consultees; there was just as much diversity among dealers as among bankers, for example.

Those who commented favorably pointed to the precedent in the case of corporate and municipal underwriters. It was noted that such a fund might skim off a small portion of newly issued securities, which might have failed to be digested and was temporarily depressing market prices out of line with other issues. Such a fund might also operate between financings to smooth ripples in the market.

Among observers who questioned the merits of the proposal or rejected it, the view was expressed that a Treasury fund might well engender expectations that it could not fulfill. If and when investors realized that the fund was supporting a new issue they might rush in to unload before such support ceased. Another reservation was based on the fear that securities purchased by the fund would overhang the market and act as a price depressant as investors anticipated sales by the fund. Much would depend, it was said, on the skill of the operators of the fund, for they would have to attempt to provide some assistance for the "baby that the Treasury places naked on the doorstep" without at the same time adopting it. Doubts were expressed that anyone is skillful enough to operate in the market in this way.

Another objection was that existence of the fund might lead the Treasury to price too thinly. The market might become suspicious of price rigging if it knew the Treasury could engage in supporting a new issue, although such suspicions might disappear in time if not borne out by experience.

A number of observers suggested that, as an alternative to establishing a special fund, the Treasury might use the Government trust accounts more actively to help smooth the market during financings. Instead of having these accounts subscribe directly to new issues as is commonly done now, they might purchase in

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the secondary market. It was recognized, however, that in its role as trustee the Treasury had a responsibility to buy for the accounts at prices that are most favorable to them but at the same time the Treasury could not very well assume that its new issues would go to a discount. At times when new issues went to a premium, the trust accounts would suffer if purchases were made in the secondary market.

Views on daily bill maturities. Another proposal with respect to financing practices was that the Treasury consider issuing bills with daily maturities somewhat as is done in the United Kingdom, in place of the present system whereby 13-week and 26-week bills mature only on Thursdays. It was argued by the proponents of this suggestion that corporations would welcome such an investment medium, and that it would reduce their recourse to repurchase agreements for the temporary employment of funds.

Objections to the proposal were based on the additional complications that would be introduced into bill market quotations as a result of daily maturities. Also, many argued that the market itself is adequately fulfilling corporate needs for specific maturities through the repurchase agreement mechanism. Such needs tend to be concentrated at specific times of the year and, in other periods, demands might be too thin to sustain an adequate market for each issue. Finally, it was noted that the suggestion might interfere with dealer financing, since it would divert corporate short-term funds that are currently tapped by Government securities dealers.

FEDERAL RESERVE ACTIONS AND PRACTICES

Apart from discussion of the influence of Federal Reserve policies and actions in the 1958 build-up and decline and of the impact of public statements of Federal Reserve officials, summarized in earlier sections of this report, the consultees expressed a variety of opinions on the continuing relationship of the Federal Reserve to the market. These concerned Federal Reserve actions at times of Treasury financing operations and activities of the trading desk of the New York Reserve Bank.

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Relationship to Treasury financing. A number of consultees observed that in its attempt to avoid interference with Treasury financings, the Federal Reserve ought to bear in mind that the process of distributing new securities may cover a period of weeks and that an even keel should therefore be maintained well after the payment or exchange date for the new issue. The opinion was also expressed that official statements and speeches should be avoided for a similar period of time following the announcement of Treasury financings so that investors will not expect that changes in monetary policy will follow close upon Treasury financing operations.

Trading desk activities. The dealers were generally well satisfied with the way in which the officials on the trading desk conduct operations in the market. On the matter of go-rounds—trading desk requests to dealers for bids or offers—which temporarily affect market trading, one dealer observed that if the previously noted proposal for daily bids and offers from dealers to the Federal Reserve were adopted, it would be possible to eliminate go-rounds, for the desk would already have a basis for selecting the desired total amount of bids or offers.

It was noted also that under the present system there is a need for ground rules on whether dealers ought to inform customers about Federal Reserve operations in the market. Apparently many of the dealers do not talk about the matter but this is said not to be so for all of them. One corporate representative stated that his lack of knowledge regarding Federal Reserve entry into the market puts him at a disadvantage in relation to the dealers with whom he undertakes transactions. Other corporate treasurers took the view that they had no need or were not entitled to such information and that they were willing to rely on the integrity of the dealers. The view was expressed by bank dealers that they feel at a disadvantage in not knowing when repurchase agreements are being made with nonbank dealers by the trading desk, for this was regarded as information that might affect the course of the market.

A number of suggestions were put forward for widening the scope of current open market operations. It was felt by some dealers that more flexibility should be introduced into open mar-

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ket operations, encompassing swapping of securities when it is desirable to influence the term structure of market yields. For example, it was claimed that if the System had sold bills and at the same time bought longer term securities in May and June 1958, the incentive to speculate would have been lessened.

A related suggestion was that the System ought to be willing to swap bills in order to make scarce maturities available to the market without affecting bank reserves. Another proposal was that the Federal Reserve engage in reverse repurchase agreements, that is, supply securities to the market on an agreement to repurchase. From the dealer viewpoint this might serve to supply particular bill maturities that happened to be scarce, while from the Federal Reserve viewpoint, it would serve as a counterpart to repurchase agreements, permitting a temporary absorption of reserves.

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Appendix A

Outline of Study for Use of Participants

I

INFLUENCES IN THE GOVERNMENT SECURITIES MARKET
LATE 1957 TO SUMMER 1958

A. Period of market advance. What were the causes of the upswing in Government securities prices in late 1957 and early 1958?

(1) To what extent did the upswing reflect:

(a) decreased demand for credit in the economy generally;

(b) portfolio shifting from shorter to longer maturities by institutional investors;

(c) Federal Reserve action to promote ease in credit markets;

(d) increased market activity by individuals and others not normally participating in the market; and

(e) any other influences?

(2) To what extent did buying of rights in the February 1958 Treasury refunding by new participants in the market set a pattern for even greater activity by similar participants in the June 1958 financings?

(3) What groups of market participants were the most active buyers of Government securities from late 1957 to the spring of 1958? Did the composition of buying interest in Government securities change over this period?

NOTE.—The outline is for general guidance only and is not a questionnaire. It is stated in question form to indicate both the scope and the points of special interest of the study. An object of this form of outline is to stimulate thinking about specific matters pertinent to cooperation in the study work.

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B. June Treasury financings. What were the distinctive features of market performance in this particular period?

(1) Regarding the bulge in credit purchases of rights to the June Treasury refunding, how should the following or any other influences be ranked in relative importance:

(a) cumulative ease in credit conditions combined with Treasury debt extension and resulting very low yields on short-term paper;

(b) expansion of lending at customary margins to finance the purchase or carrying of Government securities;

(c) extension of repurchase arrangements to new types of borrowers;

(d) competitive lowering of credit standards (including under-margining of loans and repurchase arrangements) in financing Government securities transactions;

(e) deferred delivery purchases of Government securities from dealers; and

(f) tax incentives to market participation?

(2) What groups were most active as buyers in the weeks prior to the June financing?

C. Period of market decline. What were the causes of the downturn in prices of Government securities last summer?

(1) In this development, what importance should be attached to news items and other indications of general upturn in economic activity, with turnaround in Federal Reserve policy a consequence, as against over-committed positions in Government securities on the part of temporary holders?

(2) What groups of participants were the major sellers of securities during the decline?

(3) To what extent did calls for additional margin under direct loans or termination on demand of repurchase agreements aggravate sales of 2⅝ per cent bonds?

(4) Did the speculative liquidation in this period carry market

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yields to higher levels than justified by underlying supply and demand conditions? What influences prevented a subsequent corrective adjustment in these yields?

D. What were the principal policy shifts which individual firms or institutions made in ownership of or lending on Government securities:
   (1) during the period from late 1957 to the spring of 1958;
   (2) in the weeks preceding and during the June financings; and
   (3) during the period of market decline from late June through the summer? For what reasons and with what results were these shifts in policy made?

II

Functioning of the Government Securities Market

Questions for consideration primarily by dealers—

A. How do dealers typically function in "making markets" for Government securities? During the past year and a half of wider fluctuation in Government securities prices, have dealers tended to function more frequently as broker or agent than as true dealer? What general principles should govern dealer operations in "making markets"?

B. To what extent do dealers commonly enlarge their Government securities positions during a rising market? To what extent do they commonly reduce their positions during a declining market? In the period from late 1957 through the summer of 1958, did dealers go further than usual in these respects?

C. Should dealers undertake to limit their own and their customers speculative participation in the market at times when swelling speculative activity becomes apparent? Do they have a responsibility for positioning securities or limiting their own selling when a speculative bulge by others is being liquidated?

D. How common is the dealer practice of making deferred delivery sales? Did this practice expand during the first half of 1958? Are such sales essential to the effective functioning of the market?

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E. What is the function of short selling in the Government securities market? Did short selling for speculative purposes aggravate pressures on the market during the June-July period of price decline in 1958?

Question for consideration primarily by dealer customers—

F. What services and performance do customers expect from dealers as a matter of ordinary practice? Have these expectations been fulfilled? Prior to mid-1958? Since mid-1958?

Questions for consideration by all study participants—

G. Does speculative positioning of Government securities financed by credit serve a needed role in the functioning of the market? What market participants should be expected to assume such speculative risks in the ordinary conduct of their activities? Should there be a difference as to credit availability between these market professionals and other participants not regularly active in the market?

H. In connection with its refunding and cash financing operations, what underwriting help may the Treasury normally expect to receive from:

(1) dealers;

(2) money market banks;

(3) other commercial banks; and

(4) other institutional investors?

(An answer to this question needs to take account of established portfolio practices of these investor groups and to differentiate between auction type and fixed-price type of financing operation.) In what ways might the underwriting participation of these respective investor groups be strengthened or improved?

I. Is there a need for some new type of underwriting arrangement or procedure to facilitate market adjustment to Treasury financing operations? What kind of innovation might be applicable and useful?

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III

Prevention or Mitigation of Future Selling Crises in the Government Securities Market

A. Would the severity of the market break last summer have been significantly tempered:

(1) Had lenders (bank and nonbank) during the June 1958 financings confined repurchase arrangements to Government securities dealers and had banks financed other customers only by collateral loans?

(2) Had there been no under-margining in arrangements to the purchasing or carrying of Government securities?

(3) Had there been no deferred delivery transactions?

B. How might the Treasury have altered the terms of its 1958 refundings had the extent of speculation in rights by new investors been known?

C. Is it reasonable to expect future recurrence in the Government securities market of conditions conducive to speculative excesses? What preventive steps or actions might minimize the likelihood of such recurrence?

IV

Federal Reserve Policy and Treasury Debt Management Actions

A. What are the views of informed observers about the timeliness and appropriateness of Federal Reserve intervention "to correct disorderly conditions in the market" last July?

B. What are the general characteristics of a disorderly condition in the Government securities market? Does the Federal Reserve Open Market Committee have a responsibility for intervening to correct such a condition when it develops? In a market featuring liquidation of earlier built-up long positions on the part of temporary holders, what criteria would be appropriate for determining when (and at what level) such intervention should be undertaken?

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C. What light does the debt management experience during 1958 throw on the general problem of timing maturity extension of the Federal debt? During periods of recession and mounting and uncertain Federal deficit, in what broad maturity areas should refundings normally be concentrated? Cash financings? During periods of prosperity when the Federal deficit should be in near balance or surplus, in what maturity areas should refundings normally be concentrated?

D. To what extent is strength of the Government securities market contingent on whether, in market expectations, the Treasury will be a borrower of funds or a retirer of debt? Was the prospect of a large Federal deficit ahead a factor of critical importance in the sharp decline in Government securities prices last summer? More generally, what part was played by the inflationary implications of Government deficit and other economic developments?

V

Adequacy of Dealer Organization

A. Is the present over-the-counter market adequate for Treasury obligations? Would the market be strengthened if the main flow of transactions were effected via a continuous auction mechanism associated with an existing securities exchange? An auction mechanism otherwise provided? (Note: In his hearing before the Joint Economic Committee, Chairman Martin was asked by Senator Douglas, Chairman of the Committee, to submit a memorandum to his Committee on a question to this effect.)

B. Could a formal dealer association, assuming permissive legislation, possibly contribute to a strengthening of the market? If so, what general type of organization and with what standards for membership?

C. What specific market practices might properly be regulated by rules established through a dealer association, with benefit to the functioning of the market?

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VI

Adequacy of Publicly Available Statistical Information on the Government Securities Market

A. Would the availability of more adequate published statistical information have helped to moderate the speculative build-up during the first half of 1958? What information would have been most useful?

B. To provide a statistical basis for a more effective functioning of the Government securities market in the future, would it be desirable to have regular and frequent publication of any of the following types of data (the list is intended to be suggestive only):

(1) From Government securities dealers—

(a) Daily reporting of aggregate borrowing on direct loans and under repurchase arrangement, with the latter broken down by source—bank and nonbank, and published weekly;

(b) Daily reporting of aggregate positions in Government securities by type of issue and maturity category for notes and bonds, and published weekly?

(2) From commercial banks—

(a) Reporting bank figures on aggregate repurchase arrangements against Government securities, with a breakdown by Government securities dealers and others, reported and published weekly?

(3) From a sample of large nonfinancial business corporations—

(a) End-of-month holdings of U. S. Government securities by issue—with securities held under repurchase arrangement differentiated from outright holdings and broken down by Government securities dealers and others, published monthly?

(4) From others—

(a) Aggregate repurchase arrangements of stock ex-

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change members, with breakdown by source, bank and nonbank, published monthly;

(b) End-of-month Government securities holdings of a selected sample of State and local government units, by issue, outright, and under repurchase arrangement, published monthly;

(c) End-of-month Government securities holdings of agencies of foreign banks, by issue, outright, and under repurchase arrangement, published monthly;

(d) Report from savings banks in the current monthly Treasury Survey of Ownership of any securities held under repurchase arrangement, published monthly?

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2. An Organized Exchange or a Dealer Market?

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2. An Organized Exchange or a Dealer Market?

This special technical study has the purpose of providing background on the question whether the present dealer market for United States Government securities might be improved by converting it, completely or in part, to a formally organized exchange market. For such appraisal the New York Stock Exchange is taken as a prototype of an organized exchange.[1]

The advantages most frequently claimed for the dealer market arise out of the special characteristics and needs of investment and trading in Government securities. Briefly, it is claimed that the present dealer market system:

(1) Contributes to a broad and continuous market;
(2) Is adapted to the large transactions typical of Government securities;
(3) Provides the market services needed by large institutional customers;
(4) Facilitates operations of fiscal and monetary authorities; and
(5) Provides adequate service to small investors.

The major criticisms of the dealer market arise largely because it is highly concentrated in the hands of a relatively few dealers, there is little information regularly reported about its operations, and there are no formal rules or public supervision over a market

[1] Appendixes provide selected background material on the general subject of dealer and organized exchange markets. They include a history of trading in United States Government securities (Appendix A, first section), description of the mechanics of trading in the two types of markets (Appendix A, second section), discussion of terminology distinguishing the two types of markets (Appendix A, third section), and a discussion of pertinent features of the market for Government securities in London (Appendix B).

The terms "dealer market" and "organized exchange" are used throughout the report. For comment on these and other terms used, see Appendix A, third section.

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that is vested with a special public interest. Briefly, it is claimed that:

(1) The dealer market makes available to the public virtually no information on its operations other than market quotations;
(2) Dealers' interests may conflict with those of their customers;
(3) Dealer operations may accentuate swings in Government securities prices;
(4) Dealer market advice may be biased; and
(5) The dealer market does not actively encourage participation of small investors.

FUNCTIONS OF THE MARKET

The major function of a Government securities market, like that of other markets, is to bring together buyers and sellers in the most effective manner, to execute transactions at the best possible price, and to perform this service at the smallest possible cost. While efficiently functioning markets depend on a broad number of active buyers and sellers, the manifold problems of arranging the actual exchange of commodities or securities among individuals and institutions, perhaps widely separated geographically, have led to the development in most markets of a relatively small group of specialized dealers, brokers, and traders. This group, which makes up the hard core of a market, has made it its business to specialize in the type of commodity or security traded. The specialist group serves as middleman between the ultimate buyers and sellers.

A market may be formally organized, with trading carried on in a centralized location during fixed hours by a professional group subject to rules established by the group itself or to supervision by some duly constituted public authority. Alternatively, it may be informal in character, without a centralized location or in some cases fixed trading hours, but with trading carried on through professional groups linked by telephone and other means of communication, under an informal code of conduct that has evolved out of

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the workings of the market itself. The stock exchanges and some of the commodity exchanges are examples of formally organized and centralized markets. The over-the-counter market in corporate and in Government securities and the foreign exchange market are examples of informally organized and decentralized markets.

This special technical study is limited by its terms of reference to possible modification of the present market mechanism for trading in Government securities to incorporate some or all of the processes of a formally organized exchange. It does not consider other means by which the market might be altered with a view to improvement. These might include changes in the securities traded on the market, broadening the classes of investors and traders, regulating the use of credit by customers to purchase or carry securities, establishing rules relating to practices of independent market advisers, or other adaptations affecting supply and demand forces. It is to be emphasized at the outset that the present organization and operation of the Government securities market reflect existing characteristics of the securities traded and existing interests of the issuer, monetary authorities, investors, speculators, and traders who utilize the market to buy and sell securities.[2]

Standards for judging the market performance must take account of the interests of the various groups that make up the Government securities market. All groups are interested in active and continuous markets, and all except professional intermediaries are interested in low charges for market services. Investors, the Treasury, and monetary authorities are interested also in a broad market that can absorb large transactions without undue delays and price effects, and that adjusts smoothly to changing market conditions. Speculators are interested in wide price swings in an active market and in the use of credit on thin mar-

[2] The history of trading in Government securities in the United States illustrates the evolution of markets to meet changes in basic market interests. This history is sketched in Appendix A, first section.

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gins.[3] Professional groups, whose earnings largely depend on the volume of market transactions and the efficiency with which their capital funds are employed in the market, have a special interest in a market with breadth and depth and in ready access to credit at low rates. In the organized exchange markets for corporate stocks and bonds, where regulation is authorized by Federal legislation from which Government securities are exempt, the Securities and Exchange Commission is interested in the protection of individual investors by assuring that prices are fair, open, and competitive; that market advice is impersonal and informed; that issuers make full disclosure of material facts about their listed securities; and that buyers and sellers, including market professionals, do not engage in manipulative practices. Also, the Board of Governors of the Federal Reserve System is interested, under the Securities Exchange Act of 1934, in the prevention of the excessive use of credit for purchasing or carrying securities.

The organization of the various securities markets has evolved out of the need to harmonize the diverse interests of the participants in each market. No single standard of performance can be applied to all market mechanisms because each market serves a different composite of interests and handles different types of se-

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[3] Speculation is, in general, desirable in the market, but it may become excessive at times. For purposes of this report, speculation is defined as purchases or sales with the expectation of profiting from fluctuations of prices; in contrast, investment is defined as purchases in expectation of deriving income. Speculation, because it provides an added incentive for trading, broadens the market, bringing in more traders than would be present in a purely investment-type market. It also tends to make the market more active and continuous, as speculation generally adds to the volume of transactions.

Speculative activity may have either a stabilizing or an unstabilizing effect on prices, depending on whether it tends to dampen or to amplify price movements. It is stabilizing insofar as an increase in prices is accompanied by speculative sales, or a decrease in prices by speculative purchases. It is unstabilizing when speculators on balance buy as prices are rising or sell as prices are falling. Even unstabilizing speculation may at times perform a useful function in adjusting prices to reflect promptly a change in market expectations.

Unstabilizing speculation tends to become excessive at times, however, particularly if it is supported by credit on thin margins. It may become excessive, for example, if a price increase itself becomes the basis for purchases in expectation of a further price increase in a self-generating spiral. The eventual collapse, which occurs when prices have been carried too far out of line with basic market conditions, may be especially severe if it involves forced liquidation of securities carried on credit.

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curities. A form of organization that works well for one type of security will not necessarily work well for another. No mechanism, however, can provide an effective investment market when speculative price swings provide the major incentive for trading, any more than it can provide an active and continuous market for securities at times when potential buyers and sellers are inactive.

Many of the standards outlined above are interdependent. An active and continuous market, in which commissions charged or costs of trading are low and price changes between transactions are small, may depend, for instance, on the presence of a large speculative interest that may also encourage relatively wide swings in prices. An attempt to improve the market by limiting speculation might also reduce activity in the market, thereby tending to increase the cost of transactions and to reduce the ability of the market to absorb large individual transactions without wide and abrupt price effects.

Because of their importance in shaping the mechanism for trading in Government securities, it will be helpful to characterize briefly the securities and the major buyers and sellers in the market. The securities traded include Treasury bills (sold at discount for periods not exceeding one year), certificates of indebtedness (bearing interest coupons, also for periods not exceeding one year), notes (one to five years), and bonds (five years and over) which cover the full range of maturities from short to long. Of the $142 billion of outstanding marketable debt owned by the public at the end of 1958 (excluding Federal Reserve and Government investment account holdings), roughly equal proportions mature within one year, from one through five years, and in over five years.

Short-term Government securities are sharply differentiated from other securities because they are the primary money market instrument for liquidity adjustments. Principal holders that make such adjustments are banks, nonfinancial corporations, foreign investors, State and local governments, and certain savings type institutions. These groups hold the greater part of short- and intermediate-term issues. Because of the liquidity features of these issues, trading in short maturities predominates in the Government

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securities market. The Federal Reserve regularly conducts its open market operations also in short-term issues, particularly Treasury bills.

Investor groups having greater interest in longer term issues include mutual savings banks, life insurance companies, savings and loan associations, pension and retirement funds, individuals, and personal trusts. To some extent, the longer term issues make up a separate segment of the Government securities market used primarily for the investment of savings.

ADVANTAGES OF THE DEALER MARKET

Market breadth and continuity. Government securities dealers exchange bid and offer quotations almost continuously throughout the day, and often negotiate purchases, sales, and swaps of securities with each other, directly or through brokers, as they locate supplies of securities for potential buyers and demands for larger amounts of securities than they are able or willing to absorb or carry in their portfolios.[4] Market arbitrage by dealers, whereby they buy one issue and sell another to take advantage of shifts in prices and yields between different issues, contributes to smoothing out short-run price irregularities between different issues. Contacts and trading of these sorts among the relatively small group of 5 bank and 12 nonbank dealers help to integrate the market into a unified whole.

By adjusting their portfolios on the basis of their specialized knowledge of the market, and by spreading large transactions among customers and other dealers, dealers smooth out the sharp price movement that might otherwise result from the sudden impact of a large individual transaction.[5] In this way dealers act as a buffer to equalize hourly and daily movements in supply and demand. This is particularly important when commercial banks adjust their reserve positions, and when corporations make large

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[4] For a brief statement on the mechanics of trading in the dealer market, see Appendix A, second section.

[5] See p. 89 for a discussion of the relation of dealer portfolio transactions to longer term fluctuations in Government securities prices.

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adjustments in their Government securities holdings around tax and dividend payment dates.

The dealers' knowledge of the market at times enables them to discern temporary conditions in which they may profit, without incurring excessive risk, by buying when prices are falling or selling when prices are rising, thus helping to equalize supply and demand in the market over short periods. At more uncertain times, hedging operations by dealers—such as the selling of similar issues short against long holdings, or the purchase of similar issues against short positions—may help in equalizing the market.

Dealers claim they would be able to make a better market if they were assured of obtaining financing at more reasonable rates or could more readily borrow securities to make deliveries against short sales. A more basic limitation is that dealers with their relatively small capital cannot be expected to make large purchases or sales against a strong market trend. Though dealers might be able to make a better functioning market at times if they had more capital or had access to financing at lower rates, or if there were more dealers in Government securities, no free market mechanism would have the resources to turn the market in its major movements.

Large transactions. The present dealer market, it is claimed, is especially equipped to handle promptly and without abrupt and possibly disruptive price effects the large transactions that are typical of trading in shorter term Government securities. In contrast, it is claimed that an organized exchange market could not handle such large blocks without sharp and possibly excessive price effects or undue delays.

The great volume and wide maturity distribution of Government securities outstanding and turned over each year, together with the institutional character of the market for them, depend on a market system that can serve continuously and efficiently the institutions which now account for the greater part of the trading. Many banks, nonfinancial corporations, and other institutions depend on large individual transactions (particularly in Treasury bills) to make rapid adjustments of holdings in response to short-term changes in their needs for liquid funds.

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The group of dealers that specialize in buying and selling Government securities has developed the facilities and operating methods for handling these large transactions. The amounts that they stand willing to trade at or within their openly quoted prices vary substantially with market conditions. It is difficult to state precisely the extent to which dealers will make markets "good" to customers. At times the dealers will accept large orders only on, in effect, a best effort brokerage basis. At other times it would not be unusual for them to handle orders amounting to $10 million or substantially more in short-term issues, $3-$5 million or more in intermediate-term securities, and $1 million or more in long-term bonds. In a strong and rising market much larger customer sell orders might be executed easily while large purchases would be more difficult. Similarly, in a falling market much larger customer purchase than sell orders could be executed readily.

One of the principal reasons why trading in Government securities has moved from the New York Stock Exchange to the dealer market is that the dealers "make" the market by being generally willing to buy and sell outright for their own account and to maintain sizable inventories. The essential function of intermediaries on the auction market of an organized exchange, on the other hand, is to match off ultimate buyers and ultimate sellers. In such markets, the ultimate buyers (sellers) must wait until ultimate sellers (buyers) appear with orders for the right issues, the right amounts, at the right prices. The dealers by taking positions for their own account and maintaining inventories help to provide the prompt executions of orders and the flexible arrangements called for by the sheer volume and diversity of the trading needs of investors in Government securities. Aggregate net positions of the dealers as a group ranged in 1958 from $600 million to more than $3 billion. The dealers display great ingenuity in devising efficient methods of financing such holdings, including the use of repurchase agreements which tap funds from sources outside of New York City, such as banks and nonfinancial corporations.

While specialists on the New York Stock Exchange take positions in corporate securities, these are incidental to their primary responsibility of making a better auction market, and are rela-

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tively small. Although the Exchange has dealt actively in Government bonds in the past, it has not done so for many years. Treasury bills have never been listed on the Exchange, and it is doubtful whether facilities of the Exchange would be adaptable to trading in these issues.

There would appear to be a number of problems to resolve if active trading in bonds were to be resumed on the floor of the Exchange. Many of these problems would involve the role of the specialist. The volume would be too great for one specialist. Also, the assignment of issues among several specialists would raise problems in adjusting each specialist's volume to manageable proportions and in possible interference with ready arbitrage between issues assigned to different specialists. In addition, it is uncertain whether Exchange members would undertake assignments as specialists because of the fear that they would be vulnerable to raids by nonmember dealers and other large traders. This fear might arise out of the public nature of specialists' trading at auction posts and the exposure to risk in making such an open market for large orders. In general, it seems unlikely that the specialist could undertake to make an orderly and continuous market in Government securities without official support.

In order to serve customers effectively, the dealers must maintain constant contact with potential sources of demand and supply throughout the country. Not only do they keep in close touch with the many large institutional traders in Government securities, but they also maintain merchandising organizations which they use to distribute large purchases to other institutional customers in smaller lots, or through which they may accumulate smaller lots which can be sold in large blocks. This intimate knowledge of nationwide customer needs is of considerable importance in making markets for longer term Treasury issues, particularly at times when market conditions make the maintenance of large dealer positions excessively risky. At such times, dealer transactions are largely confined to matching up customers' bids and offers, but their awareness of individual investor needs throughout the country often enables them to ferret out offsets to match market orders. Moreover, the dealers from time to time execute

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transactions with each other—either directly or through one of the several firms that specialize in acting as brokers between dealers—which help them to take care of customers' orders. The dealer mechanism, consequently, appears to contribute to the relative ease with which transactions can be executed and hence to market continuity.

A specialist on the Exchange, on the other hand, lacking these contacts with customers and other dealers, would have to depend on a balanced inflow of purchase and sale orders from investors and traders themselves. If this inflow of orders became one sided, the Exchange specialist would be limited in his ability to execute orders until the needed price adjustments, or other changes in market conditions, induced a flow of offsetting orders. This problem is more serious in the market for Government securities than it is in the stock market, because of the larger volume of orders and because prices of Treasury issues, to a greater extent than stock prices, all move together when there is a general change in market conditions. It is for these reasons among others that a specialist operation in Government securities on the Exchange raises the question of need for official support to give continuity to market pricing.

In contrast to the ability of the dealer market to handle large transactions, an organized exchange may be best adapted to handling many relatively small and medium-size individual transactions.[6] As more and more individuals have channeled their savings into insurance companies, savings banks, savings and loan associations, investment companies, pension funds, and other savings institutions, individuals to a considerable degree have come to be represented in the markets for Government and other securities by institutional intermediaries which typically combine small individual savings into large investment amounts.[7] The auction mechanism of an exchange is not adapted to absorbing large in-

[6] For a brief statement on the mechanics of trading on the New York Stock Exchange, see Appendix A, second section.

[7] Direct individual demand for marketable Government securities has also been reduced by the tremendous growth of new tax-exempt State and local government issues in the past decade.

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stitutional blocks of securities without either a substantially greater price movement from the transaction or a substantially longer delay in trading until enough buyers and sellers can be found. In many instances, at least, participation by floor traders and other Exchange members has not been sufficient for assembling or distributing large blocks during the period of auction trading. Consequently, as one phase of the growth of large institutional transactions in corporate securities, the New York Stock Exchange in recent years has made increasing use of secondary distributions and other special transactions in bonds as well as stocks which are handled at least in part outside of the auction mechanism.

Market services. Transactions in the dealer market can be completed efficiently and promptly, particularly for Treasury bills and other short-term issues. Bid and offer quotations are given and transactions are executed by telephone. Many large transactions are completed immediately or after a brief competitive check of the market; others, particularly those involving larger amounts or complicated swaps, may require a longer period for satisfactory execution.

Nationwide organization. The Government securities market is effectively, though informally, organized to serve customers throughout the country. Orders from all parts of the country flow to the highly centralized market provided by dealers, most of whom are located in New York City. Many of these dealers have a network of branch offices, representatives, correspondents, and local investment houses that maintain active and close contact with potential buyers and sellers of all types in all financial centers throughout the country. Dealer banks effect national coverage through their network of correspondent bank relationships. Many commercial banks, over-the-counter dealers, and brokers, acting as principals for their own accounts and as agents for their customers, place orders with the dealers. This informal organization is comparable in its national coverage to that of the New York Stock Exchange, its member firms, and their offices through the country.

Tailored maturities. The Government securities dealers have assumed an increasingly important function of providing invest-

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ment instruments with maturities tailored to the individual needs of corporations and others with temporary funds to invest. The need for exact maturity dates on temporary investments arises because banks pay no interest on demand deposits and rates on time deposits are rigidly administered. At times the existing supplies of short-dated Treasury bills or certificates in the market are insufficient to satisfy such requirements, or the available maturity dates do not correspond exactly to the temporary investor's future need for funds. The dealers can, in effect, create an additional supply of shorter dated securities by arranging repurchase agreements with such temporary investors, using securities of somewhat longer maturity than the agreement. Under such agreements the dealers agree to sell securities to the customer and to buy them back on a specified date in the future, prior to the maturity of the security. Since the dealer agrees to repurchase the security at a specified price, he assumes all risk of market fluctuation in the price of the security, but tries to minimize this risk by using a security with the shortest possible maturity.

Cost to customers. The cost of executing a transaction in the dealer market may be measured by the difference between the dealers' buying and selling prices. These spreads are very small because of the large volume of business, because of competition among dealers, and because dealer profits do not depend solely on trading margins. A significant part of dealers' earnings is derived from managing their own portfolios, although such operations also involve risk of loss. Portfolio earnings result in part from price appreciation on securities sold from long positions and price depreciation on securities bought to cover short positions. Earnings are also derived when interest received from securities held in portfolio or under repurchase agreements exceeds interest paid under the dealers' diverse financing and trading arrangements.

Bids and offers quoted usually are the "outside" prices at which dealers will buy or sell limited amounts. Since many dealer expenses are roughly the same whether the transaction is large or small, the trader is usually able to reduce his trading margin on large transactions particularly to good customers and in issues that are more readily traded. Recently, typical "outside" spreads

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were $\frac{4}{32}$ to $\frac{8}{32}$ ($1.25 to $2.50 per $1,000) for long-term bonds, $\frac{2}{32}$ to $\frac{4}{32}$ ($0.62½ to $1.25 per $1,000) for intermediate-term issues, $\frac{1}{32}$ to $\frac{2}{32}$ ($0.31¼ to $0.62½ per $1,000) on certificates or short-term bonds and notes, and 4 to 5 basis points[8] ($0.10 to $0.12 per $1,000) on 91-day Treasury bills. "Inside" spreads are smaller. For very small transactions the dealer may apply an additional $\frac{4}{32}$ to $\frac{8}{32}$ to the typical outside buying and selling price.

Dealers customarily quote their bids and offers for individual issues to any potential customer, although the amounts that they will transact at these prices, particularly in longer term issues, may vary with individual dealers or the state of the market. Because of close competition among dealers and because large corporate and institutional traders are alert at all times to the state of the market, each dealer has an incentive to quote as narrow a spread as possible. In arriving at an actual transaction price for blocks larger than the individual dealer is willing to handle at his open bid and offer quotation, the customer and dealer negotiate; in some instances, the dealer may only be willing to take the order on an agency basis, with the customer specifying an acceptable range of prices.

In this connection, an incidental, though important advantage claimed for dealer transactions is that the customer has greater certainty of the price he will pay or receive before closing the transaction than he would have on the Exchange. He could, of course, place a limited price order on the Exchange, but there is always the danger that by so doing he will miss the market altogether. An order at the market might, however, result in a price higher than he wished to pay or lower than he would be willing to receive.

Information and advice. Dealers in the Government securities market are specialists in the many Treasury issues with differing coupon rates, maturities, and market yields, and in tax considerations affecting investment in these issues. In view of this specialization and also because of their intimate knowledge of supply and demand forces affecting the market, dealers are in position to

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[8] In terms of discount, hundredths of a percentage point.

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provide such related services as advice on buying and selling, current news that may have market effects, and interpretation of current statistics, especially on the money market. Although dealers are not the only source of such investment advice, customers find these services helpful. Few Exchange brokerage firms would currently claim to have a comparable expertness in Treasury issues and their market performance, though given time and interest such firms doubtless could develop it. Only two New York Stock Exchange firms now act as specialized dealers in Government securities in addition to their Exchange brokerage and other business.

Operations of fiscal and monetary authorities. An efficiently functioning market for Government securities, able to absorb large transactions without undue price effects or delays, facilitates large financing operations conducted by the Treasury and the sizable open market purchases and sales that are made by the Federal Reserve in executing its monetary policies. Dealer trading in short- and long-term bonds has also made the market useful to various Government agencies in their securities flotations; Government dealers are active underwriters of public agency issues.

Dealers aid in the secondary distribution of new Treasury issues by usually taking long positions in rights and "when-issued" securities and then gradually distributing the issues through sales to and swaps with institutional and other customers. They typically tender for and are awarded substantial amounts of Treasury bills in the regular bill auctions and they subsequently distribute the amounts awarded to their customers. These underwriting activities represent vitally important market services.

The fact, too, that Government securities include all maturities, long as well as short, makes this market a part of both the capital market and the money market. Because of this blending of long- and short-term interests in a single market, fiscal and monetary operations tend to permeate all maturities in the whole credit market. Moreover, the close communication of dealers with other financial markets, together with their diversified sources of financing, assists in making the Government securities market responsive to changes in the over-all supply of and demand for funds.

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Markets in which one or more dealer firms participate include the New York and the American Stock Exchanges; and over-the-counter markets for bankers' acceptances and for stocks and bonds, including State and local government bonds. Some dealer firms also participate in underwriting corporate and other issues.

Service to small investors. Investors in marketable Government securities include the smaller units among banks and nonfinancial businesses and many individuals and personal trusts. The individual transactions in Government securities by these investors are not only relatively small, but they are more concentrated among the longer term issues than are the transactions of the larger holders.

The individual small investor places his order locally with a nonspecialized securities dealer, broker, or bank and usually pays a commission or fee for the agency service. In some cases banks handle orders for customers without charge while in others they add a small service fee. A nonbank agent may execute the order with a specialized dealer or turn it over to a commercial bank. A commercial bank, in turn, may execute the order with a dealer directly, or indirectly through a correspondent bank or in certain cases the Federal Reserve Bank of the district. Some non-dealer banks maintain small trading positions in Government securities for the purpose of executing customer orders for small lots, and clear only the net of their customer trading operations with the regular Government securities dealers.

The Government securities dealers generally handle small transactions promptly at the market price, which may be adjusted by a margin applied to small transactions. Small orders, particularly for longer term bonds, often are executed more promptly than large transactions because of their negligible impact on the market. A substantial proportion of the total number of Government securities transactions by banks and by dealers consists of these small items but their aggregate dollar volume is comparatively small.

The cost to the dealer of executing a transaction in Government securities is relatively fixed, irrespective of the size of the transaction. Since a large part of the dollar volume of the cus-

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tomer business of dealers comes from large transactions, the profit margins are largely determined by such business, and spreads are narrower than would be required for profitable operations in a similar volume of small transactions. Handling large transactions is a wholesale type of operation while handling small transactions is more like a retail operation. It has been reported in connection with the consultation phase of this study that the extra spreads ordinarily charged in small transactions do not fully cover costs. Thus, with the current number of small transactions, the individual small transaction may in part be subsidized by the large transaction. It would probably require a considerably wider ownership of marketable Treasury securities among individuals than now prevails for a small-lot business to be developed that would pay its way.

DEFECTS ATTRIBUTED TO THE DEALER MARKET

The dealer market is called on to facilitate Treasury financing, open market operations of the Federal Reserve System, and liquidity adjustments of private financial and nonfinancial institutions. In view of this special public interest, a major criticism of the dealer market for Government securities arises out of the fact that the market is highly concentrated and there is little information concerning, and no supervision over, market activity. An organized exchange, in contrast, typically supplies a large body of public information and closely supervises the practices of its members to enforce compliance with its rules. Such rules include regulations issued under the Securities Exchange Act of 1934, from which Government securities are exempt.[9] This reference to the required information and supervision characteristics of organized exchanges in the United States does not imply that they would necessarily be applicable to the present dealer market for Government securities; it is intended to suggest that such defects as arise in the dealer market because of the absence of these characteristics may be subject to partial or full remedy.

[9] The Securities Exchange Act of 1934 (Section 6) provides that regulations issued under the Act are in effect rules of the Exchange which the Exchange agrees to comply with and to enforce on its members so far as is within its powers.

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Limited information on operations. The lack of formal organization of the Government securities market and its freedom from regulation are reflected in a lack of public information about its activities. In particular, there is no continuous publication of the prices of actual transactions (as opposed to bid and offer quotations), of volume, or of dealer purchases and sales for their own account. Nor is there any requirement for disclosure (to the public or to a duly constituted authority) of dealer net positions in securities, or of amounts borrowed, such as is required of members of the New York Stock Exchange.[10]

In the dealer market the actual prices at which Government securities are bought and sold, and the volume of individual transactions, are known only to the dealer who made the purchase or sale and to the individual buyer or seller himself.[11] The customer has no published source showing the exact prices at which other buyers and sellers are doing business at the same time. Even though competition among dealers tends to provide a narrow price spread in the market and large institutional traders are kept thoroughly informed on prices through a constant flow of bids and offers from dealers, there may be occasions when small customers are not certain that they have received the best possible price. Such uncertainty is more likely to arise in the dealer market than on an organized exchange because dealer operations for own account are an important part of the market and because the mechanism of an over-the-counter market is not so well understood by the public.

Dealer operations are a matter of concern not only to customers

[10] Two specialized dealers in Government securities are members of the New York Stock Exchange. Annual financial statements of member firms and of registered securities dealers (excluding firms dealing solely in Government securities) are required to be filed with the Securities and Exchange Commission and are available for public inspection at the Commission's offices. These statements show aggregate firm positions in securities and amounts borrowed, in addition to other financial data. For specialists on the Exchange, current reports of securities positions and borrowings for own account are required to be disclosed to the Exchange but are not made available to the public.

[11] An exception arises where an inter-dealer broker handles a transaction between two dealers. The broker generally informs other dealers as to the amount sold and the price of the security in such transactions but does not disclose the names of the principals.

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interested in the best price but also to the general public interested in assurances that the market mechanism does not distort prices. The large body of information made available by the New York Stock Exchange has proved valuable to buyers and sellers of corporate securities, to market analysts, and to the regulatory authorities. There might be similar advantages for the Government securities market in having available records of volume and prices, dealer purchases and sales for own account, securities positions, and the use of credit. It should be recognized, however, that publication of such additional information might raise questions of the timing of the releases and of interpretation, and care would be required to avoid publishing data in a form that might reveal one dealer's position to his competitors or in any way limit the dealers' ability to perform their essential functions in the market.

Potential conflict of dealer-customer interests. Since dealers trade for their own account, there is always the possibility that their interests will conflict with those of their customers. For example, in a rapidly falling market a dealer may at times try to liquidate his own holdings before handling customers' selling transactions. A number of rules of the New York Stock Exchange are designed to place customers' interests ahead of those of Exchange members dealing for their own account.

The Exchange rules are useful, as illustrations, for suggesting the nature of the potential conflicts of interest between dealers and customers. A general rule provides that no member who has accepted for execution an order to buy or sell shall execute the order by selling from or purchasing for an account in which he is interested. Exceptions are made in special situations where the transaction helps to serve a customer. Another rule, with specific exceptions, provides that no member shall buy or sell for his own account while he holds or knows of a customer's unexecuted market order to buy or sell; or shall buy at or below (sell at or above) the price of a customer's unexecuted limited price order. A further rule provides that in general no bid or offer by a member on the floor to establish or increase a position for his own account shall

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be entitled to parity with (or precedence over, based on size) a bid or offer made on an order originated off the floor.

New York Stock Exchange rules also specifically limit the dealings of specialists for their own account. The most general provides that no specialist shall effect on the Exchange purchases or sales, for his own account, of any security in which he is registered as specialist "unless such dealings are reasonably necessary to permit such specialist to maintain a fair and orderly market, or to act as an odd-lot dealer in such security." The specialist, as well as other traders, is subject to the regulation prohibiting short sales at successively lower prices.

It should be emphasized, however, that if such specific rules of the Exchange were applied to the dealer market for Government securities as it is now organized, they would drastically change the character of the market, and tend to prevent dealers from performing their essential function of absorbing large transactions. Dealers with their relatively limited capital may be obliged at times, as a matter of self-preservation, to take care of their portfolio positions ahead of customers' orders. This is generally understood by their customers. When such occasions arise, the dealer may sometimes notify the customer that he (the customer) may obtain a better execution through another dealer.

Excessive swings in Government securities prices. Closely allied with the possible conflict of dealer and customer interest is the possibility that dealers' transactions for their own account may unduly accentuate speculative and cyclical price changes in Government securities.[12] Additions to portfolio in a rising market or disposal of securities in a falling market may be an important factor in a wide rise or fall of prices over a short- or intermediate-term period.

Dealer purchases and sales in expectation of bullish or bearish developments are a normal part of their operations, and in general they contribute to the desirable prompt adjustment of prices to changes in market conditions. But speculative or cyclical variations may become excessive, particularly from the stand-

[12] See p. 76 for discussion of the dealer role in smoothing out price movements between individual transactions.

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point of investors and fiscal and monetary authorities. Insofar as such price swings are initiated or amplified by activities of market professionals, such activities appear to some observers to be an appropriate area for supervision, provided this could be accomplished without restricting more desirable market characteristics, including the activity and absorptive power of the market.

This problem has been recognized in a number of the rules of the New York Stock Exchange that apply to both stocks and bonds, some of which were cited above. More particularly, members are prohibited from making successive purchases at rising prices, or successive sales at falling prices, for the purpose of unduly or improperly influencing the market price, or for the purpose of making a price which does not reflect the true state of the market. Similarly, short sales of corporate securities at successively lower prices are prohibited in order to prevent use of short selling for "bear" raids. Members also are prohibited from making transactions for own account that are excessive in relation to their financial resources or to the state of the market.

A related rule limits borrowings of member firms in relation to their net capital and thereby tends to limit the size of the positions they may take for their own account. Member firm positions in United States Government securities generally are required to have a margin of at least 5 per cent of the principal amount. On purchases of Government securities by customers for future delivery and payment (except by banks, trust companies, and certain other institutions), a deposit is required as if they were margin transactions. The Exchange rules also provide that, in computing their required net capital, member firms shall deduct 3 per cent of the market value of Government securities having maturities of five years or more.

Possible bias in market advice. Recommendations for the purchase or sale of specific Government issues, made directly or through some form of advisory service, are part of the activities of the dealers and other market intermediaries in developing and maintaining a group of customers. It has been alleged that such recommendations at times appear to be designed primarily to serve

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the dealer's interest, either in stimulating activity or in "bulling" or "bearing" the market.

The large volume of market activity in many closely related issues has increased the need for investment advice. The dealers are well equipped to give advice on Government securities, especially on technical problems such as are involved in tax and arbitrage transactions. In view of their stake in the market, however, dealers are not in as disinterested a position as, for example, the investment adviser or the statistical service.

Investors who do not have close contact with the market may be unduly influenced by dealer investment advice. On the New York Stock Exchange the need for some supervision to protect investors against biased advice has been recognized by certain rules. One of these sets standards of truthfulness and good taste for advertising material. Another requires that member firms furnishing a statistical or investment advisory service, and recommending a security in which the firm has an interest, shall make a full description of such facts to subscribers to the service.

It should be emphasized, however, that the type of advice required of the Government securities dealer is different from that required of the market adviser on corporate securities. There is, of course, no need for advice on the credit standing of the United States as there may be for some of the many diverse issuers of corporate securities. Moreover, because the market for Government securities is largely institutional in character, dealer contacts are primarily with professional buyers and sellers who are themselves well informed of market conditions and risks.

No active encouragement of small investors. The prices and costs at which investors buy and sell small amounts probably vary, depending on whether an intermediary commission or fee is charged or not, and whether the order is executed in the dealer market at outside quotations or at the even wider quotations sometimes charged for small transactions. This lack of uniformity, together with the fact that dealers regard small transactions as an accommodation, may indicate that trading facilities for the small investor are not being developed aggressively.

Eventually the transactions for these small investors, which may

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be initiated through a commercial bank, nonspecialized dealer, or broker, are executed in a market where the facilities have been developed for the special needs of large customers. Portfolios carried by dealers are geared to large transactions, procedures to prompt completion of large orders, negotiation to absorbing the individual large purchase or sale, and trading margins to the profitability of large-scale transactions.

Facilities designed more specifically to serve small investors might be established in the dealer market if an economic need developed to justify the cost of this service. It has been suggested, for example, that the dealers as a group might organize a subsidiary which, in addition to acting as a broker among all dealers, could have an odd-lot desk to handle small transactions. Odd-lot transactions in stocks listed on the Exchange are handled by two firms that specialize in providing this service for all member brokers.

It is the opinion of some observers that market participation by small investors in Government securities could be developed more effectively on the New York Stock Exchange, if arrangements could be worked out for active floor trading in long-term Government securities to take place along side the dealer market for Government securities. Advantages presented in favor of this proposal include the Exchange marketing mechanism with more than 2,500 offices throughout the country for generating buying and selling orders, the centralized public record of prices and volume of sales, and the use of Exchange facilities for distributing information and broadening public interest.

These characteristics, however, do not assure effective use of the present Exchange as a secondary market for long-term bonds. Since trading by individuals is small, volume might be insufficient to permit matching of bids and offers unless the Treasury issued marketable securities with special features, such as tax exemption, designed to attract wider individual ownership of marketable issues. Exchange rules do not set minimum commissions for United States Government bonds as they do for corporate securities, nor is it clear that such commissions, if established, could compete effectively with costs of trading through the dealer market.

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The New York Stock Exchange, prompted by the Treasury-Federal Reserve study, reviewed the potentialities for re-establishing a vigorous auction-type market in Government securities on the Exchange. After extended consideration of the matter, Exchange officials concluded that, while no theoretical bar existed to such a development, problems would be insurmountable unless both the Government and the Exchange shifted a number of fundamental policies.

One specific problem to be resolved was the difficulty under existing conditions of interesting Exchange specialists in taking the business risk of making a market in Government securities. In the first place, the specialists would be in competition with established Government securities dealers. Secondly, they might at times need to build up very large positions in Government securities, since this market, in contrast to the market for securities of individual corporations, is a heavy volume market and, when sharp price movements occur, quotations on maturities throughout the list tend to move together. Finally, because of the public nature of transactions at Exchange trading posts, the specialists in taking positions to make orderly and continuous markets would be unduly exposed to raids by nonmember dealers and other large traders.

Another problem would be that of developing an adequate incentive for handling Government securities on the Exchange through a commission schedule that would be competitive with narrow spreads prevailing in the dealer market. Other conditions for an effective Exchange market would be:

(1) A larger supply of long-term Government bonds in the market, especially of bonds having interest to individual investors through tax exemption or other special features;

(2) The placing of all Federal Reserve transactions in bonds, where the Reserve Banks act as agents, on the Exchange, and possibly, official support of the Exchange market;

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(3) A potential requirement for all transactions in Government bonds of member firms to be executed on the Exchange, except for possible "off-board" trades in exceptional circumstances; and

(4) A means of protecting the interests of the member firms that now act as Government securities dealers.

If the meeting of such conditions as these is considered to be warranted, the New York Stock Exchange has indicated its willingness to cooperate fully in further studies directed toward developing active trading of Government bonds on the Exchange. In any event, further study will be needed if it is considered desirable to encourage more widespread holdings of marketable Government securities among small investors, and this may involve questions outside of the market mechanism itself. It may be noted that the Exchange did not suggest that its facilities could be at all adaptable to trading in Treasury bills, certificates of indebtedness, or notes, which together constitute more than half of the outstanding marketable Federal debt and are also the media in which the overwhelming volume of market transactions take place.

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Appendix A

Selected Background Material

HISTORY OF TRADING IN U. S. GOVERNMENT SECURITIES

The organization of the market for United States Government securities, as it stands today, has been an evolutionary process that has grown out of the enormous changes over the years in the volume of the public marketable debt, out of the changing characteristics of the major holders of this debt, and out of the changing patterns of debt management and monetary policy followed by the country's fiscal and monetary authorities. The market has, of course, been particularly influenced by the problems of Treasury financing during and after wars.

The form of market organization for trading in Government securities has also varied from time to time. During much of the time, two forms of market organization have existed side by side. One has been the trading in Government securities on an organized market—the New York Stock Exchange—and the other has been a less formally organized over-the-counter market in Government securities centering in a group of specialized dealer firms. At various periods, the bulk of the trading has shifted from one market to the other, depending in part on the main tasks that faced the securities market, and the relative success that one or the other of the parallel markets has had in meeting the needs of the ultimate buyers and sellers of Government securities. Since the mid-1920's the bulk of the trading in Government bonds has taken place on the over-the-counter market. Treasury bills, moreover, have never been listed on the New York Stock Exchange since their issuance in 1929, but have always been handled in the dealer market.

American financial history contains many fragmentary accounts of the problems of trading in Government securities. For example, the New York Stock Exchange itself traces its beginnings as an institution to an agreement among a group of Government

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bond dealers who banded together to oppose the actions of a group of auctioneers who announced that they would hold public sales of Government bonds.

Prior to the Civil War the small volume of Government debt—the total outstanding did not exceed $70 million between 1828 and 1860—made possible only a rudimentary Government securities market. Such trading as did take place was handled mostly by private banking houses which bought and sold bonds over the counter for their own account. The very large expansion of Government debt during the Civil War, to a peak of $2.8 billion in 1865, saw the first important development of firms with a specialized interest in the distribution of Government securities among investors and the subsequent trading in such securities. These specialized firms, of which Jay Cooke and Company was the most important, served both as sales agents for new Government securities issues, selling them on a commission basis, and as leading dealers in the secondary market. As the debt began to be sharply reduced in the period after the Civil War, however, the greater part of trading in Government issues shifted into the auction market on the New York Stock Exchange.

By 1900 the bulk of the trading in Government securities had again shifted back to an over-the-counter specialized dealer market. This was primarily the result of the circulation privileges accorded Government bonds, whereby qualified banks were permitted to issue currency against Government bonds deposited by them. The dealers made it their business to demonstrate to banks the profits that could be derived from such circulation accounts, and to provide all the necessary technical services for putting such accounts into operation. By offering banks such "package" transactions the specialized dealers captured the bulk of the trading in Government bonds from the Exchange, and most Government bonds became lodged in the portfolios of commercial banks.

The more than twentyfold increase in Government debt during World War I required additional types of securities and a much broader market than had existed earlier. Ownership of Government debt was substantially broadened with large amounts going

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into the hands of individuals and other nonbank investors. A new element was added to the market by the creation in 1918 of the War Finance Corporation, a Federal agency which dealt in Government securities. The main policy of the Treasury, however, was to encourage the development of a broad private market for Government securities.

During the First World War there had been a substantial increase in Government securities trading on the New York Stock Exchange. The Treasury in fact supported this development by channeling its outright transactions (handled by the Federal Reserve Bank of New York) through the Exchange. By the mid-1920's, however, the volume of trading in Government securities on the over-the-counter dealer market far exceeded that on the Exchange. Since the bulk of the trading was outside the Exchange, there were obvious advantages in shifting Treasury orders from the Exchange to the over-the-counter market, and at the suggestion of the Federal Reserve Bank of New York its operations for Treasury account were transferred to that market in 1925. The development since 1929 of the Treasury bill as an important debt instrument and as the dominant liquidity instrument of the money market has also tended to increase the importance of the over-the-counter market, since only marketable Treasury bonds are listed on the New York Stock Exchange.

In 1958 trading in Government securities on the Exchange totaled only $100,000 compared with $2.9 billion in 1919. The present volume of trading in Government securities on the Exchange is infinitesimal compared with that in the over-the-counter market. While many stock exchange firms handle Government securities transactions for their customers, they ordinarily turn these transactions over to the Government securities dealers in the over-the-counter market rather than execute them on the Exchange proper.

MECHANICS OF TRADING IN SECURITIES

The development of the over-the-counter market as the dominant form of market organization for Government securities has evolved

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out of the needs of the market participants. It may be useful as background to review briefly the specific manner in which buyers and sellers are brought together by the professional groups that operate in the over-the-counter market and on the New York Stock Exchange.

Dealer market for U. S. Government securities. In the over-the-counter market a potential buyer or seller can enter the market through any one of three major types of professional groups: a Government securities dealer, a commercial bank, or a securities broker. The securities broker ordinarily acts as an agent for his customer, charging him a commission for buying or selling, as the case may be. These commissions may vary widely and are not regulated. The broker ordinarily turns to one of the Government securities dealers to execute the order. The commercial bank (except the dealer bank) ordinarily acts as an agent for its customer; it may add a nominal fee or perform the operation gratis as a customer service. It also will execute the order with a dealer either, directly or through a correspondent bank or, in a limited number of cases, through the Federal Reserve Bank in its district.

The hard core of the Government securities market is made up of approximately a dozen specialist nonbank firms and five large commercial banks that maintain separate departments specializing in Government securities. Most of the nonbank dealers maintain branch offices in certain leading cities but the central trading offices are located in New York.

The dealers trade in Government securities directly with buying or selling customers and also with each other and with other professional intermediaries such as the securities brokers. Dealer transactions and exchanges of quotations with other dealers mostly are handled directly but in some cases—as, for example, when a dealer wishes to avoid disclosing his hand—they may be handled through one of a small group of inter-dealer brokers. Dealers ordinarily act as principals in the market rather than as agents for their customers, though there are times, particularly in declining markets, when they function mainly as agents, especially in handling large transactions. In acting as principals, dealers buy and sell securities for their own account. They do not, consequently, charge a commission on pur-

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chases or sales, but expect to profit by maintaining a spread between their buying and selling prices. They may also profit (or suffer losses) from changes in the value of their portfolios of Government securities, or from the difference between interest earned on their securities holdings and the interest they pay on borrowings to finance these portfolios.

The dealers carry on their trading activity primarily by telephone, and employ salesmen who are in touch with customers throughout the country. The dealers receive a flow of bids and offers for Government securities directly from their customers (most large customers deal directly with dealers rather than through another intermediary), from the other professional intermediaries, and from other dealers, either directly or through a broker.

The dealers make markets in Government securities by standing ready to quote buying and selling prices for all Government securities traded in the market. These prices are frequently changing as a result of the constant shifts of demand and supply in the market. In normal markets the dealer stands ready to back up his price quotations by trading on either side of the market, but he will not do so for unlimited amounts. His willingness to buy or sell securities depends on his expectations concerning reversal of the transaction with another customer or his estimate of the market outlook if the transaction is to be absorbed in his position. Transactions do not necessarily take place at the dealer's original quotations; they may be negotiated until a mutually satisfactory price is arrived at.

Relatively narrow spreads in prices quoted by dealers are achieved by the spirited competition for the business in the market. Some buyers and sellers make it a practice to check prices with several dealers before trading in the market and to place orders with the dealer quoting the best price. This practice tends to bring the quotations of other dealers into line. Other buyers and sellers feel that placing an order with a single dealer whom they trust protects their interest better in the long run.

Dealers also trade among themselves, directly and through independent brokers, who specialize in acting as intermediaries between dealers. Such trading tends to lessen price variation among

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the dealers. These brokers are used by dealers mainly for note and bond transactions of relatively small amounts. Brokers deal almost exclusively with the primary Government securities dealers, and report the amount and terms of their trades back to the dealers. In doing so, they also provide, in effect, a quotation service.

Trading on New York Stock Exchange. At the present time trading in Government securities on the New York Stock Exchange is so limited that the organization for trading might not be applicable to a situation where turnover was more active. In particular, the method of "cabinet" trading apparently still used for the infrequent transactions in Government bonds seems ill-suited for encouraging more active trading on the Exchange.[1] Consequently, the following describes the more general organization of trading in stocks on the Exchange.

Individual buyers and sellers of securities cannot trade directly on the Exchange, but must use the services of a broker who is a member of the Exchange. The primary function of the Exchange is to match up these individual bids and offers so that transactions can be executed. The brokers always serve as agents for their customers and charge a commission on each purchase or sale. Uniform commissions are charged on stock transactions (but not on transactions in Government bonds).

While the New York Stock Exchange member acting as broker must serve as an agent for his customer—that is, he cannot buy from or sell to the customer for his own account—not all purchases and sales on the Exchange are made directly between individual buying and selling customers. Exchange members, acting as principals, may themselves buy and sell for their own account as long as they do not act as both principal and agent on the same transaction. Two other groups of professional members of the Exchange may also trade for their own account. These are the floor traders, who may buy and sell a wide variety of securities, usually for a quick turnover, and the specialists, who help to make a continuous

[1] Trading in "free bonds" (the small number of listed bonds that have an active market) is carried on through active, audible bids and offers. Trading in all other bonds takes place by entering bids and offers on cards that are placed in filing cabinets.

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market in certain selected stocks by trading for their own account and maintaining inventories of these securities. There is consequently a group of professionals on the Exchange that provides a service somewhat similar in form, but not in extent, to that of the specialized dealer in the over-the-counter market in Government securities. (At the present time, however, there are no specialists in Government bonds listed on the Exchange.)

Prices on the Exchange are constantly fluctuating, just as they are in the over-the-counter market. Transactions executed on the Exchange are publicly recorded, and the price at which the last trade was made serves as a reference point for potential buyers and sellers. The specialist also maintains, at any given time, a listing of bids and offers which have come to him for the stocks in which he is registered. The highest bid and lowest offer by a broker or floor trader, or already listed on the specialist's book, thus represent a range of prices at which business can be done, although there may be only a limited number of shares bid or offered at any given price. A large buyer or seller, consequently, might have to execute his order in parts and at varying prices.

With the expansion of corporate securities holdings by large institutional investors the Exchange has made increasing use of special procedures to permit members to handle large blocks of purchases and sales partly or entirely outside of the auction mechanism. In these, a specialist may buy or sell a large block at a discount from or a premium over the exchange price; a member firm acting for an institutional seller or buyer may round up buying or selling orders through its branch offices; orders may be generated at a fixed price announced in advance on the ticker; or, in "secondary distribution," member firms and other brokers may buy portions of a large block for resale or for their own account at a negotiated price off the floor. Some of these special transactions are reported on the ticker, and others are not.

DESCRIPTIVE TERMINOLOGY

A number of terms are used to identify distinguishing characteristics of the over-the-counter market for Government securities and

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the market for securities on the New York Stock Exchange. The over-the-counter market, for example, is described as a "negotiated" market, as "informally organized" (flexible procedures and no formal supervision), or as "decentralized" (individual firms linked by some means of communication). The Exchange, on the other hand, is identified as an "auction" market, as "formally organized" (standardized procedures and supervision by duly constituted authority) or "centralized" (central place for assembling bids and offers). Each of these terms tends to emphasize one particular descriptive aspect of the markets; the choice of any particular term depends in part on the particular aspects of the markets the analyst wishes to examine. While accepted trade terminology is undoubtedly convenient for those who have a full understanding of each kind of market, it may not be meaningful for analytical purposes and actually it may mislead the layman.

Use of the terms "negotiated" and "auction" to distinguish the nature of transactions in the over-the-counter market and on an organized exchange may be particularly misleading. The term "auction," which is defined as "the public sale of property to the highest bidder," is neither a precise nor a complete characterization of the process of matching bids and offers on the stock exchange. The term implies fixed offers to sell at the highest price the market will bring at a given time (though the offers may have reservation prices), rather than the constantly changing number and amounts of offers as well as bids, many at limited rather than "market" prices, that are placed on the Exchange.

The term "to negotiate," which is defined as "to confer regarding a basis of agreement," may also be misleading when applied generally to transactions in the dealer market for Government securities. Many dealer transactions do not involve any negotiation, but are executed more or less automatically at the dealers' outside price quotations.[2] On large outright transactions, to be sure, the dealer may quote a price that differs from his outside quotations. This may also be a fixed price, not involving negotiation, although there may be exceptions. In other transactions, par-

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[2]Types of quotations are described in the report, p. 82.

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ticularly those involving complex swaps of securities of different maturities or involving tax considerations, a considerable amount of negotiation may be undertaken by the dealer and his customer as to both price and volume. There are, consequently, important degrees of "negotiation" in the dealer market. Some transactions are also negotiated on the New York Stock Exchange, particularly those involving blocks of securities that are too large to execute satisfactorily by matching bids and offers already on the specialists' books or in the hands of brokers.

A particularly meaningful distinction between the two types of market is that based on the principal method by which each executes the orders of its customers. The dealers in the over-the-counter market act as principals, purchasing and selling for their own account and risk, while brokers on the organized Exchange act as agents in arranging purchases and sales between customers. It should be remembered, however, that Government securities dealers sometimes act as brokers, and that some professional groups on the Exchange sometimes act as principals, so that the distinction is one of degree. Reflecting the distinction implied by the terms, dealers obtain their revenues or losses primarily from the differences between buying and selling prices, including trading spreads and portfolio profits (or losses). Brokers, on the other hand, derive their revenues primarily from commissions received for arranging purchases and sales between customers.

To stress the primary function of the dealers and for the convenience of brief terminology, the over-the-counter market for Government securities is usually referred to in this study as the "dealer market." This term contrasts effectively with the term "organized exchange" which implies the broker function.

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Appendix B

Trading in Government Securities on the London Stock Exchange

The London Stock Exchange, unlike the New York Stock Exchange, handles a significant volume of transactions in Government securities. The question naturally arises whether the London Exchange experience might be applicable to trading in Government securities in the United States. This appendix does not inquire deeply into the many factors that should be investigated for a detailed comparison of the London and New York markets for Government securities. It should be stated at the outset that public information on the operations of the London market is limited, although more may become available with publication of the Radcliffe Commission report in the near future. Available information suggests, however, that the differences in the maturity pattern of Government debt in the two countries, in the composition of debt holders, in the relation of the monetary authorities to the market, and in the structure of the two securities markets would make it virtually impossible to effect a transfer of London techniques to the New York market.

A few of the broad essential differences might be noted briefly. As far as the maturity pattern of Government marketable debt in the two countries is concerned, the British debt is more heavily weighted in the longer maturities. Nearly two-thirds of the total marketable British debt, for example, matures in over five years, compared to only about 30 per cent in the United States. About a quarter of the British debt is under one year in maturity compared with about two-fifths for the United States. In Britain, a much larger proportion of marketable long-term Government debt is held by individuals, life insurance companies, and Government investment accounts than is the case in the United States. On the other hand, a far greater proportion of Treasury bills and other

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short-term debt is held by the banking system in the United Kingdom.

There are various shades of difference between the relations of the British and the United States monetary and fiscal authorities to the Government securities market. This is particularly true of the market for long-term Government securities, where the British authorities are much more active than are their American counterparts. The relations of the Bank of England and the National Debt Commissioners with both the bill and the bond markets are through special Government brokers, one for each market. The Bank of England may, at its discretion, supply funds to (withdraw funds from) the bill market by open market purchases (sales) channeled through the bill broker, or it may force the discount houses to borrow from the Bank of England in order to finance their holdings. The choice of the manner in which funds are supplied when needed by the market depends very largely on the degree of pressure that the monetary authorities desire to put on the market, and consequently on interest rates.

In addition to these operations in the bill market, the Bank of England and the National Debt Commissioners also operate in the long-term Government securities market through a Government stock broker. While not much has been published about the operations of the Government broker in Government bonds (stocks, or "gilt-edged" securities in British parlance), it appears that he is an active factor in the market, buying or selling bonds outright, or arranging swaps between bonds in short supply and those in abundant supply. The market, while it does not expect the Government broker to operate strongly against market trends, appears to rely on the Government broker to assist it in executing large transactions, in digesting new issues, or in providing help during periods of refunding.

There are also differences, as well as similarities, in market structure that can be noted only briefly. The London discount houses, with many similarities to the United States Government securities dealers, play a very special role in the London money market. Residual adjustments in the money market fall directly on the discount houses and they alone, rather than the banks, bor-

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row from the Bank of England. The discount houses rely more heavily on bank lending to finance their portfolios of Government securities, and less on nonbank sources of funds, than the United States securities dealers. The structure of interest rates is more rigid in London than in New York; banks, for example, offer the discount houses preferential rates, always below the bill rate, on part of their borrowing needs; the remaining financing needs of the discount houses are met at market rates or at a penalty rate of the Bank of England. There are fairly rigid "arrangements" between the discount houses and the clearing banks, whereby the latter do not tender directly for bills but buy them from the discount houses only after they have been outstanding for a week.

Treasury bills are not listed on the London Exchange, but are traded on an over-the-counter market in which the discount houses predominate. Government bonds are traded on the Exchange and also over the counter. Some observers feel that a growing percentage of the business is being transacted over the counter, but there is no precise information available. There are no figures available on the volume of Government securities transactions on the London Stock Exchange, nor indeed on the volume of corporate securities transactions. It appears that of the total number of transactions ("marks") reported on the Exchange, Government securities accounted for about 11.5 per cent of the total in 1957 and 1958 compared with about 17 per cent in 1949-50. There is no information available about the average size of transaction.

There are certain differences between the London Stock Exchange and the New York Stock Exchange that should be emphasized. While the brokers on the London Exchange are similar to their American counterparts, there is an essential difference in the manner in which they do business for their customers on the Exchange. On the New York Stock Exchange, brokers attempt to match up bids and offers directly, although they may use the services of a specialist on many occasions. On the London Exchange, however, brokers do not match up individual bids and offers, but execute their orders with jobbers on the Exchange. While the jobber is somewhat akin to the specialist on the New York Exchange, his activities are far more similar to those of the

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New York Government securities dealer, except that the jobber has no "customers" other than the stock exchange brokers. He makes a market for the securities in which he specializes, dealing as a principal, and quoting buying and selling prices to the brokers who execute all of their orders for their customers through him. Like the New York Government securities dealer, he maintains a position in Government securities, although it appears that in recent years the jobbers have had increasing difficulties in raising adequate capital and in financing substantial inventories. While details have not been available, it appears that the London Exchange relies very heavily upon competition among the jobbers, rather than on detailed rules and regulations, to protect the customer from "inside" market manipulation. This is in contrast to the closely regulated position of the specialist on the New York Stock Exchange.

Consequently, when a London Exchange broker has an order to execute in Government securities he approaches one or more jobbers for a quotation. He may attempt to negotiate with the jobber for a better price, but in any event will execute the transaction with one of the jobbers at the best obtainable price. The broker's customer, of course, pays the customary commission to the broker and in addition has to bear the spread between the jobber's buying and selling price.

The manner in which Stock Exchange transactions in Government securities are executed in London is thus almost exactly the same as the manner in which they are now executed by New York Stock Exchange firms with the Government securities dealers. The only difference is that in London the jobber is physically located on the Exchange, whereas the Government securities dealer in New York is not, but must be reached by telephone. As far as efficiency or speed is concerned, in dealing in securities, or in the establishment of a representative market price, it is not clear that the London market has any advantage over the New York market.

Government securities with less than five years to maturity are also dealt in by the 12 London discount houses that make a market for short Government bonds outside the Exchange. The dis-

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count houses may deal directly with corporate and other customers, but they apparently are not as aggressive as are the New York dealers in pursuing customer relationships and rely much more heavily on orders originated through the Stock Exchange brokers. The brokers, consequently, buy and sell Government securities off the Exchange as well as on it. Before executing a transaction with a discount house as one of the principals, however, the broker contacts one or more jobbers on the Exchange to see whether or not the jobber would be willing to execute the transaction at a better price. Apparently this practice of checking prices on the Exchange has become largely formalized and transactions off the Exchange are handled with great dispatch.

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