

127

EMPLOYMENT, GROWTH, AND PRICE LEVELS

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MONETARY, FISCAL, AND DEBT OPERATIONS

ANSWERS TO QUESTIONS ON MONETARY POLICY
AND DEBT MANAGEMENT.

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STUDY OF EMPLOYMENT, GROWTH, AND PRICE LEVELS

(Pursuant to S. Con. Res. 13, 86th Cong., 1st sess.)

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The materials in this part are answers to questions submitted to the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, and 17 firms dealing in Government securities during the week of August 16, 1959, by Senator Paul H. Douglas, chairman, on behalf of the Joint Economic Committee. The questions were made public August 31, 1959, in the form of a committee print.

Other materials in answer to questions asked of various witnesses in previous parts of these hearings which are not found in this part will be found in part 10.

ANSWERS TO QUESTIONS SUBMITTED TO THE
SECRETARY OF THE TREASURY

ANSWERS FROM THE SECRETARY OF THE TREASURY

I. MONETARY POLICY AND ITS RELATION TO DEBT MANAGEMENT

QUESTION

(A) Has too much reliance been placed on monetary restrictions and not enough on budgetary surpluses in recent years to achieve the goals of economic stabilization and sound debt management?

ANSWER

The lack of adequate surpluses in the Federal budget over the past decade has made it more difficult to attain our goals of economic stabilization and sound debt management.

Consequently, monetary policy has been called upon to bear more than its proper share of the burden of Federal financial policies to promote economic stability and sustainable growth. This heavy reliance on monetary policy appears to have contributed to wider swings in interest rates and capital values than would have been necessary if adequate Federal budgetary surpluses had been provided during the prosperous years since World War II. Moreover, the relatively wide fluctuations in interest rates and capital values that have occurred have certainly not made the problem of managing the public debt any easier.

The years since the return to flexible monetary policies in 1951 have been a period of generally high and rising business activity, high levels of employment, and persistence of inflationary pressures. Between mid-1951 and mid-1959, gross national product in real terms rose by 26 percent. The two recessions that occurred during the period were relatively mild and short lived. Unemployment averaged about 4½ percent of the labor force during the 8-year period 1951-59. The inflationary character of part of the period is demonstrated by the fact that consumer prices rose by more than 12 percent.

In view of the strength and frequency of inflationary pressures and relatively low levels of unemployment over the period as a whole, a net surplus of Federal budget receipts over expenditures probably would have been desirable. In the first place, a budget surplus would have aided the efforts of monetary policy in limiting demands in the private sector of the economy to levels consistent with the ability of the economy to produce goods and services whenever that was necessary. Secondly, the existence of a surplus would have permitted the Treasury to retire a portion of the Federal debt, thereby helping to relieve the strong pressures on the Government securities market and on credit markets and interest rates generally that have developed during periods of expanding business activity.

As it turned out, however, there was a net Federal budget deficit of \$20.4 billion in the 7 fiscal years 1952-58 and, because of the record peacetime deficit in fiscal year 1959, the total net budget deficit for the entire 8-year period was almost \$33 billion. (Even the net cash deficit for the period was \$16.1 billion, or half the amount of the net budget deficit; reserves being built up in Government trust funds account for the smaller cash deficit.)

The most important conclusion to draw from this experience, in my judgment, is not that the monetary authorities have been overly aggressive in the use of their powers during periods of rising business activity, but that the inadequacy of budget surpluses has shifted too large a portion of the burden for economic stabilization to monetary policy.

QUESTION

(B) Does the Treasury participate in the formulation of monetary policy? If so, in what ways? Is any such participation sufficient to insure coordination of monetary, budgetary, and debt management policies for achieving public economic policy objectives?

ANSWER

The Treasury does not, of course, participate directly in the formulation of monetary policy. The Federal Reserve System is an agency created by and responsible to the Congress. Independence of Federal Reserve from the executive branch, in principle and in practice, is highly desirable.

Nevertheless, the necessity for coordination of national economic policies is recognized, and to this end a number of informal arrangements have been established for exchange of ideas and information. When occasion warrants, the President, the Chairman of the Board of Governors of the Federal Reserve System, the Secretary of the Treasury, the Chairman of the Council of Economic Advisers, and the economic assistant to the President meet for an informal discussion of economic trends and developments.

Frequent consultation occurs between Treasury and Federal Reserve officials. The Chairman of the Board of Governors and I usually have lunch together each Monday. On each Wednesday, the Under Secretary for Monetary Affairs and several members of the senior Treasury staff usually join the Chairman of the Board of Governors, plus at least one other Board member, and their senior staff people for lunch. At these meetings, there is a free interchange of ideas and information concerning the state of the economy, credit and debt management problems, and other matters of mutual interest. In addition, we confer frequently on many other occasions, either in person or by telephone.

These arrangements have worked out well in practice. The important point is that as we carry out our respective responsibilities, both the Treasury and the Federal Reserve have the opportunity for full knowledge of each other's views. The final decisions, however, are made solely by the responsible agency.

So long as there is basic agreement as to our national economic objectives and as to the means of achieving these objectives, these informal arrangements would appear to be sufficient for insuring the nec-

essary degree of coordination between debt management and monetary policies. Any attempt to formalize relationships between the Federal Reserve and the executive would run the serious risk of impairing the independence of the monetary authorities. Indeed, complete centralization of authority over monetary, budgetary, and debt management policies is impossible—and, in my judgment, undesirable—under our form of government.

II. THEORY AND PRACTICE OF DEBT MANAGEMENT

QUESTION

(A) Should the Treasury follow the policy of issuing long-term obligations during periods of economic expansion and short-term obligations during periods of economic contraction? Alternatively, should the Treasury manage the debt with the objective of minimizing interest costs?

ANSWER

The first part of this question implies large-scale if not complete reliance on issues of long-term bonds during periods of economic expansion and similar reliance on short-term financing during periods of economic contraction. This is a rather extreme interpretation of the view that the primary objective of debt management should be to promote sustainable economic growth with stable prices by countering inflationary and deflationary pressures in the economy.

It would be impossible to adhere strictly to this approach in practice, nor would it be desirable to do so. One important practical consideration arises from the overriding need for the Treasury to meet the Government's fiscal requirements. Under some circumstances, a pressing need for cash may force the Treasury to market short-term issues, for which there is usually a substantial demand (but often at rising rates), even though spending in the economy may be rising rapidly relative to productive capacity.

Moreover, the constant shortening in maturity of the public debt, as a result of the passage of time, means that the Treasury must take every reasonable opportunity to issue long-term securities. Otherwise, more and more of the marketable debt would tumble into the short-term range. Frequent and large maturities of Treasury securities complicate both debt management and monetary policy.

Within the limits imposed by these and other important practical considerations, the Treasury does attempt to minimize reliance on short-term financing during periods of expansion, and it also attempts to handle its financing in a recession in a manner that will contribute to balanced economic recovery.

During a period of rapid business expansion, the opportunities for selling substantial amounts of long-term securities are limited. And, in any event, large-scale reliance on long-term issues would contribute to sharp increases in long-term interest rates and a marked decrease in the availability of credit for homebuilding, business expansion, and State and local government projects. Some dampening of spending in the private sector during a period of rapid business advance is desirable, but a moderate approach to such dampening is clearly desirable.

During a business recession, declining interest rates and rising bond prices would seem to provide an excellent opportunity for substantial sales of long-term Government securities. Aggressive issuance of long-term securities at such time, however, would run the risk of aggravating recessionary forces by absorbing too large a portion of the available supply of long-term credit, thereby reducing the amount of funds available to support homebuilding, business expansion, and State and local government projects. On the other hand, exclusive reliance on short-term financing would contribute to a large buildup of near-term maturities, which might have to be refinanced in a period of rapid business recovery. Moreover, the liquidity represented by the increase in short-term debt might unduly complicate public policy actions to promote sustainable growth with price stability during the succeeding business expansion.

One method of reconciling the conflicting debt-management objectives during a recession is to rely heavily on new Government security issues of intermediate-term maturity. Such issues tend to be bought by commercial banks in their attempts to bolster earnings in the face of a slackening loan demand and falling interest rates. As banks purchase these obligations with reserves made available by an expansive monetary policy, bank credit and the money supply tend to grow, thereby helping to counter recessionary pressures. If in a later period of business expansion interest rates rise and market values of these intermediate-term issues decline, the continued holding of the obligation would become more attractive to banks in order to avoid taking losses. This would help reinforce a monetary policy designed to prevent total spending in the economy from rising to an unsustainable pace.

Consistent with this approach, the Treasury marketed only \$3.5 billion of truly long-term bonds (over 10 years' maturity) in the last 2 months of 1957 and the first half of 1958, a period of business recession. Of the remaining \$39.3 billion of new marketable issues, \$17.3 billion consisted of securities maturing in 4 to 10 years. Banks subscribed heavily to these new issues (they also bought substantial amounts of existing Government securities in the market); their total loans and investments expanded at a rapid rate; and, as a consequence, the money supply grew at a very high rate. This growth in the money supply was a major factor tending to cushion the recession and to provide a financial atmosphere conducive to business recovery. Furthermore, the large volume of intermediate-term issues that were marketed contributed significantly to a lengthening in the average maturity of the debt.

The support provided by debt management to antirecessionary policies is also demonstrated by the net changes in ownership of Government securities between November 1957 and June 1958. During this period, the Treasury's net borrowing from investors other than Government investment accounts amounted to \$1.8 billion. Federal Reserve banks and commercial banks together added \$8.9 billion to their portfolios of Government obligations, and private nonbank investors liquidated \$7 billion of the securities. This shift of securities from nonbank investors to the banking system played an important part in the expansion of liquidity and money supply that contributed to economic recovery.

During fiscal year 1959, a period of strong business recovery, Treasury issuance of an appropriate volume of long-term securities was complicated by several factors. One of the most important of these complicating factors was the impact on credit markets of the record peacetime Federal deficit of \$12.5 billion. In addition, rising demands for credit in the private sector of the economy exerted strong pressures on credit markets. Until recently, a disturbing—but, in my judgment, mistaken—view that inflation is inevitable has tended to narrow the market for long-term debt instruments. Furthermore, in recent months the existence of a statutory ceiling of 4¼ percent on new issues of over 5-year securities has prevented the Treasury from selling new long-term issues.

Despite these complicating factors, the deficit was financed in a manner that helped to minimize growth in the money supply. During the fiscal year, the Treasury's net borrowing outside of Government investment accounts totaled \$9.7 billion. The Federal Reserve banks and commercial banks combined liquidated \$3.3 billion of Government securities, and private nonbank investors added \$13 billion to their holdings.

The second part of the question refers to minimization of interest costs as the major goal of debt management.

Economical borrowing is an important goal of Treasury debt management. The Treasury does not agree with the view that interest payments on the debt are of no real significance for the economy as a whole, inasmuch as they are not exhaustive in terms of economic resources but merely represent transfers from taxpayers to bondholders. The transfer is hardly frictionless; it involves additional Government expense, a considerable degree of taxpayer irritation, and—perhaps of primary importance—a significant effect on incentives in the private sector of the economy.

On the other hand, the significance of the interest payment on the public debt—now estimated at about \$9 billion per year—should not be overstressed. The average rate paid is still only about 3¼ percent, and the total amount of interest is only about 2¼ percent of current national income—not much higher than 20 years ago and somewhat lower than in the years 1946–50. Moreover, about 30 percent of the interest on the public debt is paid on securities held by the Federal Reserve banks—of which almost 90 percent is returned to the Treasury in taxes—and on securities held in Government investment accounts. In addition, a substantial portion of the interest paid on securities held by commercial banks and business corporations is recouped by the Treasury through the 52-percent income tax which applies to these investors.

Although Treasury interest rates are higher now than for a number of years, the rates are among the lowest for any central government in the free world. Both here and abroad interest rates have risen substantially during the entire postwar period in those nations which rely upon free market processes and effective monetary and credit policies for promoting economic stability.

Too much emphasis on minimizing interest costs as a goal of debt management can easily lead to longrun difficulties. One of the major dangers is that excessive use will be made of short-term securities, on which the interest rate is usually lower than on longer term issues.

This can lead to a piling up of short-term debt which, in the long run, might severely complicate debt management and monetary policy. Also, experience has clearly demonstrated that reliance on money creation to prevent interest rates from rising during a period of strong business activity can only result in inflation. The goal of holding down interest charges on the debt cannot be allowed to take precedence over the important objectives of promoting sustainable economic growth with stable prices.

In summary, the Treasury attempts to manage the public debt in a manner consistent with the attainment of our basic economic goals and, insofar as possible, actively to promote these objectives. The extent to which this is possible is affected by several important practical considerations, one of the most important of which is the pressing need for achieving some lengthening in the maturity of the debt. During a recession, both debt lengthening and economic recovery can be promoted by offering new securities of intermediate term, which banks may purchase with the additional reserves made available through an expansive monetary policy. During a period of business expansion, there is a marginal preference on the part of the Treasury for long-term financing, but such financing cannot be carried too far because of its effects on private credit markets and the availability of long-term funds. The goal of holding down interest costs on the public debt, although important, does not take precedence over other major goals of debt management.

QUESTION

(B) In view of the postwar history, can the average maturity of the debt be lengthened appreciably during periods of economic expansion? During periods of economic contraction?

ANSWER

The term "debt lengthening" is really a shorthand term for the Treasury's policy of issuing new long- and intermediate-term bonds whenever conditions are appropriate primarily in order to offset the effect of the passage of time in constantly shortening the debt.

As of December 31, 1946, the Treasury had \$97½ billion of marketable debt maturing in more than 5 years. By the end of December 1953, this total had fallen to \$47½ billion, with almost a third of the decline representing conversion of longer term marketable securities into nonmarketable series B investment bonds at the time of the Federal Reserve-Treasury accord in March 1951. Most of the rest of the decline represents the effect of the passage of time in moving issues into the shorter term area, since no marketable bonds maturing in more than 5 years were issued in the postwar period prior to the accord and less than \$12 billion was issued between that time and the end of 1953.

Since December 1953, the amount of over 5-year debt has declined by approximately three-quarters of a billion dollars. During this 5¾-year period the Treasury issued \$42¾ billion of new intermediate- and long-term bonds. However, \$43½ billion of bonds shortened up sufficiently to remove them from the 5-year-and-over category, so that

the total at the end of September 1959, was approximately \$46 $\frac{3}{4}$ billion.

Another way of stating the problem is in terms of the average length of the Treasury marketable debt, which on a comparable basis declined from about 8 years in 1946 to about 5 years at the end of December 1953, and to 4 years 5 months at the end of September 1959.

The most significant increases in average length of the marketable debt have occurred during periods of economic contraction. The average length of the debt was extended, for example, from a low point of 4 years 11 months in January 1954 to a high point of 6 years 1 month in March 1955, or an increase of 1 year 2 months during the recession and early stages of economic recovery in 1954-55. The low point of average length in the more recent recession was reached in January 1958 with an average of 4 years 6 months. During the ensuing 5 months the average length rose to 5 years 3 months, or an increase of 9 months. It has since declined below the former record low. During both recessions the major factor in increasing the average length of the debt was the sale of intermediate-term notes and bonds, largely to commercial banks during a period of monetary ease, rather than sales of long-term bonds to savings-type investors.

By contrast, the average length of the public debt declined almost continuously from the end of World War II through January 1954 (from 7 years 11 months in 1946 to 4 years 11 months in early 1954). There was also a substantial decline from the March 1955 peak of 6 years 1 month to the low of 4 years 6 months in January 1958, during a period of strong economic expansion.

The Treasury's experience, therefore, has been to keep fairly even on the average length of the debt over an economic cycle as a whole, with an expansion of average length (mostly through banks) during periods of monetary ease, and a contraction (principally due to the passage of time) during periods of monetary restraint. Thus, recent experience indicates that opportunities for significant debt lengthening during periods of business expansion are limited, but that greater opportunities exist in recessions. For reasons presented in the answer to question II (A), however, debt lengthening cannot be pushed vigorously during recessions, because of the danger of impeding balanced recovery. Still, by selling substantial amounts of intermediate-term securities to commercial banks, a significant amount of debt lengthening can be achieved, while at the same time promoting growth in the money supply to help counter recessionary forces.

It might be noted, in conclusion, that we believe the technique of "advance refunding" will provide a useful device in the future for achieving a significant amount of debt lengthening—even in periods of business expansion—with a minimum of market disturbance. This technique would involve the offering of a new long-term bond to holders of bonds whose maturity has grown relatively short due to the passage of time. Legislation passed in the session of Congress just ended will facilitate such refundings, but the existing 4 $\frac{1}{4}$ -percent ceiling on Treasury bond issues currently prevents the Treasury from offering a significant amount of new securities of more than 5 years' maturity, even in an advance refunding.

QUESTION

(C) Is the issuance of short-term debt during periods of economic expansion inflationary? If so, why?

ANSWER

The excessive issuance of short-term debt at any time tends to increase inflationary pressures. This may not create any problem when demands for funds are relatively low in proportion to the current flow of savings. However, an undue dependence on short-term debt during periods of economic expansion increases the potential monetization of the debt since short-term securities are very close to money in terms of liquidity and involve a minimum of market risk.

Short-term issues are well suited to the investment requirements of commercial banks; consequently, there is a much greater chance that inflationary increases in the money supply will occur as banks create deposits in their operations as residual buyers of short-term Treasury issues. Conversely, longer term Treasury securities—particularly those with maturities of 10 years and longer—are more attractive to savings institutions, pension funds, and other institutions that invest a large portion of the savings of the public. To the extent that these institutions buy new Treasury issues, there is no growth in the money supply.

Savings institutions and other investors that buy long-term bonds are seeking investments to hold in order to obtain a longrun interest return. On the other hand, many nonbank purchasers of short-term issues are simply investing temporarily idle funds; they intend to liquidate the securities later in order to spend the proceeds for goods and services (e.g., business inventories, new plant and equipment), meet tax payments, or to take advantage of more favorable investment opportunities. They do this because any capital loss incurred in shifting from a short-term issue to cash during a period of strong business activity is likely to be much less than if they had purchased longer term securities, whose prices tend to fluctuate over wider ranges than short-term issues.

This is what is meant by saying that “short-term securities are only a step away from being money.” The holder can either sell the security in the market at a price close to its maturity value or wait for it to mature within a few weeks or months, in order to obtain funds for spending. Consequently, there is a much greater danger of a large and rapid shift from short-term securities to cash than from long-term securities to cash. Stated differently, the existence of a large volume of short-term Treasury debt reflects a high degree of liquidity in the economy; individuals and institutions are in a much better position to transfer these securities into cash, and spend it for goods and services—thereby augmenting inflationary pressures—than if more of the Treasury debt consisted of firmly held long-term securities.

When and if liquidation of short-term securities by temporary holders takes place, the inflationary impact of the shift is magnified to the extent that they sell the securities to commercial banks, inasmuch as bank purchases tend to increase the money supply. However, spending may expand rapidly even though banks do not purchase

large amounts of the short-term securities liquidated by other market holders. As short-term interest rates rise, individuals and institutions with relatively large idle demand deposits in commercial banks may purchase the short-term issues. These demand deposit balances, previously idle, will be transferred, in effect, to individuals and institutions who use them for spending. This means that the velocity of money—or its turnover—tends to increase, thereby stimulating inflationary pressures in much the same way as an expansion in the money supply.

The large flotation of short-term Treasury issues growing out of the \$12.5 billion deficit during the past fiscal year has not as yet exerted strong inflationary pressures; these issues were largely taken up by business corporations which were experiencing rapid growth in liquidity as profits rose from recession lows. However, as business activity advances, a point is likely to be reached where corporations will be seeking funds to invest in inventories and plant and equipment. They may, at that time, tend to shift from net buyers to net sellers of short-term Treasury securities. In the absence of a current budget surplus, heavy liquidation of these securities would place additional pressure on the Government securities market and further complicate debt management. The spending of the funds would stimulate inflationary pressures in the economy.

The liquidity needs of our economy no doubt will support a substantial volume of short-term debt. The Treasury has no fear, however, that a problem will arise in meeting further growth in the liquidity needs of the economy, since the passage of time brings more and more of the marketable debt into the under-1-year area. The problem is quite the opposite; if the Treasury were to issue only under-1-year securities to replace maturing issues between now and December 1960, the \$76 billion of under-1-year debt outstanding on October 31 would rise to over \$100 billion by late 1960. By the end of 1963 the under-1-year debt would exceed \$140 billion if 1-year-or-under borrowing were exclusively relied upon.

In many ways, therefore, the tendency toward a steadily growing short-term debt is one of the most important debt management problems confronting the Treasury. The only way to cope with the problem is to continue to sell intermediate and longer term bonds at every reasonable opportunity. Under current conditions, of course, the 4¼-percent ceiling on new Treasury bond issues forces the Treasury to confine its market borrowing almost exclusively to the less-than-5-year range.

QUESTION

(D) Why has the Treasury somewhat lengthened the average maturity of the debt during periods of recession?

ANSWER

As indicated in the reply to II(B), this has been the most practical time in recent years in which the Treasury could make reasonable progress in restoring a debt structure which tends to get increasingly shorter during periods of economic expansion.

Moreover, it is important to reemphasize the fact that most of the debt lengthening achieved in recent recessions has been effected through

sale of new intermediate-term securities to commercial banks. Consequently, the increase in the average length of the debt was accompanied by an expansion in bank loans and investments and the money supply, which tended to cushion recessionary forces and promote recovery. In addition, heavy reliance on intermediate-term issues in recession-reinforced monetary policy during the subsequent expansion phase of the business cycle because of the more rapid shrinkage of bank liquidity as credit demands expanded and interest rates rose.

Unless the Treasury takes action on extending the debt, the problems of excessive liquidity would become cumulative over the years. Otherwise the short-term debt would grow from one business cycle to the next, creating ever more difficult problems for the Federal Reserve in restraining excessive private demands during periods of business expansion.

The Treasury always emphasizes the relatively greater importance it places on the economic consequences of debt management decisions as against cost factors. Nevertheless, it is not oblivious to the fact that it can achieve substantial interest savings for the taxpayer when it is able to fund some of its short debt obligations into longer maturities when rates are relatively low, consistent with its other objectives.

QUESTION

(E) What are the arguments for and against assigning the entire task of debt management to the Federal Reserve System, completely separating budgetary policy and debt management policy?

ANSWER

The original enabling legislation which the Congress passed in setting up the Treasury Department in 1789 charged the Secretary of the Treasury with the responsibility to "prepare plans for the improvement and management of the revenue, and for the support of the public credit * * *" (1 Stat. 65). One of the most vital phases, of course, of the support of the public credit, in 1959 as well as in 1789, is the successful management of the public debt. Secretary Hamilton's first report to the Congress in 1790 was a report on public credit, at a time when one-seventh of the Federal and State debt was held by Europeans.

Thus the responsibility for the handling of public moneys has rested with the Treasury from the very beginning of the Republic. The establishment of the Federal Reserve System in 1913 did not lessen in any way the Treasury's responsibility to manage the public debt or to handle public moneys in a manner consistent with the public interest. It would seem illogical, therefore, that the Secretary of the Treasury as chief financial officer of the Nation should be divested of his basic responsibilities in this regard by placing them in the hands of an independent agency which is not a part of the administration.

The Treasury finds itself in complete agreement with the position taken by the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report when it reported in 1950 that:

There have been many proposals for altering the division of authority and responsibility for monetary and debt management in the interest of securing

more appropriate policies. These range all the way from proposals that all monetary and debt-management powers be lodged in the Treasury or in a newly created department of money and finance directly responsible to the Government to proposals that all these powers should be lodged in the Federal Reserve. We do not favor either of these extreme proposals. We oppose the concentration of all these powers in the Federal Reserve primarily because we doubt the wisdom of placing one authority in the position of borrower and of determiner of the monetary and credit conditions under which its borrowing will be done, but also because it seems inappropriate to entrust the technical details of managing the debt to an independent agency. We oppose concentration of all these powers in the Treasury, or in a new department responsible to the President, because we fear that considerations relating to service charges on the Federal debt and to the ease of refunding would be weighed too heavily and would create a bias toward inflexibly low interest rates and continuously easy money. Moreover, we see only a limited value in proposals designed merely to bring Federal Reserve and Treasury officials into frequent consultations; such consultations already occur.

QUESTION

(F) Would the Treasury favor limiting the number of types of Treasury securities currently being issued? For example, the Treasury might issue only bonds or only bills or consols only.

ANSWER

Treasury debt management has always been conducted with a view to offering a considerable variety of securities which are appropriate to the varied needs of the different investor classes. It is obvious, of course, that no short-term investor would want long bonds or a consol if that were all the Treasury had to offer, any more than a pension fund or insurance company would want to be exclusively invested in Treasury bills.

If the proposed plan were to be put into effect, therefore, it would appear that a new type of intermediary would have to be established in order to convert whatever issues the Treasury put out into whatever issues the market wanted. One way that has been suggested that a proposal such as this could be put into operation would be through the sale of large blocks of such issues by the Treasury to some new type of private financial institution. This institution, in turn, would serve the function of breaking down large blocks of securities and issuing smaller blocks in accordance with market demand for various maturities.

It is difficult to see, however, just what advantages, if any, would result from this type of arrangement. If the proposed system were very efficient it would presumably operate in much the same way as the Treasury does now. It is also difficult to see how such intermediaries could possibly be set up as private institutions, since the function they would perform would be so heavily charged with the public interest. Certainly a new Government agency would not be proposed to perform this intermediary function since the Treasury already performs it—and without the intervening irrelevant step.

III. MARKETING THE PUBLIC DEBT

QUESTION

(A) To what extent does the Treasury use moral suasion in marketing its debt? What type(s) of moral suasion is (are) used?

ANSWER

The term "moral suasion" as it is used here is assumed to refer to informal arrangements between a government (including the central bank) and the financial institutions of the country, whereby a "gentlemen's agreement" is developed in regard to particular public policies throughout the credit field. Such an agreement may take the form of specific requests by a governmental authority to individual institutions, or it may involve by mutual agreement broad ground rules under which practices generally are conducted.

Within this meaning of the term, the Treasury does not engage in moral suasion in marketing its debt. Moral suasion reportedly is used in the United Kingdom and in Canada, for example, as an effective device in handling the relationships between the commercial banking system and the central bank and the central government. In both countries the commercial banks reportedly follow general credit policies laid down by the Government and carried out by the central bank in a way which has a much less formal basis in law than in the United States. The difference in evolution of the systems of government in the two countries, including greater degree of dependence on unwritten law, is partly responsible for this.

There are, in addition, fundamental institutional differences between the American banking system and those in the United Kingdom and Canada. Both of those countries have systems of branch banking which are far more centralized and far more extensive than in the United States. The 11 London clearing banks and the 8 chartered banks in Canada account for a very substantial proportion of the assets of banking establishments in the United Kingdom and Canada. By contrast, the 10 largest commercial banks in the United States account for only about 20 percent of the total banking assets in this country and the 50 largest commercial banks account for only one-third of the banking assets. We have in this country almost 14,000 separate and independent banking establishments. Consequently, any attempts by the Treasury to exercise moral suasion would almost certainly break down in practice.

This does not mean, however, that the Treasury feels it must sit completely on the sidelines in a financing operation. We encourage widespread interest in the securities which we are offering and our most effective sales force in doing this is the banks and dealers. As mentioned in the answer to question III(H) on the Treasury's use of advisory committees, one of the broader functions of the advisory committees is to assist the Treasury in handling its marketing job as efficiently as possible. The advisory committee meetings with the Treasury add to the committee members' understanding of the problems which we face and the reasons supporting the decisions which are ultimately made.

On occasion, Treasury officials through public addresses encourage active participation of banking, insurance, and other financial groups in the permanent purchase or temporary underwriting of new Treasury issues. The Treasury on many occasions encourages investors, both in groups and individually, to buy or hold more Government securities, not only from the standpoint of the importance of Treasury obligations as a basic investment in all portfolios, but also from the

standpoint of trusteeship functions which financial institutions generally have toward their shareholders.

This trusteeship function is similar to that of the Treasury with regard to the buyers of its securities. It relates not only to the dollar return on investments but also to recognition of the contribution which sound debt management can make toward appropriate Government financial policies generally—policies which are essential to the preservation of the purchasing power of the dollar.

QUESTION

(B) On balance, would debt management costs be reduced by the Treasury's maintaining a larger cash balance than at present so as to minimize the need for having to come to the market at inopportune times?

ANSWER

The Treasury can usually do a better job in the timing of its debt management operations when its cash balances are sufficient to meet operating needs and to provide a comfortable margin for contingencies.

The Treasury attempts to keep its working balances at an adequate but not excessive level. Including deposits in Federal Reserve banks (usually about \$500 million) and gold in the Treasury general fund (formerly as high as \$1 billion, but currently only about \$100 million), the Treasury's cash balance has averaged about \$4½ billion during each of the last 4 fiscal years. This is small in relation to Treasury operations; the average operating cash balance the past fiscal year has averaged only 69 percent of average monthly budget expenditures—the lowest percentage for any recent year. The Treasury's cash balance has been no higher in recent months than it was a decade ago, when budget spending was only half its present rate.

Total demand deposits (other than inter-bank deposits) in commercial banks as of December 31, 1958, for example, amounted to \$134.4 billion, of which \$4.2 billion, or only 3 percent, was accounted for by demand deposits of the U.S. Government (\$3.5 billion tax and loan accounts and \$0.7 billion other deposits). State and political subdivisions alone had \$10.9 billion of demand deposits on that same date, or 2½ times the Federal total, despite the fact that U.S. Government operations are far larger.

Economizing on the use of Treasury cash balances has, however, gone about as far as possible without impairing the efficiency of Treasury operations. As the question suggests, therefore, there are times when a somewhat larger cash balance would have given the Treasury much needed flexibility in timing its borrowing operations so that it could delay them beyond a period of market apathy for new issues, rather than forcing the Treasury to borrow in an unfavorable atmosphere because it was running out of cash. In recent years the Treasury has made this position clear in its congressional presentations outlining the case for increased debt limit flexibility.

The reply to this question, therefore, is that carrying a larger cash balance would permit the Treasury either to defer financing if it wished to in anticipation of better market conditions or, conversely

to take advantage of a strong market and build up the cash balance ahead of actual cash needs.

It is obvious, of course, that the Treasury is in no position to judge future market trends so precisely as to save on interest every time it advances or defers borrowing operations. But there have been a number of occasions when such operations would have been desirable and doubtless such occasions will arise again in the future. Each time the Treasury has to balance the desirability of advance borrowing or delayed borrowing against the cost of a higher balance outstanding.

The consideration of cost is only one part of the problem. The use of cash balances by the banks, even though they are widely fluctuating balances, is to some degree an offset to the expenses which banks incur in processing subscriptions to new Treasury issues, in the handling of tax receipts, and in the sale and promotion of savings bonds, which services the banks now perform for the Treasury without charge. If these balances should become unduly low in relation to services rendered there would be increased pressure from the banks for the Treasury to reimburse them for the costs of service performed.

The Treasury's decision as to the adequacy of its cash balances is, therefore, motivated not only by cost factors but also by considerations which are much broader. The Treasury's ability to operate on a relatively low cash balance is possible, of course, only when it has adequate leeway under the public debt limit and when it has authority to borrow directly from the Federal Reserve banks to cover temporary or emergency situations.

QUESTION

(C) Could the Treasury undertake its financings more frequently and in smaller volume in order to make it easier for the market to absorb its issues? Could "tap" issues be used for this purpose?

ANSWER

The Treasury has already made substantial progress in improving the way in which it handles the tremendous volume of financing which it must undertake even in periods of balanced budgets.

The increased use during recent years of the Treasury bill instrument, with securities sold at auction, is an example of what we believe can be a proper application of the principle of making regular offerings in small amounts. In this way the handling of approximately \$35 billion of the public debt can be placed on a routine basis so that its constant refunding has a minimum impact upon the money markets.

This program at the present time involves, first of all, approximately \$26 billion of regular weekly Treasury bills—\$11 billion of 6-month bills maturing at the rate of \$400 million or \$500 million per week, and about \$15 billion of 3-month bills maturing at the rate of \$1 billion to \$1.2 billion per week. In addition, the Treasury now has \$6 billion of longer term Treasury bills maturing on midmonth dates in January, April, and July, with the expectation that a fourth issue of similar size will be offered in due time with an October 15 maturity. It is expected that this series of 1-year bills will also be rolled over in routine fashion at each maturity date.

The Treasury in addition has developed a pattern of tax anticipation bill maturities, of which there are currently \$7½ billion outstanding, maturing on the heavy corporation income tax collection dates at mid-March, June, September, and December. Since these issues are sold to cover seasonal borrowing needs in anticipation of tax receipts they are, of course, paid off at maturity, but a cycle of \$6 to \$9 billion under present circumstances is likely to be outstanding at any time. Since the predominant need for tax anticipation securities is still in March and June, rather than September and December, it is to be expected that offerings of March and June tax anticipation maturities will continue to be larger than the offerings of September and December maturities.

Other Treasury market offerings in recent years have been typically scheduled for maturity in the other 4 months of the calendar year—mid-February, May, August, and November. For the year ahead the total maturities in these months average about \$9 billion, about \$4 billion of which is held by the Federal Reserve and Government investment accounts and about \$5 billion by the public.

Turning now from the orderly arrangement of maturity distribution to the frequency of Treasury cash offerings of securities, other than Treasury bills, a number of observations should be made.

The present Treasury practice with regard to the offering of new cash issues is that such offerings will take place whenever the Treasury needs the cash but with a minimum of about \$500 million for a new long-term bond, and a higher minimum for a new issue of shorter term securities. In this manner the Treasury is able at a given time to mobilize the resources of all the organizations that participate in the distribution of any new securities which it offers, rather than diffusing its efforts over a greater number of smaller issues.

The Treasury has seriously considered the possibility of reducing the size and increasing the frequency of new offerings. The appeal of this approach is that the risk of money market disturbance by large Treasury offerings would be materially lessened if the size could be cut down. On the other hand, the frequency of Treasury offerings is also an important disturbing factor to the market. Market analysts point out that even if the Treasury did all of its financing on a weekly basis, rather than trying to concentrate it in larger amounts, the issues involved would still be in the neighborhood of \$1 billion a week, quite apart from Treasury bills. Many of these analysts conclude, therefore, that the greater frequency of new offerings would be more disturbing to the market than the present system, since the amounts would still be of substantial size. Moreover, greater frequency of offerings would tend further to restrict the timely and flexible application of Federal Reserve monetary policies.

More frequent offerings of long-term bonds also have been considered by the Treasury, since they would seem to have some appeal in gearing the Treasury's long-term securities offerings more closely to the flow of funds to savings-type investors. Advocates of this method point out that if the Treasury somehow could judge the flow of savings funds with reasonable precision it could perhaps carry a somewhat smaller cash balance in commercial banks.

It should be pointed out, however, that the flow of savings available for investment in Government securities is also uneven and does not

suggest, therefore, any regular pattern of the size of Treasury long-term offerings on a weekly, monthly, or even a quarterly basis. Moreover, competing demands for savings will also vary over time, both within a given year and at different stages of the business cycle.

Additional important questions arise as to the market effects of relatively small issues of longer term bonds at frequent intervals. For one thing, the small size of the issues might impede trading in the securities in the secondary market; to some extent that has been the case with small issues in the past. Moreover, some market analysts point out that, during a period when interest rates were expected to rise, many investors might withdraw from the market in view of the certainty of additional offerings of bonds in the future. In this event, the amount of bonds that the Treasury could sell might be reduced or existing market rates of interest might rise faster than would otherwise be the case.

The Treasury has had considerable experience in the offering of "tap" issues in the nonmarketable field but has not felt that the same principles could be applied too easily to marketable securities. At the present time series E and H bonds are the only Treasury securities available on tap. These bonds, of course, are sold to small savers who buy them because of their safety and their convenience of purchase and redemption at stated values. Savings bonds terms are changed somewhat infrequently; the increase to 3¾ percent which became effective June 1, 1959, is only the fourth change in the interest rate provisions on E- and H-bonds in more than 18 years.

The Treasury has been considerably less successful in selling other nonmarketable securities on a tap basis. Beginning in 1941 the Treasury began selling 2-year tax savings notes (later extended to 3 years and called savings notes) to investors who wished to accumulate short-term funds, principally in building tax reserves. These short-term securities could be bought at any time and were redeemable on demand at predetermined redemption values so that the interest return could always be determined in advance. When markets were pegged these short-term tap issues served a very useful function in attracting money—mostly from corporations—into Government securities.

In the postwar period, however, the return to flexible markets made the savings note instrument extremely attractive when market rates were low and extremely unattractive when they were high. This led to very large sales of these securities at some times and large redemptions at other times. Infrequent revisions in terms did not solve the problem and the Treasury finally abandoned the sale of savings notes in the fall of 1953.

The Treasury's experience with savings bonds available on tap to larger investors has also been somewhat unsatisfactory. Beginning in 1941, the Treasury began selling series F and G savings bonds with a limit of \$50,000 a year for either series or both in combination to larger investors interested in a nonmarketable security. The F and G savings bond program was very successful during the war years and was responsible for the diversion of a substantial volume of investors' funds into Government securities.

F- and G-bonds continued to be attractive in the postwar period up through 1950 when the peak volume outstanding was reached. Fol-

lowing the Federal Reserve-Treasury accord and the return to flexible markets for Government securities, however, F- and G-bonds began to present some of the same problems discussed with regard to savings notes. Sales fell off substantially in 1951 and 1952 and two new series—J and K—were offered beginning in May 1952 with an interest rate of $2\frac{3}{4}$ percent, replacing the former $2\frac{1}{2}$ percent on the F- and G-bonds, the sale of which was discontinued on April 30, 1952. Series J and K bonds were attractive only during 1954-55, and the remainder of the time until their discontinuance on April 30, 1957, sales were relatively small. When interest rates were rising, F, G, J, and K bondholders found it to their advantage to flood the Treasury with heavy redemptions, thus adding to the financing burden which the Treasury faced during such periods. The constant drain on the Treasury from redemptions of these bonds (including paying off maturing bonds starting in 1953) has injected more than \$15 billion into the market during the last 7 years, far exceeding the amount of marketable bonds with 10 years or more to maturity which the Treasury has been able to sell in the meantime.

The unfavorable experience with nonmarketable tap issues may not be wholly applicable to marketable taps. Nevertheless, experience indicates that, under conditions in which interest rates respond flexibly to market forces of demand and supply, purchases of a marketable tap offered at a fixed price would also tend to increase rapidly at one time and to decrease sharply at other times. To avoid these sharp swings in sales, the Treasury would have to adjust the offering price of the securities, perhaps as often as every few days. Such frequent changes in offering price might be confusing and disturbing to the market. Moreover, there is a strong likelihood that changes in the offering price would be interpreted by the market as official Treasury forecasts of interest rates and credit market conditions. This could contribute to abrupt changes in market sentiment that would magnify interest rate movements and speculative operations.

The Treasury's decision in the past not to issue marketable securities on a tap basis does not foreclose the possibility of such issues in the future, however, and we shall continue to study the matter.

QUESTION

(D) Would it be desirable for the Federal Reserve to use its direct purchase authority of section 14(b) of the Federal Reserve Act, as amended, to finance an increase in the Treasury's cash balance in order to facilitate Treasury management of the debt?

ANSWER

As is indicated in the reply to question III(B), there have been instances in the past when a larger cash balance would have permitted greater flexibility in timing of borrowing operations. Nevertheless, the Treasury does not believe that the direct purchase authority of the Federal Reserve should be used to bolster cash balances for this purpose.

The direct purchase authority is properly viewed by both the Federal Reserve and the Treasury as an emergency authority. This interpretation is supported by the fact that the authority is temporary

rather than permanent in nature. The Treasury has emphasized this point in its periodic requests to Congress for renewal of the authority.

In other countries, direct recourse of the Treasury to the central bank, on a more or less permanent basis, has led ultimately to severe financial difficulties. The funds created by the central bank in the process of such lending are "high powered" money and, unless offset by some type of compensatory action, their creation can contribute to strong inflationary pressures. In our judgment, the temporary advantages obtained from the use of the authority to bolster the Treasury's cash balances would not be sufficient to outweigh the undesirable effects that might result from a breach of the basic principle of separation of the Treasury and the central bank.

QUESTION

(E) (1) Would it be possible to reduce the Treasury's debt management problems by making greater use of the auction technique in connection with the issuance of intermediate- and long-term securities?

ANSWER

Despite the fact that the Treasury is pleased with the results of the auction technique of selling Treasury bills and has extended the use of that technique to an increasing volume of bills in recent years, we do not believe that the auction technique lends itself to the successful issuance of intermediate- and long-term securities and probably would not be in the public interest.

A major objective of Treasury debt management policy is, of course, to promote as broad a distribution of the public debt as possible. In this way more of the debt can be placed in the hands of longer term investors. Savings out of current income can be tapped and less reliance is needed on borrowing from commercial banks.

Subscriptions to new offerings of Treasury certificates, notes, and bonds issued on a fixed-price basis are made by thousands of small banks, corporations, associations, and individuals throughout the country. Most of these investors do not have enough current background data to submit a knowledgeable bid for these securities. If the competitive procedure were used, therefore, the Treasury could be in a position of imparting the opportunity now open to small- and medium-sized investors of buying new securities directly from the Treasury. This might be taken to imply that the Treasury is not interested in their having a chance to buy from the Treasury on the same terms as large investors.

Furthermore, on fixed-price issues the Treasury can more easily control the amount issued to any single investor or investor class than it could on an auction. Total subscriptions from commercial banks on medium and longer term bonds, for example, are typically limited to a certain percentage of capital and surplus and on occasion subscription limitations from other types of investors have been used. Substantial downpayments are also often required to minimize speculation. Typically, allotments in full are made to small investors. In addition allotments (actual security issuances) to different investor groups may vary considerably, with preference usually given to savings-type investors. The allotment procedure, in particular, would be

extremely difficult to use in connection with an auction, and there would be difficulty in adapting other successful marketing techniques to the auction method.

Another way of looking at the problem is that the competitive situations arising from the auction technique in handling short Treasury issues versus long Treasury issues are quite different. In the auction of a short-term security the professional underwriters who purchase for secondary distribution are competing not only among themselves, but are also competing with a large number of professional buyers who are purchasing for their own investment needs. Thus the market underwriters have to consider not only the underwriting competition but they also have to submit bids that are competitive with those submitted by the primary investors who are well acquainted with this market technique.

On the other hand, in a longer term issue the use of the auction instrument would undoubtedly generate bids almost exclusively from the professional underwriters, both dealers and banks, who would then do the secondary distribution. In this case the professional underwriters have to worry only about their underwriting competition and do not have the competitive influence of informed bids submitted by primary investors.

It should also be mentioned that most new Treasury securities are not issued for cash but are offered in exchange for maturing securities. Use of the competitive bidding system on all new securities would mean, presumably, that the Treasury would pay off all maturing issues in cash and issue new securities. At the present time, most holders of maturing issues—again, many of them small holders—simply turn in the old security for the new one. If, however, each holder has to enter a competitive bid for the new securities, he again runs the risk of being left out and of having to buy the securities back from some successful bidder.

Competitive bidding for all new issues would also tend to add to the amount of purchases by those buyers familiar with bidding techniques who would submit bids at relatively low prices just on the chance that they would be accepted. This would be particularly true in a period where interest rates are rising and credit is not so readily available. In such periods, reluctant buyers would tend to indicate their lack of enthusiasm for Government securities by offering low bids (high interest rates). One result of competitive bidding under such circumstances would, therefore, tend to be a net increase in the cost of interest on the public debt to the Treasury—and to the taxpayer.

In addition, if the successful bids were so low as to produce interest rates on the new securities well above the market, the entire market could be upset, with unfortunate implications for both debt management and monetary policy. In many instances, therefore, too great use of competitive bidding would tend to prevent the Treasury from fully exercising its debt management responsibilities.

On long-term issues the problem of the leverage effect of a small yield difference in causing a large difference in price comes into play. A quarter of 1 percent spread in yield on a 3-percent 91-day bill is worth only 63 cents on a \$1,000 bill. On a 3-percent 1-year issue it is worth \$2.45 per \$1,000, and on a 3-percent 20-year bond it is worth

approximately \$37. That means that even though the high and low accepted bids on a 20-year bond are within a seemingly narrow range of one-fourth of 1 percent, the price range would be all the way from \$963 to \$1,000. Let us assume that the average bid accepted is \$985. As a result, the bidder who was shrewd (or lucky) enough to get his bid accepted at \$963, the "tail" bidder, is encouraged to sell his bond immediately for a quick speculative profit as long as the market price is well above his cost. If many of those who bought bonds cheaper than the average do this, of course, their profits will shrink as the price goes down, but in the process they will have succeeded in knocking the market down and interfered with the orderly distribution of the issues by legitimate underwriters to ultimate owners. The secondary distribution of an auctioned bond would be further impaired, of course, by the obvious reluctance of successful bidders who paid above the average price to take a loss on the transaction at the market price even if it remains steady at the average bid.

Two more points may be made. Many institutional portfolio managers dislike the auction technique because they have to pick a price. If they bid high enough to insure buying the new securities they probably will be above the average accepted bid and will be subject to the criticism of their own institution that they paid too much. If they try to be sure to get under the average they may be outside the range of accepted bids and come away from the auction (which is, of course, based on sealed bids) with nothing. Since there is always the secondary market to fall back on, many investors prefer to take the latter chance rather than the former, thus tending to lower the average price and increase the cost to the Treasury.

The other point also relates to investor attitudes. Quite apart from tax considerations, the basic preference by investors in Governments is for issuance at par. Many investors buy coupon—that is, they want as high a rate of current earnings as they can get rather than the same overall income consisting of lower current earnings plus a capital gain when they sell the bond or it matures. These investors (such as pension funds) prefer to buy a $4\frac{1}{4}$ -percent 10-year bond at par, yielding $4\frac{1}{4}$ percent, to a $3\frac{1}{4}$ -percent 10-year bond at a little under 92, also yielding $4\frac{1}{4}$ percent. On the other hand, many investors prefer not to buy at a premium because they would rather not get part of their capital back with each interest payment.

There are also serious potential tax complications involved in Treasury auctioning of any securities other than Treasury bills, particularly with reference to longer term bonds. In an auction of any coupon issue it would still be necessary for the Treasury to price issues to some extent; a coupon rate has to be placed on the security in any event. However, no bid could be accepted below a certain discount under par without tax complications. If the discount were less than one-fourth of 1 percent below par for each full year to maturity on the new security, the increase in value to par would be a capital gain. But securities issued at any greater discount would be subject to the tax law provisions governing original issue discount, and the increase in value to par in this case would be taxed as ordinary income, with a proration based on time if more than one holder is involved. These provisions do not apply to bills since they are not a capital asset and all increases in value are taxed as ordinary income.

This would not be as great a problem if the Treasury issued all such securities at the same time. But with an auction, bids may be accepted at a great many different prices. Each of these securities issued in acceptance of varying bids would have a different original issue discount under the tax law. Furthermore, even securities issued with the original issue discount might be accorded different tax treatment as the result of transactions in the secondary market. In addition to producing a multiplicity of slightly differing types of the same issue in the market, this would create additional confusion in evaluating them. Thus, investor interest in such issues would be effectively undermined.

The Treasury believes, therefore, that there are formidable obstacles in the path of a successful application of the auction technique to intermediate or longer term bonds. We are pleased, however, with the results to date of the rapid expansion of the auction technique in the very short-term area which we have undertaken recently, and certainly do not foreclose the possibility of further expansion of auctions in that area. We believe further that the present practice of offering Treasury certificates, notes, and bonds at prices and interest rates determined by the Treasury does result in an effective distribution of new Treasury issues at minimum cost to the taxpayer. In the last analysis, a potential buyer of a new Treasury issue must find the rate of interest attractive or he will prefer to buy a security in the outstanding market regardless of whether the Treasury evaluates that attractiveness for him by setting a price, or whether he tries to measure the amount of attractiveness himself in terms of submitting a bid.

QUESTION

(E) (2) If the auction technique were feasible and if all Treasury debt financing employed this technique, would there be less constraint on the Federal Reserve in discharging its monetary policy responsibilities?

ANSWER

The auction technique, even if feasible, would in our judgment do little to provide greater freedom of action for the Federal Reserve in discharging its monetary policy responsibilities. Under existing techniques, the primary constraint on administration of monetary policy arises from the relative frequency of Treasury debt operations and the necessity for the Federal Reserve to maintain an even keel during financing periods. In the case of intermediate- and long-term Government securities adoption of the auction technique would, in itself, do nothing to change this situation. The basic solution to this problem is to promote, over time, better balance in the debt structure. The Treasury has recently made significant progress in this direction in connection with the short-term debt (see the reply to question III(C)), and we hope to make considerable progress in the future by use of "advance refunding."

A major advantage of the auction technique, if feasible, would seem to be the avoidance of the necessity for Treasury pricing of new issues. Again, however, market uncertainty concerning a new Treasury offering is primarily related to the types and maturities of new issues, not to the offering rate. Given a specific type of security and

maturity range, inspection of existing market yields can provide investors with a fairly exact indication of the interest rate that the Treasury will place on a new issue.

The general conclusion stated in the reply to question III(E) (1) should be repeated, namely, that the Treasury believes that the present practice of offering securities other than bills at prices and interest rates determined by the Treasury results in an effective distribution of new issues at a minimum cost to the taxpayer.

QUESTION

(E) (3) Does the Treasury under present marketing arrangements pay a premium interest rate so as to compensate those who buy on the primary distribution (dealers and commercial banks) for resale on a secondary distribution basis?

ANSWER

The interest rate placed on a new Treasury issue is usually somewhat higher than market yields on outstanding Government securities of comparable maturity. To a considerable extent this is merely a reflection of the fact that an additional supply of securities can be placed in a given maturity range in the market only by offering a slightly higher yield than prevails on the outstanding issues. With a Government securities market that is so active and widespread, each investor contemplating the purchase of a new Government issue has a choice of buying the new one or an outstanding issue. If the new issue is not attractively priced, he will naturally seek an alternative investment, either in the form of an outstanding Government security or perhaps a competing investment such as a corporate or municipal bond or a real estate mortgage.

The slightly higher interest rate that is paid may also be viewed in part as compensation to those who buy securities directly from the Treasury for distribution in the secondary market. On many occasions, however, the rate so set has not actually proved to be a premium rate. In some instances the new issue has failed to develop a premium price in the secondary market and has been redistributed at a loss.

It is important to realize that the difference between the rate that the Treasury has placed on new issues and market rates for comparable outstanding issues has averaged only about one-eighth of 1 percent for all issues marketed since 1952. This compares with a spread of about three-tenths of 1 percent for the average of the all high-grade corporate issues marketed in this same 6½-year period. This indicates that the Treasury always gives careful consideration to cost factors in pricing new issues.

QUESTION

(E) (4) Might there on occasion be an overpricing of an issue? If so, how does this arise? Is it possible that the risk of such a development could ever be entirely eliminated? In particular, would the auction technique eliminate this risk?

ANSWER

The only occasions when there appears to have been an overpricing of a Treasury issue, in the sense of too high an interest rate being placed on a new security, have been instances where the Treasury offering has taken place at a time when interest rates were falling rapidly. It is only by hindsight that it is clear that the new issues have moved to attractive premiums during the first month or so after issuance, and outstanding issues in the same maturity range have shared in similar market price improvement. There are more instances of Treasury underpricing than Treasury overpricing in recent years, however, from the standpoint of hindsight and, as indicated in the reply to the preceding question, the average new Treasury issue during the last 6½ years has been priced to yield the investor only one-eighth of 1 percent above yields obtainable in the outstanding Government securities market.

Since 1952 the Treasury has issued marketable bonds running 10 years or more to maturity on nine separate occasions, involving seven new issues and two reopenings of existing issues. On only two occasions was the market price (closing bid quotation) on the new offering more than eight thirty-seconds above the offering price. In other words, the market price of a \$100 bond exceeded \$100.25 on its issue date in only two cases. On two other occasions the new issue sold at a premium of less than eight thirty-seconds over its issue price on its issue date. In one instance the market price on issue date was exactly the same as the issue price. In the remaining four instances the new issue was quoted in the market at a price below the issue price on the issue date.

In terms of interest rates the difference between the offering yield and the market yield as of issue date was 1 basis point (one one-hundredth of 1 percent) or less in six of the nine issues, and the entire range of difference was from 22 basis points above on the most attractive issue to 4 basis points below on the least attractive issue. Measured by this standard, therefore, it is apparent that the average error in the Treasury's estimate of the market was very close to zero if the criterion is the market price at issue date.

Even this criterion, however, presents certain obvious difficulties since it assumes that the Treasury can price its securities precisely on their issue date, which is typically 10 days or more away from the announcement date of the issue. Therefore, in times of rising interest rates (and falling bond prices) a new Treasury long-term issue which is properly priced in the first instance may look quite attractive at the time of the offering but may lose some of its investor appeal by the date on which it is issued. This is what happened, for example, on both of the long-term bond issues thus far in 1959.

On the other hand, when bond prices are rising and interest rates falling, an appropriately priced Treasury long-term issue at the time it is announced may look exceedingly attractive by its issue date. This is the reason the two long-term bonds issued in the early stages of the 1957-58 recession registered sizable premiums in the market by the time their issue date approached.

The term "exceedingly attractive," however, can be used only with relation to the original interest rate offered on the bond. It cannot

be used with respect to the market price behavior of the new issue in relation to the market price behavior of similar issues that are already outstanding since, of course, these all tend to move together. If they did not, an investor would immediately sell the higher priced issue and buy the lower priced issue in order to make a quick profit. A basic function of any market is to iron out any such inconsistencies.

The result of overpricing and underpricing—as judged by hindsight—can never be eliminated. It is a phenomenon associated with the freedom of interest rate movements in a competitive market. Even if the Treasury were able to judge market conditions so exactly as to price each issue precisely on the market curve of outstanding issues, new offerings priced on this basis would in most cases fail, because an investor would have no incentive whatsoever to buy the new issues rather than outstanding ones.

We do not believe, therefore, that it is appropriate to consider this margin of attractiveness on Treasury securities as a risk. It is, rather, more in the nature of a fee paid to underwriters who participate in the secondary distribution—who run the risk of loss as well as the chance of gain—plus a justifiable measure of incentive to investors who buy from the Treasury with the intention of holding the new issues more or less permanently.

The auction technique, if feasible, would of course eliminate the so-called risk of overpricing in that the market would price the issue by submitting bids on the offering date. Still, there would be no assurance that the issue might not subsequently rise to a premium (or fall to a discount) in when-issued trading. As is pointed out in the reply to question III(E) (1), however, the Treasury believes that the auction method of marketing intermediate and longer term bonds would actually result in higher interest rates paid on the securities than is the case under the methods currently utilized.

QUESTION

(F) How has the Federal Reserve's "bills only" policy influenced the Treasury's marketing problem? Has this policy made the marketing problem easier by strengthening the market for Treasury securities, and thereby making it easier for the market to absorb large issues? Or has the "bills only" policy made the marketing problem more difficult, for example, by denying to the Treasury the possibility of obtaining temporary underwriting support?

Is it possible for the Treasury to use its own trust accounts to this end, or in some other way provide itself with temporary underwriting support?

ANSWER

The Federal Reserve's decision to concentrate its open market operations in short-term securities is a natural evolution of the policies it followed after the Federal Reserve-Treasury accord in 1951. Pegging of interest rates during the preaccord period had seriously impaired the effectiveness of the Federal Reserve as an efficient executor of monetary policy.

Following the accord, the Federal Reserve withdrew support immediately from the market for outstanding longer term Treasury issues. It also withdrew support gradually from new Treasury

financings insofar as specific new issues or adjacent outstanding issues were concerned. These steps were felt necessary to rebuild a Government securities market which had confidence in the Federal Reserve's willingness to let market forces assert themselves throughout the maturity range of Government securities, except for the very shortest issues, in which the Federal Reserve would continue to deal in pursuance of its monetary objectives in either creating or absorbing bank reserves.

We believe that the policies followed by the Federal Reserve since the Treasury-Federal Reserve accord have, indeed, contributed to a restoration of market confidence in the competitive forces which account for its strength. The so-called bills only policy is essentially an operating technique for creating or absorbing bank reserves with a minimum direct effect on prices of Government securities. It may be true that at times departure from this technique might have eased Treasury debt management problems. It is also true, however, that System operations in long-term securities might on occasion lead to transitory price movements in these securities that would complicate rather than ease our debt-management problems.

Admittedly, debt-management problems could be eased—but only temporarily—by abandonment of “bills only” and a return to the practice of directly supporting the prices of Government securities. But if the “bills only” practice were superseded by the earlier practice of rigidly pegging the prices of Government securities, it would be at the cost of encouraging a highly inflationary expansion in the money supply. The objective of facilitating debt management, although important, cannot be allowed to take precedence over our more important economic objectives relating to employment, growth, and price levels.

Some observers believe that one middle course, involving Federal Reserve support of Treasury securities only at times of financings (underwriting) could be effective in easing debt-management problems without hindering the functioning of the market or endangering the attainment of more important economic objectives. Such a middle course presents difficulties, however, during periods of relatively stable investor expectations it might appear feasible; but at such times the Treasury's debt-management problems are not usually severe. Those problems become most troublesome in a declining market, but it is precisely at such times that minimal support operations are most difficult to carry out. When investors expect higher interest rates, an attempt at small-scale support purchases by the System runs the considerable risk of encouraging large-scale liquidation by market holders of Government securities. Under such circumstances, large-scale support purchases might become necessary. This means that high-powered reserves, capable of supporting a multiple expansion in the money supply, are injected into the market by the Federal Reserve. And it is probable that such injections would occur at a time when monetary restraint is appropriate in order to promote our important economic objectives.

Nor does the Treasury believe that it should use its own trust accounts in the capacity of providing underwriting support to new issues. The Treasury does have limited facilities for market stabilization during financing operations through the use of these Govern-

ment investment accounts. It engages in such operations, however, only when it is to the direct investment advantage of the trust fund or agency to buy maturing issues for the purpose of exchanging them for new issues or to buy new issues directly. Such purchases can and have been made, and they have had an incidental effect of assisting the Treasury in the marketing of a new issue. Such purchases, however, are made only in pursuance of a trusteeship function with the intention of holding the securities and not engaging in market trading back and forth.

It has also been suggested that the Treasury might consider setting up a stabilization fund to help in the marketing of new issues. The Treasury has given considerable thought to the possibility of establishing such a fund. Furthermore, it has been encouraged to give the matter careful study by a number of participants and observers in the Government securities market whose views were expressed in the recently completed consultations conducted as part of the Treasury-Federal Reserve study of the Government securities market. The discussion is reported in part I of the recently published Treasury-Federal Reserve study as follows:

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.

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.

The Treasury would oppose any suggestions for a stabilization fund which would visualize market support activities designed to influence the basic trend of market prices. This would be an interference with

the normal forces of supply and demand in the Government securities market and could require an untold volume of resources which when exhausted would merely cause the market to fall back again on competitive forces. Treasury support operations in this manner, therefore, are subject to many of the same objections as proposals for rigid Federal Reserve support of the Government securities market. Treasury stabilization purchases with funds obtained in the market would have the relative advantage over Federal Reserve pegging in that at least there would be only a dollar for dollar expansion of credit—not the multiple effect of “high powered” money growing out of the expansion of bank reserves by the central bank. But, as mentioned earlier, the resources required by such a broad-scale stabilization fund could be very large.

QUESTION

(G) Are present arrangements for the secondary distribution of Treasury securities adequate? Do dealers and commercial banks provide an adequate network for placing securities with final holders?

If not, is there some better arrangement? For example, would making use of the Federal Reserve as a distribution system be of help?

ANSWER

The Treasury believes that the present arrangements for the secondary distribution of new Treasury securities are quite adequate. Dealers and banks subscribing to these issues have contact with thousands of investors every day throughout the country and, if the market for the new Treasury issue is receptive, this distribution moves forward very quickly and smoothly.

This does not mean that the present system is entirely trouble free. The question of the adequacy of present distribution arrangements was raised specifically in the consultation phase of the Treasury-Federal Reserve study of the Government securities market. The following excerpt from part I of the Treasury-Federal Reserve study reflects the discussion of the problem in consultations conducted last spring in connection with that study:

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 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.

The Federal Reserve banks, of course, play a vital role in the distribution of new Treasury issues since they act as a focal point for the preparation of all material sent to the banks, dealers, and potential investors as soon as the Treasury announcement of the terms of the new issue is made. They also handle all of the individual subscriptions for the Treasury, make allotments (in accordance with percentages announced by the Treasury), and handle the actual transfer, issuance, and retirement of the securities. (Almost half of the total expenditures of the Treasury's Bureau of the Public Debt represents reimbursement of expenses incurred by the Federal Reserve banks in their capacity of fiscal agents for the Treasury). As indicated in the reply to an earlier question, however, the Treasury does not favor the use of the Federal Reserve System as underwriters of new securities.

QUESTION

(H) How does the Treasury conduct its advisory consultations concerning debt operations with the various representatives of the financial community? For example, what kinds of institutions and individuals are called upon for advice? And how stable is the composition of these various advisory groups? Are specific recommendations of any sort made by these groups, and if so, is a record kept? To what extent does the Treasury get conflicting advice from its various advisers? When there are differences, how, if at all, are they reconciled?

To what extent has the Treasury been guided in its debt operations by the advice of these advisory groups? To the extent that the advice provided is adhered to, does it (1) tend to result in operations which minimize the interest cost to the Treasury, or (2) tend to result in

operations which contribute directly to maintaining economic stability, or (3) both? In any case, why?

ANSWER

At the present time there are five advisory committees of various financial groups which meet with the Treasury from time to time to discuss various debt management problems. These committees are as follows:

- (1) American Bankers Association, Government Borrowing Committee;
- (2) Investment Bankers Association, Governmental Securities Committee;
- (3) National Association of Mutual Savings Banks, Committee on Government Securities and the Public Debt;
- (4) American Life Convention and the Life Insurance Association of America, Joint Committee on Economic Policy; and
- (5) U.S. Savings & Loan League and National Savings & Loan League, Joint Committee on Government Securities.

These are informal groups which are invited from time to time to come to the Treasury and advise the Secretary and the Under Secretary during the planning phases of Treasury debt management operations, as has been the practice ever since the early days of World War II. In each case, these committees are established as an integral part of the committee system in their respective parent organizations. Their operations involve no Government expenditures. The responsibility for membership selection, chairmanship, staff work, financial arrangements, meeting places, minutes, and reports rests solely with the sponsoring organizations. There is continuity of membership from year to year so that each group has developed considerable experience with the Treasury's problems; nevertheless, there is also some turnover in membership from time to time. Only the timing and purpose of the meeting are suggested by Treasury officials.

After introductory sessions with Treasury officials for purposes of briefing the committee members on the background of the pertinent problems involved, each committee—in most instances—meets alone, with no Treasury employee present, to discuss the problems thoroughly and to work out recommendations. These recommendations are then presented orally—typically in an informal manner—developing not only group conclusions but also reflecting specific observations by individual members.

These meetings are usually held toward the end of the period leading up to the Secretary's financing decision. By that time, the Treasury has already been studying all factors in the market environment intensively from many different points of view, so that the basic job of analysis is nearing completion before the meetings are held.

The principal function of the advisory committees is to assist the Treasury in interpreting the potential market demand for new securities as among various types of investor classes and as among different maturities of bills, certificates, notes, and bonds. For example, an appraisal of market demand by these advisory groups can aid the Treasury materially in determining the advisability of putting out a long-term bond or an intermediate-term bond under rapidly changing

market circumstances. It is the best way we know of conducting a quick, yet comprehensive, survey of market demand in various maturity ranges close to the time of financing. The various dealers and bankers represented on the American Bankers Association and Investment Bankers Association advisory committees are in daily contact with upward of 5,000 investors in every part of the country, and they handle transactions in Government securities that total more than a billion dollars per day. They know what securities their customers are interested in buying and what they want to sell. They also are in a position to express judgment as to whether existing demand can be effectively capitalized on by the Treasury in the sense that it is matched by a substantial flow of funds which would be available for purchase of Treasury securities.

It is obvious, of course, that interest rate trends generally and the coupon rate which the Treasury might have to pay on a new Treasury security in a particular maturity area are a part of the normal working knowledge of these two groups in dealing with investors throughout the country. The major question remains, however, as to the availability of a market which the Treasury can effectively tap.

It is well understood by all but the most unsophisticated investors that the rate of interest which the Treasury will have to pay on the specific issue it decides upon can vary only within very narrow limits, depending on the market quotations on the day that the Treasury makes its announcement.

Interest rate recommendations are only one part of the advice and frequently the least controversial part of the advice which is given. The consulting groups and the Treasury are, after all, examining the same basic factors. As noted earlier, the Government securities market is a broad market with daily transactions that exceed \$1 billion. It is a market in which transactions are conducted each day on more than 85 issues of marketable Government securities, ranging in maturity from a day or two up to more than 30 years. Any investor can draw a line through the market yields of outstanding issues and develop a "market curve." If the Treasury tries to sell a security that pays interest at a lesser rate than comparable outstanding issues there is obviously no incentive for anyone to buy it since he can obtain a better investment in the open market. Therefore, the Treasury has to price its new issues so that they are slightly more attractive than securities available on the outstanding market, particularly if it wants to sell a significant amount or if the outstanding market is very thin.

Advisory committee recommendations typically include a reference as to what the committees believe the market tells them would be an appropriate interest rate at the time that the committees meet. On occasion, recommendations are made on the basis of "a rate that is consistent with the market at time of offering" without specifying a specific figure. All committee recommendations are submitted with the understanding that, particularly with regard to interest rates, the committee itself might have a different opinion if market conditions shifted between the time of the recommendation and the time the Treasury makes its announcement. To the extent that market conditions do not change, it would be surprising if advisory committees' expressions of an indicated interest rate on a new issue for the same

general maturity range would differ more than one-eighth of 1 percent from the eventual Treasury decision. In fact, they have not differed either between each other or with the ultimate Treasury decision by more than one-eighth of 1 percent during recent years.

The advisory committees are also very helpful in advising the Treasury on various details with regard to each offering. If among the possibilities considered, there is, for example, the issuance of a bond in the 5- to 10-year area, the advice of the committees as to the demand on the part of various investor classes of a 6-year, 8-year, or 10-year bond can be very helpful. Their advice may also go a step further and suggest a precise date, but this usually is something which the Treasury will decide principally on the basis of the way in which the proposed new security fits into the existing maturity structure. Obviously, if the Treasury has a heavy concentration of maturities to meet on a given date, it will seek to avoid adding further to that concentration and will select a more or less open maturity date.

Treasury policy in recent years has been to issue bonds, notes, and certificates with maturity dates confined to the 15th day of February, May, August, or November in order to limit future Treasury refundings to these four dates as much as possible. This selection of refunding dates permits the Treasury to make better use of March, June, September, and December midmonth dates for the maturity of tax-anticipation securities, since these are the dates on which corporate tax payments typically fall due. As these practices have become more routine, they have also facilitated the intention of the Treasury to issue 1-year Treasury bills maturing on a regular basis on the 15th day of January, April, July, and October. These aspects of Treasury debt management "housekeeping" are well known to the market. The advisory committee's recommendations obviously assume that the Treasury will work in this direction; thus it is no surprise for their suggestions to follow the same sort of timing of maturities as the Treasury has been using.

The committees' recommendations are presented orally in the case of the Investment Bankers Association and in written summary by the American Bankers Association group in terms of what might be called a majority report. The meetings of both of these groups with the Secretary, the Under Secretary, and other Treasury officials are informal. Strong minority positions with regard to types of securities to be offered, interest rates, exact maturity dates, and many other aspects of the forthcoming financing are typically presented. This may be handled by the chairman of the committee on behalf of the minority or by a spokesman selected by the chairman. Individual members of the committee are always encouraged by their own chairman and Treasury officials to express independent positions as freely as possible, and a typical meeting will find many such expressions.

Meetings with three other formally organized advisory groups are broader in scope than those with the ABA and IBA committees, and their financing recommendations, to the extent that any are made at all, are usually rather broad. As a result, they largely focus on expressions of interest in various maturity areas and views as to the way in which the current demand for Government securities, or lack thereof, relates to the general economic environment in which the Treasury financing is to take place.

The groups representing the mutual savings banks, the savings and loan associations, and the life insurance companies are groups which have the specific job of reinvesting the savings of millions of individuals who purchase life insurance or who make deposits or own share accounts in these savings institutions. Their interests and field of competence are largely confined to their own investment portfolios.

On the other hand, the investment banker group represents the Government securities market itself. In many ways, therefore, the firms which these Investment Bankers Association committee members represent are in more intimate contact with the investment problems of a much larger group of institutions in life insurance, mutual savings banks, and savings and loan associations than the members of those particular institutional advisory committees. In addition, the investment banker group represents the most practicable and efficient way of ascertaining the current investment practices and needs of a vast body of investor classes throughout the country which are not as formally organized as the three that have been mentioned. These include State and local governments with reference to investment of pension and retirement funds, reinvestment of the proceeds of bond issues prior to disbursement of the funds, and temporary investment of peak tax collections. These also include corporate pension funds which are self-administered. The investment banker group is also the best source the Treasury has on an up-to-date basis of unusual sources of demand for securities on behalf of endowment funds, foundations, or mutual funds.

By the very nature of their business, the firms represented by the investment banker group have an intimate and comprehensive knowledge of the market which no other groups can have. The American Bankers Association group shares some of these attributes through correspondent bank arrangements that blanket the country. They can give us, therefore, an up-to-date "feel" on bank investment practices and what the changing attitude of thousands of banks may be toward specific types of Government securities which the Treasury might offer. The American Bankers Association group is concerned, therefore, with both the primary and secondary demand for Government securities by banks throughout the country. The particular institutions which are represented on the committee buy some new Treasury issues with the intention of holding them—sometimes to replace existing issues that they wish to dispose of and sometimes (when loan demand is slack) to add to their portfolios on a net basis. Most of the securities that they buy, however, are purchased in their capacity as underwriters—securities which they in turn will sell to the ultimate investors. The secondary distribution of these securities is in large part also handled through the dealers.

The IBA and ABA consulting committees are also helpful in regard to many other aspects of Treasury terms on new issues. These are usually concerned with technical matters but these are important with regard to the successful offering of the new issues. The consultants may help the Treasury in answering such questions as: What downpayment requirements would seem to be suitable on a given type of issue in order to discourage potential speculators? Are there market practices, such as dealer price quotations on a cash issue before the subscription books are closed, which in particular

cases may contribute to or detract from the success of the issue? How should allotments be handled on cash issues among various types of investors? How can the interest of small buyers best be encouraged? What minimum allotments should be made in full? How does the market react under particular circumstances to allotments which might exceed 10 percent of the announced amount? Should attempts be made under certain circumstances to limit the size of one option on refunding issues as against the other? Should new refunding issues be dated ahead of the maturity of the old issue to give more incentive to investors to make the exchange? Can down-payment privileges be modified for particular types of subscribers as, for example, other governmental units? Under the circumstances then prevailing, how many days should elapse between the Treasury announcement of the new issue and the opening of the subscription books in order to make sure that there is a maximum coverage of potential buyers? How long should the subscription books be open?

In addition, the advisory committees are requested by the Treasury from time to time to give careful consideration to broader aspects of Treasury debt management planning as they appraise the overall needs of the economy and the outlook for savings on the part of individuals and institutions. The committees are also helpful in keeping the Treasury abreast of the most up-to-date information and analysis with regard to the problems which corporations and State and local governments are having in the offering and secondary distribution of new issues, together with analysis of the interrelationship of the three securities markets with the mortgage picture and with the broader problem of relative desirability of stocks versus fixed income obligations. The committees are often asked to express themselves with regard to the savings bond program. In the last analysis a large part of any success which the Treasury has in this method of encouraging a wider distribution of the public debt must depend upon institutional groups, such as commercial banks, mutual savings banks, savings and loan associations and insurance companies.

The advice which the Treasury receives on all of these matters is certainly not confined in any way to the suggestions by these committees or their individual members. The Treasury's own analysis of the factors which lead up to each financing decision is a composite of many points of view. The Treasury staff itself is constantly reviewing past financings in a critical way in order to improve Treasury debt management techniques and procedures as well as broad policies. The Federal Reserve System actively participates in the construction of the framework on which the Secretary's ultimate decision is based. This is true of the staff of the Board of Governors itself as it gathers background information that is in many cases just as important for debt management as for monetary policy. It is true also of the staff of the Federal Reserve Bank of New York in its unique role as an observer on an hour-by-hour basis of the operations of the Government securities market. It is true also of each of the Federal Reserve banks throughout the country, not only in terms of interpretation of regional differences in the market for Governments, but even more importantly in terms of the experience which the Reserve banks have gained as fiscal agents for the Treasury Department in the actual management of each financing operation once the Treasury policy decision has been made.

The composite of all of these expressions, together with independent expressions through correspondence or personal contact by individual participants or observers in the market, helps to form the fabric from which the eventual decision on financing is made. In the last analysis, of course, each decision is made personally by the Secretary of the Treasury, and that decision is announced to the public within a few hours at the most after it has been reached. If his decision happens to be identical with the advice of one or more committees, it is more likely to reflect the support of action he was already seriously considering rather than an acceptance of advice.

QUESTION

(I) To what extent can the Treasury, without disrupting the bond market and without support from the Federal Reserve, obtain additional funds by borrowing at short term by raising short-term interest rates?

ANSWER

As explained in the reply to question III(E) (3), the Treasury has, over the years, been able to do its borrowing at rates averaging approximately one-eighth of 1 percent above the rates available on alternative outstanding Government securities. This is true of short-term issues as well as long. This should not be interpreted to mean, of course, that the Treasury raises the general level of interest rates by one-eighth of 1 percent each time it puts out a new issue, since the new issue characteristically settles back in line with the market movements of similar term outstanding issues as the new issue becomes seasoned. During the last fiscal year, however, almost all Treasury short-term borrowing to raise additional funds has been through auctioning Treasury bills—3-month bills, 6-month bills, tax-anticipation bills, and 1-year bills.

The rate of interest which the Treasury must pay to raise new funds in the short-term market depends both on the size of the Treasury's demands in relation to competing demands and on the supply of funds available which the Treasury can tap. During the last fiscal year, of course, when the Treasury had to finance almost all of the \$12½ billion deficit through short-term issues, the demands on the short-term market were exceedingly heavy, since the credit impact of economic recovery and renewed growth (including a heavy volume of bank loans and other short-term paper) was also very large. Consequently, the increase in short-term interest rates which has occurred has been substantial.

QUESTION

(J) Is the market for Treasury issues largely limited to current cash flows, or do Treasury offering terms sometimes induce a readjustment of existing portfolios to accommodate the new issues?

If the market for new Treasury issues is largely limited to current cash flows, to what extent are these flows earmarked for particular maturity lengths and for particular degrees of risk? How is such earmarking to be accounted for?

ANSWER

The market for Government securities is very fluid. A new Treasury issue, therefore, often may be purchased by a buyer who has no current cash flow available for such investment but who finds that he can raise the necessary funds by selling in the market other securities which he holds. This readjustment of portfolios is going on all the time on the part of most institutional investors.

If an investor anticipates that the Treasury may be putting out a long-term bond a few months hence he may invest temporarily in short-term Treasury securities if the rate is adequate. Moreover, when the Treasury offers new long-term issues it sometimes provides for deferred payment by savings-type investors who may wish to relate their purchases to current cash flows.

Practice with regard to earmarking current cash flows for Government security purchases will vary greatly from one investor class to another, and there will also be wide variations within each investor class. Decisions to buy an outstanding Government issue or a new issue will depend largely on the characteristics of the issues being considered, investors' holdings of mortgages, municipal securities, loans, corporate securities, etc., and outstanding commitments in each of many areas of investment. Pension funds and insurance companies, of course, tend to prefer longer term Government securities; the average length of life insurance company holdings of Government securities is currently about 12 years to maturity. Mutual savings banks and savings and loan associations tend more toward intermediate-term securities, with an average length of nearly 10 years for mutual savings banks, and a little less for savings and loan associations. On the other hand, the average length to maturity of commercial bank holdings is only about $3\frac{1}{2}$ years.

IV. THE COMPETITIVE POSITION OF TREASURY SECURITIES

QUESTION

(A) Has the competitive position of Treasury securities worsened in recent years? If so, which factors account for this development? Has the competitive position of Treasury securities been affected by recent price behavior of Treasury intermediate- and long-term issues? By growth in amount outstanding of federally guaranteed and agency issues?

ANSWER

It is certainly true that the competitive position of U.S. Government securities has worsened in recent years. This is in no way a reflection on the quality of the Government's obligations, which continue to be the prime quality investment in the Nation. It is rather a reflection of the improved quality of competing investments. This improvement in many cases has grown out of the fact that the risk of loss on other investments has been effectively minimized by the Nation's unprecedented prosperity during the last 20 years, plus the effect of Government programs themselves. These latter programs include principally Government loan guarantees and certain aspects of the income tax.

Federal Government programs to guarantee home mortgages for veterans and to provide FHA insurance on various types of mortgages have contributed to the unprecedented volume of homebuilding in America since World War II. But they have also fostered a marked improvement in the quality of mortgages as investments for the billions of dollars that Americans each year save out of their earnings—savings which they invest directly or which insurance companies, savings banks, savings and loan associations, or pension funds invest in their behalf.

There are a great many other debt obligations outstanding today which our Government also aids in one way or another, including securities issued by many Federal Government agencies, even though those securities are not actually guaranteed by the U.S. Government. At the same time that the volume of long-term Government-aided obligations has been growing, the volume of long-term Treasury bonds has been declining. At the end of 1946, for example, there were \$117 billion of U.S. Treasury bonds outstanding which originally bore maturities of over 10 years. In contrast, there was \$61½ billion of what might be called long-term Government-aided debt outstanding. Twelve years later—December 31, 1958—the \$117 billion total of long-term Government bonds had shrunk to \$65½ billion, while the \$61½ billion Government-aided total had grown to \$58½ billion, \$55 billion of which is in FHA and VA mortgages alone.

In addition, the continuation of high individual and corporate income tax rates in the postwar period has made the complete exemption from Federal income taxes which is enjoyed by State and local government securities very valuable. State and local debt outstanding has increased from \$16 billion in 1946 to \$59 billion in 1958. Tax exemption has contributed to the ability of State and local governments to sell their securities, but it has also meant that Federal securities are relatively that much less attractive, particularly to individuals in the higher income brackets.

Competition for funds available for investment has also been increased in other ways. A high corporate income tax rate has made corporations more inclined to borrow than to issue stock, since interest payments are deductible for income tax purposes, but dividend payments are not. Moreover, from the standpoint of the average small saver, Federal insurance of bank deposits and savings loan shares has practically eliminated any difference in risk between private savings and Government bonds.

While market price fluctuations of intermediate- and long-term Government securities have been somewhat greater in recent years than in the 1930's and 1940's, these fluctuations do not appear to have been a major factor in accounting for the decline in the competitive position of the securities. To the extent that some investors had come to view longer term Governments as secondary reserves, possessing a high degree of liquidity, this contention may be true.

It should be obvious, however, that a high degree of liquidity imparted to longer term Treasury securities by means of direct support of the market by the Federal Reserve System would have highly inflationary consequences even if such policies had no other undesirable consequences. To attempt to improve the competitive position of Government securities by inflationary policies would in the long run

be self-defeating. Such policies would lead to strong expectations of inflation and, after a point, it would be difficult to sell Government bonds (and other fixed-dollar securities) at any time.

The problem of encouraging more long-term investors to buy and hold Treasury securities is also increased by the tendency among some investors to prefer stocks to fixed-dollar obligations—savings accounts, and corporate and other bonds and notes as well as Governments—because of what I believe to be a mistaken conviction that the purchasing power of the dollar will decline further. It is in this environment that the sale of enough long- and intermediate-term Treasury securities sufficient to keep the debt from getting shorter must also compete with large and growing demands for borrowing by State and local governments, by corporations for plant and equipment needs, and by homebuilders and buyers.

QUESTION

(B) There are several possibilities, listed here, for correcting the alleged decline in the competitive position of Treasury issues. Which of the following alternatives would be most desirable and acceptable in improving the competitive position of Treasury securities:

(1) Remove the present ceiling on interest rates payable on issues with maturities over 5 years?

(2) Institute secondary reserve requirements, of a variable nature, which can then be used to put Treasury securities permanently into commercial banks?

(3) Raise reserve requirements of member banks and offset this potential reduction in the money supply by Federal Reserve purchases of Treasury securities?

(4) Offer a type of security which would compete directly with savings institutions (savings and loan associations, mutual savings banks, etc.) for the current savings of the household sector?

(5) Abandon the several types of guarantee programs—guaranteed and insured mortgages, guaranteed non-Treasury securities issues, guaranteed deposits of commercial and savings banks and shares of savings and loan associations—or else require affected lending institutions to take stipulated amounts of Government securities?

ANSWER

Each of the suggested alternatives for improving the competitive position of Government securities is discussed below.

Before discussing them, however, it should be pointed out that we feel the most important way of improving the competitive position of Government securities is for the Government to do everything it can to keep its fiscal affairs in order. This not only works toward improving the market for Government securities in the narrower sense, but also at the same time helps to lessen inflationary pressures and this has a wholesome and pervasive effect on the entire market for fixed income obligations—including savings accounts and insurance.

(1) *Removal of the 4¼-percent ceiling on Treasury bonds.*—Legislation to remove the ceiling would facilitate sound debt man-

agement, and this in turn would help to improve the competitive position of Government securities. Exclusive reliance on short-term borrowing, which is necessary so long as the ceiling exists and long-term interest rates are above $4\frac{1}{4}$ percent, adds to inflationary pressures. This is partly because short-term securities are only "one step away from being money," and partly because short-term issues are especially attractive to commercial banks, whose net purchases add to the money supply. Inflationary expectations tend to reduce the attractiveness of Government securities, as well as other fixed-dollar investments, relative to equities, real estate, and other assets whose prices tend to rise as inflation occurs.

Moreover, removal of the $4\frac{1}{4}$ -percent ceiling would help improve the competitive position of Government securities by providing the Treasury with greater flexibility in tailoring its securities to the market. Under present conditions, the Treasury is confined to short-term securities and thus must forego opportunities to offer securities to meet the current investment requirements of savings institutions and other long-term investors.

(2) *Secondary reserve requirements.*—The Treasury is strongly opposed to any actions that would attempt to improve the competitive position of Government obligations by forcing individuals or institutions to purchase or hold the securities. In our judgment, actions of this type would militate against our longrun goal of promoting a self-reliant market for Government securities. It is a device which would tend to reduce competitiveness, not enhance it.

The details of any plan involving "secondary reserve requirements" would have to be known before the plan could be analyzed and a judgment rendered as to its effectiveness. There is the distinct possibility that any such procedure, if designed primarily to provide a shelter for Treasury securities, would complicate the flexible administration of Federal Reserve credit policies.

(3) *Increases in reserve requirements and Federal Reserve purchases of Government securities.*—Federal Reserve open-market operations and variations in member bank reserve requirements are two important instruments of monetary control. It would not be desirable, in our judgment, to restrict the flexible use of these instruments for monetary purposes in order to support prices of Government securities.

A major practical objection to this technique arises from the fact that it might lead to severe dislocations and disturbances in credit markets. The initial impact of Federal Reserve purchases of Government securities is in the money market centers; some time must elapse before the impact is felt in other parts of the country. A blanket decrease in reserve requirements, however, affects all member banks throughout the country. Thus, the shortrun effect of the proposed technique would be to promote ease in the money market centers and tightness elsewhere. It can be argued that market forces would tend to correct these imbalances, and they would—over time. But in the short run, forces might be set in motion leading to abrupt swings in interest rates and availability of credit in particular areas; credit "droughts" in one part of the country and "surpluses" in another; and so on.

(4) *A new type of Government savings program.*—As is well known, the Government offers on continuous sale series E and H savings bonds,

on which the yield to maturity has recently been increased from $3\frac{1}{4}$ to $3\frac{3}{4}$ percent—and the yields were also increased on outstanding bonds. The absolute safety of principal and interest, the convenience of purchase and redemption, and the certainty of a fair and guaranteed return for the full life of the bonds make them attractive investments for millions of Americans. Approximately 8 million people now purchase savings bonds on payroll savings plans. We believe that savings bonds compete directly and effectively for the current savings of the household sector of the economy and do not, therefore, favor a major change in the program or the offering of a wholly new type of Government bond for the small saver.

(5) *Abandonment of guarantee programs or forced purchases of Government securities by lending institutions.*—As noted in the answer to question IV (A), the guaranty programs of the Federal Government have contributed to a substantial increase in the volume of high-grade securities that compete directly with Government securities for investors' funds. In our opinion, however, abandonment of these programs would be a serious mistake and would have a pronounced effect on many types of economic activity—notably homebuilding.

Extreme action of this type does not appear necessary. The Treasury feels very strongly, however, that sound principles of finance should always be applied to these programs, including the encouragement of adequate owner equity in the property as well as lender vigilance in granting and servicing the loan.

We are also opposed, as noted earlier, to any actions that would require lending institutions to purchase and hold Government securities. Any such action would tend to undermine confidence of investors in the ability of the Government to handle its financial affairs properly and soundly without the aid of artificial restrictions on market institutions.

V. PERFORMANCE OF THE MARKET FOR TREASURY SECURITIES

QUESTION

(A) What are the criteria according to which the performance of the market for Treasury securities should be judged? What is satisfactory market behavior?

ANSWER

The performance of the market for Government securities should be judged primarily in terms of the way it fulfills the needs of the buyers and sellers in that market and also in terms of the public interest, including particularly its capacity to meet the needs of the Treasury and the Federal Reserve in the exercise of their responsibilities.

A market that properly fulfills these needs will possess depth, breadth and resiliency. A good market will show strength and activity. The volume of trading will be large enough to absorb or provide at all times offerings of securities of the size that investors wish to sell or to buy. Such a market will also generate a good range of offers and bids, so that new purchasers will come forth at successively lower prices and new sellers at successively higher prices. There will be a large and active participation in the market by many investors representing diverse investment needs. A market that performs satisfac-

torily will also show an ability to respond flexibly to changing economic and monetary conditions, yet not be swayed back and forth by idle rumors.

As a part of this investor participation a good market should also be serviced by dealers who are reliable, who show the highest degree of integrity, reliability, and regard for the public interest, and who execute orders efficiently and promptly.

From the standpoint of the public interest, there are several aspects of satisfactory market performance that need to be considered. There should be a ready market for new Treasury securities, consistent with the underlying conditions of supply and demand. This means that the market mechanism should be able to absorb new offerings of substantial size with a minimum of market disturbance. This will depend in part upon the rapidity and accuracy of the flow of information to investors, and in part upon the effectiveness of underwriting to facilitate the secondary market distribution of securities to ultimate holders.

A broad, well-functioning market for Government securities is necessary also for the effective implementation of monetary policy, since the monetary authorities must be able to make purchases and sales of Government securities of sufficient size to effect needed changes in bank reserves without disrupting the market.

Another aspect of a strong market from the standpoint of the public interest is that the market should provide sufficient information to the Treasury and the Federal Reserve to enable them to ascertain with promptness, accuracy, and with sufficient detail, the pressures that are being placed upon the credit system of the country as well as the responsiveness of the market to a new Treasury offering. In the process, of course, enough of this information should be available to the general public to aid the financial community in a better management of its own financial needs and objectives.

A good market is an evolving market that grows and changes over time in response to the changes that occur in our economy and in our financial structure. A rigid market mechanism that did not change would soon become completely inadequate in meeting the changing needs that will develop over the years. How one judges satisfactory market behavior is, therefore, in terms of the empirical results—how the market responds in the distribution of Treasury securities, how the market meets the needs of investors, and how the market responds to changes in economic and monetary conditions. These are all judgments based upon the performance of the market as it operates today, as it has operated in the past, and as its operations are visualized in the future.

QUESTION

(B) If market performance has been unsatisfactory, what factors account for it? Are there any specific remedial steps which could be taken to improve market performance?

ANSWER

The performance of the Government securities market in measuring up to the standards outlined in the reply to question V(A) has been very good.

There are many elements of strength in the Government securities market as it exists. The physical structure of the market, as it operates through the Government securities dealers, exhibits characteristics that are highly desirable. The Government dealers have proved to have the integrity and honesty that is needed for operations in millions of dollars that are transacted by telephone without the necessity of entering into elaborate written contractual arrangements which would seriously impede transactions. Dealers also generally maintain an adequate inventory to satisfy promptly investor needs, and they are able to complete substantial transactions on very short notice, transactions that are far in excess of the size of those handled through the stock exchange. This is the largest market in the country—with transactions averaging more than a billion dollars a day—and it responds quickly to changing monetary and general economic conditions and to changes in the demand for and the supply of funds. As a result of these characteristics, investors are able to transact operations with reasonable promptness and in sufficient size to meet their needs, and at a very low cost.

From the standpoint of the public authorities, the market's response to Treasury financing operations has generally been quite satisfactory. The market has assumed the underwriting function and the secondary distribution of new Treasury issues with considerable promptness and efficiency. From the point of view of the Federal Reserve, purchases and sales of Government securities can be effected with speed and efficiency. The Government securities market provides a very quick method for disseminating public information on Treasury debt management decisions and general monetary and credit conditions throughout the entire country.

Aside from difficulties arising from the limited size of the market in relation to the magnitude of Treasury financing operations any weaknesses in market performance are those that appear in times of unusual stress. Obviously there are not always enough resources available to guarantee a successful underwriting or transfer of Government securities regardless of size. There are also occasions when sharp changes in the business outlook have brought out some weaknesses in market structure. There are also certain other aspects of the market structure that may be troublesome in periods of rapid market movements although they are not disruptive under more normal conditions. It is important to emphasize, however, that most departures from satisfactory market performance have been in periods of unusual stress. This was especially true in the summer of 1958, when investor expectations were strongly influenced by the sharp upturn in business activity and prospects of a very large Federal deficit.

Certain remedial steps could be undertaken to improve some of these weaknesses that have occurred. In cooperation with the Federal Reserve, we are now seeking to improve the quality, quantity, and timeliness of statistical information that underlies market performance. This will provide information in greater detail as to what is happening in the market at a given time. Market practices are being examined carefully to ascertain whether some of these practices are likely to develop along lines that will weaken rather than strengthen the market.

Speaking generally, however, the market as a whole has performed very well over the years, and the weaknesses which we are examining reflect primarily the impact of unusual events which are not a basic characteristic of the market. Constant study is needed to follow developments and to help the market improve over time as conditions continue to change.

ANSWERS TO QUESTIONS SUBMITTED TO THE
CHAIRMAN OF THE BOARD OF GOVERNORS
OF THE FEDERAL RESERVE SYSTEM

ANSWERS FROM CHAIRMAN OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

I. GENERAL MONETARY POLICY

QUESTION

A. Proper degree of monetary restraint:

(1) Has monetary policy had to assume too much of the burden of economic stabilization in recent years? At the present time? Would greater reliance on fiscal policy, and less on monetary policy, better serve to achieve public economic policy objectives?

ANSWER

With respect to the first two parts of this question, our judgment is in the affirmative. With respect to the third part of the question, it seems to us that the question of the most desirable relationship between fiscal policy and credit and monetary policy "to better serve to achieve public economic policy objectives" can best be answered in terms of how each can function in its appropriate role rather than in terms of choosing greater reliance on one and less on the other.

Roles of fiscal policy and credit and monetary policy

Fiscal policy and credit and monetary policy are measures available to the Federal Government to influence the level of effective demand. Fiscal policy acts through the relationship between Government receipts and expenditures and thus affects directly after-tax incomes of businesses and consumers. An increase in Federal expenditures unaccompanied by a tax rise, or a decrease in taxes unaccompanied by a reduction in expenditures, tends to increase the total demand for goods and services, while a reduction in Federal expenditures or an increase in taxes tends to have the opposite effect. Such changes correspondingly affect the borrowing demands of the Federal Government and pressures on credit markets and interest rates.

The initial impact of credit and monetary policy is on expenditures with borrowed funds, particularly those obtained directly or indirectly from commercial banks. An easing policy tends to increase the availability and reduce the cost of credit and a policy of restraint has the reverse effect. Monetary policy also has an effect on expenditures other than with borrowed funds, as liquidity, capitalized values, and profit expectations respond. Both fiscal policy and credit and monetary policy have additional derived effects as higher or lower money incomes lead to increased or reduced expenditures and as changes in consumption demand lead to changes in investment.

Governmental anti-inflationary or antideflationary policy is most effective when the course of actual developments is such that fiscal

policy and credit and monetary policy complement each other. Credit and monetary policy has greater flexibility in administration and in timing than fiscal policy. It can be altered promptly to adjust to changing economic conditions, and gradually to respond to changes as it develops. For this reason, it is particularly well equipped to offset short-run fluctuations in demand or for use when the long-term direction or extent of change in demand is uncertain.

Under current conditions fiscal policy has a measure of built-in flexibility. Expenditures under social security programs increase and tax receipts decline when employment and incomes fall, and expenditures decline and tax receipts rise when incomes increase. Beyond such adjustments, however, fiscal policy is considerably less flexible than monetary policy, and there is some lag in the effectiveness even of these adjustments with respect to the course of the business cycle. Legislation may be required to bring about changes in the receipt-expenditure pattern, and this is understandably a time-consuming process. The receipt-expenditure pattern at any time reflects decisions made on a number of economic and noneconomic questions—for example, military needs, the requirements for an adequate social security and welfare program, farm subsidies, and the characteristics of an equitable tax structure—and any attempt to change the balance for contracyclical purposes requires that consideration be given to questions such as these.

Fiscal policy is a particularly potent contracyclical weapon, however, because of the magnitude of change possible and the fact that it operates directly on incomes rather than influencing borrowing. Moreover, fiscal policies can be directed to individual elements of weakness or strength in the economy—through changes in expenditures, taxation or the use of guarantees—while the selectivity of monetary policy is limited.

Insofar as possible, it is desirable that reliance be placed on fiscal policy to offset major excesses or deficiencies in private demand. Fiscal policy must be determined in advance, however, on the basis of expected developments in private demand that may be intensified, moderated, or even reversed in the actual course of events. It is of the utmost importance, therefore, that credit and monetary policy be used flexibly to counteract the excesses or deficiencies of aggregate demand that seem bound to emerge in the course of economic development.

Since fiscal policy is determined in advance, it is possible for it to operate inadvertently to aggravate cyclical movements, fostering an increase in total demand under inflationary conditions or tending to reduce demand under deflationary conditions. Such developments, when they occur, definitely increase the problems of monetary policy.

The opposite type of development is much less likely. Because monetary policy is formulated currently, it is much less likely to operate to increase the burden of fiscal policy. That this can happen was illustrated by experience under the pegging policy prior to the Treasury-Federal Reserve Accord in 1951. If monetary policy is flexible, however, and is properly decided in the light of present conditions, it ought to operate in such a manner as to offset rather than accentuate the aggregative effects of all the forces that make for instability.

Recent developments

Although the Federal budget for the current fiscal year as a whole is estimated to be in balance, the Treasury had a cash deficit in fiscal 1959 totaling \$13 billion. It is estimated that the deficit in calendar 1959 will total \$8 billion, about the same amount as in the recession year 1958. This deficit has tended to add to the total demand for goods and services. In part the deficit reflected responses of taxes and expenditures—with some lag—to the recession beginning in late 1957, but in part it reflected increased expenditures for governmental programs which were either not directly related to the recession or which are not being reversed now that recovery has taken place and the danger of inflationary boom has reappeared.

Increased after-tax incomes in the recovery period, fed in part by Federal deficit financing, have permitted consumers and businesses to increase expenditures for consumption and investment purposes without resort to the credit market. In addition, income increases in some cases have served as the basis for increasing indebtedness by improving credit risks and increasing the capacity of borrowers for debt service, thus serving to activate credit demands.

The Federal deficit was incurred at a time when incentives to spend from income or borrowed funds were already increasing. In the credit market, the demands of the Federal Government added to those of businesses, consumers, and State and local governments worked to push interest rates higher. The problem was accentuated by the large volume of maturing Federal debt outstanding and the necessity for frequent refundings. Aside from weekly bill offerings, the Treasury entered the market with new security offerings 13 times in fiscal 1959 for total borrowings of \$63 billion.

While the fiscal 1959 deficit was the largest since fiscal 1946, Federal Government deficits have characterized the period since 1952 with the exception of fiscal 1956 and 1957, when moderate surpluses were realized. During most of this period the economy was characterized by excessive demand and inflationary pressures; only in fiscal 1954 and fiscal 1958 were there deflationary pressures. During a large part of the period Treasury operations have tended to add to disposable incomes and to create additional pressures in the credit market at times when pressures were already strong.

QUESTION

(2) Is the present level of interest rates sufficiently high to limit expansion of total spending to noninflationary proportions? Is the present level of interest rates serving to check spending for consumer durable goods and for plant and equipment?

ANSWER

The development of inflationary pressures is a gradual, dynamic process that comes about, in the main, as the result of a buildup in demands for goods and services that leads to advances in costs and prices, especially prices of goods for which demands are so great that they cannot be met promptly. Such price advances, in a generally strong market situation, may extend to a wide range of goods even while the economy as a whole is still rising toward capacity levels.

If the buildup in demand is allowed to gain too much momentum, stabilization policies may be incapable of containing them and the resulting inflationary expansion will then set the stage for a sharp cyclical contraction. Whether the present state of credit availability and level of interest rates is or is not sufficiently restraining to help prevent such a buildup depends on how rapidly demands continue to expand, not only overall but in different industries and markets.

The current condition of credit availability and level of interest rates reflects the relationship between the demand for and supply of funds at the present time. Federal Reserve policy, which is one factor affecting the supply of funds, is administered so as to permit changes in the saving-investment relationship to be reflected in the credit market rather than leading to excessive changes in the money supply beyond the needs of the public to hold cash balances.

Any attempt to keep credit availability from being curtailed and interest rates from rising under circumstances such as those of recent months would be accompanied by an increase in the credit and monetary base at a pace set by market forces and expectations. Such expansion of the credit and monetary base would provide the means of financing demands for goods and services in excess of current output and would be a stimulant to general price advances. This in turn would create further pressures on interest rates as incentives to borrow were increased and savings were reduced or diverted to equities.

Restrained credit availability and rising interest rates in a period of strong economic expansion tend to trim down marginal loan demands, to stimulate savings, to temper expectations concerning future prices and profits, and to reduce capital values of fixed income assets. These latter developments in turn moderate speculative influences on equity prices and tend to reduce expenditures with internal as well as borrowed funds.

It is impossible to measure precisely the restrictive effects of reduced availability of credit and of higher interest rates on expenditures either in the aggregate or in individual areas. Increasing credit extensions and increasing interest rates usually take place simultaneously. Indeed, it is the increase in credit demand that leads to the bidding up of interest rates. In periods of economic expansion, some increase in credit-financed expenditures is desirable in order to facilitate the utilization of existing or newly available productive capacity and also to provide for accretions in the stock of capital essential to realize the growth potential of the economy and to prevent shortages in periods of heavy demand.

There can be no doubt that limited availability of bank credit and rising interest rates can restrain expansion of credit-financed expenditures. Restraint on credit expansion means that not all potential loan demands can be satisfied. Higher costs of credit induce marginal borrowers to consider more carefully their needs for, and uses of, credit financing. Lenders, faced with active demands for credit, are obliged to sift credit applications more carefully and apply more rigorous tests to those finally accepted. This will be true even though higher returns for savings may increase the total volume of funds available for lending and investing.

In a period when inflationary expectations are widely held and intended uses of funds include many which depend on persistence of

inflationary trends or which are intended as inflation hedges, limitation of credit availability avoids many ill-directed uses of resources, with their undesirable social consequences. Under such circumstances, interest rates are likely to rise, irrespective of credit and monetary policies, because saving, which is the principal source of credit, will be discouraged and investors will want higher returns to compensate them from the expected depreciation in the value of their savings.

The effect of a restrictive credit policy and rising interest rates on credit spending in various areas reflects many factors, including not only the elasticity of credit demand in any particular area, but also the number and types of institutions lending to such borrowers, sources of funds available to the lenders, and competing demands confronting the lenders. One important factor affecting many credit areas is the period over which restrictive or easing actions are in effect. For example, during the earlier phases of recovery and boom, banks, other lenders, and the public may have excess liquidity obtained during the earlier recession. This will enable them to continue expenditure plans and lending policies for a time, despite the beginning of a restraining monetary policy. Furthermore, borrowers may have unused lines of credit which the lenders feel obligated to honor even after a restraining monetary policy has restricted their willingness and ability to make new commitments. In such instances the effect of a more restrictive monetary policy in curbing spending may be somewhat delayed.

Recent developments

The period since the spring of 1958 has been characterized by rapid recovery and expansion in production and incomes. Expenditures for most types of goods and services have risen. Many consumers and businesses have carried out expenditures in part by drawing on liquid assets, but there has also been a sizable increase in borrowing. From the second quarter of 1958 to the second quarter of 1959 expenditures on consumers' durable goods rose from \$37 to \$44 billion (seasonally adjusted annual rate), residential construction from \$35 to \$41 billion, and expenditures on producers' durable equipment from \$23 to \$26 billion. Government purchases of goods and services increased, consumer expenditures for nondurable goods and services rose sharply, and in the business inventory area there was a shift from disinvestment to accumulation at an unusually rapid rate.

The economic recovery and expansion has been accompanied by a sharp increase in credit. From mid-1958 to mid-1959 business loans at commercial banks rose by \$4 billion, outstanding corporate securities by \$8 billion, consumer credit by \$4 billion, home mortgage debt by \$13 billion, other mortgage debt by \$5 billion, and publicly held U.S. Government securities by \$9 billion.

Sharp increases in expenditures and in credit are customary during periods of recovery from economic recessions. In the second quarter of 1958 gross national product at \$435 billion was 3 percent below the peak reached in the third quarter of 1957. Industrial production was 12 percent below its previous peak, and more than 7 percent of the labor force was unemployed. Many consumers and businesses had paid off short-term debts and accumulated liquid assets during the recession. Liquidity of lenders also had risen as banks acquired Government securities and paid off their indebtedness to the Reserve

banks, savings institutions increased security holdings, and consumer lenders paid off bank and open market debt.

As income rose and profit expectations improved, consumers and businesses increased their spending not only from current incomes and profits but also by drawing on accumulated assets and increasing their indebtedness. In view of increased lender liquidity and higher incomes and profit prospects of borrowers, lenders expanded credit freely in response to the increased demands and in many cases actively promoted credit expansion.

Over the course of the past year, however, credit has become less readily available and interest rates have risen progressively. The liquidity of many consumers and businesses has declined as they have drawn on liquid assets and increased indebtedness. Lenders, too, have drawn down their liquidity and in many cases increased their indebtedness as well.

The recent change in credit conditions has affected all types of lenders and all areas of credit, although in different ways and in different degrees. All types of lenders have been faced with increasing demands for credit compared with the supply of funds available. Bank reserve positions have tightened, and savings institutions have experienced an increase in demand relative to the supply of savings. Bank and nonbank lenders have raised funds by borrowing and by selling securities, but these sources of funds have become increasingly expensive. Saving by consumers and businesses has risen, but not so rapidly as the demand for funds. As a result, interest rates charged consumers, businesses, and governments have risen, and some lenders and underwriters have requested borrowers to reexamine and reduce or defer their borrowing programs.

From mid-1958 to the present, the rate on prime 4- to 6-month commercial paper has risen from $1\frac{1}{2}$ percent to $4\frac{3}{4}$ percent, yields on outstanding AAA corporate bonds have risen from $3\frac{1}{2}$ to $4\frac{1}{2}$ percent and yields on new issues to $5\frac{1}{4}$ percent, and the prime loan rate charged by banks to the highest grade business borrowers has risen from $3\frac{1}{2}$ to 5 percent. Rates on direct loans made by banks and other lenders to small businesses and consumers, which declined little during the recession, have increased less than rates charged large borrowers in recent months, but credit has probably become less readily available relative to demand in these areas also. In contrast, stock yields declined steadily from early 1958 and by July 1959 were the lowest on record for a comparable prosperity period and the margin under high-grade bond yields was the widest in 30 years. Historically, stock yields have typically exceeded bond yields. Stock prices declined after July, however, possibly reflecting in part the effect of rising interest rates and some tempering of speculative influences.

While expenditures in most areas have continued to rise, the rise would have been greater if credit had been freely available with no rise in interest rates. The extent of the effect of reduced credit availability and rising interest rates has varied, but the credit tightness has extended to most areas. Although recordings of mortgage loans have been in record volume, there are reports of decreases in commitments for future loans.

Plant and equipment expenditures

Expenditures for plant and equipment lagged behind other expenditures during the recovery, partly because of the typically longer

leadtime between orders and delivery of machinery and other capital items. Such expenditures increased sharply in the second quarter of 1959, however, and plans for further expenditures remain quite strong. Expenditures to date have been financed in considerable part from internal funds, but the necessity of resorting to the credit and capital markets is increasing.

Costs of credit financing of plant and equipment expenditures have risen sharply. Whether financing is carried out through term loans, private placements, or public security flotations, funds are less readily available than formerly and interest costs are sharply higher. To the extent that projects are deferrable, it is to be expected that borrowers will become less interested in undertaking them as finance charges take a larger proportion of expected returns. Projected uses of funds are also examined more closely by lenders, since they are unable to accommodate all the demands on their resources. Moreover, higher interest rates also tend to dampen financing activity by reducing net returns from property acquisitions and by moderating expectations of increases in demand and profits.

Expenditures for consumer durable goods

Expenditures for household appliances remained strong during most of the recession, and consumer demand for automobiles picked up late in 1958. Both cash and credit purchases have since expanded in both types of goods. Many consumers are highly dependent on availability of credit for purchases of durable goods, and the proportion of credit purchases has typically risen as demand has expanded cyclically.

Interest charges to the consumer respond only slowly to changes in open market rates of interest. Interest costs are a small part of the total costs of lending to consumers, and interest rates on some types of consumer loans are limited by law. Lenders respond to changes in credit conditions mainly by changing the terms on which they lend or the credit standards that they employ. Many consumers are less sensitive to changes in financing costs than to changes in maturity and downpayment requirements.

Consumer installment loans, particularly automobile loans, declined during the recession, and many consumer lenders were able to reduce their use of borrowed funds. As a consequence, when demand picked up, they were in a position to expand credit readily. Consumer lenders are now finding funds more costly and difficult to obtain, however, and lenders are finding alternative loans more attractive. The rate on commercial paper placed directly by large sales finance companies, for example, has risen from $1\frac{1}{16}$ percent in mid-1958 to 5 percent at the present, and costs to such companies of borrowing directly from banks or other lenders or floating long-term securities in the market have also risen. Consumer finance companies have experienced similar increases in costs of raising funds.

Increasing costs of funds are working to reduce the attractiveness to sales and consumer finance companies of loan expansion on the basis of lower quality credit risks. Many consumer finance companies are unable to raise their interest rates to restore their profit margins because of limitations of State laws, and many sales finance companies also appear to be operating with somewhat reduced margins between the cost of funds and interest charged the consumer. Moreover, con-

sumer credit companies are highly dependent on other institutional lenders for their loanable funds, and in periods of tight credit such funds become more difficult to obtain.

In recent years, commercial banks have become an increasingly important direct source of consumer loans, as well as lending to finance companies and retailers. Consumer loans have been attractive from a profit standpoint, and losses have been relatively low. During the past year, however, reserve positions of commercial banks have tightened and returns available from security holdings and business and other loans have increased sharply. This has been tending to make bank consumer lending activity relatively less attractive.

Interest charges to the short-term consumer debtor thus far have risen substantially less than those to the business borrower. Such charges are typically much higher than in business and mortgage lending because credit costs (investigation and collection) are much higher per dollar of credit. Some banks, however, have increased interest charges on direct loans to consumer somewhat and it is reported that other lenders are considering similar actions. Average maturities on most types of credit have continued to increase, and this has tended to offset the effects of any higher interest rates on average monthly payments but the maximum maturities available on some types of loans, including new car contracts, have thus far held unchanged from those of several years ago. In 1955-56 the increase in maximum terms on new car contracts was a particularly important influence in increasing credit extensions and in retarding the growth of repayments.

In some important areas the increase in credit that has taken place has been merely proportionate to the increase in sales. The proportion of new cars sold on credit, however, has declined from 1958 levels, and the average size of note has increased only slightly in response to higher prices.

It is always difficult to identify cases in which tightening of credit takes the form of cutting back on extensions to marginal credit risks, but the effects of such tightening on total credit growth can be significant. Such means of allocating available funds can be expected to increase as consumer lenders become less liquid and find funds increasingly difficult and expensive to obtain.

QUESTIONS

B. Impact of monetary policy :

(1) Does a restrictive monetary policy, as reflected by high-interest rates and tight bank reserve positions, equally affect all sectors of the economy?

Does a restrictive monetary policy have a greater impact on any of the following sectors than on others :

(a) State and local governments ;

(b) Small business ;

(c) Business in competitive (as opposed to oligopolistic) industries ;

(d) The residential construction industry ;

(e) Industries, such as public utilities, with long planning horizons?

(2) Have any empirical studies been undertaken in the Federal Reserve System in recent years to determine whether restrictive

monetary policies affect some types of activity more than others? If so, what are the results of these studies? If not, are any such studies now planned? Can the flow-of-funds analysis which has been developed at the Board of Governors be used in this connection?

COMBINED ANSWER

At any point of time both the availability of credit funds and the level and structure of interest rates operate to determine the extent to which various sectors of the economy can and prudently should undertake financial commitments. Availability of credit and the level-of-interest rates are twin influences, the significance of which cannot be separated for individual examination. For many purposes, the availability of funds and the terms on which they are available other than interest rate provisions, are considerably more important to borrowers than interest rates themselves.

The availability of funds and the interest rates prevailing in credit and capital markets reflect a wide range of demand-and-supply influences. The demand for funds is a composite of business uses stemming from current needs for working and fixed capital, consumer demands to obtain funds to purchase durable goods, housing, and to finance other personal needs, State and local government demands to finance divers community facilities, demands of the Federal Government to finance any deficit between receipts and expenditures, demands from foreign governments and enterprises for short-term or longer term purposes, and demands from each of these sectors to refinance maturing indebtedness incurred in the past.

On the other hand, the supply of funds is made up by repayments of debts incurred by various economic sectors in the past, funds attracted from idle balances or temporarily available prior to being spent, funds provided from current bank credit expansion, and, most importantly, funds available from new current savings of individuals and businesses.

The level and structure of interest rates prevailing in credit and capital markets at any given time reflect the complex interplay of these demand and supply forces. This interplay is necessarily conditioned by the current state of activity in the economy and expectations as to the future. Credit and monetary policy, which works on the bank reserve base and thereby influences the pace of bank credit and deposit expansion, functions as a supply factor in interest rate determination. It is a marginal factor that is more or less important in accordance with the state of economic activity, for the role of credit and monetary policy in economic stability is to adjust itself flexibly to the economy's credit and cash needs with the public interest objective of fostering sustainable economic growth with a stable value for the dollar.

The complexity of interest rate determination makes it impossible to break down the responses of individual sectors of the economy to changes in credit availability and interest rates so that those attributable to monetary policy may be identified and appraised apart from those due to other market factors. Existing methodology of empirical research provides no technique by means of which separate identification and appraisal may be accomplished.

Each sector of the economy, including not only those listed in the question but others as well, is marked by unique economic and institutional characteristics that distinguish it from other sectors. For example:

(a) The sectors differ with respect to their sensitivity to the fluctuations of other sectors and to fluctuations in general economic activity.

(b) The sectors differ considerably with respect to capital needs and the extent to which their fixed capital outlays must be financed by outside financing, i.e., market borrowing. There are also differences in the time period for which capital is needed so that some borrow mainly in short-term markets; others, in long-term markets.

(c) Creditworthiness as viewed by lenders varies from sector to sector so that they differ in the ease of access to credit and capital markets. Some borrowers can reach more sources of funds than others.

(d) Sectors differ with respect to the importance of interest, either as a cost of operations or as an income element. The differing incidence of the tax structure means that interest rates influence some borrowers more than others.

(e) The demand for the products of some sectors is indirectly affected by credit availability and interest rates. This is certainly true of industries producing construction materials, and is very likely true of industries producing consumer durable goods, sold to a large extent on credit.

A critical evaluation of the way in which movements in credit availability and interest rates, including those induced by credit and monetary policy, affect various sectors of the economy can satisfactorily be made only after consideration of these fundamental structural variations from sector to sector. In fact, even if monetary factors were neutral over economic swings instead of moving countercyclically, the sectors would experience differential impacts of changing availability and cost of credit as the result of their inherent structural differences. Empirical studies made as a foundation for judging the impact of credit and monetary policy must pay particular attention to these important variations in structure.

In the sections that follow, several empirical studies made by the Federal Reserve as well as some done by others will be cited and drawn upon for general observations. Much of the empirical work on impact of monetary policy done at the Federal Reserve is not confined to special studies, however, but is an integral part of continuing day-to-day intelligence activity.

(a) *State and local governments.*—The Federal Reserve follows the market for State and local government securities closely and regularly as a part of its current economic intelligence activities. Extended internal staff studies of this market were undertaken and reported on in 1955, 1957, and 1959. The System also carried out a special study of costs of local government financing in 1957 and a System committee is now looking into technical aspects of a continuing study of financing costs for State and local governments. For a considerable period, the Federal Reserve maintained the principal statistical service which classified State and local government security offerings by pur-

pose of issue; this statistical series was the foundation for a more comprehensive series later initiated by the Investment Bankers Association. In addition, the Investment Bankers Association collects special figures relating to the volume of financing deferred because of capital market conditions from time to time.

In general, State and local government capital expenditures have been well maintained during the last decade. The empirical studies of this decade suggest some countercyclical movements of postponable State and local government capital expenditures, such as observable bulges in 1954 and 1958 and some cutbacks in 1957. On the other hand, expenditures such as essential school and sewer construction seem to be less sensitive to cyclical changes in credit conditions.

Important structural factors account for the effects of credit availability and interest rates on State and local spending. The proportionate of State and local governmental capital expenditures financed by market borrowing is somewhat larger than is true of most private businesses. Accordingly, both the availability of funds and their cost are more likely to have an important influence on State and local government decisions to undertake capital expenditures than is true of private business. Some State and local governmental units operate under statutory or constitutional interest rate ceilings which can rigidly deny them access to the financial markets. Some small local governmental units do not have access to the national market at all.

The distinctive feature of State and local government borrowing is tax exemption which gives it an inherent market advantage. This privilege is of value and appeals primarily to special groups of tax-paying investors, such as higher income individuals, commercial banks, and casualty insurance companies. The interest of high-income individuals in tax-exempt securities appears to be influenced more by the competing attractions of common stocks than by the attractions of any other single investment vehicle. The participation of commercial banks in the market for State and local government securities, depending as it does on their reserve positions is clearly sensitive to competing demands, and to credit and monetary policy. The interest of casualty insurance companies varies mainly with the fluctuations in underwriting profits and common stock prices. Presumably their interest in tax-exempt securities is also influenced to some extent by fluctuations in interest rates since these fluctuations will affect the relative attractiveness of stock versus bond investment.

(b) *Small business.*—Although the Federal Reserve studies the financing activities of businesses of all sizes continuously, its most ambitious special inquiry into small business finance is a multiphase project only a portion of which is yet complete. In April 1958 the Federal Reserve made available the first two parts of a three-part study of the problem.¹ Since these parts were published as congressional documents, further reference to them here is not needed. The third part of the study, and its most ambitious section, is only now starting to produce useful results.

The composite of evidence so far accumulated suggests that small business depends on internally generated funds to finance long-term

¹ "Financing Small Business," report to the Committees on Banking and Currency and the Select Committees on Small Business, U.S. Congress, by the Federal Reserve System, pts. 1 and 2, Apr. 11, 1958.

capital expenditures even more than bigger businesses. Some small businesses that are well established do not seek or want outside funds and are content to grow at the rate permitted by earnings retention. New businesses, however, tend to be small, and probably have special and more difficult financing problems. Small businesses generally also have access to fewer sources of funds.

In recognition of these structural differences in the availability of financing to businesses varying in size, several governmental programs have been initiated for special small business credit facilities. Small business depends on commercial banks for short-term capital to some extent, but to an even greater extent it depends on trade credit flowing to it from larger businesses as suppliers or occasionally even as customers.

Creditworthiness, or ability to demonstrate it, is a frequent problem in small business. In other words, small businesses are in many instances viewed by lenders as marginal borrowers. Large businesses usually have demonstrated their ability to service debt and to grow. It is not surprising that when lenders are faced with heavy demands for limited supplies of funds, small businesses will find their loan requests more carefully scrutinized. Those small businesses whose profit margins are narrow and competitive survival uncertain may especially bear the incidence of this more careful credit screening.

The empirical evidence suggests that the direct impact of either changing availability or changing cost of credit, in part in response to credit and monetary policy, varies somewhat by size of business. The variations are relatively modest, however, and the more indirect effects of credit and monetary policy, through its influence in promoting price stability and sustainable general economic growth are probably of greater importance.

(c) *Business in competitive (as opposed to oligopolistic) industries.*—The special reference to this classification of business presumably grows out of the hypotheses advanced in recent years that oligopolistic industries are immune to the effects of credit and monetary policy because they can administer prices with sufficient success to offset reduced availability of credit and higher interest costs. This hypothesis rests to a large extent on the assumption that such industries also have more assured access to credit quite apart from cost.

Empirical studies of business finance have not been framed according to the terms of this hypothesis. To some extent classification of business by size, the point covered above in "(b)" affords a rough way of getting at this case. For businesses of equal size and credit worthiness, however, it is by no means clear that differences in availability of credit exist. Moreover, businesses of all types, whether competitive or oligopolistic, are reluctant to raise prices if such price advances would lose business and reduce profits. This force constantly works to check price increases based on higher interest or other costs.

Some so-called oligopolistic industries are clearly influenced by general credit conditions. Several of them rely on installment credit intermediaries (sometimes so-called captive finance companies) for the sale of part of their product and for a number of others sales volume is heavily dependent on mortgage or security market conditions. While the oligopolistic industries may not depend directly on credit financing of their operations, the sale of their product may depend to an important extent on credit availability and credit cost

to customers. Where this is the case and there are probably few oligopolistic industries where it is not the case, they are indirectly subject to such impact of monetary factors and interest rates as the latter may have on the volume of credit financing.

(d) *Residential construction industry.*—The Federal Reserve follows closely current developments in mortgage financing and in the construction industry. Two members of the staff have been given leaves of absence in recent years to conduct special research studies of mortgage financing and mortgage markets: one at the National Bureau of Economic Research and the other at the University of California in Los Angeles.

Studies conducted at the Federal Reserve, together with the results of other empirical inquiries, point to the importance of the availability and cost of finance in determining the rate of residential construction activity. Borrowing to buy houses is typically long term and on an installment-repayment basis. A change in interest rates, to the extent its effect is not offset by a lengthening of the maturities of mortgages, has considerable effect on the amounts of monthly payments required. These amounts, in turn, affect the volume of spending on new homes, the distribution of such spending among more or less expensive homes, and the relative attractiveness of rented as compared with owner-occupied residency.

Interest rates on conventional mortgages (those not guaranteed or insured by a Government agency) fluctuate with market interest rates. The fluctuations, however, are narrower than those experienced by some of the more volatile interest rates and also usually involve some time lag. The availability of funds for conventional mortgage lending undoubtedly affects construction activity directly; variations in interest rates or mortgage costs appear to affect the willingness of homeowners to assume debt and certainly affect the cost of doing so, and thus affect construction activity indirectly. The institutions specializing in conventional mortgage lending must obtain their funds from the general flow of saving and, being competitive with financial institutions that are sensitive to monetary policy, such as commercial banks, tend in turn to relay this influence to customers via availability of credit and interest rates.

A fluctuating portion of mortgage funds is in the form of insured or guaranteed mortgages. The primary reason that this portion fluctuates so drastically is that, up to the present time, interest rates on both insured or guaranteed mortgages have been set by law or regulation. The effective yields on such mortgages may vary moderately as the result of discounts but the permissive range of discount variation has been curbed by regulatory limitations on the marketing of these mortgages. With the effective yields on these mortgages dampened by regulation, investors lose interest in them when the yields are no longer competitive in the capital markets. As a result, the supply of funds available for financing through insured or guaranteed mortgages has been far more volatile than the supply of funds available for conventional mortgages.

(e) *Industries, such as public utilities, with long planning horizons.*—Part of the Federal Reserve research staff devotes its time primarily to study of current developments in business finance and capital markets. This study has found that interest rates as a cost

are more important in industries with long planning horizons and with relatively high capital-output ratios.

In the public utility industry, fluctuations in interest costs may be largely offset in time by the public utility ratemaking process, so that the effect of a rise in interest rates on capital expenditure plans of such public utilities is limited to some extent, particularly in situations where demand is relatively inelastic and steadily expanding. Furthermore, many public utilities feel obligated, or are obligated by law, to furnish their services to whatever extent demanded so that they feel they cannot allow interest rate costs or the availability of funds to limit their capital expenditure plans for any great length of time. Some public-utility-type enterprises undertaken by public authorities such as toll roads, toll bridges, and related projects, where the major part of the investment needs to be financed in a short period of time, are unquestionably markedly influenced by interest as a cost factor. Demand for their services is frequently sufficiently elastic so that interest costs may be a matter of decisive consideration in the timing of their construction.

Flow-of-funds accounts as a device for measuring differential effects

In answer to your specific question relating to the Board's flow-of-funds accounts, the regular quarterly publication of which was begun in the August Federal Reserve Bulletin, this analysis contributes to an understanding of differential impact of monetary factors by presenting a broad historical record of credit flows to and from various major sectors in competing credit markets. The grouping of data for the various sectors and for the various financial markets of the economy and the regrouping of these data into sector and transaction categories that are analytically useful has made possible the systematic examination of the financing activities of each group in the perspective of what else is happening in the economy in general and in the credit markets in particular.

The availability of the flow-of-funds accounts has improved our ability to analyze each type of credit flow to each major sector simultaneously in terms of (1) the total credit flow of that type, (2) the whole pattern of capital market flows, (3) the other sources of financing utilized by the sector, and (4) the sector's need for funds in relation both to its income and its expenditures. As a result, the flow-of-funds accounts are a convenient vehicle for analyzing the mutual impact of the various financial and nonfinancial groups in the economy and of the mutual adjustment process among the various financial markets.

The number of areas for which such perspective is provided depends, of course, upon the availability of data for building up such a comprehensive picture. In terms of the areas specifically referred to in the questionnaire, the flow-of-funds accounts have contributed to analyses of impact on State and local governments and their financing; residential construction and mortgage financing; and unincorporated business to the extent permitted by inadequate data. The breakdown between corporate and unincorporated business available for the flow-of-funds accounts is not exactly parallel to the breakdown between large and small business called for in the questionnaire. Industry breakdowns within nonfarm, nonfinancial business, e.g., the public utilities grouping mentioned in the questionnaire, are not

at present made in the flow-of-funds accounts, but some broad breakdowns of this kind could be made on an ad hoc basis to provide economywide perspective to the capital expenditures and financing of such groups.

Conclusion

The catalog of special sectoral characteristics enumerated above includes a number of examples in which variations in availability or cost of funds resulting from market forces and, to some extent from accompanying credit and monetary policy, undoubtedly has some differential effects. An analysis of other sectors would no doubt also show variations from sector to sector. A broader and truer perspective on the point would be that many differences inhere in our economic and financial structure and would persist regardless of the character of the credit and money system and of the variations in policy that might be pursued under this system. When the wide range of organic and structural differences inherent in the various sectors is recognized, credit and monetary policy may differ in its effects on these sectors of the economy only to an extent that is in keeping with, and largely caused by, these broader differences.

Differential impacts of monetary policy can grow out of still one more general economic factor: the nature of expectations with respect to price level inflation. Even if fears of inflation were widespread, they would not affect all sectors of the economy equally. The general response of those who had such fears would be to pay less attention to interest rate costs. But since the ability to command funds differs, the actions resulting from the fears would be far from uniform. These actions would be hard to classify by the sectors enumerated in this question, but they unquestionably would vary. An attempt, therefore, to temper interest rate changes that might otherwise result from forces operating in the market might influence expectations in a manner contrary to the public interest at the time.

QUESTION

C. Mix of weapons of monetary control:

Reserve requirements:

(a) Has Federal Reserve policy aimed at a secular decrease in reserve requirements in the postwar period? In the last few years? If so, what objectives are sought? Is a change in the level of bank profits one of these objectives? Would lower reserve requirements make it possible for the monetary authority more readily and effectively to control the member bank reserve base?

ANSWER

The Federal Reserve has had no policy specifically directed toward achieving a long-run secular decrease in reserve requirements. Nevertheless, since the level of reserve requirements in the immediate postwar years was high by earlier standards, some reduction in this level was made as occasion was appropriate during the late forties and fifties.

Postwar increases in reserve requirements were made in 1948 and early 1951. In these years, economic conditions called for restraint on credit and monetary expansion, but Federal Reserve support of the Government securities market precluded use of open market and discount operations for this purpose.

Postwar reductions in reserve requirements occurred in 1949, 1953 and 1954, and 1958. These were recession periods when stimulus to bank credit and monetary expansion was needed. The release of reserves at these times stimulated banks to put available funds to use and worked to facilitate resumed expansion of bank credit and money.

In none of the above reserve requirement actions was "a change in the level of bank profits" a causal consideration.

The percentage of deposits that banks are required to hold as reserves determines the amount of bank credit expansion that is possible on a given reserve base. The extent to which any change in the reserve base affects the credit and monetary situation depends on this expansion ratio. With a low reserve requirement level, a given dollar increase in reserves makes possible a larger expansion of member bank credit than in the case of a higher reserve requirement level. A lower requirement level thus can give the Federal Reserve greater leverage in affecting total bank credit and the money supply.

In general, it does not appear that a lower reserve requirement level would materially affect the readiness or effectiveness with which the Federal Reserve can influence the member bank reserve base. If the reserve requirement level were very low, the Federal Reserve would need to be especially sensitive in guarding against tendencies for short-term variations in reserves to cause undue money market fluctuations. At the same time, as long as requirements were not so low as to create excess reserves beyond the appropriate needs of the economy or the ability of the Federal Reserve System to absorb them, the System would be in a position to maintain regulation of the reserve base of the money supply.

QUESTION

C. Mix of weapons of monetary control:

(1) Reserve requirements:

(b) Does the Federal Reserve System, in carrying out its responsibilities for monetary policy, affect member bank earnings? If so, has the discharge of this responsibility permitted an adequate level of bank earnings over the postwar period as a whole? At the present time?

ANSWER

Most actions in the field of credit and monetary policy, like governmental decisions on many other matters, have some effect on the earnings of the businesses affected. Thus, the agencies exercising governmental decision authority necessarily have a responsibility for appraising and keeping informed about these effects. Many factors are always impinging on the earnings performance of an individual business, so that neither the effects of specific public policy actions nor their cumulative impact can be clearly identified. Nevertheless, in our view the discharge of Federal Reserve System responsibilities

over postwar years has permitted an "adequate" level of bank earnings.

With respect to the "adequacy" of bank earnings over the postwar period as a whole, from the viewpoint of the national economy, it is impossible to set up any completely satisfactory standards. For example, on the question of the relationship of bank earnings to the earnings of enterprises in other fields, the return on bank capital was less than on capital invested in industrial enterprises, on the average, for many years. In recent years, bank earnings have been improving, however, as indicated by the figures below, and in the recession year, 1958, were above those in manufacturing corporations. Furthermore, the two categories are not strictly comparable, because of differences in risk and other important factors.

Rates of return (profits after taxes as percentage of average net worth)

	1955	1956	1957	1958
Manufacturing corporations.....	12.6	12.5	11.1	8.6
Commercial banks.....	8.1	8.1	8.6	9.9

Adequacy of bank earnings over the postwar period may also be judged by the growth trend in the industry. Total commercial banking assets increased 60 percent from the end of 1946 to the end of 1958, and total banking offices, 25 percent. The latter percentage is lower because (1) it is based on physical rather than value numbers and, therefore, unlike assets, it has not been directly affected by the postwar rise in prices, and (2) banks have to obtain supervisory approval before new offices are established. Bank failures and other discontinuances have been very low in the postwar period.

Another, and probably the most relevant, test is the ability to obtain needed capital in the banking business in order to provide for growth and the proper assumption of risk. For this purpose, if banks as a group are unable to raise, in the security markets, the amount of capital funds that is considered appropriate for the sound conduct of the banking business, this might suggest the desirability of a higher level of earnings in order to lead to longer run increases in their capital funds. When banks wish to strengthen their capital positions, increased earnings may help them to do so, either by enabling them to retain more earnings or by encouraging investors to buy additional stock that may be offered to them.

Bank capital accounts in recent years, as illustrated in the following table, have shown smaller ratios to total assets than were customary 20 years or more ago. It may be noted that the downdrift in the ratio of bank capital to total assets from the late 1920's to late 1940's has been checked and some strengthening in average capital positions has occurred since then. The average ratio of bank capital to risk assets, which was high in the prewar years of economic stagnation and in early postwar years, has since been reduced to just under the average prevailing in the late 1920's.

Capital ratios of member banks

[Average in period]

	1926-30	1936-40	1946-50	1951-55	1956-57	1958
Capital accounts as percentage of—						
Total assets.....	12.9	10.8	6.6	7.1	7.8	7.9
Total assets less cash and U.S. Government securities.....	17.6	25.8	21.1	16.0	14.7	15.0

So many considerations enter into the measurement of the adequacy of bank capital, however, that aggregate ratios of this nature are only a rough indication of capital adequacy. In the past few years many banks have successfully strengthened their capital positions through sales of stock to investors, in addition to retaining substantial amounts of earnings, thereby suggesting more adequate recent earning ability insofar as adequacy may be measured by ability to attract capital.

QUESTION

C. Mix of weapons of monetary control:

(1) Reserve requirements:

(c) Is the logical limit of the policy of minimum intervention and the associated "bills only" policy that all changes in member bank reserves should be carried out by changes in reserve requirements? If so, why hasn't the "bills only" policy been carried to this limit?

ANSWER

No. The governing considerations were stated by Chairman Martin in his written answers submitted in the Joint Economic Committee hearings of July 30, 1959, in response to a question from Congressman Curtis. In general, the market for Treasury bills provides an efficient medium for open market operations designed to influence the volume of member bank reserves. Since the bulk of Federal Reserve operations are of relatively small magnitudes designed to keep the supply of reserves sensitively attuned to temporary variations in credit and money needs as they appear, purchases and sales of Treasury bills in an active market provide an appropriate instrument for such use. Changes in reserve requirements could not be employed for these purposes.

QUESTION

C. Mix of weapons of monetary control:

(2) Open market operations with special reference to "bills only":

(a) The explanation provided in the report of the ad hoc Subcommittee on the Government Securities Market is quite generally cited as the "official" explanation for the "bills only" policy. Has this position changed?

(b) With the benefit of hindsight, should there have been more frequent deviations from the "bills only" policy than in fact occurred since 1953?

ANSWER

(a) A further "official" explanation for the policy of conducting open market operations in short-term securities (except in the correction of disorderly markets) was in the reply of the Chairman of the Board of Governors to question 3 submitted by the Subcommittee on Economic Stability of the Joint Committee on the Economic Report in connection with subcommittee hearings of December 7, 1954.

The latest official statement on the subject was presented to the Joint Committee on the Economic Report by Chairman Martin on July 27, 1959. The positions taken in each of these official documents are consistent.

(b) In our judgment, no. The relationship of the technique of conducting open market operations in short-term securities to speculation in Government securities, together with brief consideration of the broader effects of alternative techniques, is taken up in the answer to question III-F.

QUESTION

C. The mix of weapons of monetary control:

(3) Selective credit controls: Are standby consumer credit controls necessary at the present time? Would any of the following standby credit controls be desirable at the present time?

(a) Direct control of bank lending?

(b) Secondary reserve requirements?

(c) Direct control over the terms of mortgage lending?

(d) Direct control of corporate and State and local securities issues?

ANSWER

Consumer credit controls

The desirability of an available authority to regulate consumer credit was discussed in some detail in my written response to a question by Congressman Reuss at the hearings before your committee on July 30, 1959 (p. 1490.) Briefly, it is the view of the Federal Reserve Board of Governors that the effectiveness and workability of any such authority depends heavily on broadly based public acceptance and support. The many conflicting views, pro and con, on the regulation of consumer installment credit were set forth in the Board's study of this subject (see pt. I, vol. I, ch. 16), published in 1957. As indicated in the reply referred to above, we feel the question of whether a direct regulation of this type of credit will find the necessary public acceptance and support can best be resolved by the Congress itself.

Direct controls on bank lending

Analysis and experience in other countries would indicate that there is serious question as to the desirability of any effort to exercise direct control over bank lending, except perhaps in periods of extreme national emergency. The most obvious shortcoming of this approach is that in our highly developed and complex economy credit is extended by a wide variety of financial institutions whose loans and investments are to a considerable extent interchangeable. Hence, purchases of Government securities by banks may make it possible for life insurance companies to make business loans and so on. Thus, the imposition of direct controls on one part of the total lending and investment

activity of one type of financial institution is not likely to be very effective.

Apart from this, the Board has grave reservations as to the longer run effect of any such direct control on the healthy growth of our free enterprise economy, including the ability of new enterprises to become established and grow. Since controls of this type would necessarily have to be based on the lending activities of individual institutions in some past period, the longer the controls were in effect, the less they would reflect changing conditions in the economy. Healthy growth requires that resources be allowed to move freely to their most efficient uses and governmental direction of lending or investing by banks or other types of financial institutions seems bound to impede this movement.

Secondary reserve requirements

Suggestions for a secondary reserve requirement are usually associated with a situation in which primary reserve requirements have been rendered ineffectual by support of the Government security market by the Federal Reserve System. Since the effect of such support is to give a "money quality" to all high-grade marketable debt instruments, the simultaneous application of such support and imposition of secondary reserve requirements would not help but would hamper the achievement of economic growth and stability.

Real estate credit controls

Control over the terms of mortgage lending presents some of the same problems as control over the terms of consumer installment lending. The potential usefulness of special standby authority in this field is doubtful, however, because mortgage credit appears to have a more direct responsiveness to shifting conditions of ease or tightness in credit markets than shorter term consumer credit. Moreover, the more liberal home mortgage terms currently available are mainly associated with programs of mortgage insurance or guarantee provided by the Federal Government. The Board has advocated on various occasions, and still believes, that considerable latitude should be allowed to the governmental agencies administering these insurance and guarantee programs to vary the mortgage downpayment and maturity terms offered under them as economic conditions indicate.

Controls on corporate, State, and local security issues

It is very difficult to see how any Federal agency could exercise effective control over State and local security issues in the United States except in periods of grave national emergency. Even in these circumstances there would seem to be serious question as to the constitutionality of such action.

Direct control of corporate issues raises many of the same problems as direct control over bank lending. Except as a part of a comprehensive program of direct control affecting all major areas of lending and investing, it is doubtful that such controls could be effective, and they would certainly give rise to many serious inequities and administrative problems. Again, it is hard to conceive that circumstances requiring and justifying the employment of such controls could arise so quickly that the Congress would not have opportunity to weigh their merits against other alternatives. Hence, we see no advantage to the establishment of standby authority in this area.

QUESTION

C. Mix of weapons of monetary control:

(4) Control of financial intermediaries:

Would it be desirable to give the Federal Reserve System or some other Federal agency authority to control the lending activities of insitutional lenders; e.g., life insurance companies, mutual savings banks, savings and loan associations? If so, should such authority be on a standby basis? What specific controls would be desirable?

ANSWER

The primary function of most nonbank financial institutions is to serve as a conduit for savings. In general, these financial institutions operate by gathering together part of the current income stream not used by receivers to finance current, primarily consumption expenditures, and make these gathered funds available to finance outlays principally for investment goods (including houses and consumer durables) by other individuals, by businesses, and by governments. So long as these intermediaries limit their activities to channeling the current savings stream, there would appear to be no more need to control their lending activities than there would be to establish allocations for the use of any of the community's savings.

In time of increasing demand for institutional funds, financial intermediaries may attempt to supplement their inflows of savings by selling financial claims acquired earlier or by borrowing. Because the relationship of these intermediaries to savers (policyholders, depositors, and shareholders) is a fiduciary one, the financial community tends to regard continuing large resort to bank borrowing to supplement saving inflows as undesirable. Prudent management requires that intermediaries support their investment operations by their savings accumulations rather than by borrowings especially borrowing of short-term funds.

Occasionally, supplementary funds are needed to accommodate short-term fluctuations in savings inflows, particularly since so large a share of investment outflows is determined by commitment arrangements made earlier. For some institutions, such as savings and loan associations, specific governmental programs have been created to moderate the impact of unforeseen contingencies and to even out flows of funds as between local mortgage markets. For other institutions, borrowing or "warehousing" arrangements with commercial banks have been developed to equalize temporary time discrepancies between savings flows and investments. There would clearly be a hazard to national economic stability if financial intermediaries as a group built up a large current indebtedness in a period of strong demands for funds which then had to be liquidated out of their savings inflow in the succeeding period. This process could lead to excessive long-term lending and investment on the basis of short-term funds in prosperity periods and unduly sharp curtailment in periods of recession.

To the extent that nonbank financial intermediaries depend on supplements from the banking system, they are subject, of course, to the same credit restraints limiting all bank credit expansion. In attempt-

ing to borrow from the banks, intermediaries must compete with other borrowers for whatever total of credit is available.

To the extent that supplementary funds are obtained from sources other than the commercial banking system by selling financial claims, additional inflationary pressures can be created, but only in the sense of any other factor tending to increase the turnover or rate of use of the existing money supply. In attempting to sell assets, financial intermediaries are limited—perhaps to an even greater degree than other investors—by unwillingness to suffer losses in asset values in a period of rising interest rates and declining values for outstanding financial claims.

To the extent that the Federal Government or one of its agencies provides facilities for lending to, or taking over the assets of, savings institutions, there will be an impact on the market for securities. The effect on the credit situation would be similar to that of financing through the securities market corresponding changes in other governmental expenditures.

Inflation is not, however, a necessary consequence when financial intermediaries attract funds from the banking system, either by offering higher returns for savings or by selling financial claims to banks. The restraint on deposit growth at a time when economic conditions necessitate such restraint requires banks to make appropriate adjustments in their lending and investing activities. The competitive efforts of nonbank intermediaries, of course, may change the structure of lender-borrower relationships, and these shifts may work to increase the rate of use of the active money supply and possibly even the money supply itself. These developments, however, would be affecting the formation of monetary policy, and presumably would be taken into account.

To some extent the lending activities of nonbank institutions may add in other ways to inflationary pressures in the short run. This may occur if resource limitation is more intense in capital goods industries, for the bulk of institutional lending is to finance investment activities which place their greatest demands on capital goods lines.

The "near-money" nature of the liabilities of various nonbank financial institutions may induce holders of these liabilities to spend more freely out of current incomes than they would if the liabilities they held had a greater degree of risk. This would be true also if savers held short-term marketable Government securities or other liquid assets of this type. As a consequence, changes in the public's holdings of such liquid assets need to be taken into consideration in determining credit and monetary policies directed toward maintaining a supply of money appropriate for sustained growth.

In one sense, the growth of nonbank financial intermediaries may have made the economy more responsive to the exercise of monetary policy during economic expansion. An important part of the flows through intermediaries are of contractual nature and not readily available for diversion by individual savers to finance inflationary or speculative outlays. These contractual flows tend to be relatively stable, and their allocation to investment outlets tends to follow fairly regular and to some extent predictable patterns. As an increasing share of the savings flow becomes contractual, erratic movements in

capital markets tend to be reduced and monetary policy can be applied more effectively.

II. DEBT MANAGEMENT

QUESTION

A. Do the Treasury's debt management operations hamper the execution of monetary policy? If so, is this hindrance of major significance? If so, are there ways of conducting debt operations so as to minimize this interference?

ANSWER

The Treasury's debt management operations may hamper the execution of monetary policy in three important ways. First, the frequency of Treasury financing operations affects the timing of Federal Reserve policy action. Second, the effect of Treasury financing upon the money market and the Government securities market at times affects the degree to which the Federal Reserve may press toward policy objectives. Third, the effect of debt management upon the liquidity of the economy tends to interfere with the Federal Reserve's ability to achieve the monetary and credit effects toward which its policies have been aimed. Interference with the timing of Federal Reserve action has frequently been troublesome and at times a serious handicap; interference with the effects of Federal Reserve policy has had broader economic significance.

1. Excluding the regular weekly auctions of Treasury bills, the Treasury came to market with offerings of marketable securities on an average of eight separate occasions during each of the 5 calendar years 1954 to 1958, inclusive. There have been 11 Treasury debt operations in calendar 1959. The Treasury has engaged in a financing operation of some size during most months in recent years.

In view of the temporary effects of Treasury debt operations on the smooth functioning of the money market, the Federal Reserve System has regularly pursued what is known as an "even keel" monetary policy during, immediately before, and immediately after dates when the Treasury is engaged in a debt operation. During such periods, overt System actions, such as changes in the discount rate, have not been taken. Maintenance of an "even keel" in the money market has helped to prevent any interference with Treasury financing as a result of changes in monetary conditions. It has also contributed to market conditions that facilitated the pricing of new Treasury offerings.

With Treasury debt operations occurring as frequently as they have during recent years, the time intervals during which the Federal Reserve System could appropriately take policy action have been relatively few in number and relatively limited in duration. One consequence has been that the Federal Reserve System has been obliged to time its actions in accordance with free periods. Thus, given the economic and financial circumstances calling for particular policy actions, the actual timing of action has been profoundly influenced, if not principally determined at times, by the Treasury's financing schedule.

2. Because of the impact that large financings by the Treasury have on money and securities markets, debt management operations at times in recent years have limited the degree and speed with which the Fed-

eral Reserve System could pursue its policy objectives. This condition has arisen principally when the Treasury has been faced with the need to refinance maturing issues or to raise new cash at times when the Government securities market was already under pressure from expanding private demands for funds. The problem has been complicated by an inadequate fiscal policy and the growth in the total Government debt.

Most individual Treasury financing operations, whether for new money or to refund maturing obligations, are of extremely large size, frequently running to several billions of dollars. The process of selling and redistributing a new cash issue of such size involves substantial movements of funds and extensive portfolio rearrangements among large numbers of investors. Even in the case of a refunding, a significant part of the maturing issue typically is held by investors who are relatively uninterested in the Treasury exchange offering unless it is a straight rollover into a 1-year issue. As a result very sizable ownership changes and movements of funds are often required to place the new securities with investors. It is unavoidable that changes in the ownership of the public debt and the related movements of money of this size should impose some strain, and at times considerable strain, upon the money and Government securities markets around times of Treasury financing. With Treasury debt operations occurring as frequently as they do, the markets are sometimes subject to strain from this source almost continuously over periods of several months.

In the conduct of its open market operations, the Federal Reserve System must necessarily rely upon interpretation of conditions in the central money and securities market, including the Government securities market, as one indicator of general conditions of money and credit availability in the economy. To the extent that Treasury debt management operations create pressures upon money flows through the central money market, produce congested conditions in the Government securities market, and generate uncertainties that have an influence upon market rates of interest and the flow of investable funds, a situation is created in which it becomes more difficult to judge accurately national financial conditions.

3. While the economy may be said to have a hard core of need for liquidity instruments and while the Treasury should be alert to serving this need through the provision of an appropriate supply of short-term securities, the concentration of new Treasury securities in short-term maturities can have an important influence upon the monetary system, and thus upon the effectiveness of monetary policy. In the past year (September 1958 to September 1959), Treasury marketable debt within 1 year of maturity held outside official accounts has grown by \$4.8 billion. While this growth of virtually riskless, highly liquid money substitutes has not been the equivalent of a growth in the money supply of equal amount, the effect upon liquidity in the economy has been substantial. The substitution of near-money assets for cash in the liquidity accounts of individuals and institutions of all types has contributed to an increase in the velocity of money. As a result, the efforts of the Federal Reserve System to limit inflationary demand pressures through regulation of the quantity of money have been complicated.

With regard to minimizing debt management interferences with Federal Reserve policy execution, the Treasury has been steadily

adapting its financing practices to further this objective. Specifically, the Treasury has attempted to consolidate all of its 1-year certificate issues on quarterly dates to mature February 15, May 15, and so forth; new issues of Treasury notes and bonds have also been scheduled to fall due on these dates. In addition, the Treasury has simplified its short-term debt by adding a full cycle of weekly issues of 6-month discount bills to its regular weekly cycle of 3-month bills, and it has established a new cycle of 1-year Treasury bills to mature at quarterly dates in January, April, etc. The bulk of the Treasury's publicly held short-term debt has been placed on a routine, rollover basis employing an auction method of issue. The auction method under which the buyers set the prices they are willing to pay, has reduced the need for a Federal Reserve "even keel" policy around the period of the financing operation.

While the net effect of the above actions has been to add to the number of short-term issues outstanding, the average size of each issue has been reduced, and, in the case of the 1-year and 6-month bills, the assurance that when they mature they will be replaced through an auction of similar obligations has removed uncertainty as to the type of security to be offered and the marketing method to be followed. Refunding of this short-term debt should, in the future, have a smaller impact upon the market and, accordingly, should not interfere unduly with either the timing or execution of Federal Reserve policy.

To reduce the future frequency and size of its trips to the market and to forestall further large increases in the volume of short-term debt outstanding, the Treasury has under consideration procedures for offering amounts of intermediate and longer term debt in exchange for certain outstanding issues before these securities mature or become liquidity instruments through the passage of time. Apart from the advance refunding approvals, the problem of marketing intermediate- and long-term issues, which differs in many respects from that of short-term issues, is receiving continuing study with a view to strengthening offering methods.

QUESTION

B. To what extent can the Treasury, without seriously affecting the bond market and without support from the Federal Reserve, obtain additional funds by borrowing at short-term by paying short-term interest rates?

ANSWER

In the answer to this question, it is assumed that the phrase "by paying short-term interest rates" should be read to mean "by paying the rate of interest necessary to attract short-term investors." While the question is not amenable to a quantitative answer, the general nature of the factors that limit short-term financing under the conditions posed can be indicated. In general, the limit is set by the state of financial markets and the attitude of investors at the time.

The Treasury can obtain additional funds at short term without assistance from the Federal Reserve and without seriously affecting the bond market only to the extent that it can attract nonbank funds either from idle balances, from bank funds that can be attracted from other uses, or from the current flow of money receipts in excess of

money expenditures. As the total supply of short-term Treasury securities has increased in recent months, at a time when Federal Reserve monetary policy has generally restrained monetization of public debt in commercial bank accounts, the level of interest rates on short-term securities has risen significantly. Higher short-term interest rates have encouraged economizing on cash balances among non-financial business corporations, State and municipal governments, and other institutions. In a sense, some part of the liquid assets in the economy which otherwise would have been held as cash have been encouraged to go into short-term Government obligations by the more attractive interest rates.

Activation of existing idle balances for the specific purpose of investment in short-term securities, however, has accounted for only part of the net placement of short-term Treasury securities outside the banking system. Another, perhaps larger, part has represented the investment of funds from the enlarged cash flow that has accompanied the advance in economic activity. Rising levels of economic activity and income are usually accompanied by increases in the short-term assets and liabilities of all sectors of the economy, including corporate working capital, liquidity reserves for various contingencies, tax receipts of State and municipal governments, etc. By and large, the additional liquidity in the composite balance sheet of the total economy has taken the form of holdings of short-term Government securities and other liquidity assets rather than the form of cash. The extent to which businesses and other economic units acquire short-term securities rather than holding cash in such circumstances depends in part on the level of short-term interest rates.

The financing of the large Treasury cash deficit in fiscal 1959 is an illustration of this process. The cash deficit grew out of a flow of Treasury expenditures that exceeded Treasury receipts and was financed through additions to the supply of short-term debt outstanding. In the first instance, most of the new short-term Treasury obligations were sold to the banking system so that the funds the Treasury spent represented new money (this process required temporary assistance from the Federal Reserve). As the Treasury spent the new money it had borrowed, the enlarged supply of cash in the expenditure stream was more than was required for transactions purposes and, attracted by the rates of interest being paid, was used in part to buy the new short-term securities from the banks. The banks in turn were under pressure to sell short-term securities in order to obtain funds to meet rising demands for loans. The new money was thus replaced in the asset structure of the economy with interest-earning short-term obligations almost as liquid as money.

Additional amounts of short-term debt might be sold if short-term interest rates were to rise to a level high enough to cause some investors to move funds out of intermediate and longer term obligations and into the short-term area, with upward interest rate effects on these longer maturities. Such shifts of funds usually occur when upward rate movements create an expectation that further upward movement will occur, with the result that some funds intended ultimately for longer term investment are placed temporarily in the short-term market pending the anticipated upward rate movement. If the Treasury were obliged to foster such expectations as a result of being forced

to drive short-term rates higher through confining its offerings to short-term securities, the net effect would be higher long-term rates. Carried far enough, the result might "seriously affect the bond market" as suggested in the question.

Long-term funds might also move to short-term investment when intermediate- and long-term rates of interest are low, perhaps during business recession, relative to expectations as to what the normal or average level will be over the next year or two. In this case, Treasury financing in short-term securities might result in short-term rates that were high relative to rates of interest on longer maturities. As a result, this relationship of market rates might attract some long-term funds into short-term investment without seriously disturbing the long-term market.

Finally, rising rates of interest on short-term Treasury securities tends to attract funds from abroad. International movement of short-term investment funds has not generally been an important influence in the domestic money market since the Second World War. As more and more countries have moved toward full currency convertibility in recent years, however, there has been evidence of increased money flows of this sort.

QUESTION

C. Is the market for Treasury issues largely limited to current cash flows, or do Treasury offering terms sometimes induce a readjustment of existing portfolios to accommodate the new issues? Why?

If the market for new Treasury issues is largely limited to current cash flows, to what extent are these flows earmarked for particular maturity lengths and for particular degrees of risk? How is such earmarking to be accounted for?

ANSWER

In general, the total market for new issues, including Treasury issues, is limited to current cash flows. There are two important exceptions to this general statement. First, to the extent that there are idle cash balances in the economy in excess of money needs for transactions purposes, it may be possible for the Treasury to attract these balances by offering rates of interest that compensate the investor for the moderate reduction of liquidity resulting from substituting a near-money asset for cash. Second, to the extent that commercial banks add to their holdings of Government securities, the market for these securities may in turn be broadened by the addition of new money to the current cash flow.

The first exception has been of considerable significance since the Second World War, but it probably will be of less importance in the future. The unusually large money supply relative to income at the end of the war has possibly by now been largely absorbed into transactions balances, and there may be relatively little scope left for "activating idle balances." If spending units find ways and means of economizing on cash balances because they want the return to be gained from investing in short-term securities, growth in the dollar value of economic activity will not necessarily add proportionately to the economy's transactions needs for money.

The second exception rests largely upon policy decisions of the Federal Reserve System and, therefore, does not constitute an independent source of funds for the purchase of Treasury issues. Since changes in the money supply may be limited by the Federal Reserve, net commercial bank purchases of Governments can occur only to the extent that banks liquidate other assets or reserves are available to permit banks to add to their deposits and their portfolios of loans and securities. The commercial banking system has been a sizable net purchaser of Government securities mainly during periods of business recession, when the Federal Reserve has fostered an increase in bank assets even though the current demands for bank credit from other sources have contracted. In periods of business expansion the strength of private credit demands leads to an increase in bank loans at a rate so much faster than the increase in bank reserves that banks are required to liquidate Government securities.

There frequently are substantial readjustments of existing portfolios, induced by Treasury offering terms, to accommodate new issues; but these readjustments, so long as they replace one financial asset with another, require funds from the current cash flow, either directly or indirectly, to accommodate the new issue. An investor who liquidates an existing issue to purchase a new Treasury obligation has not diverted funds from his own current cash flow to absorb the new issue, but his sale of existing securities in the market has, at some point in the financial process, absorbed funds from current cash flow. Of course, to the extent that the Treasury's offering terms are more attractive, everything considered, than terms on alternative investments, the Treasury may increase its share of the current cash flow by absorbing funds that would otherwise have gone into other uses. These funds would, however, be derived from current cash flow.

The second half of this question refers to the extent of segmentation of current cash flows in the financial markets. There are no wholly adequate measures of the extent to which these cash flows are segmented as to maturity and degree of risk, but what is known of investor practices suggests that segmentation of current flows with respect to maturity is significant. Most investors and investing institutions schedule their flow of investable funds into maturities that are determined by considerations of sound portfolio management consistent with the nature of their liabilities and with attainment of maximum income, and there usually is limited latitude for rearrangement of these flows. The exceptions to this general observation are numerous, however, and may under particular circumstances be controlling.¹

There apparently is considerably less segmentation of flows among types of investments differentiated by risk characteristics than there is among different maturity areas. A diminishing number of public pension funds are limited in their investments to U.S. Government obligations or specified State or local government issues, and some types of institutions specialize in particular forms of lending (e.g., savings and loan associations). But many investors and investing institutions are prepared to purchase financial assets of varying degrees of risk with, of course, the appropriate yield differential. More-

¹ The question deals only with the supply side of the market for investable funds. It should be noted that the margin for shifting among maturity areas appears to be greater on the demand side; i.e., borrowers, as a group, appear to be more flexible in adjusting the maturity of their borrowing than lenders their lending.

over, in recent years the evaluation of risk characteristics attaching to different types of obligations apparently has moved somewhat in the direction of reducing the risk differential between Treasury issues and other obligations.

In part, this development has been a result of greater confidence that there will not be a recurrence of major depression as part of the business cycle movement. In part, it has reflected the availability of mortgages carrying Government guarantees or insurance and of Government agency issues which, although not guaranteed by the Government, are considered by many investors as virtually the equivalent of Treasury issues. Nevertheless, the significance for Treasury debt management of the shiftability of investment funds among risk sectors is that, while the Treasury no longer has a sizable assured market for its issues, it has access at competitive rates of interest to the largest part of the current flow of investment funds at all maturities.

Returning to the compartmentalization of the current flow of investable funds by maturity class, the principal exception to the conclusion that such compartmentalization is extensive relates to the potential for shifting existing financial assets among investors. Most large investing institutions have existing financial assets in their portfolio that cover a rather wide maturity range. Thus, an institution (such as a life insurance company) that regularly channels virtually all of its net flow of funds into longer term issues may invest more than its current cash flow in such issues and obtain the additional funds by selling from portfolio issues that have moved into an intermediate maturity range. These intermediate securities may, in turn, be purchased by an institution (such as a commercial bank) that finds an income advantage in buying intermediates and selling shorts sufficient to offset the resulting loss of liquidity. The short-term issues sold by this institution may be purchased by an investor (such as a nonbank corporation) who channels his investment funds exclusively into the short-term area. In this illustration, the supply of long-term investment funds has been increased, indirectly, from the cash throwoff in the short-term area. Whether or not such a shifting about in portfolios will occur in a particular case will depend upon the income advantages to be derived (including allowance for tax considerations), upon the prevailing expectations as to interest rates, and upon the willingness or ability of the various institutions involved to absorb the reduction in portfolio liquidity that is implied.

While there is reason to believe that portfolio realignments have been instrumental in recent years in reducing compartmentalization by effecting a flow of funds from the short-term area into longer maturity sectors, the evidence suggests that funds have not moved as easily in the opposite direction. There have been brief periods when firm expectations of rising long-term interest rates in the near future have caused funds destined for long-term investment to be employed temporarily in the short-term market. Also, there have been occasions in recent years when heavy commercial bank liquidation and Treasury financing in the short-intermediate area (e.g., 2 to 5 years) have caused a "bulge" in the rate curve that has attracted some funds from both shorter and longer maturity areas.

In general, however, the almost unremitting pressure of demand for capital funds since the Second World War and the relatively exces-

sive liquidity of the economy until recently have tended to exert a pull into the long-term from the short-term area. This suggests that, in spite of the tendency for interest rates to raise in recent years, there has been sufficient uncertainty of the speed or extent to which rates would rise to justify prompt investment at long-term rather than deferral in anticipation of higher rates. In the face of strong demands for capital funds, this circumstance was a necessary condition of market equilibrium.

The fact that there have been substantial movements of funds from one maturity sector to another through the mechanism of portfolio adjustments among investors does not alter the general proposition that the current flow of new investable funds is substantially earmarked, or compartmentalized, as to maturity in which it will be invested. The principal reason for this earmarking is that investing institutions tend to relate the maturities of their investment portfolios to the anticipated need for the funds. In the short-term area, where investments are held as cash substitutes or as reserves for predictable cash needs, such as tax or dividend payments, the linkage between the maturity of the investment and the function of the funds employed is clearest. Anything but a short-term investment would be unduly speculative. Similarly, in the case of pension funds, life insurance companies, and similar investors the need for the funds is in the distant future. Some short-term assets may be held for contingencies, and a staggering of maturities in the investment portfolio may be maintained, but the total portfolio will be heavily weighted toward the long-term end.

Some institutions—most notably commercial banks—are potentially subject to very large losses of funds, through deposit withdrawals or claims, upon very short notice. Such institutions place a premium upon liquidity in their investment portfolios, but it would be needlessly conservative to carry all assets in the demand form that characterizes their liabilities. Therefore, these institutions also hold varying amounts of assets in the intermediate or longer maturity areas, scheduled so as to provide a more or less steady flow of securities into the short-term sector. Subject to qualifications arising out of their current liquidity requirements, these institutions tend to channel investments funds into intermediate-term marketable securities.

In the case of the commercial banks, however, it should be noted that investment behavior in recent years has tended to be adapted to the stage of the business cycle as well as to be influenced by the bank needs for income. Large movements of bank funds into intermediate issues in search of income have occurred at times when interest rates and loan demands have been low; return movements of funds into shorter maturities for liquidity purposes have taken place when the money market has tightened, interest rates have been higher, and loan demands have picked up.

QUESTION

D. Marketing the public debt:

(1) Private underwriters provide their own underwriting support for issues they market. In view of the fact that its issues typically are larger than private issues, doesn't the Treasury need such underwriting support? If such support is sometimes neces-

sary, should the Treasury provide this support or should the Federal Reserve provide it?

ANSWER

The marketing problems of the private bond market and underwriting procedures developed to cope with these problems are of doubtful relevancy to the marketing of Government securities. The frequency and size of Treasury issues point to problems far more complex than any encountered in marketing private bonds.

Conceivably, an underwriting program of modest objectives might be useful in counteracting short-term market factors that exert an influence on a Treasury financing out of all proportion to their real significance, and which, unchecked, might endanger the success of a financing. As a practical administrative matter, however, it might prove quite difficult to distinguish between short-term market developments and those marking a change in economic trend. A misinterpretation of market factors by the managers of an underwriting fund could prove costly by quickly draining the resources of a fund because of the size and frequency of Treasury financings.

Another risk of an underwriting program is that it might generate a higher rate of attrition on maturing issues than otherwise in instances where new offerings were closely priced. This could occur if the underwriting fund provided an assured secondary market for the rights to the new issue, thereby encouraging dealers to acquire them from customers and to sell them to the fund.

The managers of an underwriting program would also have to face the problem of disposing of Treasury securities acquired through support purchases. If the securities were retired, an underwriting fund would have to be replenished by additional borrowing, and, very likely, short-term borrowing. As a result, shortening of the average maturity of the debt, which has been a major debt management problem in recent years, might be accentuated.

If, on the other hand, an underwriting program envisaged the holding for later resale of securities acquired through support purchases, the market might eventually react unfavorably to the overhang of securities available for sale from the inventory. In view of the relative frequency of Treasury financing operations under the existing maturity structure of the debt, there would be some danger that inventory in the underwriting fund would become abnormally large and unwieldy.

By judging the basic state of demand and supply for Government securities, market professionals are able to take a position in such securities, but it is quite another matter to be able to take and maintain a position with reasonable confidence when confronted with the continuing possibility of market sales out of a large inventory of a Government fund overhanging the market. In order to protect themselves, market participants might decide to maintain a light position in securities held in the inventory. Consequently, the market for such issues and those of adjacent maturity might be dampened considerably.

In recent years private bonds requiring organized underwriting support were often of less than top quality and too expensively priced. In such cases, the result was a decline in the offering price of private

bonds when syndicates were terminated. While Treasury issues are of prime quality, this private experience might be repeated in the Government securities market. The result could be repeated declines in the market prices of supported Treasury issues when underwriting was terminated. This could have unfavorable repercussions on investor interest in the Government securities market. Also, after a decline in market prices has occurred, the knowledge that Treasury issues had earlier been supported could lead to criticisms that the Treasury had manipulated the prices of its issues, a criticism that has been directed on various occasions against underwriters of private securities.

The views of several individuals closely associated with the Government securities market on possible underwriting of Treasury securities were expressed in informal consultations with the Treasury-Federal Reserve study group concerned with recent developments in that market. There was no consensus expressed by these seasoned observers of and participants in the market. Some of those who were favorably inclined toward some form of underwriting fund pointed to the apparently helpful function provided by stabilization of private securities. Others were somewhat fearful that the existence of a fund might encourage underpricing of issues or might create market expectations of price support.

The possible difficulties of underwriting Treasury securities noted earlier and the concerns expressed by some consultants about such underwriting emphasize the necessity for more study of its need, careful clarification of its specific market objectives, and its possible detailed character. Only after further study and clarification, could it be decided whether the Treasury might be authorized to undertake administration of an underwriting fund.

QUESTION

D. Marketing the public debt:

(2) What are the arguments for and against assigning the entire task of debt management to the Federal Reserve, completely separating budgetary policy from debt management policy?

ANSWER

Arguments for assigning debt management to Federal Reserve

1. The financial and economic impacts of debt management and monetary policy are closely related. Each affects the liquidity of the economy. Each affects the availability of loanable funds to the private sectors of the economy. Each affects the level and structure of interest rates. As a result, each has an influence on aggregate demand for goods and services. It is desirable, therefore, from the viewpoint of a consistent approach to economic stabilization policies, that debt management and monetary policy be so conducted that they reinforce rather than counteract each other.

2. Debt management and monetary policy each affects the environment in which the other operates and therefore has an important bearing on what constitutes appropriate policy in the other area. The receptivity of the Government securities market to new issues and the

interest rates to be paid are influenced by current monetary policy as well as by the cumulative effects of past monetary policies. On the other hand, the choice of monetary policy at any point of time is conditioned by the maturity structure and ownership distribution of the outstanding Treasury debt as well as by current policies with respect to debt management.

3. Day-to-day operations to implement prevailing debt management and monetary policies are necessarily interacting. The frequency, size, and character of Treasury financing and refunding operations constitute a limitation on the freedom of action of the monetary authorities. Similarly, actions in the field of monetary policy have an impact on the Government securities market and therefore condition and limit the operating decisions of those responsible for debt management.

The arguments set forth above, although they could be considered to favor assigning the entire task of debt management to the Federal Reserve, more properly emphasize the need for close coordination between debt management and monetary policy.

Arguments against assigning debt management to Federal Reserve

1. The major and perhaps overriding argument against assigning the entire task of debt management to the Federal Reserve is that the money-creating function, which has been entrusted to the Federal Reserve by the Congress, ought to remain completely separate from the Government borrowing function. If the two functions were combined, the danger would be greater that pressures would be brought on the Federal Reserve either to finance Government debt directly or to adopt monetary policies that would facilitate Government financing particularly at times when they would conflict with the broader economic stabilization objectives of monetary policy.

2. It may also be argued that, functionally, debt management and monetary policy, and fiscal policy for that matter, are separate arms of governmental economic stabilization policies, with distinct though related impacts on the economy. Under our form and structure of Government, there are good reasons for the existing separation of these economic policy functions.

With respect to debt management and monetary policy, one of the reasons for separation is the possibility of conflicting objectives. The Treasury has a broad interest in economic stabilization objectives and, at the same time, as the largest single factor on the borrowing side of the credit and capital markets, has a strong interest in borrowing at the lowest possible cost. The Federal Reserve has the major responsibility of providing the appropriate supply of money and bank credit for economic growth and stability. In carrying out this responsibility it must, of course, recognize how important a factor it is on the supply side of the money and credit markets. While market interest rates will be influenced by adaptations in monetary policy, the function of these rates is to allocate efficiently among many competing demands the total supply of credit in which bank credit is one component. This necessitates flexibility in the level of interest rates as demand and supply forces shift with the ebb and advance of economic activity.

Thus, separation of function as between debt management and monetary policy is desirable from the viewpoint of checks and bal-

ances. At the same time, however, the complementary relationship between debt management and monetary policy calls for mutual understanding with respect to objectives pursued and coordination of techniques of implementation.

QUESTION

E. Theory of debt management:

(1) Should the Treasury follow a policy of issuing long-term obligations during periods of economic expansion and short-term obligations during periods of economic contraction?

Alternatively, should the Treasury manage the debt with the objective of minimizing interest costs?

What other considerations determine the choice of maturity when new securities are to be issued?

ANSWER

At present levels of interest rates and under existing legislation governing debt management, the Treasury has only very limited ability to pursue the kind of policy contemplated in this question. The question, accordingly, does not have much practical content at this time. The question also is mainly of theoretical interest because debt management today is confronted with a maturity structure grossly out of balance as a result of cumulative trends over postwar years. Thus, the Treasury will not have much discretion in varying the maturity mix of its offerings according to economic conditions until the prevailing maturity imbalance in the Federal debt structure can be corrected.

Approaching the question in theoretical terms, therefore, one definition of the purpose to be achieved through contracyclical debt management policies might be in terms of marginal effects upon economic liquidity. Liquidity is a compound relationship between the supply of money available for effecting economic settlements, the structure of financial assets convertible into money with varying degrees of difficulty and cost, and the volume and dating of economic settlements requiring money. Treasury debt management might be employed to affect the moneyness of financial assets as an aid to national credit and monetary policy. To the extent that such aid was effective, debt management policy would, of course, complement monetary policy. It should be kept in mind, however, that the changes in interest rates brought about by the response of monetary policy to market factors over economic fluctuations automatically affects the liquidity of the economy in the desired direction. Whether these resulting changes in the economy's general liquidity would need to be supplemented by debt management action in particular cyclical situations would be a matter of judgment at the time.

A somewhat more specific reason for pursuing a countercyclical policy with respect to the maturity structure of the debt might be to influence the availability of long-term funds for other, private capital investment purposes. If, as appears to be the case, there is some degree of compartmentalization in the flow of financial funds, movement of elements of the debt from shorter to longer maturities, or the reverse, would not only affect the general liquidity of total financial

assets, it would also have a direct influence upon the relative availability of funds at different maturities. This influence would find expression, of course, through variations in the term structure of interest rates.

Realistically, the market for Government securities would impose limits upon the Treasury's ability to regulate countercyclically the maturity structure of its debt, particularly its ability to lengthen the structure in periods of economic expansion. Competing demands for long-term funds at such times would typically be very strong, and to tap even small amounts (by Treasury financing standards) would require competition, through interest rate and other terms, with other borrowers. Long-term funds are generated at a fairly steady rate through the savings process, and the potential for portfolio readjustments probably could not be relied upon to supply sizable additions to the savings flow in brief periods, particularly at times of rising interest rates and declining liquidity. At the same time, the present corporate tax structure and other factors create some uncertainties about elasticity of demands for capital funds with respect to interest rates. Consequently, efforts by the Treasury to compete for large amounts of longer term funds at times of economic expansion has to avoid producing discontinuities in the capital markets.

While recognizing limitations, both conceptual and practical, upon the contribution that debt management may be able to make to countercyclical policies, it is also necessary to recognize that failure to take into account the effects of debt management decisions upon liquidity and the availability of funds at different maturities would be a mistake. Treasury debt management policies that allow the debt to shorten during periods of economic expansion, through failure to issue enough longer term obligations to maintain the maturity structure, may help to swell the flow of funds into the capital market. To the extent that these portfolio adjustments include, at the short-term end, the purchase of near-money assets by nonbank investors out of idle balances or from an enlarged current cash throwoff, the new financing provided would not come from the savings process but from an increase in the velocity of money. If the Treasury did not issue at least enough intermediate and longer term securities during periods of economic expansion to prevent the maturity structure of the debt from shortening significantly, debt management would necessarily increase the burden upon monetary policy in maintaining noninflationary financial conditions.

The Treasury should always manage the debt with the objective of minimizing interest costs so long as this is consistent with other important public interest objectives. What is less or more costly in the selection of new securities is not always easy to determine from a longrun standpoint. With 3-month Treasury bills (October 1959) trading around 4 percent and the 1-year rate around 5 percent, it is at least arguable that the piling-up of short-term debt which will have to be refunded at these rates is a more costly course than would have been the funding of part of this debt through the issue of additional amounts of intermediate and long-term securities at some time in the past when long-term rates were lower than bill rates are now, though well above bill rates at that time.

An important factor bearing on the longrun interest cost of the Federal debt is the number of times that the Treasury has to come

to the market during successive time periods for large-scale borrowing operations. Frequency and scale of borrowing will affect both the selection of maturities and the interest rate that the Treasury is obliged to pay. For the Treasury to be in a position to minimize its long-run costs of borrowing, as well as to have flexibility in adapting the maturity of its obligations to the liquidity needs of the economy, it must attain and maintain a well spaced maturity structure for the existing very large Federal debt.

A special consideration in connection with the present maturity structure of the debt, with its short average of about $4\frac{1}{2}$ years and frequent trips by the Treasury to the market for large financings, is the recurrent uncertainties in, and pressures on, the market which this repetitive borrowing produces, with adverse results both for monetary policy and constructive debt management policy. While it has been possible to eliminate part of this "impact effect" of Treasury financing through a program of routinizing the refunding of short-term and seasonal debt, there is a limit to the extent to which short-term debt can be employed and there remains the problem of refunding other debt elements as they reach maturity.

A further consideration in the Treasury's selection of maturities to offer is the need to avoid such inflationary influences as may stem from the management of the public debt. This consideration is discussed in the answer to the following question.

QUESTION

E. Theory of debt management:

(2) Is the issuance of short-term debt during periods of economic expansion inflationary? If so, why?

ANSWER

When short-term debt is employed in a period of economic expansion to finance a budgetary deficit, or when short-term debt is relied upon at such times to refinance longer term securities, the net effect will tend to increase inflationary pressures. To the extent that new short-term debt simply refunds existing short-term debt, of course, the net effect in most instances and conditions would be neutral in that the refundings would not influence whatever degree of inflationary pressures might exist at the time.

Consider first the effect of using short-term debt to finance a budgetary deficit. The net expenditure by the Treasury is reflected in the absorption of physical goods, labor, or services; that is to say, income is generated in the process. The net effect from the expenditure side upon the level of aggregate demand and upon the flow of funds is identical to that in any deficit sector which relies upon credit to finance its deficit. If short-term financial assets are used to finance the net Government deficit, these assets are, as a general rule, of interest as investments mainly to commercial banks or to those investors seeking an interest return on excess or temporarily idle cash balances.

If the new short-term securities are absorbed by commercial banks without any reduction in other assets, it is clear that the Government deficit has been financed without a net withdrawal of funds from other portions of the flow of funds, and the effect is an addition to expenditures that may be inflationary.

If, on the other hand, the short-term securities are purchased by nonbank corporations or other investors as money substitutes, the funds are derived either from idle balances, leading to an increase in velocity of money, or from the current cash flow. If the latter, there has been an offsetting withdrawal from the current flow of funds equivalent to the net expenditure by the Treasury, and the immediate effect may not be inflationary. But the investor in this instance has purchased the money substitute only as a temporary lodgment for a momentary excess of liquid funds (which may indirectly have grown out of the Treasury financing itself if the new securities were underwritten initially by commercial banks), and there has not been a real diversion of current income to savings.

Another way of stating this point is that the investor's attitude toward the scheduling of future expenditures for such items as plant, equipment, or inventory is probably the same after purchasing the short-term Government securities as it would have been if cash had been held instead. There has been no diversion of funds from other purposes for the purpose of financing the Government deficit as there presumably would have been if the deficit had been financed through the issue of longer term obligations. In most instances, longer term securities are purchased by investors with the view that this is a long-range employment of funds that makes those funds unavailable for other purposes.

Reliance upon short-term financing also may be inflationary when the budget is in balance and new Treasury securities are issued solely for the purpose of refunding outstanding debt. In this case, if the Treasury confines its financing wholly or largely to short-term obligations, the effect will be a tendency for the outstanding debt to move toward shorter maturities. If allowed to proceed for any period of time, this shortening of the maturity structure of the debt can lead to a change in the character of large amounts of debt; investment-type obligations are replaced by potential money substitutes. Where this process occurs in a period of economic expansion, the net effect of the increased flow of short-term obligations to holders acquiring them as money substitutes, and the concomitant shortening of the maturity of existing obligations outstanding—in effect, a release of long-term funds—has the same inflationary influence as that involved in the financing of a deficit at short term. The only way in which the Treasury can avoid this inflationary effect is to issue enough intermediate and longer term obligations to offset the shortening of the outstanding debt with the passage of time.

This analysis of the inflationary effects of reliance upon short-term financing on money velocity has dealt only with what might be termed the first round effect upon the flow of funds. In addition, there is an effect of longer duration upon liquidity which tends to maintain the new levels of money velocity. To the extent that the short-term Treasury securities are money substitutes, they tend to be treated for cash flow purposes as the equivalent of cash. Thus, higher levels of money expenditures are supported upon a monetary base in which growth of the money supply proper has not been necessary, but in which money supply plus money substitutes have grown appreciably.

A special inflationary effect of Treasury reliance upon short-term financing should be mentioned. The piling up of short-term debt forces the Treasury to finance more frequently in refunding its debt.

As pointed out in the answer to question II(A), the execution of Federal Reserve policy is impeded by frequent Treasury financing operations, and the effectiveness of the Federal Reserve System in resisting inflationary monetary and credit developments is thereby lessened:

III. PERFORMANCE OF THE MARKET FOR TREASURY SECURITIES

QUESTION

A. From the viewpoint of aiding the conduct of an effective monetary policy, should the market for Treasury securities be so organized as to make it possible for transactions of relatively large volume to take place with only small price changes? Or would it be better if the market were so organized as to require relatively large price movements, even for transactions of small volume? Or does the best arrangement lie somewhere in between these two extremes? If so, where?

ANSWER

The Government securities market may be said to perform a three-fold role. First, it provides a medium which aids the Government in financing its vast public debt through the temporary underwriting of amounts of new issues not taken in the first instance by more permanent holders. Second, it provides a mechanism that makes possible the liquidation of savings held in the form of Treasury securities when necessary by shifting such holdings to other investors. And third, it provides facilities for banks and other holders of liquid funds to obtain some return on their holdings and yet be able to turn them into cash promptly when needed.

It is principally in connection with the last of these functions that monetary policy operates, although monetary policy is also concerned with the proper performance of the other functions. With respect to the other functions, in fact, it may be said that from the standpoint of conducting effective monetary policy, the most important requisite of the Government securities market is that it reflect the long run market forces of demands for and supply of savings. This means that it should be so organized as to include a sufficient number of professionals or other participants who have information and judgment as to these forces, and who are able and willing to take positions in support of their views so as to ameliorate the influence of temporary forces that might otherwise cause unduly wide price fluctuations.

The type of price performance in the Government securities market most conducive to the conduct of an effective monetary policy is one in which price changes are not so extreme that they prevent the maintenance of a relatively large volume of continuous trading. This desired relationship between volume and price applies with particular weight to the market for short-term Treasury securities, but in markets for longer term issues it is also important to have continuous trading. In the case of the latter, however, moderate daily price changes are not inconsistent with rather wide price swings over the cycle.

The need, for monetary policy purposes, for a continuously operating market reflects the very close contact that exists between monetary

actions and the Government securities market. This contact occurs in two ways, (1) through the direct entry of the Federal Reserve into the market to buy or sell Government securities in the exercise of open market policy, and (2) through the much larger secondary buying and selling operations in Treasury issues set off among commercial banks and other investors when changing economic conditions and countercyclical monetary actions change the general availability of credit and money relative to borrowing demands.

From the standpoint of conducting effective monetary policy, the market for Government securities must obviously be sufficiently active to accommodate the direct transactions of the Federal Reserve. This need cannot possibly be realized, however, unless the market is also sufficiently broad and continuous to accommodate the much larger aggregate volume of transactions undertaken by other investors as a means of adjusting portfolios to changes in individual commitments as well as to Federal Reserve actions that affect the reserve base of the commercial banking system.

If the Government securities market were not sufficiently continuous to permit regular accommodation of portfolio adjustments by other investors, the reaction of the economy to changes in monetary conditions would become uneven and abrupt. For example, if commercial banks—in a period of rising monetary restraint—suddenly found they could no longer sell Government securities to adjust reserve positions even at appreciable price concessions, new bank lending could be abruptly curtailed, and this could lead to a severe restriction on the availability of credit to businesses at a time when the liquidity of their own Government security holdings was also being adversely affected.

A Government securities market in which relatively large price changes occurred on even a small volume of trading would probably be characterized in practice by periods of discontinuous trading in which investor portfolio adjustment could not be regularly accommodated. In such a market at times of rapid economic adjustment, large, abrupt changes in Government security prices might generate expectations of further large changes and cause rapid cumulative price movements that would inhibit trading. The danger that monetary actions in a market of this type might lead to disruptive price changes would hamper the usefulness of such actions for purposes of fostering economic growth and stability.

A Government securities market in which a relatively large volume of trading can be accommodated with only moderate day-to-day changes in prices seems less likely to be vulnerable to periods of disorderly conditions. In this type of market, investors can make adjustments in their Government security portfolios on a more continuous basis, and the general response of the economy to a changing money and credit situation can be carried out more smoothly, with less disruption to market expectations and less risk of possible constriction in general credit availability resulting from market instability.

Any attempt, however, by official instructions to maintain a Government securities market in which holdings of all maturities could be liquidated at will with little change in prices over economic cycles would, of course, provide excessive liquidity to investor portfolios and would be inconsistent with an effective monetary policy in periods of strong inflationary pressures. This would be particularly true if

prices did not respond to changes in the volume of securities bid or offered. When, as during the period prior to the Federal Reserve-Treasury accord, lending institutions can readily dispose of relatively large blocks of long-term securities with little concession from quoted prices, the excessive liquidity is almost bound to generate inflationary pressure.

A market characterized by continuous trading and only moderate day-to-day price adjustments need not, however, result in excessive liquidity; for a continuous market in this sense and wide adjustments of prices and yields to cyclical developments in economic and credit conditions are wholly consistent. In periods of monetary restraint, declines in security prices will reduce the general liquidity of investor portfolios and operate to reinforce monetary objectives. Such reductions in portfolio liquidity will operate to discourage the sale of Treasury securities to obtain cash, but they will not lead to such illiquidity as would handicap the continuous functioning of financial organization.

A Government securities market in which individual transactions of moderate size can be absorbed with little impact on prices is likewise essential to the technical conduct of Federal Reserve open market operations. The bulk of these operations is not designed to ease or tighten bank reserve positions, but rather to offset seasonal and other fluctuations in the supply of reserves caused by changes in other factors affecting reserves—principally gold and currency flows, changes in Federal Reserve float, and changes in required reserves. Operations of the latter type are designed to prevent fluctuations in these other factors from producing effects on bank reserves inconsistent with the degree of ease or restraint set by policy objectives at the time. Such operations are most effectively conducted if the price impact of System buying or selling is kept at a minimum. This end is accomplished when System transactions are confined to the short end of the market.

To offset seasonal swings in bank reserve positions within the year, aggregate changes in Federal Reserve security holdings may total as much as \$1.5 billion over the course of a few months, and in some weeks of peak seasonal movement they may amount to several hundred million dollars. On the other hand, gross open market operations in any one year designed to ease or tighten bank reserve positions for the purpose of promoting orderly economic growth tend to be smaller and more evenly distributed.

Forces of credit demand typically press against available credit supply, including bank credit, in times of economic expansion, and this pressure relaxes in times of recession. Federal Reserve open market operations must take into account these swings in market pressures. In some cases when the System is seeking to change bank credit availability, seasonal factors may already be operating strongly in the desired direction. At times such factors provide or absorb more reserves than are needed to achieve a change in reserve availability sought by the Federal Reserve, thus requiring offsetting Federal Reserve open market operations. In short, there is frequently no correlation between the direction of change in System reserve objectives and the side of the market on which open market operations are actually being made at the time.

In any consideration of monetary policy and price changes in Government securities, it should be remembered that the major impact of Federal Reserve open market operations on money and credit conditions results from their effect on the volume of bank reserves made available to commercial banks rather than from their direct effect on Government security prices. Fundamentally, this is true because each dollar of reserves released or withdrawn in our fractional reserve system of banking has a multiple impact on the resulting additions to or subtractions from bank assets; whereas each dollar of buying or selling entered into directly for the open market accounts counts for only \$1 in its impact on market supply or demand. The widespread reserve effects of open market operations on buying and selling propensities of banks and other investors are thus distributed widely, by means of arbitrage and substitution, to all sectors of the Government securities market and beyond this market to interest yields in other securities markets.

QUESTION

B. Does the discharge by the Federal Reserve System of its responsibilities for controlling the money supply seriously affect the normal functioning of the market for Treasury securities? Does it hamper debt management operations? Are the characteristics of the market for Treasury securities such as to limit the Federal Reserve System in the discharging of its responsibility?

ANSWER

The discharge by the Federal Reserve System of its responsibility for monetary policy does not materially hamper debt management operations nor affect the normal functioning of the market for Treasury securities at times of debt management operations. Federal Reserve "even keel" policies are specifically intended to avoid such interference with the Treasury or with the market. The characteristics of the market for Treasury securities need not limit unduly the Federal Reserve System in discharging its responsibility. As discussed in the answer to question II-A, however, the timing, degree, and speed of System action have often been affected by the frequency and magnitude of Treasury financing operations and the market uncertainties generated by these operations.

Federal Reserve policies aimed at regulating credit and money supplies do, of course, affect the demand for Treasury securities. When Federal Reserve policy is aimed at encouraging an easy availability of funds, the demand for Government securities (and other marketable debt instruments) will tend to run ahead of current supply at prevailing rates of interest, and the reverse situation will prevail when Federal Reserve policy is attempting to restrain the availability of new credit funds. Federal Reserve actions, it should be pointed out, do not determine the broad trends in interest rates; they have a modifying effect. In periods of contraction, Federal Reserve policy generally functions to increase credit availability, even though credit demands are contracting, thus accelerating the decline in interest rates. In periods of expansion of credit demands, on the other hand, the System generally endeavors merely to restrain the rate of expansion

in credit and money, not to bring about an actual reduction in the credit and money supply.

If the reference in the question to effect upon the "normal functioning of the market" is meant to suggest something other than a market influence of the sort described above, the answer is that the Federal Reserve System does not materially affect normal market functioning. The function of the Government securities market, as of any market, is to establish an equilibrium price at which the market is cleared. Federal Reserve operations do not hamper the establishment of such a price.

In spite of every effort to avoid such a result, policy actions by the Federal Reserve have at times had an effect upon the outcome of Treasury debt management operations. Normally it is desirable that there should be a considerable period of time between the termination of a debt management operation and a Federal Reserve policy move. Depending upon the size and characteristics of the Treasury financing, there is likely to be an undigested supply of the new issue, and of other issues that have been sold to purchase the new securities, in the market for some time after the completion of the operation. Because Treasury debt operations have sometimes occurred at short intervals, the Federal Reserve System has found it necessary to take policy actions at times when undigested Treasury securities were still available in the market; the alternative would have been a protracted delay before the System could again have found an opening between Treasury debt operations. In the meantime, prevailing tendencies toward excessive credit expansion could have proceeded unchecked. That is why the Treasury tries to schedule its financing insofar as possible to allow time intervals sufficiently long to enable the Federal Reserve System to take policy actions when appropriate and without fear of disturbing effects upon Treasury financing.

QUESTIONS

C. Has the performance of the market for Treasury securities, as measured by price volatility, been satisfactory in the period since mid-1953? Has this performance been better than in the period prior to mid-1953?

D. What criteria other than price volatility should be used in evaluating market performance? According to these other criteria, has the market for Treasury securities performed satisfactorily in the period since mid-1953? In particular, has it performed better than in the period prior to mid-1953?

COMBINED ANSWER

Price volatility in the Government securities market can be considered either in terms of short-run movements—i.e., the amplitude of hourly, day-to-day, or week-to-week price fluctuations or in terms of longer run price swings over economic cycles. Any discussion of price volatility in either of these respects applies principally to securities of intermediate and long maturity, since short-term issues because of their near maturities are relatively stable in price.

The accompanying tables provide rough measures of changes in the volatility of Government bond prices since the Treasury-Federal

Reserve accord in March 1951. Table I summarizes maximum and median week-to-week changes in Government bond prices within half-year periods. It shows that such changes were widest in 1957 and 1958. In the other years since 1951, the relative volatility of week-to-week price changes was quite similar.

Table II gives the overall size of price changes for long-term bonds and the average change per month from lows to peaks, and peaks to lows over cyclical price swings following the Treasury-Federal Reserve accord. This table shows that price volatility for long-term bonds was greatest for the 1957-59 cycle.

TABLE I.—*Week-to-week changes in prices of Treasury bonds, half-year periods, 1951 to mid-1959*¹

	Maximum weekly change	Median of weekly changes (ignoring signs)		Maximum weekly change	Median of weekly changes (ignoring signs)
1951—March to June.....	-\$1.56	\$0.56	1955—July to December..	-\$0.97	\$0.44
July to December.....	-1.03	.38	1956—January to June....	-1.59	.47
1952—January to June.....	+ .88	.34	July to December....	-1.91	.53
July to December.....	-1.19	.38	1957—January to June....	-2.56	.72
1953—January to June.....	-1.94	.38	July to December....	+2.63	.81
July to December.....	+1.56	.44	1958—January to June....	-1.94	.94
1954—January to June.....	+1.81	.50	July to December....	-2.06	.97
July to December.....	- .69	.34	1959—January to June....	+1.69	.56
1955—January to June.....	-1.09	.44			

¹ Changes are for the Treasury bond issue showing the largest price fluctuation in each statement week within the period.

TABLE II.—*Cyclical swings in prices of Treasury bonds from Treasury-Federal Reserve accord to mid-September 1959*¹

Period	Total amount of price change	Average price change per month
Mar. 1, 1951 (accord) to June 1, 1953 low.....	-\$11.23	-\$0.42
June 1, 1953 low to Aug. 3, 1954 high.....	+13.26	+ .95
Aug. 3, 1954 high to Oct. 17, 1957 low.....	-19.76	- .51
Oct. 17, 1957 low to Apr. 21, 1958 high.....	+10.88	+1.81
Apr. 21, 1958 high to date (Sept. 14, 1959).....	-17.78	-1.05

¹ Comparison from Mar. 4, 1951, to June 6, 1953, is for the weekly average of prices of bonds in the Federal Reserve "old series"; after June 6, 1953, comparisons are for weekly averages of prices of 3¼ percent bond of 1978-83.

The tables show that mid-1953 is not a particularly significant reference point for evaluating variation in the volatility of Government security prices since the Treasury-Federal Reserve accord. Presumably, it has been selected for reference dating for these questions because of the important changes in Federal Reserve techniques of open-market operations adopted about that time.

Answer to the question whether recent bond market performance has been satisfactory calls for some standard against which to judge market performance. The greater amplitude of cyclical price movements in Government securities in recent years reflects in part re-establishment of flexible monetary policy. As a result, Government securities prices have responded to changes in the intensity of demand for credit and capital relative to the supply resulting from changes in the level and pace of economic activity. Clearly, if bond prices

had remained inflexible under these changing conditions, large Federal Reserve support operations would have been required and regulation of the expansion of bank credit and money would have been nullified.

Recognizing that rigid bond prices would have represented unsatisfactory market performance, the question remains whether the degree of price volatility that did occur was excessive. An answer to this question requires, first, consideration of the factors responsible for the price behavior since mid-1953 and, second, the application of appropriate criteria for evaluating recent market performance.

Factors affecting price volatility since mid-1953

Since price movements are reflections of the background influences that affect supply and demand conditions in the market, no judgment of the relative performance of the market before and after mid-1953 can be based on the price record alone. When the background factors lying behind price movements are different in two periods, the fact that price developments also differ does not necessarily mean that the technical functioning of the market was any better in either period. The relevant judgment to be made is whether the market in the one period performed as well as it did in the other in terms of the conditions it had to face.

Looking behind the price record of before mid-1953 and after, it is clear that the background conditions which the market had to face in the two periods were quite different. At the time of the Federal Reserve-Treasury accord the economy was beginning to move into a more stable phase following the Korean war inflation, and between mid-1951 and mid-1952 this relative stability continued, with money conditions in a generally neutral state. Over much of the period, participants in the Government securities market were more concerned over the possibility of recession than over any other departure from the prevailing economic stability. Following the conclusion of the 1952 steel strike, a sharp scramble for inventories developed, accompanied by a rapid rise in credit demands; only then did monetary pressures become more acute, and only then did the Government securities market come under significant pressure. In the first half of 1953, pressures on the Government securities market intensified.

In contrast to the relative economic stability of most of the period before mid-1953, the period since has been marked by two full economic cycles—i.e., two recessions and two periods of expansion. The first recession was followed by a vigorous period of investment boom, accompanied by strong inflationary pressures. Although the recession of 1957-58 was the sharpest of the postwar period, it was followed by an unexpected and unusually sharp recovery, which has led again to economic expansion with a potential of inflationary boom. Reflecting these rapid cyclical swings in economic activity and resulting shifts in the intensity of credit demands, it is not surprising that Government security prices have moved over a much wider range than was the case from 1951 to mid-1953.

Moreover, a special complicating influence on the Government securities market during the recent period which was not present before mid-1953 has been the changed fiscal position of the U.S. Treasury. During fiscal 1959, a combination of very large increases in Federal spending and no increase in tax receipts forced the Treasury to bor-

row (net) more than \$8.5 billion.² This added demand for funds at a time when other borrowing demands were also rising created great pressure on securities markets—particularly that for Treasury issues. In the period before mid-1953, the Treasury was a net borrower of only \$3 billion in the period of rising bond market pressures from mid-1952 to mid-1953, while during fiscal 1951 and 1952 it made net debt repayments of more than \$6 billion. Net debt repayment of nearly \$5 billion by the Treasury in fiscal 1956 also helped to moderate pressures on the Government securities market during the early phases of the 1955-57 boom, but thereafter while other borrowing demands rose, the surplus position of the Treasury was eroded—leading ultimately to the large net cash borrowing of fiscal 1959.

Therefore, in view of the wide differences in background influences affecting the Government securities market before and after mid-1953, no very meaningful judgment can be made on the basis of relative price volatility alone as to the relative performance of the market during the two periods.

Criteria for evaluating market performance

Apart from price volatility, a number of other criteria may be applied in evaluating the performance of the Government securities market since mid-1953. These other criteria relate directly to operational characteristics of the market.

Broadly, market performance may be judged in terms of how well the market serves the needs of buyers and sellers of Government securities. Performance may be further judged in terms of how accurately the market reflects in prices and yields underlying patterns of demand and supply, and of how smoothly the maturity structure of yields adjusts to changes in supply and demand in different sectors of the market.

Making of markets and serving the needs of buyers and sellers

The primary function of a market, however organized, is to provide the facilities which permit all willing buyers and sellers to effect trades with reasonable promptness at mutually acceptable prices. A well-working market provides these facilities at minimum cost so that investors may earn the largest possible net return on their purchases and may alter the composition of their portfolios at the lowest possible expense. These facilities, moreover, should be available to all potential market participants, large and small, on a low-cost basis. A market which serves efficiently the needs of all investor groups permits the execution of a large volume of trading and encourages the development of broad participation; these in turn contribute to satisfactory performance of the market in terms of price and yield relationships.

The Government securities market has performed satisfactorily the basic function of serving participants and making markets. This was the consensus of the group of knowledgeable observers who discussed questions of market performance at some length during the consultation phase of the recently completed Treasury-Federal Reserve study of the Government securities market. Among the ob-

² In June, just before the beginning of the fiscal year, the Treasury borrowed \$1.1 billion and began the year with an unusually large cash balance, that was drawn upon to finance part of the fiscal 1959 deficit of \$13 billion.

servers associated with institutions that invest heavily in Government securities, there was agreement that, even with the greater volatility of prices recently, the market has functioned satisfactorily. Most stated that, with a little patience, they had usually been able to complete promptly orders of moderate size at acceptable prices and larger orders after reasonable time lapse.

Participants in the Government securities market generally acknowledge, however, that at times particular issues have been temporarily in scarce or redundant supply. Dealers' efforts to meet demands for scarce securities have sometimes been unsuccessful, partly owing to their inability to borrow the required issues for purposes of making short sales. At other times, when prices of Government securities have been falling sharply and offerings have exceeded bids, dealers have been reluctant to take on more than small amounts of securities at their quoted bid prices and have handled larger transactions as brokers rather than dealers. Both dealers and customers who participated in the Treasury-Federal Reserve study stated that trading became especially difficult in mid-July 1958 when the crisis in Lebanon and Iraq coincided with a large Treasury refunding. In fact, in the view of the majority, the market on July 18, 1958, actually became disorderly in the sense that bids were lacking and selling was becoming cumulative, producing accelerating price declines. The Federal Reserve intervened to help correct this disorderly situation.

Several consultees pointed out, nevertheless, that even during the summer of 1958 markets in Treasury issues were active and a sizable volume of trading was completed. They suggested that some of the complaints of market thinness heard from customers at the time really reflected their unwillingness to accept realistic prices at which securities could be moved. Complaints of market thinness were also attributed in some cases to an overhasty comparison of bond trading under recent conditions of monetary restraint, with pre-Federal Reserve-Treasury accord trading volume when even long-term bonds were fully liquid because the System was supporting their prices. Statistics on dealer trading volume collected in connection with the Treasury-Federal Reserve study support the view that a sizable volume of activity in Treasury issues continued to take place in the summer of 1958 during the months of rapid price decline.

In general, the volume of trading in Government bonds of intermediate- and long-term maturity has followed a cyclical pattern since the Treasury-Federal Reserve accord, rising to peak levels in periods of recession when Treasury offerings of new issues have been larger and falling off during periods of economic expansion. Throughout the cycle activity has been highest during weeks of Treasury financings when investors were making adjustments in their portfolios in response to new offerings and when new issues were being redistributed by dealers and other temporary holders among ultimate holders. A special factor tending to limit market supply and activity in medium- and long-term Treasury securities during recent periods of rising interest rates has been the unwillingness of many holders to realize the capital losses that would result from their sale. Volume in such issues was particularly small in the first three quarters of 1957 and has been small again in the summer and fall of 1959.

Views among consultees as to the influence on trading volume of wider price swings in Treasury issues over the recent economic cycle were varied. Several cited cases of individual investors who have come to feel that Treasury issues have lost some of their attractiveness as investment media because of increased price risks. Most, however, were of the opinion that the major institutional holders of Government securities would continue to show an interest in Treasury issues whenever their yields were attractive relative to yields on other investment alternatives.

The Government securities business is highly competitive. As a result of pressures to obtain business, bid prices quoted by one dealer cannot long be significantly lower than those of other dealers nor can offered prices long be significantly higher. In consequence, nearly uniform market prices are formed at which trading in volume can take place. Because of competition among dealers and a large volume of trading, spreads between bid and offered prices are narrow and the transactions-cost to participants in the Government securities market is comparatively small.

Large-scale participation in the Government securities market is confined to banks, other savings institutions, nonfinancial corporations, and other institutional investors. Prices and spreads quoted by dealers, therefore, relate to the large orders received from such investors.

At interest levels prevailing until recently, individuals have generally preferred investments other than marketable U.S. Government securities as outlets for their savings; hence, the total volume of transactions from this source has been comparatively small and orders tended to be in odd-lot sizes. These relatively small orders have usually been processed through the customers' own banks and, according to reports, have generally received prompt service at reasonable prices.

Many of the consultees for the Treasury-Federal Reserve study were of the opinion that the charges on small-lot orders are below costs, resulting in less expensive service than could be expected for orders of similar size in other financial markets. Some nonbank dealers testified to the effect that they have little interest in handling odd-lot orders, but bank dealers as well as other banks indicated that they regularly render such service as an accommodation to customers.

Flexibility of prices and maturity structure of yields

A market which performs satisfactorily the function of bringing buyers and sellers together is likely also to be one in which prices reflect accurately the overall patterns of demand and supply. Prices which are formed under conditions of competitive trading tend in ordinary circumstances to clear promptly all effective buy-and-sell orders. Since supply and demand conditions change, prices in a well-functioning market must be free to vary.

Markets for U.S. Government securities in recent years have generally met satisfactorily standards of responsiveness to shifts investor supply and demand. Trading and positioning of securities by dealers and other informed market professionals have provided an important degree of continuity over time in prices and yields so that the price and yield effects of temporary fluctuations in investor demand have usually been ironed out while more lasting shifts have been reflected

in price quotations. Because of the large volume of retail transactions relative to the aggregate resources of dealers, dealers cannot maintain price quotations which over a period do not approximately equate purchases from and sales to their customers.

Owing both to professional activity and to portfolio adjustments of investors, market yields on the various maturities of U.S. Government securities have generally had consistent and smooth patterns. Yields on issues of similar maturity are ordinarily closely comparable; continuing differences in yields on certain adjacent issues ordinarily reflect special advantages—relating to such matters as tax treatment, current interest income, or maturity date—which attach to the issue showing the lower yield.³

Changes in supply or demand in one sector of the Government securities market tend to be promptly transmitted to other sectors of the market. A high degree of correlation exists in the direction of change in market yields on short- and long-term Treasury securities when yields in both maturity sectors are averaged over only a few weeks. This process, which helps diffuse the effects of change throughout the market, reflects the ready substitutability in investor portfolios of issues in adjacent maturity sectors as well as arbitrage activity on the part of market professionals.

Linkages in yield relationships are close not only within the Government securities market but also between this market and markets for other securities. Changes in yields and interest rates in a particular securities or loan market, consequently, reflect the supply-and-demand conditions in the economy as a whole as well as the specific pressures which are acting on the particular market. The Government securities market in recent years has filled a central role in this interconnecting system of financial markets.

At the same time, it needs to be kept in mind that, in periods of important shift in credit and capital market conditions, rapid changes in Government securities prices may encourage undue speculation in these securities. Both the Treasury and the Federal Reserve System have to keep alert to these disruptive developments and to take them into account in determining their respective policies. Unstabilizing speculative developments in the market, such as occurred around mid-1958, need to be averted to the extent possible, recognizing, however, that risk of some speculative instability in the market at times is a cost that has to be paid for market fluidity and flexibility.

QUESTION

E. What is the outside limit on the amount of securities the Federal Reserve System can sell (or buy) per period of time without "disorganizing" the market for Treasury securities? On what factors does this outside limit depend? Has this outside limit increased, decreased, or remained constant over the last few years?

³ A security carrying a higher coupon may be preferred by investors who are more interested in current income than in yield to maturity. On the other hand, the lower coupon issue selling at a discount from par may provide a higher after-tax yield to maturity for investors subject to higher bracket income taxes, because of the lower tax rate on capital gains than on current income, if they are willing to wait until maturity or liquidation to obtain part of their return.

ANSWER

The concept of an "outside limit" beyond which Federal Reserve purchases or sales in the Government securities market cannot go without leading to disorganization has two possible interpretations. One considers only the immediate market impact of System actions on supply or demand in the particular issues being traded; the other is concerned with the much broader influences on the Government securities market that develop in response to the effects of open market operations on bank reserves.

Immediate market effects of open market operations

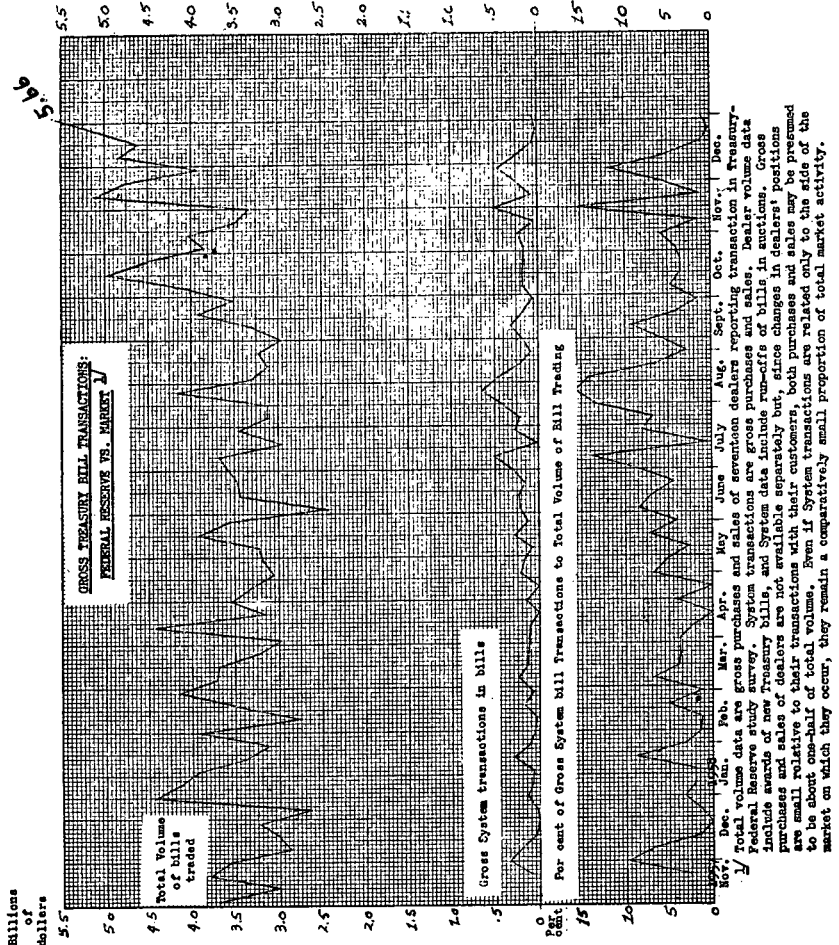
In recent years, System market actions have been concentrated in Treasury bills. Over this period, there is no record of disorganization in the Treasury bill market caused by the sheer weight of Federal Reserve purchases or sales. Therefore, no specific examples of "outside limits" to Federal Reserve open market operations can be cited from experience. In practice the System account manager has been able to buy bills as needed from the market, the market has never failed to absorb System offerings, and for the most part Federal Reserve operations have been accommodated with little influence on yields.

The account manager, moreover, has not been deterred by unfavorable technical conditions in the market from effecting the reserve changes judged to be necessary for achieving open market objectives. On occasion when the System has been active in size on one side of the market for a sustained period of several days, there has been a perceptible response of yields—though no larger than yield changes in some other periods when the System has been entirely out of the market. Normally, the instances in which market responses in bill yields to Federal Reserve operations have appeared to be significant, have been situations in which the weight of other market transactions has been on the same side of the market as the System action.

An explanation for the generally smooth market accommodation of Federal Reserve operations in recent years is suggested by the attached chart which shows the ratio of gross System transactions in Treasury bills to the total volume of dealer bill trading.⁴ The figures charted are gross totals by statement week and include operations on both sides of the market. The chart points up the very large trading volume that typically occurs in the Treasury bill market. It also shows that with only a few exceptions the share of total weekly volume represented by System bill trading in late 1957 and 1958 was well under 10 percent. The higher share of the market represented by System actions in late July, and early August 1958—around 15 percent—reflects heavy sales and redemptions of bills from the open market account to offset the redundancy of reserves created at that time by System support purchases of "when issued" certificates in the August 1958 refunding. The higher share in late June 1958 represents seasonal buying to prepare for the July 4 currency outflow, and the higher shares at the end of November 1959 and in December 1958 reflect purchases to meet normal year-end reserve needs.

⁴Data on dealer trading volume were obtained from the recently completed "Treasury-Federal Reserve Study of the Government Securities Market."

In all of these cases the absolute volume of System trading was quite large, yet conditions in the market were highly receptive, and System operations were easily accommodated.



Broader reserve effects of open market operations

Interpreting the concept of an "outside limit" in terms of the broader reserve effects of open market operations, the question appears to ask: first, how large a volume of securities can the Federal Reserve sell before the resulting restraint on reserves will cause disorderly price declines in Treasury bond markets; and, second, in the opposite phase of the cycle, how far can security purchases be pushed to ease bank reserves before the bond market becomes disorganized on the upside, by a speculative scramble to share in expected price advances?

In this context, the concept of a fixed "outside limit" on Federal Reserve buying or selling must take into account the fact that open market operations are not the only factors affecting the volume of bank reserves—the other major factors being gold movements and

changes in float, currency in circulation, and required reserves. Thus, there is no necessary correlation between the amount of securities bought or sold by the System in the market and changes in the net free or net borrowed reserves of member banks. Most open market operations are conducted for the purpose of offsetting temporary and seasonal reserve effects of changes in these other factors. Hence, even large-scale Federal Reserve buying or selling frequently is accompanied by relatively small changes in bank reserve positions. Moreover, in periods when changes in policy objectives do call for a shift in bank reserve availability to ease or restraint, much of the change may be effected technically merely by failing to offset the influence of other reserve factors or by offsetting them in smaller degree than would be the case if reserve objectives remained unchanged.

QUESTION

F. Has the "bills only" policy of the Federal Reserve System strengthened the market for Treasury securities in any way? If so, how? In particular, has this policy had the effect of reducing or of increasing the amount of speculative activity in the market? Why?

ANSWER

The market for short-term securities, particularly bills, is very much broader than the market for longer term issues. The current market for securities purchased or sold by the Federal Open Market Committee, consequently, is much less disturbed when those operations are conducted in short-term securities and when it is generally expected that operations will continue to be conducted in such issues. In this way, the techniques of conducting open market operations in short-term securities, usually bills, have removed one important factor of market uncertainty.

This should not be read to mean that the Government securities market has fully achieved the depth, breadth, and resiliency that is desirable and that was held out as a feasible goal in the 1952 report of an ad hoc subcommittee on the Government securities market of the Federal Open Market Committee.⁵ The market has not been wholly satisfactory in these respects at any time in the postwar period. In the period prior to the Treasury-Federal Reserve accord in 1951, the market, because of Federal Reserve pegs, had no opportunity to develop depth, breadth, or resiliency in the sense in which these terms were used in the ad hoc committee report. Since the accord, the market at the shorter end has attained these qualities in important degree.

Such shortcomings as still persist in the effectiveness of the longer term sectors of the market stem from several basic influences. For one thing, the very large Federal debt, not only the direct debt but also the indirect debt in the form of agency issues, has had to be constantly financed through the market. Even in years of budget bal-

⁵ These terms were defined in the report (reprinted in the hearings of the Subcommittee on "Economic Stabilization," 83d Cong., 2d sess., 1954, pp. 257-307) as follows: "A market which has many orders to buy and sell around the last market price has 'depth.' If it has broad public interest and draws bids and offers from many sources, it is considered to have 'breadth.' If orders pour in with small change in price, it has 'resiliency.'"

ance and surplus, the Treasury and its agencies have had to make frequent trips to the securities market. Thus, except in periods of recession, when demands for Government securities are stronger, investors have seldom had reason to feel that failure to purchase this month would represent opportunity foregone. There was always likely to be another offering of securities in the month or months ahead on as favorable or more favorable terms.

A second fundamental factor has been the persistence of inflationary developments and the increasing acceptance of an expectation of longer run inflationary trends by important and large segments of the financial community. This influence has tended to diminish the incentive to save and invest in longer maturity fixed income securities in general, including Treasury issues, except at interest rates high enough to cover the forward inflation risk. That is to say, the inflationary impulse has worked to narrow public investment interest in the lowest risk, fixed income obligations and has reduced public participation in the market.

A further force adverse to improved performance of the longer area of the Government securities market has been a relative decline in the attractiveness of Government securities as compared with other investment media. Federally insured and guaranteed obligations (regarded by many investors as the equivalent of direct Government obligations), bonds of well-established corporations, and corporate common stocks (partly for participation in the economy's growth and partly as inflation hedges) have all come to compete more actively with Treasury securities for the investor's dollar, with repercussions on the depth, breadth, and resiliency of the longer term sectors of the market.

Finally, in the postwar years, the market has had to cope with a Federal debt of very large size, left as a legacy of World War II. In the immediate postwar period, debt was retired in substantial amounts, reflecting, in part, the availability of larger Treasury balances at the end of hostilities than were needed under peacetime conditions and in part cash surpluses as military expenditures were subjected to sharp curtailment. The effects of both these factors had disappeared when the Korean war broke out. Thereafter, debt held by the public rose during the period of military buildup and the 1953-54 recession, declined in 1956 and 1957, and rose sharply during the 1958-59 recession-recovery period. Thus, in the period since the Second World War there has been no consistent reduction in the large supply of outstanding Government securities, which might have had strengthening effects on the functioning of the market.

With regard to the future, there is no doubt but that the development of appreciable budget surpluses in periods of high activity with which to reduce market supply of Government securities, along with abatement of expectations of creeping inflation, would contribute greatly to the performance of the market in terms of the depth, breadth, and resiliency.

It is assumed that, in the last part of the question, the words "speculative activity" mean "excess" speculative activity. As discussed in the recent Treasury-Federal Reserve study of the Government securities market, there are various kinds of speculation, some contributing to and some detracting from the functioning of markets.

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.⁶

The most active speculation in Government securities, especially speculation financed on credit, centers in notes and bonds, since price fluctuations in these obligations are greater than in short-term securities. The main occasions for speculation of this kind in recent years—in the spring of 1953 and in the spring of 1958—were based on expectations about the broad course that economic activity and the general level of prices might take in the future, along with expectations about the shifts in credit and monetary policy that might be associated with general economic developments. Accordingly, undue speculation of this type has not been related to the particular open market policy by which bank reserves were being made available.

With respect to the specific effects on speculative activity generally of the technique of limiting open market operations to short-term securities, usually bills, it may be said that the procedure has removed one potential element of excess speculation from the market, namely, speculation in specific longer term issues in which open market operations might be conducted. On the other hand, as explained in the Flanders subcommittee hearings of December 1954,⁷ the established technique of conducting Federal open market operations in short-term securities has allayed apprehensions that might inhibit professionals in the market from taking speculative short-term positions in longer term Government securities. Such speculation contributes to the smooth functioning of markets.

One way of exploring further the part of this question relating to effects on undue speculative activity is that of considering the potential impact on speculation of alternative operating procedures that might be followed by the Federal Open Market Committee. The alternatives here reviewed, which are not consistent with one another, have been advocated in some quarters from time to time. After assessing their possible effects on speculation, it will be pertinent to consider some broader effects that would ensue from their application.

⁶ Pt. I, 2. "An Organized Exchange or a Dealer Market?", p. 74 footnote.

⁷ P. 15, answer of the Chairman to question No. 3, hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, 83d Cong., Dec. 6 and 7, 1954.

(1) *Countercyclical purchases and sales of bonds.*—One alternative assumption regarding Federal Reserve operations in the Government securities market might be that during recessions the Federal Open Market Committee would buy long-term securities (bid up market prices and reduce market yields) until economic activity turned up; and, contrariwise, that, during periods of rising activity, it would sell long-term securities (offer securities to reduce market prices and raise market yields) until inflationary developments were brought under restraint. Such a policy could conceivably stimulate a volume of speculative activity that was undue or excessive, since long-term interest rates would probably move over a wider range than if operations were confined to short-term securities. Such speculative positioning, it could reasonably be expected, would endeavor to be on the side of the market on which the System was operating.

The reason for this is that the mere appearance of official buying or selling of long-term securities would probably produce more extreme price effects than would be justified by the amount of reserves released or absorbed at the time. Such effects would tend to be temporary, however, since the basic effects of open market operations on interest rates, both short and long, derive primarily from the amount of reserves released or absorbed.

If official intervention in the longer sectors of the market were confined to stimulating sharp rate adjustments early in the recession and early in the recovery, the volume of speculation over the span of the cycle might be reduced. This, of course, assumes that (1) such periods could be promptly identified; that (2) sharply lower interest rates on Government securities early in recession would not initiate excessive and destabilizing speculation in other financial markets; and that (3) sharply higher interest rates on Government securities early in recovery would not unduly impede recovery. On the other hand, if the market came to expect these early cyclical interventions in the bond market, large-scale speculation might develop and be concentrated in these very short periods of interest rate adjustment. Experience shows that, under existing operating techniques, large-scale speculative participation in the market at cyclical turning points already poses a problem.

(2) *Purchases and sales of bonds to temper swings in bond prices.*—An alternative and conflicting assumption with very different implications is that open market operations in longer term securities would be conducted so that bond price changes would be smaller than would otherwise occur. Under this assumption, the Federal Open Market Committee would sell long-term securities when their prices were rising early in recession to prevent such prices from rising too rapidly; contrariwise, it would purchase long-term securities when they were falling in price during boom conditions to prevent capital losses on long-term issues from becoming "too large."

One aim of the operation here assumed would be to moderate bond price fluctuations, and, if successful, this development might work to dampen the volume of speculation over a cyclical swing. Another aim, however, would be to reduce uncertainty as to the range of fluctuation of bond prices, and over a cycle this development might work to swell appreciably the volume of speculation at potential turning points because possible speculative losses would be more determinable while

the leverage of the speculator who is financing on credit would remain substantial. Thus, despite the smaller possibility of capital gain, more speculative participation could be attracted.

The same type of stimulus to speculation might still develop if, in addition to the above operations designed to lessen the swings in long-term interest rates, the Federal Open Market Committee would simultaneously undertake operations in short-term securities to counter the destabilizing effects on bank reserves of operations in long-term markets. In this case, the Committee would proceed in slumps to purchase even more short-term securities than would otherwise be necessary to ease credit conditions in order to replace reserves absorbed by its sales of long-term securities. Contrariwise, in booms, it would sell even more short-term securities than otherwise, the excess being needed to absorb the reserves provided by its purchases of long-term securities.

(3) *Purchases and sales of bonds to determine the level or range of bond prices.*—A different assumption is that the Federal Open Market Committee would operate so as to take direct responsibility for the level of interest rates on long-term Treasury issues. In other words, it would decide from time to time a level, or range, for prices and yields on these issues that it considered appropriate to the general economic and credit situation. Thus, the Committee would be operating a kind of movable peg.

Under this assumption, the Federal Open Market Committee would need to enforce its decision either by buying or by selling long-term Treasury securities whenever market prices and yields threatened to move out of an established range. In this case, market prices and yields could be kept stable until a definite decision were reached by the Committee to raise or lower them. Whatever the other effects of this procedure, day-to-day speculation would be contained for some periods. Since such a plan of operation would run counter to basic market forces, it could not, in all probability, command market confidence. At the point where market professionals believed that limits to the maintenance of the prevailing range had been reached, speculation against that range could increase sharply to a level likely to be excessive.

Broader effects of alternative open market policies.—If any of the alternative suggestions for open market operations discussed above were to be seriously considered for adoption, there would be certain important economic effects, apart from effects on speculation, that would weigh against them.

With respect to the first assumption, for instance, this pattern of operation would cause market participants to turn from observation of basic supply and demand forces for longer term securities to close attention to the Federal Reserve activity in this area of the market. It would also divert the focus of Federal Reserve operations from regulation of bank reserve positions in accordance with the economy's cash balance needs for stable growth to regulation of levels of longer term interest rates. Releases and withdrawals of reserve funds from the market with this focus would almost certainly prove to be smaller at times and larger at other times than would be appropriate for the economy's cash balance needs. The result would be a loss of control of this strategic quantity, and consequently a loss of control of the

volume of funds available for lending and investing. A further hazard of this method of operation would be that it would undermine the effective functioning of the money and capital markets and, because of instability generated for them, would give rise to secondary and unpredictable instabilities for economic activity and prices generally.⁸

With regard to the second assumption, if the Federal Open Market Committee undertook operations in bonds to minimize uncertainty as to the range of bond prime movements, these operations would in each case withdraw or inject reserves into the market in the opposite direction to what would be desirable in the interest of economic stability. Unless counteracted in some way, this effect would be to accentuate via monetary fluctuations both the boom and the slump, thus adding to economic instability.

Another effect of Federal Reserve operations to moderate price movements in Government bonds would be that the Federal Open Market Committee would function to prevent long-term interest rates from reaching positions consistent with attainment of economic stability in the sense that bond price and yield movements could not contribute as much to sparking revival during slumps and curtailing excess demand during booms. In slumps as well as booms, changes in short-term interest rates would be relatively greater. More important, it would be very difficult under this plan of operation for the Committee to judge promptly and reliably the effects on credit and capital markets of its releases or absorptions of reserves, and to come to appropriate and timely decisions as to whether to accentuate or temper its policy actions. A new, and an avoidable, uncertainty (and even lag) would thus be introduced into the decision-making process regarding countercyclical open market operations.

Furthermore, the scope and magnitude of the job of the Federal Open Market Committee in attempting to moderate swings in bond prices might be very large, in fact so large that it could not be accomplished without seriously distorting market appraisals of alternative investments and of portfolio maturity distributions. If the Committee operated on opposite sides of the market with respect to short-term and long-term securities, holders of these securities might be induced to sell one and buy the other against the Committee, thus tending to offset the effect of its actions. Consequently, massive amounts of purchases and sales, speculatively motivated, might occur at times.

With regard to the third assumption, finally, if the Committee undertook to maintain an established level or range of long-term bond prices and yields, its operations would greatly increase the liquidity or money quality of all long-term Treasury issues held in the market. If such a policy were rigorously pursued, it could have serious inflationary consequences. For these inflationary risks to be kept within bounds, this type of open market operation would require that the average level of long-term interest rates over time be significantly higher than under the existing operating procedures.

⁸ For a more detailed examination of the effects of Federal Reserve open market operations in longer terms securities, see Winfield W. Riefler, "Open Market Operations in long-term Securities." Federal Reserve Bulletin, November 1958, pp. 1260-1274.

QUESTION

G. Would it be desirable to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Treasury securities? Would this significantly reduce speculative activity in Treasury securities?

Would a reduction in speculative activity in Treasury securities be helpful from the point of view of conducting monetary policy and debt management in the interest of economic stability? For example, has such speculation actually hindered monetary policy or countercyclical debt management policy in the period since the accord?

ANSWER

Whenever Treasury securities are bought in the hope of making a profit from resale before maturity, the resulting position may be deemed speculative from some points of view. Such purchases are often made on a fully paid cash basis, and speculation by holders buying for cash could not be affected directly by a margin requirement. However, there has also existed at times a significant volume of speculation in Treasury securities on a credit basis, and margin requirements could possibly contribute to the limitation of this type of speculation.

Speculation on credit in these securities was particularly important during the economic recession and revival of 1957-58. As pointed out by the study group in the recent Treasury-Federal Reserve study of the Government securities market, credit-financed speculation in connection with the June 1958 Treasury financing appears to have attained an excessive volume, considering the size of the operation. In many cases the speculators financing on credit put up virtually no amount of margin; inadequate margins were especially frequent in connection with credits extended in the form of repurchase agreements. Liquidation of credit-financed positions appeared almost immediately upon the delivery date for the new securities, and this both triggered and accentuated the declining phase of the market.

The wide and rapid price fluctuations in the market for Treasury securities during this 1957-58 period were not only a matter of concern to the Treasury in view of its debt-management responsibilities, but were also of concern to the Federal Reserve because of its responsibilities for overall credit and monetary conditions. Insofar as credit speculation contributed to these price fluctuations, it hindered the conduct of credit and monetary policy.

While credit speculation in the Government securities market did complicate Federal Reserve and Treasury activities in 1958, regulation of such credit by means of required margins or similar measures would, of course, bring disadvantages as well as benefits. First, it should be recognized that those who buy Government securities in hopes of reselling them at a profit are a vital factor in the market. Even the curbing of speculation deemed excessive could, under some circumstances, adversely affect the market structure if it involved rules and regulations of such complexity that the free flow of funds in the regular conduct of the market would be seriously hampered or the costs of doing business substantially increased.

It should also be pointed out that speculation in fixed-interest securities, despite occasional excesses, may be useful to economic stabilization, by channeling short-term bank credit temporarily into long-term investment media in times of recession. There would arise, too, the question whether any margin requirement should be varied upward or downward and if so, when, by whom, and upon what considerations. Speculation in Government securities tends to grow in periods of economic recession when the public might not understand an upward revision of the required margin and the problem of flexible and timely administrative change could be troublesome. An inflexible requirement, on the other hand, might impede the adequate flow of credit into the market at times when it was needed. Finally, of course, any margin regulation, whether variable or fixed, would involve in some degree enforcement problems.

If it were determined that official margin requirement regulation is desirable, the report of the study group (referred to above) suggests that there are three approaches which the Government might consider in dealing with this problem: first, a statement by bank supervisors to each lending institution within their jurisdictions indicating minimum margins to be adhered to as standard; second, a requirement that each holder participating in the exchange of maturing Treasury issues for new issues state his equity position in those securities as being in compliance with the standards that the Treasury would set forth (plus the continuing requirement by the Treasury of appropriate deposits on subscription to its new issues offered for cash); and third, the introduction of a special margin regulation, similar to that now applicable under the Federal Reserve Board Regulations T and U to the purchasing or carrying of corporate securities. The latter type of regulation would require special congressional authorization, since present law specifically exempts Government securities from this type of credit regulation.

The questions of whether there should be official margin requirement action with regard to credit purchases of Government securities, and, if so, the form it should take, are under study, and we are not prepared to make a recommendation regarding the matter at this time.

ANSWERS TO QUESTIONS SUBMITTED TO
DEALERS IN TREASURY SECURITIES

ANSWERS BY DEALERS IN TREASURY SECURITIES

I. DEALER FUNCTIONS AND PRACTICES

QUESTION

A. What functions do dealers in Treasury securities serve?

ANSWERS

Bankers Trust Co.

Dealers provide a national market place for buyers and sellers of marketable U.S. Government securities. They also serve as underwriters and distributors of U.S. Treasury discount bills and other issues of Governments offered for cash or as part of refunding operations.

A broad market in Government issues is required by commercial banks in adjusting their reserve position necessitated by changes in the level of their loans and deposits. Business corporations and public bodies require a fluid market to adjust their cash flow and to invest temporarily proceeds of security flotations. Insurance companies, savings banks, and pension funds investment activity require the maintenance of a broad primary market. Last but not least, John Doe is provided a market at all times in the marketable obligations of his country.

Another important function of the Government dealers is to inform their clients of trends and developments in the money and bond markets and to advise them on their investment problems.

Bartow Leeds & Co.

Depending upon his size a dealer should make reasonable markets in Treasury securities, give sound advice to customers, and supply market information that is factual. He should at all times remember that he is a person of trust and shares a great responsibility.

Briggs, Schaedle & Co., Inc.

The functions of the Government security dealers are, among other things, to make markets in securities of the U.S. Treasury and governmental agency issues; to assist the U.S. Treasury in its borrowing and refunding operations, and to be available to the Federal Reserve System when called upon to assist in its open market transactions.

Chemical Bank New York Trust Co.

The principal function of dealers in Treasury securities is to provide a market for such securities by standing ready to purchase or sell Treasury bills, certificates, notes, or bonds for their own account. Naturally, the amount of securities which any dealer can purchase or offer for sale at any given time is limited by the dealer's capital and

the market exposure. For this reason, a dealer will sometimes act, in effect, as a broker by bringing together a buyer and a seller.

Government dealers as a group serve an important function in the underwriting and distribution of new Treasury issues. This applies to cash offerings and especially to an exchange offering, inasmuch as dealers buy the maturing issues for exchange and make a market on the new securities even before they are issued.

Various services are performed for customers in the form of consultation and advice, as well as the physical handling of the securities. The dealers also perform a distinct service to the Treasury and to the Federal Reserve Bank of New York as agent for the Treasury by reporting daily on market activity and by less frequent consultation in connection with market conditions, and especially in connection with Treasury financing. Government bond dealers are the mechanism through which the Open Market Committee does its buying and selling.

C. F. Childs & Co.

The primary function of dealers is to facilitate the exchange of existing securities among investors and to aid in the distribution of new Treasury issues.

Continental Illinois National Bank & Trust Co. of Chicago

A dealer's basic function is to act as a bridge between the final buyer and seller of Treasury securities. To the best of his ability, he tries to make continuous markets in reasonable amounts within his quoted market. The details of how this is done will vary with changing market conditions. No specific definition of dealer functions could be made that would apply under all kinds of market conditions. In our own case, we strive to have an available supply for security buyers and to furnish a ready market for those seeking to sell. This is possible at most times for transactions of the small and moderate size that account for the bulk of all transactions. In periods of rapidly changing prices, or for transactions involving large amounts, dealers do not always provide an immediate market for Government issues. In recent years, however, the noteworthy feature of the market has been its ability to absorb and trade all maturities if given sufficient time under very adverse market conditions.

C. J. Devine & Co.

(1) To create and maintain markets in all U.S. Government securities and those of its agencies, under favorable or adverse conditions.

(2) To bring buyers and sellers together. Our firm, for example, accomplishes this through the maintenance of our nationwide system of 10 regional offices connected by a direct wire system. This affords us the opportunity of instantly closing a transaction without affecting the market.

(3) To advise and assist institutions in arranging portfolios.

(4) To be willing to take positions in order to help maintain a stable market at all times.

(5) To assist in underwriting and distributing new U.S. Government and agency issues throughout the Nation.

(6) To bid for our own account and to advise customers in establishing their bids for Treasury bill offerings.

(7) To furnish market quotations and other pertinent information continuously during the business day.

(8) To serve in an advisory capacity to the Treasury and governmental agencies regarding the condition of the market for contemplated new issues.

(9) To keep the Federal Reserve bank and open market account informed as to the condition of the market at any given time.

(10) To prepare and distribute by mail informative data, such as daily quotation sheets, weekly bulletins, and monthly yield books, in order to keep all types of investors abreast of the current market.

(11) The extension of our facilities enables banks, brokers, and general securities dealers to give prompt and efficient service to all small individual and institutional investors.

Discount Corp. of New York

The market for Treasury obligations, like the market for other fixed income obligations, is a negotiated market. As in all well developed markets, some mechanism is needed for the arrangement of the negotiation and consummation of transactions between buyers and sellers. This is provided by competing dealers who specialize in trading U.S. Government securities. The present form of organization evolved over the past four decades as an historical response to the changing needs of a growing and diverse group of market participants, both public and private.

The dealers, acting on their own initiative in a competitive search for buyers and sellers, maintain the fullest and most continuous contact with all sources of demand and supply. This contact is essential to the formation of contending judgments as to the prices at which clearances can be readily effected incident to the creation and maintenance of viable markets for Treasury obligations. It is this competitive effort and a willingness to take positions at risk on the part of dealers which provide a flexible market-making mechanism through which transactions can be readily arranged on a nationwide basis capable of imparting the needed breadth and efficiency to the market. Thus a vigorous dealer mechanism plays a large part in the ability of the money and credit markets to give needed liquidity and shiftability to the secondary reserves of the banking system and to the invested reserves of corporations and others.

Apart from its value to investors in effecting ownership transfers, a broad and efficient dealer market for outstanding Government securities is of critical importance to the Treasury and the Federal Reserve System. For the former, it is a prerequisite for attracting a strong primary demand for Treasury obligations on original subscription. For the Federal Reserve System, it is no less important as a responsive mechanism through which open market operations of the Federal Reserve banks can make effective contact with the credit and capital markets.

Dealers also serve an important function as underwriters of Treasury debt on original issue. Under present conditions of credit restraint, dealer underwriting is most aggressive in that area where the market is broadest and the risk is measurable—that is, participation in Treasury bill financing. Some underwriting response from dealers is also forthcoming in other types of offerings but in periods of de-

clining markets and of heavy and frequent Treasury finance the dealer has often been able to perform a more constructive function to the Treasury and his customers by abstaining from original subscription and utilizing his buying power in the secondary market.

Finally, dealers also perform a necessary function in supplying information on market conditions and activity.

First Boston Corp.

(1) As a result of continual contact with potential buyers and sellers throughout the country, dealers provide a marketplace for Government securities at narrow differences between bids and offerings consistent with the supply and demand factors. This is possible because of a specialized knowledge of the market, a willingness on the part of dealers to risk their own capital, and the competitive nature of the business.

(2) At risk to their capital employed, dealers add breadth and liquidity to markets for Treasury issues through utilization of positions—in some instances going long issues to accommodate sellers, and in other instances going short issues to accommodate buyers.

(3) Dealers aid the commercial banks in adjusting day-to-day money positions. This is accomplished by their willingness to take reasonable amounts of short-term securities into position, and their ability either to finance the positions or find other buyers for the securities. In this way, dealers help to balance the supply of and demand for funds throughout the country.

(4) Similarly, dealers are important to the Federal Reserve bank in its open market operations. In addition they continually provide the Federal Reserve with market information.

(5) Dealers aid the Treasury in its financing operations:

(a) By bidding regularly for weekly Treasury bill offerings for later redistribution.

(b) By acting as distributors of new issues in refunding operations; i.e., buying maturing issues from holders not wishing to exchange, converting such "rights" and selling the new issues to other investors. This diminishes potential attrition which the Treasury might otherwise suffer.

(c) By subscribing for cash offerings of other Treasury issues for redistribution to investors.

(d) By supplying the Treasury with information and advice at times of financing.

First National Bank of Chicago

Dealers in Government securities serve as intermediaries between prospective buyers and sellers of the various Government issues; in other words, they provide the facilities whereby buyers and sellers in different localities can obtain bids and offerings in the marketplace without delay. Often times conditions are such that a customer may find it necessary to obtain a "cash" or immediate bid or offering, perhaps to adjust his reserve position, and it obviously would be difficult to find the buyer or seller, as the case might be, if he were located in a distant part of the Nation. Even regular transactions for next-day delivery are facilitated by the dealers who maintain positions in the various issues by means of their customers contacts throughout the country.

In addition, the dealers perform a very important function in underwriting U.S. Government securities. Attrition problems are minimized by dealers' trading in "rights" whereby they purchase and convert huge amounts of maturing issues which otherwise would be turned in for cash. Afterward they assist in the distribution of the new issues by means of their trading activities. The inventories carried by the dealers, as a whole, are substantial in total, and they provide a temporary haven for the various Government issues pending the appearance of buy orders which might not have been available at the time the original sales were made. Furthermore, in trading with each other and in arbitrating for their own accounts, the dealers provide bids and offerings in the marketplace, thus adding somewhat to the "depth, breadth, and resiliency" of the market.

Aubrey G. Lanston & Co., Inc.

Dealers in U.S. Treasury securities collectively provide an efficient, competitive mechanism through which Treasury securities may be bought and sold conveniently by the public, the Federal Reserve, and the Treasury. Dealers provide continuous market quotations, they bring buyers and sellers together, and in the course of buying and selling for their own account they function to clear the market whenever buyers may concentrate in one issue or group of issues and sellers in another issue or group of issues. Dealers' buying and selling for their own account usually helps to even out temporary excesses of selling and, on other occasions, of buying by the public. Dealers are a source of information on conditions in the market and on factors that may affect the market. This is extremely helpful to investors, to the Federal Reserve, and to the Treasury.

In discharging these functions, dealers name the prices at which they are willing, individually, to buy and to sell. These are made on the basis of their best judgment of innumerable market factors, including their willingness to buy and to sell and their estimate of their ability to resell and to rebuy. These quotations thus are subject to the test of purchase and sell decisions on the part of investors and other dealers. If more buying develops at the offered prices for a given issue or any group of issues, a dealer is likely to raise his bid and offered prices. Conversely, if more selling develops at the bid prices for a given issue or group of issues, a dealer is likely to lower his bid and offered prices.

As the flow of buying and selling shifts back and forth during a day and over longer periods of time, quotations will rise and fall in consonance with the balance of buying and selling in an endeavor to strike an equilibrium. Although dealers, therefore, make a market in the sense that they stand ready to purchase and sell Treasury securities at a price, the market is really made by the buying and selling of thousands of investors in Treasury securities.

Morgan Guaranty Trust Co. of New York

Principal function of Government security dealers is to provide a marketplace where buyers and sellers can transact business at net prices. Dealers act as intermediaries through which the process of placing Government securities with more permanent investors can be accomplished through distribution and redistribution. They help to facilitate Treasury financing operations and those of various gov-

ernmental agencies. Dealers also play an advisory role, making available to customers information concerning the market and related subjects.

New York Hanseatic Corp.

Dealers in Treasury securities serve the following functions:

(1) Provide a service to the economy and investors by supplying a common marketplace where potential buyers and sellers may ascertain a realistic value for their securities and where Government obligations may be bought or sold at net prices.

(2) Maintain highly specialized personnel that are in daily contact with banks and institutions from coast to coast with reports as to the condition of the market, future prospects for the price trend, and suggestions or recommendations that may be helpful to customers.

These contacts are made entirely at the dealer's expense and any cost to a customer who wishes to inaugurate a phone call to a dealer is underwritten by the dealer.

(3) Assist importantly in Treasury cash borrowing and refunding by acquiring inventories of the securities involved and aid customers in the proper evaluation of new Treasury obligations in conformity with bank and institutional needs for income and liquidity.

(4) Maintain advisory and statistical departments for analyzing security portfolios and supplying information to customers.

(5) Carry security inventory, or maintain short positions, which may be called upon to meet the buying or selling needs of investors. Naturally, a dealer hopes to be rewarded for the risk involved in a market position through the medium of favorable price movement.

The Government bond industry is extremely competitive with the several dealers vying with each other for customer business. Dealers risk their capital repeatedly by participating in Treasury financing operations without underwriting compensation and receive no commissions or brokerage fees for their trading endeavors.

Wm. E. Pollock & Co., Inc.

A dealer's primary function is to service his customers. This entails making and maintaining markets.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

Not long ago a British economist wrote the following about the British capital market:

The explanation [of Britain's high standard of living] is to be found * * * in the vast accumulation of national capital. * * * This productive national capital has come into existence as a result of two fortunate features of British history. The first is that our fathers and grandfathers saved a high proportion of what they earned. * * * The second is that in the last two and a half centuries this country has built up a uniquely excellent mechanism for transferring savings from the hands of the men who have saved into the hands of businesses that are able and eager to use savings to good advantage. This mechanism is the capital market, which, to this day, has its center of gravity—and indeed nine-tenths of its being—in a handful of institutions that have set up their head offices in a single square mile in the city of London. * * * There is, in fact, a good case for saying that the obliteration of the expertise accumulated in the square mile of the city of London could cause a reduction in the standard of living of the ordinary British worker greater than that which would be caused by the obliteration of almost any other single national asset (Norman Macrae, "The London Capital Market," London: Staples Press, 1955, pp. 11-12).

As much could be said of the of the U.S. capital market. It is, therefore, somewhat ironical that Wall Street is often made the whipping boy and political scapegoat of those who are avowedly seeking to improve the commonweal. For it is literally true that the unprecedented levels which this Nation has attained in its national wealth would never have been possible without the enterprise, the technical know-how, and the lines of communication that have been erected by the traders, brokers, and specialists that are housed in Manhattan's lower triangle known as Wall Street. Students of financial mechanisms and objective observers know that at the apex of this financial community stand the 17 or so Government bond houses. They are the counterpart of London's primary market for the Nation's prime credits. These dealers facilitate the securities flotations of the No. 1 borrower in this country, the U.S. Treasury. They act, with others, as primary underwriters and distributors of new Treasury issues. They provide the secondary market in Government securities, thus enhancing liquidity, and promoting the issues' popularity as an important component of investment portfolios.

The secondary function performed by the Government securities dealers is the provision of a conduit or transmission belt for monetary policy. For example, when the Federal Reserve System wishes to expand or contract the quantity of reserves in the banking system, one of the primary means is the purchase or sale of Government securities for open market account through these same dealers.

Too, the Government bond dealers facilitate the portfolio adjustments of the numerous financial intermediaries—banks, insurance companies, pension funds, and other residual holders of the Nation's savings.

Because of their gilt-edge quality and generally high liquidity, Government securities are widely held as a cushion or reserve. As secular or seasonal demands increase, this reserve can be converted into loans, mortgages, or other evidences of credit accommodation. Principally it is the Government bond dealers who provide the market for such adjustment transactions.

To perform these essential functions the dealers must—

- (1) Provide the risk capital, facilities, and personnel to discharge their responsibilities.

- (2) Establish and maintain continuing business relations with as many categories of investors as may be necessary to enable successful operation in an adequate and effective market.

- (3) Serve either (a) as principal, or (b) as agent, as the client's interests may require.

- (4) Prepare and distribute such factual and essential working material (e.g., quotation sheets, interest charts, brochures, circulars, offering notices, financial reports, etc.) as may be required in furtherance of the broad dissemination of essential information.

D. W. Rich & Co., Inc.

The function of the dealer in U.S. Government securities is to facilitate the exchange of such securities by making markets, by bringing buyers and sellers together and performing the function of underwriter during times of U.S. Treasury financing and refinancing.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) A basic function of dealers in Treasury securities is to provide as close and as broad a marketplace for buyers and sellers of Treasury issues as market conditions permit. Since only rarely do buyers and sellers of the same issue appear in the market simultaneously, dealers, in order to provide this service, act almost entirely as principals rather than as brokers; i.e., they make purchases or sales for their own account and risk.

(2) Dealers provide the tool through which the Federal Reserve Open-Market Committee can make purchases or sales for its portfolio accounts, thereby increasing or reducing reserves in the banking system, and thus controlling the volume of bank credit.

(3) Government securities dealers provide a market that is vital to the Treasury in its debt management operations. In this market sellers and buyers of maturing securities are brought together during a Treasury refunding. Dealers purchase "rights" from holders who would otherwise permit them to mature unexchanged. They then exchange these "rights" for the new securities for later resale. Because of this underwriting, the attrition in a refunding is perceptibly reduced. Without an efficient dealer market, the Treasury would find it much more difficult to refund its obligations.

(4) Dealers act as underwriters for cash offerings of Treasury securities. This function is important particularly in the weekly bill auctions, where dealers act as underwriters each week of amounts that generally range in size from \$300 to \$500 million.

QUESTION

B. Do dealers in Government securities have an obligation to stabilize securities prices in the very short run?

ANSWERS

Bankers Trust Co.

In our judgment, dealers in Government securities do not have an obligation to stabilize prices in the very short run. The desire of dealers to be successful in their operations does contribute to some stabilization of securities prices. For example, in a period in which the demand for Government issues is rising, bids will be marked up and dealers will allow their inventories to run down in order to meet the requirements of their customers and this, in turn, will relieve the upward pressure on prices. On the other hand, when offerings are increasing and there is a downward pressure on prices, dealers, again in order to maintain established customer relations, will find it necessary to add to their inventories. Thus, day-to-day operations of the dealers will help even out very short run price movements.

Bartow Leeds & Co.

At the time of a Treasury financing or when a dealer has an order that he is attempting to execute for a customer he might feel obligated to do his reasonable part in stabilizing securities prices in the area of operation.

Briggs, Schaedle & Co., Inc.

No. A Government security dealer only reflects in the price, the factors that exist in the market at the time. If there are more sellers

than buyers, obviously prices must go down, and if the forces are strong enough, there is no dealer or combination of dealers who can stop the decline in prices.

Chemical Bank New York Trust Co.

Government security dealers do not have a franchise and therefore it cannot be said that they have a specific obligation to stabilize prices. It is a self assumed obligation, however, in practice, and dealers feel that they must do everything reasonably in their power to provide sufficient bids and offerings to avoid widely fluctuating markets.

C. F. Childs & Co.

Dealers have no obligation to stabilize securities prices; their operations, however, tend to produce this effect.

Continental Illinois National Bank & Trust Co. of Chicago

No. A dealer does have an obligation to try to the best of this ability to make markets for his customers on a regular and continuous basis within his quotations. However, no dealer could take on the job of trying to stabilize market conditions. The market is too big in relation to the capacity of any individual or group of dealers to consider this question seriously. For dealers to act in concert to this end is not only not feasible but also would not be desirable.

C. J. Devine & Co.

Dealers have an obligation to assist in stabilizing a market in the very short run, if at all possible. Under normal conditions, the answer is, yes.

Discount Corp. of New York

The various firms now dealing in U.S. Government securities stand in a competitive relationship to each other. The basic function of each is to create and maintain markets for Treasury obligations, but, to succeed, operations must be profitable in the long run. The dealer is, therefore, acutely conscious of his duty to his proprietary owners but no less sensitive to the varied responsibilities indigenous to his business in dealing with the Treasury, the Federal Reserve System, and his customer clientele. This sense of responsibility is promoted by the pressures of competition and the emphasis placed on individual performance by the market participants. If dealers meet these responsibilities in a balanced way, serving the needs of all market elements ably and well, they contribute to market orderliness and directly create those conditions in which the need for stabilization is held to a minimum. They do this by aggressive action aimed at developing all possible sources of buying and selling interest and by bridging any resulting gap by taking up the residue within the limits of their capability. Dealers cannot withstand major market trends arising out of basic unbalance in the demand and supply relationship, the duration and extent of which cannot be measured in terms of "short run".

Dealer obligation does not extend to stabilization. That is a strong term implying action beyond the routine capability of any group of private independent dealers or market mechanism. The phrase "obligation to stabilize security prices" implies criteria and involves judgments about the validity and propriety of given price levels for Treasury obligations. No private group can or even should arrogate

to itself this obligation as a proper function. To the extent that stabilization is necessary and desirable, judgments and remedial actions would appear to be more a public responsibility of, say, the Federal Reserve System charged as it is by law with specific duties in the area of credit conditions.

First Boston Corp.

We believe this question needs amplification of the word "stabilize" and the phrase "in the short run." In the final analysis, prices are governed in a free market by general credit conditions and the degree of balance between buying and selling orders. But, in any event, there is no "obligation" to stabilize.

First National Bank of Chicago

To the extent that dealers furnish bids and offerings to their regular customers in times of market stress, it can perhaps be said that this action on their part contributes to the stabilization of the market in the short run. There is a limit to this type of support, however, as no business enterprise can operate at a loss indefinitely without eventually being forced out of business. I believe that the dealers, to the best of their respective capacities, make substantial contributions to the efforts to maintain orderly markets and perform necessary functions in the marketing phase of Treasury operations.

Aubrey G. Lanston & Co., Inc.

In our judgment, dealers accept more of an obligation in this regard than their self-interest would dictate. This is partly a matter of pride. A dealer dislikes to turn down a customer who wants to sell simply because the market is going down and he thinks this will continue for a day or two, or vice versa. It is also because the dealer hopes that sometime this same customer will come in to sell when he, the dealer, thinks the market is going up or will keep going up. In other words, continuous customer relationships form an important consideration and the dealer's reputation as one who is able to perform in accordance with the wishes of his customers is a valuable stock in trade. The question, however, might be stated more succinctly. Must an individual dealer feel obligated to accept what he believes might be, say, a \$200,000 loss in his net worth for some intangible reasons, such as the spirit of a college boy giving his best on a do-or-die basis for his alma mater? The answer to that question is "No." It should be kept in mind that unwilling purchases by a dealer to the extent of a mere \$10 million net in intermediate bonds could provide such a loss in a matter of several days or a week.

Nonetheless, the dealer's short-run operations ordinarily tend to have a stabilizing effect on prices of securities, because where these are under temporary pressures due to a temporary excess of selling over buying dealers are likely to increase their positions. Similarly, on temporary bulges in demand, dealers are likely to reduce their positions. In other words, dealers, in attempting to function in the market as principals, find that it pays to respond (via their inventories) to the ebb and flow of demand and supply of Treasury securities.

Morgan Guaranty Trust Co. of New York

There is an implied obligation to the customer to make a market (bids and offerings) regardless of the dealers own position. In the

very short run, by definition, this process would serve to help moderate wide price swings.

New York Hanseatic Corp.

Dealers are obligated to stabilize Government security prices in the very short run to an extent commensurate with their ability to trade both ways in the market. By this we mean that as long as professionals can buy and sell securities without impairing their capital structure they should attempt to maintain a stable price level. However, if volume is predominantly on one side of the market, dealers should be perfectly free to back away from a situation which might place them in financial difficulty. There is no business operating under free enterprise that is expected to stand up to a threat of loss purely as a duty to the maintenance of a price structure.

Wm. E. Pollock & Co., Inc.

Dealers have an obligation to stabilize prices in the very short run.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

I believe it to be a generally accepted precept that no private individual or business is expected to act in a manner which is contrary to his private interest. For example, no private enterprise or industry could be expected to shoulder the responsibility for preventing a depression. This clearly is the function of higher authority, adequate in resources and means. Similarly, without the benefit of material subsidy, Government bond dealers could not be expected to reverse a trend in the cost of money or its reflection in fixed interest-bearing securities prices. It would not be to society's longrun interests to have dealers attempt to act in this manner, as impairment of their credit worthiness would lessen or destroy the existing market mechanism.

However, dealers' operations do tend to stabilize prices. In the absence of dealer willingness to make markets, position arbitrages,¹ or position spread situations,² the impact of institutional operations would on occasion cause sharper fluctuations and cause prices of given issues to move higher or lower than is now the case.

D. W. Rich & Co., Inc.

No, except as a function in the generally accepted method of doing business.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

Dealers in Government securities do not have either the obligation or means to stabilize security prices in the very short run. Their function is, primarily, to provide a market for Treasury securities. To do this, they must maintain their own capital and thereby their ability to continue to serve investors.

¹ Savings Bank Journal, vol. XXI, No. II, p. 46:

Arbitrage: "The term as used commercially is a misnomer when applied to traffic in Government securities. In Government securities transactions the term means the simultaneous purchase and sale, or the converse, for subsequent reversal of obligations definitely comparable in character and to the calculated maturity; the exchange involved to be initiated at such price or yield differential as essential experience tables or charts indicate with reasonable probability will permit an ultimate reversal gain."

² *Ibid.*

Spread trading: "Any simultaneous purchase and sale, or the reverse, made with or without anticipation of a subsequent reversal, to procure an existing advantage or favorable disparity in prices, yield, or maturity."

QUESTION

C. How do your inventories of Government securities (long-, intermediate-, and short-term) change when interest rates change? For example, when interest rates increase, do you increase your holdings of long-term securities, or decrease them, or perhaps even take a short position? Under what circumstances might one or the other of these reactions occur?

ANSWERS

Bankers Trust Co.

As a general rule we endeavor to curtail our holdings of all maturities in anticipation of an upward change in interest rates. In other words, we try to reduce our inventory to a minimum. This may involve taking a short position in some issues which would enable us to provide a bid in a declining market.

As market conditions and the outlook improve, we would strive to increase our holdings, first in short terms, and subsequently in the medium- and long-term issues.

Bartow Leeds & Co.:

When interest rates are thought to change we would try to anticipate this change. If interest rates appear to rise we would shift out of long- and intermediate- to short-term issues and perhaps take a small short position in a longer bond; conversely, if we thought interest rates were to shrink we would hope to anticipate this, and change our position to a long position of intermediate- and long-term bonds.

Under the circumstances where we felt general economic conditions were slipping and business indexes were weekly giving evidences of this we would "feel" our way and make gradual purchases of intermediate and longer term bonds. On the other hand if we felt that we were nearing the bottom of a business slide, but did not feel sure when this would occur, we would sell bonds on strength and have an even position in a few weeks.

Briggs, Schaedle & Co., Inc.

We try to anticipate the rise and fall of interest rates. If we think interest rates are going up, we decrease our inventories. If we think they are going down, we increase them.

Chemical Bank New York Trust Co.

The immediate result of a sudden increase in rates is for our inventory to increase because our customers are inclined to want to sell and we have difficulty in immediately disposing of the offerings which we have to accept in making a market. Conversely, when rates suddenly drop our customers are anxious to buy and we find our inventory depleted. Of course, it would be our desire to do the opposite; theoretically, a short position should be established in long securities when the market is falling, and a long position built up in a rising market. In practice this is very difficult to accomplish successfully. Furthermore, it is not always profitable for a dealer to maintain this kind of a position because the trend progresses slowly, with frequent movements running against the trend for several days. A dealer must buy and sell continuously and cannot ride the trend. It can become quite

expensive to buy Governments 1 day and sell them 2 days later at a lower price, even though the long-term trend might be in an upward direction.

An examination of our inventory figures on a monthly basis for the past 7½ years reveals relatively small changes in volume or composition. There was a tendency to reduce inventory in 8 of the 11 months which included a rise in the discount rate, and a tendency to increase inventory in 4 of the 6 months which included a reduction in the discount rate. There was not any continuation of this tendency, however, and in following months the effect of the change in rate was usually eliminated. Factors other than rates confused the picture. For example, in months when Treasury financing occurred our inventory would frequently increase, especially at times when an exchange offer involved the carrying of "rights" during the refinancing period. The aggregate inventory carried has not varied by much more than 10 percent from one year to another except in one case when there was a 50 percent increase above the preceding year. This large increase may be attributed primarily to a heavy borrowing program by the Treasury.

C. F. Childs & Co.

This question should be phrased differently. Our inventories do not change when interest rates change. They change with a change in the trend of interest rates, or when such a change in trend is expected, e.g., if we anticipate a trend to lower rates, our long position in all maturities probably would expand. Conversely, if higher interest rates are expected, our position might be short certain issues to hedge our long position, and to supply support to selling investors.

Continental Illinois National Bank & Trust Co. of Chicago

Under most circumstances, we try to manage the inventory position on the basis of our judgment of the market outlook. During a period of market uncertainty or rising interest rates, we attempt to maintain minimum inventories consistent with the objective of giving the best possible service to our customers. When the outlook is for lower interest rates, we are willing to see our inventories increase. There may be involuntary inventory changes in the short run contrary to these general objectives simply as a result of normal transactions with our customers.

C. J. Devine & Co.

Inventories will change when economic conditions indicate an expectation of higher or lower interest rates, as dealers will attempt to either contract or expand their positions.

Discount Corp. of New York

The two questions C and D are interrelated. They will be answered together since both are concerned with factors that influence the inventory policy of a dealer.

There are no fixed rules or mechanical guides that can be reliably followed in running a position in Government securities incident to a successful operation as a dealer. Both the level and changes in position are a reflection of capacity and willingness to take risks.

Informed professional speculations—whether it be in commodities, real estate, or securities—is a necessary and integral part of dealer

activity and vital to any viable market in a free enterprise economy. A dealer must anticipate future price movements in some degree and the nature of his business places him in a competent position to appraise the day-to-day technical position of the market. Positions will vary widely in total size and composition between dealers at any given time and between different points in time. Ideally, a dealer will try to accumulate a position near the bottom of a decline or during the early stages of a rise and liquidate before the rise reaches a peak or spends itself. Both his effectiveness and financial strength depend heavily on successful judgments of market trends. Only in this way can he even out price trends and provide more continuous markets as he meets residual demand or supply through changes in positions, liquidating when the rest of the market is still accumulating and vice versa.

Judgments of market trends and inventory positions are not governed by current interest rate changes as such. These are a result, or symptom, of the strength of fundamental market forces already in being or widely expected. A dealer should try to anticipate all forces that are likely to have an immediate or future impact on investor actions and to hold implications for official policies.

Some of the factors that are considered in arriving at decisions are the following:

1. Visible and prospective sources of supply and demand for Government securities.
2. Prevailing economic conditions and outlook.
3. Conditions in credit and capital markets.
4. Cost of borrowing to finance inventory.
5. State of seasonal cash flows of corporations and others.
6. Strength of seasonal credit demands at banks.
7. Direction and intensity of Federal Reserve policy as measured by published statistics and response of credit markets to control programs of credit restraint and ease.
8. Treasury debt management problem as evidenced by—
 - (a) Cash position and need to finance a seasonal or budget deficit, or ability to retire debt.
 - (b) Maturity schedule and Treasury ability to market debt of given term in the light of housekeeping needs on the one hand and economic impact on the other.

As a result of a review of such factors as these and their relative importance, a dealer's inventory may be increased, reduced, or the relative composition may be altered.

First Boston Corp.

There is no set pattern. The level of interest rates is certainly not a controlling factor in taking positions. We are governed by our judgment at the time.

First National Bank of Chicago

Under ordinary circumstances, the contents of a Government trading account change substantially on a daily basis, depending on supply and demand factors. However, as interest rates increase or decrease, the changes are promptly reflected in the prices of the securities in the account, and the largest variations, of course, are in the longer maturities. Therefore, as interest rates increase, insofar as it is pos-

sible, we tend to permit our long-term holdings to decline as protection against the resulting depreciation in the account. The reverse is true when interest rates decline. There are times, of course, when conditions are such that the scope of our operations varies considerably from the usual procedure, but, in general, the fluctuations in our long-term holdings follow the above pattern. On the other hand, our short-term holdings are substantial most of the time, and tend to expand when longer term holdings decline in response to firming tendencies in the interest rate structure.

Aubrey G. Lanston & Co., Inc.

This question is not well phrased from the point of view of a dealer. It is important to remember that major interest rate changes do not take place from day to day but rather over a period of weeks and months.

Dealer inventories are a reflection of at least four things:

1. Long and short positions which the dealer took, perhaps unwillingly, for the reasons mentioned in question IB above.
2. Inventory taken on a day-to-day basis on the dealer's judgment of current supply and demand.
3. Offset (arbitrage) positions that are a mixed consequence of points 1 and 2.
4. Positions based on the dealer's anticipation of future trends in interest rates.

This question really relates to point 4. Naturally it is our objective to increase this part of our inventory at or near peak levels of interest rates and to reduce it as interest rates move to lower levels. We have been reasonably successful in gaging these changes correctly for the most part and in adjusting our inventory positions to our expectations. For example, beginning with mid-1957 when investor demand was slack for short-term and intermediate Treasury securities, we increased our inventory particularly in money market issues. Later, in the summer, we also added to our holdings of intermediates. Then, in late 1957 and the first part of 1958, we reduced our positions substantially. In fact, in 1958 we traded the market, primarily by underwriting and distributing each new issue as it was offered by the Treasury.

Of course, there have been circumstances over the years when we have misjudged the business and credit situation and when, as a result, the management of our inventory position was less satisfactory and when adjustments in it were less timely.

Morgan Guaranty Trust Co. of New York

There is no fixed relationship between inventories and changes in interest rates. It would be ideal to be able at all times to adjust inventories correctly in anticipation of changes in interest rates. Transactions involving net sales, even to the extent of going short, near the peak of a movement and net purchases, even to the extent of going long, near the bottom of a movement would not only prove profitable but would also serve to moderate market swings. In practice, however, inventory adjustments often prove much more inflexible owing to the need to accommodate customers and as the result of unforeseen developments.

New York Hanseatic Corp.

Our inventory and position policies change considerably with fluctuations in interest rates as is to be expected in any business in which a dealer takes a stand in his stock in trade, and is faced with changing markets. In this respect, a dealer operation in Treasury securities is no different from that of a dealer in commodities, automobiles, cattle, etc.

When it appears that our interest rate structure will climb and bond prices decline we naturally attempt to have as small a position as possible in the more vulnerable intermediate and long-term maturities. Moreover, if certain of our customers happen to be investing money and buying securities from us at such a time we might temporarily establish a short position. With respect to short-term issues, it is our experience that our position tends to build up in this liquid type of media during periods of high rates as dictated by the needs of our customers and our ability to carry such securities at a favorable interest spread between coupon or yield and the cost to borrow funds. On the other hand, if rates are declining and prices rising we naturally hope to own an inventory of any and all maturities that will appreciate in value.

Circumstances that might cause such reactions to occur include the size and responsiveness of the market in which a dealer must attempt to unwrap a position commitment, the direction of the economy with attendant financing needs, the frequency of Treasury borrowing and refunding operations, and the general standing of our business structure in comparison with competitive forces throughout the world.

Wm. E. Pollock & Co., Inc.

Our inventory swings decidedly with changes in interest rates. Higher rates lead to either a small or no position in long term securities. As a firm policy, we do not maintain a short position at any time. We maintain a substantially larger relative position in short term securities. Our positions in general move in the direction of that section of the market where activities are greatest at any given time.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

As merchandising Treasury, agency, and instrumentality obligations is one of the many dealer functions, stock in trade or inventory is essential to operations. Necessarily the quantity and nature of one's inventory varies with expectations of economic trends, judgment, or market breadth, ability to finance inventory profitably, and the willingness of management to assume risk. Generally, inventory enlarges as the market volume increases, and diminishes as the volume decreases. Categories of maturities held vary with the demand of the issuers and the supply of funds. As the amount of outstanding Treasury bills increases, the position of primary bill dealers should be expected to increase. So, too, as the total of outstanding agency and instrumentality obligations enlarges, the dealers specializing in these credits should be expected to expand these components of their inventories.

Changes in interest rates, as established by Treasury, agency, and instrumentality obligation prices, is a daily—at times minute to minute—occurrence. The trend of interest rates is a matter of longer

term economic considerations. Dealers must operate perceptively and prudently to continue in the industry. In my testimony before the Joint Economic Committee at its hearing in New York City on August 7, 1959, in answer to questions by Representative Wright Patman, I outlined a dealer's appraisal of an economic adjustment and his indicated position actions. That testimony follows:

Representative PATMAN. Did the professionals anticipate the downward trend in 1957? Did they think it was correct to increase the rate in August 1957? Did they do well in forecasting the revival in April and May of 1958? Would you like to answer separately?

Mr. GILMARTIN. Yes.

Representative PATMAN. Did the money market professionals anticipate the downturn in the economy in the fall of 1957?

Mr. GILMARTIN. Not until after August 1957.

Representative PATMAN. Did they believe it was correct to raise the discount rate in August of 1957?

Mr. GILMARTIN. I can only speak for myself. At the time I believed explicitly so. In retrospect, it might seem that the timing could have been better. But a decision has to be made at a given moment. It is unfair to be a Monday morning quarterback.

Representative PATMAN. Did you, as a group, do fairly well in forecasting the revival in April and May of 1958?

Mr. GILMARTIN. The revival of the economy in April and May of 1958?

Representative PATMAN. Yes.

Mr. GILMARTIN. There again, sir, if you will permit me the opportunity to explain. In the Federal Reserve index you had a 1 point improvement in May over April, and a 1 point improvement in June over May. The figures for the month of June obviously did not become available until July. There were a great many of us that were not convinced that the business picture had turned definitely until late July or perhaps very early in August of 1958. Isolated surveys or statistical indicators had been noted but earlier were not deemed conclusive.

I do not think that all dealers acted the same way. I think some dealers may have liquidated a material part of their positions for tax considerations or other reasons, such as their reading of the economy and the action of the long bond market at the end of April and the first part of May. I do not think all did the same thing.

When the Treasury came to the market in June, I think the business climate at that time, or the turn in it that you are now referring to, was not generally perceived. If it had been, I do not think the Treasury would have received exchange tenders totaling \$7,400 million to an issue of which the preliminary estimates of distribution ran between \$3 billion and \$3,500 million.

Representative PATMAN. In the early months of 1958, the Fed lowered reserve requirements and bought securities. What was your interpretation of this action? What did you do in the market following this action? Would you have acted differently if the Fed had increased member bank reserves solely by open market purchases?

What was your interpretation of this action, that is, when the Fed lowered its reserve requirements in the early part of 1958? What was your interpretation of that action?

Mr. GILMARTIN. That the decline in the economic climate or, in other words, the recession, would tend to deepen. It was necessary for them under the circumstances, as they have done at other times in the past, to provide a cyclical remedial action.

Representative PATMAN. Would you have acted differently if the Fed had increased member bank reserves solely by open market purchases?

Mr. GILMARTIN. No, sir; I think not.

Representative PATMAN. How would you have acted then? What would have been your action? Just the reverse?

Mr. GILMARTIN. In both instances we are talking about the increase in the available money supply?

Representative PATMAN. Yes.

Mr. GILMARTIN. In either case we would have interpreted that as a continuing bearish outlook on the economy and we would have interpreted that as a lesser demand for funds and, therefore, a greater demand for investment securities, and

to provide the supply that we later would be expected to make to our customers and to the market generally, we would have increased our position.

D. W. Rich & Co., Inc.

Since we are specialists in short-term securities only, we cannot, of our own experience, answer the questions on long-term securities. However, our belief is that it is impossible to make any specific answer to this question. What causes these changes in price levels is much more important in determining the dealer's decision to be "long" or "short," than the plus or minus in interest rates.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) Our inventories in Government securities vary primarily with expectations of the outlook for interest rates and the demand for certain maturities rather than actual changes in rates.

(2) We tend to increase inventories of long-term securities when we anticipate a trend to lower interest rates and attempt to hold them at a minimum when the opposite is true.

(3) Such changes in inventories take place on the basis of our analysis of the expectation of the trend in interest rates and on our estimate of investor demand for Treasury issues—long, intermediate, and/or short-term.

QUESTION

D. What factors other than interest rates influence the level of, and changes in, your inventories of Government securities?

ANSWERS

Bankers Trust Co.

Action as described above may be prompted by factors other than a prospective change in interest rates, for example:

1. Outlook for better business followed by increased loan demand.
2. Anticipation of excessive Treasury financing due to budgetary deficit.
3. Prospect for an offering of long-term Treasuries.
4. Prospect of divestiture of Government holdings by corporations.
5. A more restrictive Federal Reserve policy. A reversal of the situations described in 1, 2, 4, and 5 would suggest a building up of our trading positions.

Bartow Leeds & Co.

Besides the effects of interest rates on our thinking there are many other factors that would govern our type of kind of position. Some of these would be political considerations, both national and worldwide, general economic and seasonal economic considerations, Treasury fiscal position and Federal Reserve Bank policy.

Briggs, Schaedle & Co., Inc.

The ability to borrow money on an inventory decides how big that inventory should be. If money is extremely scarce, obviously it would be suicide to go out and buy a large inventory. The converse is true if interest rates are tending to decline.

Chemical Bank New York Trust Co.

The principal factors which influence the level of inventory of a bank Government dealer are (1) the outlook for business and the attendant outlook for interest rates, (2) the bank's reserve position and the attendant availability of funds for carrying inventory, and (3) the requirements of Government bond customers.

C. F. Childs & Co.

Again the question's form is not quite apt. The level of interest rates does not influence our inventories, but a change in their trend does. It is a change in the prices of securities that largely establishes interest rates. As above, our position changes with expectations of future price conditions. Affecting these are economic conditions, Federal Reserve System policies and actions, Treasury budget outlook, with its implications for deficit or surplus, and the size of refunding programs ahead; and Treasury policies regarding choices of types of new securities to be issued.

Continental Illinois National Bank & Trust Co. of Chicago

There are several short-run factors that will change our dealer inventory levels. The main ones are market expectations of the future, Treasury financing operations and changes in the level and type of market activity. When the Treasury has a financing operation, we normally have an increase in inventories of the issues involved in the exchange or the issues being offered for cash. When the volume of trading activity increases substantially for one reason or another in a particular maturity area, we might tend to have a greater inventory position in those issues involved than otherwise would be the case.

C. J. Devine & Co.

There are numerous factors other than interest rates which influence the level of and changes in our inventories of Government securities. Among the more important are:

- (1) International developments.
- (2) Unusual news events.
- (3) Political factors, such as a national election.
- (4) General business and economic conditions.
- (5) An abnormal supply of corporate and municipal bonds.
- (6) Anticipated large reinvestment of moneys received by public units or foundations.
- (7) Expectation of Treasury deficits or surpluses in substantial amounts.
- (8) Anticipated Treasury financing or refunding operations.

In summation, our business, as that of specialists in U.S. Government obligations, is predicated on the premise that the basic justification for our economic existence is the performance of a service of such quality that it enables various groups of investors to adjust their investments to the financial requirements of their business and personal activities.

In order to accomplish this objective, we must maintain positions in Government securities. Experience has taught us that the immediate opportunities to pair off buy-sell inquiries are exceedingly low in relation to our total volume of transactions. Our positions are estab-

lished primarily to anticipate the probable market needs of our clientele. Hence, expectations as to the short- and long-term trends of the business cycle and, in turn, the probable influence of these forces on the trend of interest rates, and the availability of credit must be a constant and paramount consideration.

Further, such influences as international developments, strikes in major industries, the acceleration and deceleration of the cash flow of corporations, the periodic income tax payment requirements of major industries, the monthly rise and fall of the "float" within the commercial banking system, political factors, national elections, new legislative enactments, the anticipated supply of and demand for municipal and corporate securities, any unusual demand for fixed income securities to employ the funds received by public units and foundations, the investment and borrowing operations of the various Federal agencies, the status of the Federal budget, the probable financing and refunding operations of the Treasury, and the sudden development of a wholly unexpected event must be appraised instantly and followed carefully on an intraday and interday basis. Positions must be quickly adjusted and readjusted as the impact of these events is felt, so that we can be in a position, to the greatest extent possible, to accommodate our customers in making the financial adjustments that these new developments impose upon them. Obviously, such actions compel us to assume calculated risks through constantly attuning our positions to the anticipatory effects of these influences.

All free market structures are the mass reaction of human beings to a given set of circumstances. Inasmuch as emotional excesses are inherent in human behavior, free markets, at times, reflect these excesses of optimism and pessimism. Whenever such excesses become manifest, we endeavor to assist in their resolution because they obviously tend to weaken, but only in a temporary sense, the health and stability of the market to the disadvantage of all interested parties.

Discount Corp. of New York

See replies to "C" above.

First Boston Corp.

Positions, either long or short, are usually the result of accommodating a buyer or seller when there are not offsetting bids or offerings in the market to complete the transaction. As these buyers and sellers are our customers, our aim is to accommodate them. Our willingness to do so, by buying or selling from our positions, is governed by our judgment of the risks involved. In this connection, it might be worth pointing out that only through a willingness to do business can a dealer obtain and retain customers and thereby have a volume of business adequate to carry on a profitable operation.

Other factors which would influence the inventories of Government securities would be—

- (1) Interest cost of carrying securities.
- (2) An imminent cash offering or a refunding by the Treasury might tend to induce dealers to lighten positions in order that they might participate to a greater degree in the Government offering and make a maximum contribution to the financing.
- (3) The expected level of business activity and demand for credit.

(4) Congressional actions such as the recent denial of the Treasury's request to raise the ceiling on interest payable on long-term bonds, thus indicating that the impact of Treasury offerings probably would be confined largely to maturities no longer than 5 years.

(5) Anticipation of a Treasury deficit or surplus.

(6) Estimated supply of corporate and municipal offerings.

First National Bank of Chicago

Other factors which influence the level of and changes in our inventory are—

(1) Credit policies of the monetary authorities.

(2) Expansion or contraction of business activity.

(3) Variations in the demand for credit in the economy.

These factors, however, are related to each other and to fluctuations in the interest rate structure. If business activity subsides, the demands for credit ease, and money also becomes easier as the monetary authorities seek to stimulate sagging business activity. The result is that interest rates decline and Government prices advance. The opposite effects will be evident if business becomes reactivated and expansionary forces again become predominant in the economy.

Aubrey G. Lanston & Co., Inc.

In some degree this question has been answered in I-(C) preceding. Dealers in Treasury securities necessarily must function in managing their inventory position very much like merchants in any other line of business such as shoes, apparel, hardware, and the like. Every merchant must decide constantly whether or not it is desirable to increase or reduce the size of his inventory, taking into consideration the fact that a decision to increase it will involve a further tie-up in his capital or will add to his operating costs by adding to the cost of his borrowing.

A dealer's inventory consists, of course, of his long positions in securities and of his inventory of bids established through his short positions. In connection with his long positions, a dealer must balance the return he receives on each security against the day-to-day cost to him of carrying the security. It is important to note that this comparison is made with the coupon rather than the gross market yield on the security (except for money market issues of a few months to maturity) when judgments are reached in connection with day-to-day trading inventories. The financing of short positions can be even more costly to a dealer than the carry of long positions, since, in addition to paying the full coupon rate on the security, the dealer must also pay a borrowing fee.³ However, sometimes long and short positions can be meshed at a more bearable cost to the dealer.

The importance of adequate dealer financing to the efficient operation of the money market and the desirability of working out arrangements to improve materially the facilities available for dealer financing were recognized by the Federal Reserve as early as 1918, specifically in

³ The willingness of a dealer to establish short positions is dependent upon the availability of facilities for borrowing securities in order to make delivery. Where such borrowing facilities do not exist, and that is the case for a number of issues that are not generally held by commercial banks, it is ordinarily not practical for us to take a short position in such issues, or even to make sales in response to customer interest unless we are actually long the specific issue in question or unless we are certain that a supply of the issue will come into the market in time for us to make delivery.

the annual report of the Federal Reserve Bank of New York for that year. Over subsequent years the System devoted considerable study to this question but the basic problem was never satisfactorily solved. In very recent years, however, dealers in Treasury securities have been successful in adapting repurchase transactions in such a way as to draw upon the enlarging funds of nonbank investors available for investment in short-term money market issues. Use of repurchase transactions has also been extended to tap temporary surplus funds of banks outside the major money centers. Unfortunately, this development looking toward a more satisfactory solution to the problem of financing the money market has been adversely affected by the discouragement offered by regulations of the Comptroller of the Currency with respect to repurchase transactions (discussed elsewhere in these answers).

Morgan Guaranty Trust Co. of New York

Factors having an influence on the level of inventories include—

- (1) Supply and demand, particularly with regard to customer operations.
- (2) Availability and cost of money at lending institutions.
- (3) Availability and cost of money through other sources (repurchases).
- (4) Treasury and agency financing operations.
- (5) Arbitrary limitation set by management based on exposure and capital.
- (6) Attitude toward market.

New York Hanseatic Corp.

Aside from interest rates, dealer positions often are influenced by statistics supplied to us by official agencies which reflect changes in business activity and the relationship of the money supply to the near term outlook for the economy. Also, the budgetary position of the Government enters into our evaluation of bond market prospects to the extent that a large deficit denotes a need for heavy Treasury borrowing and an oversupply of securities. Balanced budgets or financial surpluses in Government indicate a static or possibly a declining supply of Treasury investments and our position policies may be adjusted accordingly.

Wm. E. Pollock & Co., Inc.

The rate is the prime factor but temporary positions of a substantial size may be taken during periods of Treasury cash or refunding activities.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

See answers to question "C."

D. W. Rich & Co., Inc.

The supply and demand factor—the number of our customers wanting to buy or sell.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

Assuming that this question means voluntary changes in our inventories in Government securities rather than those resulting unavoidably from our dealer operations in serving customers, the basic factors are as stated in C; our analysis of the outlook for the trend

ahead in interest rates and investor interest in specific issues or maturity categories. No others are of importance.

QUESTION

E. Have your inventories (as measured by, say, monthly or quarterly averages) increased perceptibly in the period since mid-1953? On the average, are they larger now than they were in 1953-54? or than they were before 1953? or before the accord?

ANSWERS

Bankers Trust Co.

Our inventories have not increased since the various dates mentioned, including the period prior to the accord.

Bartow Leeds & Co.

In the period since mid-1953 our inventories from maximum to minimum have not varied perceptibly except that since that year we have had at times a larger position in Treasury bills. On the average, with the exception of bills, our inventories have not been larger up to now than they were in 1953-54 or before 1953. Before the accord, our inventories were smaller in all categories.

Briggs, Schaedle & Co., Inc.

We like to think that our firm is becoming gradually more important in the Government security business, and we believe that our inventories on the whole, over a period of time, have been slightly larger than they were around 1950 to-1954.

Chemical Bank New York Trust Co.

Our inventories have not changed appreciably since mid-1953. They have been larger at times than they were in 1953-54, but at present they average about the same as they did in those years.

C. F. Childs & Co.

Yes; our inventories now average larger than before the accord.

Continental Illinois National Bank & Trust Co. of Chicago

This depends on what date we are considering. There have been periods since mid-1953 when our inventories have been substantially larger than they were at that time. Conversely, there have been other periods when the opposite has been the case. On the average, our inventories today are less than they were during the easy money periods of 1953-54 and 1958, and, on the average, are lower than they were before the accord. However, there have been periods when our inventories on the average have been larger than they were at these previous dates.

C. J. Devine & Co.

Taking off our inventories as of the end of each month for a period of 6 years (mid-1953 through mid-1959) our average monthly inventories have increased approximately 9 percent during the period. On an average monthly basis for the first 6 months of the year 1959, our inventories were approximately 18 percent lower than average monthly inventories in 1953-54. On an average monthly basis for the first 6 months of the year 1959 our inventories were approximately

6 percent lower than average monthly inventories in 1950 through 1952. On an average monthly basis for the first 6 months of the year 1959 our inventories were approximately 18 percent lower than average monthly inventories in the period January 1950–March 1951.

Discount Corp. of New York

Total net inventory at mid-1959 (as measured by quarterly averages) was at a fairly low level. It was also low at that time in relation to previous quarters in the past decade. Since mid-1953 our inventory has fluctuated over a wide range, moving substantially above the mid-1953 level at times and at others somewhat below.

Bare comparisons of total net inventories are not susceptible of any significant interpretation in terms of the periods designated in the question.

First Boston Corp.

Our present position is among the smallest we have maintained in recent times. However, since 1951, our inventories have fluctuated widely. This has been the result of our judgment of market conditions, and our willingness to do customer business and/or the extent to which we wished to participate in Treasury financing.

First National Bank of Chicago

Our trading inventories have increased since 1953, and on the average they are larger now than they were in 1953–54. Presently they are also larger than they were prior to 1953, and prior to the accord in 1951.

Aubrey G. Lanston & Co., Inc.

Our total inventories of Treasury securities are on an average larger now than they were, say, in 1953 and 1954, and particularly so as to earlier years. This has reflected in part the fact that our firm was formed only in 1949 and has grown steadily since then. This increase does not hold true for all categories of securities, however; the growth has been centered primarily in the short-term market where customer activity has enlarged materially.

It is important to note, however, that it is not useful to speak in terms of averages in this connection, because then you average the positions during both high and low points in the interest-rate cycle of which there have been at least five during the period since mid-1953. Our inventory position in long bonds probably averages considerably lower today than in earlier years largely because the flow of inquiry from investors in such securities is markedly less. In the intermediate-term sector, for comparable points in the business cycle, our position will not have changed very much on an average, although perhaps we are more judicious in reaching judgments to take large positions in these today than we might have been in 1953.

In short-term securities our positions have followed the unparalleled growth in breadth and activity of the market—and in our participation in it.

Morgan Guaranty Trust Co. of New York

Use of average figures to compare inventories in different periods of time may not be too meaningful owing to the combination of short and long positions and to the varied distribution of holdings in dif-

ferent maturity brackets. Inventories now are about the same to somewhat larger, considering influences mentioned in D above.

New York Hanseatic Corp.

Our average inventory of Government securities has increased since mid-1953 but such enlargement in holdings has varied considerably due to changes in our portfolio policy in the interim. For example, in the first half of 1958 our holdings were four to five times as large as they were around the middle months of 1953. Toward the end of last year and in the first 3 months of 1959 they fell off to about three times the 1953 level while more recently they have about approximated the amount of 6 years ago.

Taking 1953 and 1954 together, we find that average experience during 1958 and thus far in 1959 saw us carrying about the same volume of securities as in the earlier period.

With respect to earlier years, we find that we recently have been carrying about twice the portfolio that we carried prior to 1953 including the years prior to the Treasury-Federal Reserve accord.

Wm. W. Pollock & Co., Inc.

Our average inventories have increased since 1952 largely in ratio to the volume growth of the Government bond business as a whole.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

In the period under consideration material changes have occurred in the composition of the marketable Treasury debt and in the magnitude of the market for obligations of agencies and instrumentalities of the Government. The changes in composition of the debt and the character of its component elements is important. Categorical answers to the question would be misleading, because the question is not sufficiently specific to permit any uniformity of understanding for formulating and presenting factual information. In an attempt to provide helpful responses, I have chosen to answer on the basis of information reasonably available to all respondents. I have chosen "month-end net inventories (position) as reflected on the firm's books of account." It should be noted this ignores inventory (position) totals by nature and category. For whatever purpose they may serve, I submit the findings of an examination of Chas. E. Quincey & Co.'s net position herewith:

(a) June 30, 1953 (base). Average net inventories have increased perceptibly since that date.

(b) Present average inventories are approximately the same as the average of 1953-54.

(c) Present average inventories are larger than the month-end average for the years 1951 and 1952.

(d) Present average inventories are somewhat smaller than before the accord of March 1951.

D. W. Rich & Co., Inc.

Our security position as a dealer varies so widely that it is impossible to offer any useful contrast in averages between one year and another.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

Our inventories in total are larger today than they were in 1953-54—than they were before 1953—and also than they were before the

accord. This increase in inventory, however, is confined primarily to shorter term maturities. This is the result of the increase in the amount of such issues now outstanding and the broader investment interest that has developed in short-term securities. Our inventories of longer maturities vary considerably in amount as a result of our dealer operations, but on the average are no larger than they were in the earlier periods in question.

QUESTION

F. In financing your operations, to what extent do you rely on—

- (1) your own capital;
- (2) borrowing from New York City banks;
- (3) borrowing from banks outside New York City;
- (4) borrowing from State and local governments;
- (5) borrowing from nonbank financial intermediaries;
- (6) borrowing from nonfinancial corporations;
- (7) borrowing from the Federal Reserve System; and
- (8) borrowing from other sources?

Has the relative importance of these sources changed in recent years? If so, how? Does the relative importance of these sources change in a systematic way as credit conditions change?

Do you experience difficulties in raising sufficient funds to finance your positions? If so, what changes in financing arrangements might improve the situation?

Do the present arrangements give a competitive advantage to bank dealers?

ANSWER

Bankers Trust Co.

(Questions 1-8:) It is difficult for a bank dealer to respond to this question. From time to time this bank borrows either from the Federal Reserve bank or through the purchase of Federal funds from New York City and out-of-town banks, and upon other occasions through repurchase agreements entered into with banks and financial and nonfinancial corporations. However, the need to borrow is only partially related to our operation as a primary dealer in U.S. Government securities.

The relative importance of sources has changed in recent years. Dealers naturally seek to borrow funds at the lowest rates and in sufficient amounts. From time to time out-of-town banks, nonfinancial corporations, and some public bodies have made funds available to dealers through repurchase agreements at rates lower than the rates quoted by commercial banks or the Federal Reserve bank. As credit conditions tighten, dealers probably rely more upon sources other than the banking system.

We do not believe that present arrangements give a competitive advantage to bank dealers.

Bartow Leeds & Co.

In financing our operations (1) we have to regard our capital as our *raison d'être* and use it fully at all times. (2) We use our line of credit in New York City banks when they offer us competitive rates. (3) We borrow at times from banks outside of New York City when they offer a competitive advantage. (4) We have never

borrowed from State and local governments. (5) We have never borrowed from nonbank financial intermediaries. (6) We have from time to time borrowed from nonfinancial corporations for short periods. In stringent periods when interest rates are comparatively high we utilize this type of borrowing to our mutual maximum. (7) We have never relied upon the Federal Reserve System to help finance our operations but it might be said that when the opportunity arose and the System offered financial help we would welcome it and use it to our mutual maximum. (8) From time to time we have borrowed from an agency of the Government for, generally, a stated short period of time. Again we could not anticipate that this opportunity was to be offered to us and so we would only take advantage of their offer to help in our financing needs in a small proportion of our actual total requirements.

When interest rates are high and cash flow is large the bigger non-financial corporations have been a greater source of help in the last year or so. It might be said that this apparent fact is one that has followed a period of business recession. We have no real statistics at hand to prove this. We have found that in times of high interest rates some New York City banks with which we are acquainted are loath to be as helpful in financing our operations as they are at times of lower interest rates.

There does not seem to be any systematic way that these sources change as credit conditions change that are predictable. I feel that we use noncommercial bank aid in financing our operations during high-interest-rate periods to a greater degree than we do use them when interest rates are lower. So as credit conditions change we have to be guided in an unsystematic way by probing to find out what source will aid to best advantage in our financing needs.

It would seem plausible that if the Federal Reserve System thought it prudent to help dealers on Fridays it would offer to these dealers a special repurchase arrangement for Friday purchases to be paid off on or before the following Tuesday. It would be most helpful to the market and, in particular, the seller of the securities and the dealer who bought them. It would tend to smooth out things and make Friday transactions for "cash" a less difficult and less costly operation. The helpful prudent judgment of the Federal Reserve System in providing this aid on Fridays might improve the market-ability of last-minute transactions in a given week.

It would seem that the present arrangements do give bank dealers a competitive advantage. A nonbank dealer receives aid from the Federal Reserve bank when it feels conditions warrant this aid; the bank dealer has direct access to the Federal Reserve bank discount window if it is not closed. Also the bank dealer has a source of securities in the bank's own portfolio which may be made available to him against a short position.

Briggs, Schaedle & Co., Inc.

We use our capital:

- (1) To carry our inventories.
- (2) We borrow a moderate amount of money, principally from our clearing bank. We only depend on the New York banks to lend us money if we cannot get it any place else.

(3) We find that we can usually borrow money cheaper from the banks outside of New York than we can in New York City.

(4) We do not borrow any money from State or local governments.

(5) We get some money from nonbank financial intermediaries.

(6) We borrow considerable amounts of money from nonfinancial corporations.

(7) We borrow relatively small amounts from the Federal Reserve System, and then only at their pleasure.

(8) Our borrowings from other sources are negligible.

The corporations, in the last few years, have been a very large factor in lending their temporary cash to the Government security dealers. This changes, of course, depending on whether the corporations are in funds or whether their financial situation is tight. We have never experienced any difficulty in being able to borrow sufficient funds to take care of our inventory. I do not think that there is any competitive advantage to bank dealers in the present market setup.

Chemical Bank New York Trust Co.

(1) As a bank dealer we rely primarily on our own capital.

(2) Inapplicable.

(3) Inapplicable.

(4) Inapplicable.

(5) Inapplicable.

(6) We occasionally enter into repurchase agreements with nonfinancial corporations, but this is primarily to accommodate the corporation.

(7) Our Government dealer operations may at times influence the amount of the bank's borrowing from the Federal Reserve System. The dealer department does not have direct access to credit from the Federal.

(8) The amount of Federal funds bought by the bank may also be influenced by dealer inventory.

There has been no significant change in any of these sources.

Bank dealers are at a disadvantage in the matter of repurchase agreements extended by the Federal. Nonbank dealers are frequently accommodated by the Federal, but the same privileges are not accorded to bank dealers. Present arrangements do not give a competitive advantage to bank dealers, although at times it may be easier for a bank dealer department to take care of its cash requirements. In today's tight money market the bank finds it necessary to take care of customers and does not have excess funds readily available for a trading position in Governments.

C. F. Childs & Co.:

Our own capital is fully utilized at all times. In addition, we make use of all the sources listed for borrowed funds, except that borrowings from State and local governments are insignificant. The relative importance of these sources shifts from time to time; particularly, when credit is tight and money rates are rising, more is borrowed from nonfinancial corporations. We rarely experience difficulty in raising sufficient funds to finance our position. We have no changes in present arrangements to suggest. We believe that bank dealers do have some competitive advantage, inasmuch as they alone have the discount privilege of the Federal Reserve banks.

Continental Illinois National Bank & Trust Co. of Chicago

Since we are bank dealers, most of these questions are not applicable to us. Fundamentally, we finance our dealer position as a part of our overall employment of bank funds. The size of our dealer inventories can be substantial and it is an important factor in managing our general funds position. However, a bank of our type has very large flows of funds both in and out on any given day so that financing dealer inventories is only one facet of the overall problem. Normally, our position is financed on the basis of our own funds, although we, like other banks, do operate in the Federal funds market and borrow from the Federal Reserve on occasion.

We doubt that present financing arrangements give a longer run competitive advantage to bank dealers. The basic decision of whether or not a dealer increases or decreases inventories is based on his appraisal of market conditions. The question of whether or not funds are available to finance the inventory carry conceivably might assume overriding importance in specific situations. But the problem of financing positions generally arises during periods of rising interest rates when the bond market is under pressure. At such times we doubt that most dealers would be reaching out to increase positions even if funds were readily available and a net interest gain could be realized on the carry. In any case, the nonbank dealers have shown great agility in opening new avenues for funds when bank funds are scarce.

It may be that there is an advantage at certain times to a bank dealer in having, at least theoretically, ready access to funds for financing inventories. However, the Federal Reserve discount rate is a dominating rate in the money market when money is comparatively tight. Under such circumstances this rate, along with the going money market rates, affects bank dealers as well as nonbank dealers. When Federal Reserve policy becomes restrictive, it has a quick impact on money market banks, including their ability to carry large dealer inventories. Secondly, the very nature of being in the commercial banking business has some offsetting disadvantages as contrasted to the nonbank dealer. Nonbank dealers probably have more flexibility in their operations than do bank dealers, encumbered as they are by various banking laws, regulations, and customs. There is also the fact that the dealer operation is secondary to the commercial banking operation; when money is tight, this affects funds available for the dealer operation.

C. J. Devine & Co.

(1) We rely on our own capital to the greatest extent possible so as to utilize it effectively in the operation of our business. At times, part of it will represent deposits required to secure bank loans to satisfy the desire or need to increase our positions and to have funds available in periods of Government financings when we have to put up good faith deposits.

(2) Generally, the major part of our operations is financed by borrowing from New York City banks.

(3) Normally, borrowing from banks outside New York City is only for the purpose of carrying positions for local delivery. On occasions, however, when funds are in better supply outside of New York City, we have taken advantage of this situation.

(4) and (5) To our knowledge we have not borrowed from State and local governments, nor have we borrowed from nonbank financial intermediaries.

(6) At times, when large corporations had excess funds to invest temporarily, we have borrowed from them in substantial amounts.

(7) When the Federal Reserve System is willing to enter into a repurchase agreement for a limited period of time, we have taken advantage of the borrowing privilege, provided we have had a position in securities that could be utilized for such purposes. (These loans are limited to securities maturing within 15 months.)

(8) We do not borrow from sources other than those listed above.

Until recent years we depended primarily on New York City banks for our borrowings. In recent years we have increased our borrowings from banks outside New York City and, during seasonal periods, from nonfinancial corporations. The relative importance of these sources does not appear to change in a systematic way as credit conditions change. It has been our experience, however, that when interest rates are low, credit is made readily available by the commercial banks; when money rates are high, we rely more on other sources.

We have never experienced any difficulty in raising sufficient funds to finance our positions.

To our knowledge, the present arrangements do not give a competitive advantage to bank dealers.

Discount Corp. of New York

Apart from its capital, which is fully utilized, the primary source of credit used by Discount Corp. in its operation is obtained from money market banks in the form of negotiated loans. It prefers, where feasible, the direct type of local credit accommodation on grounds of convenience. The corporation handles all of its own clearance of transactions.

The corporation also utilizes repurchase agreements in managing its portfolio, most frequently in carrying Treasury bills. Sometimes these contracts cover other short-term securities, but it is not the corporation's practice to extend them to long-term maturities.

Most of these repurchase agreements are with out-of-town banks to which these contracts serve as an alternative to the sale of Federal funds. Discount Corp. enters into repurchase agreements with nonfinancial corporations which have temporary accumulations of funds related to their particular patterns of cash receipts and expenditures.

Discount Corp. also engages in an "investment type" of repurchase agreement with nonfinancial corporations whose particular needs for a special maturity date are not met by existing maturities of Treasury obligations. In these cases Discount Corp. may draw a contract covering the sale and repurchase of Treasury bills or other short-term issues with a maturity that corresponds to the life of the contract, setting the rate by the going market rate of the securities used. This is the competitive response of the Government security market to the practice of finance companies of cutting their paper to various convenience dates for corporations and others with funds available for temporary investment.

Discount Corp. also engages in repurchase agreements with the Federal Reserve Bank of New York when that bank finds it necessary or desirable to use this method of putting funds into the market inci-

dent to the expression of credit policy, and when the corporation has the securities available for this purpose. These agreements are undertaken at the initiative of that bank.

Other investor groups mentioned in this question assume little or no importance in our repurchase activity or as direct sources of credit.

The relative importance of our dependence on repurchase agreements has increased in recent years as the result of the interplay of many factors, including a return to a flexible credit policy, restoration of competitive credit markets, and growing credit demands at rising rates from both public and private sources. Under these conditions there have been times during periods of restraint when credit was available only at relatively high rates from money market banks. Repurchase activity has fluctuated in response to a changing relationship between the cost of dealer loans and other key rates such as the Federal funds rate, the bill rate, and other open market rates to which the terms of repurchase contracts are tied.

Discount Corp. has not and does not now have difficulty in obtaining sufficient funds to finance its inventory. Credit has always been available to it at money market banks, although the number of banks willing to make it available have at times of active credit restraint been limited and the rates asked have been relatively high.

The precise arrangements governing the internal allocation of funds and the costs thereof used by dealer departments of commercial banks are not known by Discount Corp., but on the basis of observation there is no basis for a belief that dealer banks have an advantage over nonbank dealers in making across-the-board markets in U.S. Government securities.

First Boston Corp.

To finance our operations under recent conditions we have obtained our money mainly from the following sources:

- (1) Nonfinancial corporations.
- (2) Banks outside New York City.
- (3) New York City banks.
- (4) Federal Reserve System.

Nonfinancial corporations in recent years have become an increasingly important source of funds. However, as a Government dealer we depend on the large money-center banks to finance our operations when money is not available at lower rates from other sources. We would prefer to borrow from banks, even at a slightly higher rate, rather than finance through buy-back agreements with corporations because of the relative ease of making the necessary arrangements and substitutions of collateral.

We have not experienced difficulties in raising sufficient funds to finance our positions. The problem has been chiefly one of cost. At times we have experienced difficulty in financing our normal trading positions except at an interest loss.

To the extent that bank dealers have access to the Federal Reserve discount window, they have an advantage at times over nonbank dealers.

First National Bank of Chicago

Inasmuch as we are a dealer bank, we rely entirely on our own capital, and we do not borrow from outside sources to finance our

trading operations. It seems improbable that this self-financing gives us a material competitive advantage over other dealers. Nonbank dealers apparently are able to borrow without difficulty sufficient funds to finance their operations. Moreover, their substantial use of the repurchase-resale agreement with the Federal Reserve, other banks and corporations affords nonbank dealers an important vehicle of inventory financing. On the other hand, the fact that they have to pay higher rates on borrowed funds in a tight money market does not react to their disadvantage any more than it does to dealer banks. In this situation the dealer banks are using funds that might be employed at higher rates in a tight money market. Taking all these factors into consideration, it does not seem that either regular dealers or dealer banks have any appreciable competitive advantage over the other.

Aubrey G. Lanston & Co., Inc.

We obtain the major portion of the funds needed to finance our operations from banks outside New York City and from nonfinancial corporations. State and local governments and nonbank financial intermediaries are relatively unimportant source of financing. We borrow regularly from New York City banks, but as a general rule the amounts involved are far less important than the other sources previously mentioned. We use our own capital to supply the margins required for financing our positions and to pay accrued interest. However, a significant portion of our capital funds is held inactive on deposit with the principal banks in the money market centers from whom we borrow from time to time.

Repurchase agreements with the Federal Reserve are, of course, available only when the System chooses to make them and they are on the average not an important source of funds although on occasion such as during periods of seasonal strain in the money market (as at the end of the year) repurchase agreements with the Federal Reserve assume great importance to the ability of dealers to function normally.

The relative importance of these financing sources has changed considerably in recent years. It used to be that the principal source of financing was the New York City and Chicago banks. Today it is the other banks and an assortment of nonbank sources. If this change had not occurred it would be more difficult, perhaps impossible, for dealers to carry the large inventory of money market and sometimes of intermediate securities that is part and parcel (and a prerequisite) to the enlarged activity and usefulness of such securities to investors, both bank and nonbank.

The importance of nonbank sources becomes highly significant in periods when bank credit is under some restraint.

With respect to whether we have had difficulties in obtaining sufficient financing, the answer is "no" for three reasons: First, the Federal Reserve usually assists the market from time to time when money market conditions become unusually stringent. Second, we have placed increased reliance on nonbank sources of funds, the availability of which is typically more predictable than for bank funds. Third, whenever the ordinary availability of credit is reduced, we reach out to attract funds from banks throughout the country by bidding for

funds at a rate above the rate at which banks can ordinarily put day-to-day money to work.

Obviously, we must gage and adjust the volume of our inventory to expected changes in the availability of credit from all sources mentioned above.

One development that in recent years has hampered dealer financing has been a series of actions taken by the Comptroller of the Currency in 1957 and in 1958 in which the Comptroller classified sales of securities made to banks under so-called repurchase agreement as loans rather than as security transactions. This requires a bank to report such transactions as loans for statement purposes, even though such security transactions are the most liquid assets a bank can hold (except for cash). Since many banks are in a position where they cannot permit their loan totals to increase (due to an already high loan ratio), these institutions may refuse from time to time (or as a rule) to participate in the financing of Government security dealers, especially during periods when a "call" is likely to be made for a statement of condition.

It would improve financing arrangements for dealers in Treasury securities if so-called repurchase agreements engaged in by banks were to be classified in bank statements of condition as securities or money market assets instead of as loans.

In this connection we are appending to these answers a section from a statement made by Mr. Lanston before the Senate Finance Committee in connection with its consideration of H.R. 8160, together with excerpts from the committee's report on that bill and from the remarks made by the chairman when introducing the bill before the Senate. This material may be helpful in eliminating some of the semantic and substantive confusion which surrounds repurchase transactions.

The fact that bank dealers have access to the rediscount window probably gives some competitive advantage to bank dealers, particularly in the short-term sector of the market, although we have found that by ingenuity and aggressiveness a nonbank dealer can overcome this disadvantage.

We believe also that it would be helpful to the market and its financing if the Federal Reserve would seriously reconsider its practice of making its credit to banks (through the rediscount window) immediately available and immediately extinguishable. For example, in England and Scotland where such immediate credit arrangements do not exist, the banks never borrow directly from the Bank of England; they make their adjustments through the markets. In Canada, when the authorities were seeking to establish and improve the foundations on which a national money market might be built in that country, the Bank of Canada changed its practices in order to cause banks to make day-to-day adjustments in their positions through the money market.

Morgan Guaranty Trust Co. of New York

Being a bank dealer, operations are financed mostly through use of our own capital although the availability of funds depends importantly upon the bank's money position. Most other sources of funds mentioned in this section, aside from repurchases with customer banks and nonfinancial corporations, are used either infrequently or not at all.

In recent years, increasing use has been made of repurchases as mentioned above. The importance of this source of funds seemingly has not changed in a systematic way as credit conditions have changed.

Difficulties in raising funds, when experienced, usually are related to the bank's reserve position. Bank dealers, more than other dealers, tend to feel the effects of a general money tightness. Owing to the reluctance of the banks to borrow from the Federal Reserve, dealer operations may become unduly restricted under stringent money conditions. This handicap might be overcome by permitting dealer divisions of banks to make use of the repurchase facilities now provided other dealers.

Bank dealers have no apparent competitive advantage with respect to raising funds to finance positions. In fact, nonbank dealers are given accommodation at the Federal Reserve through repurchase agreements, which facilities are not made available to member banks.

New York Hanseatic Corp.

Currently, we finance our operations predominantly with funds from nonbank financial intermediaries and nonfinancial corporations. We avoid borrowing from banking institutions wherever possible for reasons of economy, and rarely obtain funds from any State or local governments. Whenever the Federal Reserve System is offering repurchase arrangements we use the privilege to the extent of our needs. However, in view of the uncertainty of the Federal's help to dealers through repurchase arrangements, it would be dangerous to rely importantly on this source of funds.

The present situation reflects the unusually liquid position of nonfinancial corporations that have been accumulating large amounts of cash in recent months as a result of record earnings and a steel strike. Such funds frequently have been available to dealers for short periods through the medium of repurchase contracts. Otherwise, there is a rather systematic change in the sources used by dealers to carry positions. In periods of easy money they prefer bank financing to a more important degree because of favorable rates and simplified handling and rely less on repurchase agreements that often tend to hinder trading operations because securities may not be available for sale until agreements terminate.

Apropos the financing of dealer positions with nonfinancial corporation funds, there is a growing belief in economic circles that this phenomenon does not make for particularly healthy money market conditions. Of course, the practice is an outgrowth of the law prohibiting commercial banks from paying interest on demand deposits which forces business corporations to enter into repurchase agreements with bond dealers in order to earn interest on excess cash without incurring market risk. However, economically speaking, the vast amount of corporation funds committed to repurchase agreements or invested in short-term Government securities represents a highly liquid reservoir of money which is beyond the realm of control or estimate of the Federal Reserve authorities. To date, the commitment of these funds to the Government market has been helpful to the Treasury in its financing problems as well as to dealers. However, this money could represent a dangerous inflationary force at some future date if corporations decided to liquidate Government securities and finance an ascending level of production as well as to extend credit to consumers. The

result could be renewed difficulties in our gold and currency situations. It might behoove Congress to reexamine the Banking Act of 1933, which eliminated interest on demand deposits.

We have experienced no particular difficulty in financing our position in the current period of tight money but we suspect that this is only because of the aid of the nonfinancial corporations. If we did not have this source of funds and had to carry inventory exclusively with banks at an interest cost above our earning yields there is little question that we would have to restrict our position to nominal proportions.

Recently, market experts have been predicting that nonfinancial corporations will be net sellers of Governments after the steel strike is over and they find other uses for their money in the operation and improvement of their businesses. In that event, there is likely to be a squeeze on banks to finance dealers at the same time that they are experiencing great consumer and business loan demand. A solution would be for the Federal Reserve System to constantly offer dealers repurchase arrangements at the prevailing rediscount rate.

Present arrangements certainly supply a borrowing advantage to dealer banks in that these institutions have much greater recourse to funds available from the Federal Reserve System at the rediscount rate than the nonbank dealers. Currently, large banks are charging $4\frac{1}{4}$ to $4\frac{1}{2}$ percent for loans to dealers carrying Governments while their own bond departments derive the benefit of the prevailing 4-percent rediscount rate.

Wm. E. Pollock & Co., Inc.

1. Primarily as margin.
2. Almost entirely so under normal conditions.
3. Infrequently.
4. Not at all.
5. Not at all.
6. No, we do not borrow but frequently make repurchase agreements.
7. No, we do not borrow but occasionally make repurchase agreements.
8. Not at all.

Yes, during periods of higher yields on Treasury bills and other short securities, corporations find it profitable to make repurchase agreements on U.S. Government securities.

Yes, low yields on short Government paper would make it unattractive for corporations to enter into repurchase agreements or buy securities outright and therefore, leave more funds with commercial banks.

We do not experience any difficulty in financing our positions and find financing arrangements satisfactory. Our primary consideration is the rate or cost of money.

Lacking knowledge of bank-dealer borrowing arrangements, we cannot gauge the competitive advantage, if any.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

1. Cyclical, secular, and seasonal money market influences are the major factors in resolving many of the answers to this question.

(1) Necessarily Chas. E. Quincey & Co.'s legal status (a copartnership) must be considered. The firm's available capital, adjusted for undistributed profit and loss, inventory appreciation or depreciation, and reserves, must serve as the basis for all credit requirements and accommodations.

(2) through (8). As no specific period of time was delineated in the questionnaire, for convenience I have used the interval of January 1 to August 31, 1959, as the survey period. The results of this study indicate that financing for operational requirements, above adjusted available copartnership capital, was provided by the following sources:

	<i>Percent of reliance</i>
(2) New York City banks (commercial, trust companies, savings)-----	61.30
(3) Outside New York City (commercial, trust companies, savings)-----	1.90
(4) State and local governments-----	0
(5) Nonbank financial intermediaries-----	0
(6) Nonfinancial corporations-----	7.45
(7) Federal Reserve System-----	0
(8) Other sources-----	29.35
Jan. 1 to Aug. 31, 1959-----	100.0

2. Yes.

Under conditions of high economic activity, the lessened availability of central Reserve and Reserve city bank funds at competitive rates has necessitated seeking funds from other sources. Country banks excess reserves, usually found in relatively small amounts, are uneconomic to seek. A rather consistent amount of such funds do not move through the limited channels of the Federal funds market. Under these conditions other sources must be sought and mediums other than conventional collateral loans devised and employed. At such times extra-banking system funds generally provide a higher percentage of dealer requirements. Under conditions of low economic activity banking system funds usually are readily and competitively available.

3. "Difficulties," in the sense used in this question, must be construed in terms of its relative and practical effect. To my knowledge there has never been a time when we could not obtain the funds required for operations from some segment or member of the banking system—at a price. The important considerations, however, are the certain and ready availability of required funds and the cost of them. It is not always possible to obtain required funds without overcoming the inhibitions of some or all of these considerations.

Many hearings have been conducted and many studies have been made on some or all phases of this subject over the many years it has been a matter of concern. Certain information bearing on various considerations of dealer financing appears in the testimony of Benjamin Strong, governor of the Federal Reserve Bank of New York, W. R. Burgess, assistant Federal Reserve agent of the Federal Reserve Bank of New York, George L. Harrison, governor of the Federal Reserve Bank of New York, and others, in the record of the hearings before the Committee on Banking and Currency, House of Representatives, 69th and 70th Congress, on H.R. 7895 and H.R. 11806, held from March 24, 1926, through May 29, 1928.

An excerpted statement bearing on this subject, made by the Honorable Benjamin Strong, governor of the Federal Reserve Bank of New York, follows:⁴

The importance of the bankers' acceptance as an instrument to finance America's trade has been elaborated in some detail in the testimony already given before this committee as well as in the annual report of the Federal Reserve Board for the year 1925. (See pp. 7-10.) It has also been pointed out before the committee that the dollar acceptance as a credit instrument in the world's market is dependent largely upon an open and active discount market where such acceptances can always be sold and that the ready marketability of the short dated obligations of the U.S. Government, that is, certificates of indebtedness and Treasury notes, depends to a large extent upon an open and active discount market where they can always be sold.

The essential requirements for an open discount market for either bankers' acceptances or short dated Government securities include (1) a sufficient number of strong financial institutions and houses acting as discount houses and dealers who will always buy at stable rates related to current money rates, prime bills, that is, bankers' acceptances and short dated Government securities, which are offered for sale in that market, (2) an assured and sufficient supply of money at economic rates to enable such houses to carry on, and (3) an assured place of rediscount.

Private banking firms and discount corporations already established in New York and certain other Federal Reserve bank cities provide for the first of these requirements. The money market ordinarily provides a large proportion of the funds required by the discount houses at rates somewhat below the current call loan rates paid by stock exchange houses. This, in a measure, answers the second requirement. But in times of money stringency when rates are advanced in the money market, it becomes essential to the maintenance of the discount market that discount houses have recourse to the Federal Reserve banks for a portion of their current requirements for money with which to carry the bills and Government obligations which constitute their portfolio, and also to enable them to buy new offerings of bills and Government obligations at times when the supply of such bills and securities measurably exceeds the demand from investors. These discount houses act as wholesalers and also retailers in the securities with which they deal. A bank or a corporation can always sell to one of these dealers, at a price, practically an unlimited amount of bankers' acceptances or Treasury certificates. The dealer making the purchase ordinarily resells all or a substantial portion of them to other investing clients. These buyers may be local banks, corporations, or individuals, or similar persons located in other parts of the country or abroad. The constant demand from such investors makes it necessary for the discount houses and dealers to carry at all times an adequate stock of paper assorted as to maturities, size of pieces, etc., required by the particular and diversified needs of their clients. As the gross profit of discount houses consists of but a very small fraction of 1 percent per annum, usually at the rate of one-eighth to one-fourth of 1 percent per annum on the value of their purchases, it is impracticable for them to carry their wares wholly on their own capital. The margin of profit on their business being so small, unless they have recourse to the Federal Reserve banks at relatively stable rates in times of need, they would not be able to continue in business.

At such times of need, when it is impossible for the dealers to procure funds in the market either at all or at rates economically possible for them, assistance must be given to them by the Federal Reserve banks by means of spot purchases of a portion of their supply of bankers' acceptances or Government securities. But as they are retailers of these goods and must have them available for sale in the future, the Federal Reserve banks have made arrangements with them so that they may repurchase such acceptances or securities at some time in the future. This future sale is provided for under arrangements which are ordinarily referred to as "sales contracts." These so-called sales contracts are instruments executed by recognized dealers who are banking firms and corporations specializing in making and maintaining the market for bankers' acceptances and short-time Government obligations.

⁴ Hearings before the Committee on Banking and Currency, House of Representatives, 69th Cong., 1st sess., on H.R. 7895, Apr. 12, 1926, pt. 1, pp. 431-432.

Studies such as that of the New York Clearing House Association, "A Study of the Interrelations of the Money Market and Government Securities Market" (October 1957), and studies of other associations or groups, explored areas of the problem in varying degrees. Neither hearings nor studies have resolved satisfactorily this important problem. The problem is a difficult one, but not necessarily impossible of solution. Ideas that hold interest for those seeking solution of the problem have been advanced, but will require considerably more study and development before such proposals for resolution can be made available.

4. Present arrangements under certain conditions could favor the bank as compared with the nonbank dealer. It must be assumed that bank dealers as a last resort would have more likelihood of success in raising required funds at the Federal Reserve banks' discount windows than nonbank dealers might have in making overtures for acceptance of repurchase agreements. The latter are now extended at the convenience and upon the initiative of the Federal Reserve Board's Open Market Committee.

D. W. Rich & Co., Inc.

1. Our capital is used in providing margins to the loans we make. 2 through 7. Since we do a nationwide business, we scan the entire country every day in search of cheap money. In this part of our activity we contribute a service for all of our customers, putting their money to work wherever we can find it.

From the experience of this corporation, dealings with nonbank institutions have increased importantly in the previous 10 years.

In general, we are able to finance our operations to our complete satisfaction. When problems do arise, it is almost always in connection with some temporary increase in our portfolio. Suggestions of ways to eradicate these occasional difficulties appear from time to time, but as yet no agreement has been reached as to the best method.

In our operations, "no"; but we are not in a position to know how bank dealers operate.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

1. (1-8) We continually seek the least expensive method of financing our inventories. The sources of such financing vary constantly and we make every effort to locate the most favorable borrowing terms. For this reason, it is impossible to give a more specific answer to this part of this question.

2. (1) In the last 2 or 3 years there has been a greater source of short-term funds to finance dealer inventories available from non-financial corporations and some public bodies. This is because it is to the mutual advantage of these groups and the dealer to finance a substantial part of inventory through repurchase agreements negotiated with these sources of short-term funds.

(2) As interest rates change, the importance of these sources for financing dealer inventories varies. In periods of extremely easy money, the commercial banks become more competitive in their desire to make dealer loans. At such times, a larger percentage of dealer inventory is financed through the banks, as contrasted with a smaller percentage in the periods of higher short-term interest rates. Credit conditions, in themselves, are of only minor importance.

3. (1) Our firm has found no difficulty in raising sufficient funds to finance our positions at any time.

(2) There are no major changes I have to suggest that might improve our ability to finance our inventory.

4. In my opinion the present financing arrangements give no important competitive advantage to bank dealers.

QUESTION

G. Have your operations in Government securities changed as a result of the introduction of the "bills only" policy? If so, how? In particular, has this policy strengthened the dealer function of your firm relative to the broker function?

ANSWERS

Bankers Trust Co.

The "bills only" policy has induced a greater willingness on the part of Government securities dealers to rely upon their own judgment and appraisal of market forces in determining their inventory positions and pricing policies. This policy has therefore strengthened the dealer function.

Bartow Leeds & Co.

The introduction of the "bills only" policy has served to eliminate one of the big factors that directly concern the intermediate- and long-term sector of the Treasury list in day-to-day trading. If it can be said that one of the constant uncertainties were removed when a "bills only" policy was instituted it left less factors to be resolved in making judgments within the market. For example, the supply and demand factor in the bond part of the market stands out more importantly, perhaps more singly than it did before the "bills only" policy. In measured judgment we felt we could assume greater risks and make bigger markets and that our function of being a dealer was certainly strengthened.

Briggs, Schaedle & Co., Inc.

In answer to these questions, I would say that the amount of short term U.S. Treasury obligations has increased considerably in relation to the long-term bonds, so that naturally there is a greater activity in the short end of the list. We strongly feel that a "bills only" policy is a very wise and important area in which the Federal Reserve Bank Open Market Committee operates. If the Federal should try to influence money rates through purchase and sale of intermediate- and long-term bonds, the market would be very much more unsettled than it is at the present time, and nobody would know where the real market was because chances are it would be fictitious if the Federal operated in the longer areas.

Chemical Bank New York Trust Co.

There has been no basic change in our operations in Governments since the introduction of the "bills only" policy. Our relations with the Open Market Committee have changed a good deal in that we formerly acted as a broker and currently we are acting as a dealer in the true sense of the word. Prior to the "bills only" policy dealers were paid a commission on transactions between the Open Market

Committee on the one hand, and investors on the other. This commission usually amounted to approximately \$25 per million on bills, 5 to 10 cents per thousand bond on rights, and one sixty-fourth on other Governments. Operations at present require dealers to make offerings to the Federal at current market prices, and these offerings may be accepted or rejected by the Open Market Committee. Similarly, dealers are asked to bid on bills, but this does not occur very often because the Open Market Committee generally prefers to let bills mature, which obviates the necessity of open market sales. A dealer has to be more cautious under present conditions as he is not working for a commission and his position is subject to market fluctuations.

C. F. Childs & Co.

Yes; as a result of the "bills only" policy's introduction, our operations have enlarged. In particular, since we consider it feasible to carry larger inventories under this policy, the dealer function has been strengthened relative to the broker function.

Continental Illinois National Bank & Trust Co. of Chicago

Our operations, like any other dealer's, are continually changing as market conditions and practices change. The "bills only" (more properly "bills usually") policy has not been a key factor in these changes. Rather it has been changes in basic money market conditions which have led to changes in Federal Reserve operations as well as changes in Government security dealers' operations. The fortunate abandonment of the pegged market in 1951 created an entirely different market atmosphere than was the case prior to that time. When long-term Government securities were maintained at specific prices over long periods of time, the country suffered as the Federal Reserve lost its ability to carry out its basic objectives. As we moved into free markets, all of us had to shift our sights as the market, in performing its proper function, became one that went down as well as up, and both profit and loss possibilities increased. Since the return to a freer market in Government securities, there have been times when the dealer function as contrasted to a broker function has been strengthened a great deal. There have been other times when obviously no dealer could reach out and stand ready to buy large blocks of securities because of the market outlook and therefore had to think more in terms of a broker function in intermediate and longer term securities.

This area of discussion raises a basic point concerning the operations of dealers in intermediate and longer term securities. We believe that a careful examination of the facts will show that, on the whole, the Treasury security market is an effective, efficiently functioning market. Comparison with any other market will show that it has functioned effectively even in periods of severe monetary stress, and during most periods has accommodated large purchases and sales of securities with relatively little price effect. This is especially true in the short-term money market area of the market.

It is fashionable to say that the longer term Government bond market, since the abandonment of the pegs, is thin and cannot accommodate a large volume at quoted prices. Some blame this partly on the so-called bills only policy. But the market for longer Govern-

ment bonds is less thin than any other bond market and probably any other security market one can find. Furthermore, there is a fallacy in condemning the Government security dealers for not being willing to sell or buy large amounts of long-term bonds on the phone at quoted prices. Long-term investors realize when they buy long-term bonds that they assume a risk of larger price fluctuation and lesser marketability as contrasted with short-term issues. This is in the very nature of long-term investments. No reasonable long-term investor could expect otherwise, and no reasonable long-term investor could expect a dealer with limited capital funds to buy large amounts of longer bonds for his own account under weak market conditions. No reasonable person would do this himself unless he had a final buyer on the other side of the transaction.

C. J. Devine & Co.

Our operations in Government securities have changed as a result of the introduction of the "bills only" policy to the degree that the supply of and demand for Government securities reflect their true relative value in the market. Because a market in bonds, created through the forces of supply and demand, is more normal and realistic, we believe that the dealer function of this firm has been strengthened.

The "bills only" policy reduced the broker function, a negligible factor in our business, to the extent that our sale of longer term bonds to the Federal Reserve on a brokerage basis, for the account of customers, was eliminated.

Discount Corp. of New York

It would be impracticable to ascribe directly any change in our operations to the introduction of the "bills only" procedure. The Federal Reserve System's efforts to recreate a desirable degree of relative freedom in the market for Government securities has had a definite influence on the market and upon the operation of all participants. Whether it is possible to isolate the impact of "bills only" as an operating procedure from that flowing from flexible monetary policies is questionable and we shall comment further on this in question III F. For the purpose of this question the most that can be said is that the course of economic developments and the official policies pursued by Congress, the Treasury, and the Federal Reserve System have all had their market impact.

With free markets there has been an increased degree of self-reliance and enterprise in completing transactions, a closer scrutiny of operating procedures and a more aggressive, competitive approach in extending and widening the range of customer contacts. In keeping with these developments, the corporation has sought and found new mechanics for carrying a part of its inventory. This has helped to hold down the cost of carrying a position and at the same time enabled the firm to serve better all of its customers, including those who participate in repurchase agreement activity. The course of events has thus resulted in a greater willingness to take the risks of using inventory as a buffer between imbalance in demand and supply. The dealer function has thus been reinforced.

First Boston Corp.

See reply to question H.

First National Bank of Chicago

The "bills only" policy has removed a factor of uncertainty from market psychology by the knowledge that the Federal Reserve will ordinarily operate only in the short end of the list. Admittedly, in any given situation, it is difficult to separate out and weigh the factors determining the level of inventories. Other things being equal, however, the "bills only" policy has increased our willingness to carry inventories and as such has strengthened the dealer function as against the broker function.

Aubrey G. Lanston & Co., Inc.

The change by the Federal Reserve to its erroneously called bills only policy was a part of the process of changing from primary policy objectives of pegging interest rates and bond prices to the objectives of flexible monetary policies designed to restrain booms and to cushion recessions and to protect the purchasing power of the dollar—all prerequisites to the promotion of maximum employment opportunities and sustained economic growth.

This complete change in the focusing of monetary policy objectives has naturally had repercussions in all credit and capital markets. It is impractical, therefore, to judge the so-called bills only policy by comparing our operations now with those before this practice was adopted.

The Federal Reserve is the largest single holder of Government securities. It also is the largest single potential buyer and seller. Prior to the adoption of the present practices of the Federal Reserve, a dealer had to consider before he bought from a customer whether, immediately or soon thereafter, the Federal Reserve would sell the same or similar issues. Vice versa, a dealer might accommodate a customer's desire to buy only to have the Federal Reserve come in with its unlimited buying power immediately thereafter. Hence, when the Federal Reserve used to deal throughout the range of the market, dealer performance had to function more as brokers and less as entrepreneurs whose activities were determined by the public's desires to buy and sell. Before the present practice the Federal Reserve, therefore, was largely the market, and since then the market has been one that was a reflection of the forces operating throughout the economy.

Morgan Guaranty Trust Co. of New York

Since introduction of the "bills only" policy, it has been possible to continue operations with more confidence inasmuch as decisions relating to market expectations no longer require the additional analysis of possible arbitrary actions of an outside authority. In general this position has strengthened the dealer function.

New York Hanseatic Corp.

The "bills only" policy has not noticeably changed our operation in Government securities. Previously, we were left pretty much to our own devices in trading on our markets except in times of "disorder" or when the Reserve had some particular objective to accomplish in the market. Since the inauguration of the "bills only" policy interest rates have been in a generally upward trend and the volume of customer trading in intermediate and long maturities has dimin-

ished because many investors cannot justify taking losses of the magnitude involved at the depressed price levels. With this low trading activity the Federal's absence from the bond area has been of little consequence to dealer operations except during the market upset around the middle of 1958.

The "bills only" policy probably has placed dealers in a better position to anticipate market trends on the basis of fundamental economic considerations instead of having to contend with unexpected intervention by the Federal as these authorities might seek to adjust the money supply through the buying or selling of bonds, etc., instead of bills.

Because of the absence of Reserve bank action in bonds, we believe that our functions as a dealer have been put to greater test in that our advice to customers and position policies must be based on very careful analyses of economic conditions. Previously, many decisions of both investors and dealers were heavily weighted by knowledge of the objectives of the Federal Reserve System with respect to the level of interest rates.

Inasmuch as we operate as a prime dealer in Government securities, none of our functions come under the "broker" classification.

Wm. E. Pollock & Co., Inc.

Yes, the "bills only" policy has increased the volume of activity in short-term securities to a substantial extent. Therefore, our operations have increased proportionately in that area of the market.

Yes, the narrow-spread markets change broker functions into dealer functions.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The term "bills only" policy is in fact a misnomer. Any objective study of Federal Reserve open market operations since the adoption of procedures evolved as the result of the ad hoc committee recommendations made in 1953 will indicate a more appropriate title to be "bills usually." The impact of the "accord" of March 4, 1951, and subsequently the adoption of "bills usually" on September 24, 1953, as a part of the rules governing Open Market Committee operations, have had an effect on dealers' thought processes and on their conduct of operations. These factors are by no means the only considerations or reasons for such changes as may have occurred, but are a part of such considerations. Dealers cannot ignore economic trends, fiscal policy, debt management, monetary policy, magnitude of the Federal, agency, and instrumentality debt, the change in the nature and composition of the debt, or the attitudes and actions of the Congress.

An interpretation of the Federal Reserve System's "bills usually" policy is set forth in "The Federal Reserve System's 'Bills Only' Policy: A Suggested Interpretation," by David I. Fand and Ira O. Scott, Jr.⁵ It is worthy of the committee's consideration.

A reprint of the article is appended to these answers to the committee questionnaire. (See p. 1959.)

Figures presented in my answer to parts (E) and (F) above represent the overall changes that have occurred with respect to Chas. E. Quincey & Co.'s inventories. It would require considerably more

⁵ The Journal of Business, University of Chicago, vol. XXXI, No. 1, January 1958, pp. 12-18, inclusive.

time and research to reflect effects upon the respective areas within the inventory or position.

In my opinion, the "bills usually" policy has strengthened the dealer function, relative to the broker or agent function of this firm, particularly under normal or orderly market conditions.

D. W. Rich & Co., Inc.

Since we are short-term specialists, the increase in the supply of short-term securities has increased our business, which has always been that of a dealer rather than a broker.

Salomon Bros. & Hutzler, Girard L. Spence, partner

(1) Our operations, if anything, have been expanded as a result of the introduction of the "bills only" policy. I stated before the committee in New York it is my conviction that the "bills only" policy of the Open Market Committee has permitted dealers to function more confidently than they would if the Open Market Committee traded in other sectors of the Treasury market.

(2) Any important change in this present policy involving trading by the Open Market Committee in other maturity sectors of the market (other than under the most pressing circumstances) might limit the willingness of dealers to take positions, and tend to contract the size of the markets they now make to investors. It could, I believe, increase instability in the market, as well as widen the spreads between bids and offers.

(3) As I explained to the committee, our firm acts as a dealer and not as a broker in Government securities in practically every transaction. There are, however, times when extremely large inquiries may hit a thin market. In such instances we may ask to be allowed to work "on order" for a short period rather than execute the entire trade as principal at once "on the wire." This could apply equally to a buying or a selling operations.

QUESTION

H. In what way would your operations be affected if the Federal Reserve System were to deal in long-term Government securities? Would such operations create a more serious problem for dealers than Treasury debt operations in the long-term market?

ANSWERS

Bankers Trust Co.

We believe that if the Federal Reserve System were to deal in long-term Government securities, these operations could create serious problems for dealers. The introduction of the Federal Reserve System into the long-term market would pose a major imponderable to the dealers in their appraisal of the outlook; namely, what is the Federal Reserve likely to do in the future? Appraising the prospects in the credit markets is a very difficult undertaking at best and we fear it would be infinitely more difficult if this major imponderable were to be added. There would be the real possibility that Federal Reserve intervention would create an unnatural or artificial price level and this could create serious problems for the dealers, and for the Treasury, especially at times when the Treasury was undertaking long-term financing.

Bartow Leeds & Co.

If the System were to deal in long-term Government securities our firm would feel less secure in the market. We would have to reshape the size of our markets that we would make to customers to a smaller size and of course the amount of inventory that we carried would reflect the amount of our concern.

Treasury debt operations in the long-term market could be predicted with reasonable accuracy once it was known what Treasury policy might be. The figures that are published weekly and even more often allow even a novice to form a guess as to the financial needs of the Treasury. Dealers make special studies of these figures. I believe no serious problems for dealers would be created by the entrance of the Treasury into the long-term part of the list. If there were, however, a rapid series of borrowings in this end of the list the results might have serious repercussions.

On the other hand if the Federal Reserve System were to deal in the long market a real problem for dealers would exist. Markets would tend to become thin, price fluctuations wider, and much speculation would take place as to what the System might next do. Much time would be wasted, buyers and sellers would hesitate to act and as likely as not they would at times act in the same direction causing unwanted problems.

Briggs, Schaedle & Co., Inc.

See reply to question G.

Chemical Bank New York Trust Co.

In the event that the Federal Reserve System were to deal in long-term securities it would become the dominant factor in the market. Presumably, its operations would be on both sides of the market at one time or another, and the knowledge that offerings might be made unexpectedly would restrain us from carrying a position in those securities which might be offered. Similarly, we would hesitate to set up a short position in an issue which might be subject to a sharp upward movement on news that the Federal was in the market. In the case of debt operations by the Treasury the situation is well advertised and is expected. The date and approximate amount of debt operations are known sufficiently well in advance to prepare the market, whereas an offering by the Open Market Committee could be made at any moment without warning.

C. F. Childs & Co.

As a result of the "bills only" policy our operations have been enlarged, mainly because fluctuations in the bills market, caused by the Federal Reserve's buying or selling, are very minor. Consequently, we are able to form judgments concerning the trend of the market by only our appraisal of the economic, financial, and political outlook. If the Federal Reserve were to act in all categories of Government securities, our difficulty in arriving at any conclusive judgment would be compounded. OMC action in the Treasury issues having maturities beyond a year could effect considerable fluctuations so that our operations would be very largely guesswork. Even under present conditions this is a gambling business, but under a policy where the Federal could operate in any type of securities, this gambling would be reduced to a game akin to crap-shooting, and we would be forced to

function more like a broker. This was the case during the period of the "pegs," at which time we seriously questioned the wisdom of staying in the Government securities business.

Continental Illinois National Bank & Trust Co. of Chicago

Under current conditions and those prevailing in recent years, we would be increasingly reluctant to trade as a dealer in long-term Government securities if the Federal Reserve were active in this segment of the market. For all practical purposes, the Federal Reserve has unlimited buying power and also has or could readily buy the largest longer term Government security portfolio in the United States. Under such circumstances, it would be reasonable to expect that the market would cease to rely on normal supply and demand conditions in appraising prices and market potentialities and would shift back to trying to guess what the Federal Reserve might buy or sell at any given time. Having such a large, unknown factor in the market would force a dealer to be extremely cautious and to reduce his commitments on either side of the longer term market except under unusual conditions.

It is likely that such operations would create a more serious problem for dealers than Treasury debt operations in the long-term market. Treasury debt operations can and do create a number of problems because of their size. However, it is possible to gage reasonably the timing and impact of Treasury operations, at least within a tolerable margin of error. To some extent, longer run Federal Reserve objectives can likewise be gaged reasonably; but day-to-day open market operations are another matter. Furthermore, the sheer size of Federal Reserve operations merely for offsetting reserve factors presents a selling and buying potential that would be immense relative to the size of the long-term market. Price gyrations and consequently capital risk exposure would be similarly large relative to that existing in the Treasury bill market.

C. J. Devine & Co.

In what way would your operations be affected if the Federal Reserve System were to deal in long-term Government securities? Would such operations create a more serious problem for dealers than Treasury debt operations in the long-term market?

The Federal Reserve System, operating in long-term securities, would create a temporary and artificial market which, in a short space of time and depending on the trend, could correct itself. Time has demonstrated that dealers operating in a nonsupported market are more willing to take commitments on the long and short side and that buyers and sellers are more disposed to make decisions while the market remains on its own. To our mind, this, of course, has tended to create a better and broader market. Federal Reserve System operations in long-term securities would create a more serious problem for dealers.

Treasury debt operations are publicly announced, enabling dealers to judge and appraise the market, whereas the extent of Federal Reserve operations, in their total, is not made known in advance.

Discount Corp. of New York

This is a hypothetical question with an inadequate hypothesis. Without more information we have no present basis for judging the

operating effect upon the corporation of Federal Reserve System intervention in the long-term Government security market. To be helpful more information would be needed about the basis or objective of such operations, e.g. whether they would (a) be regular or sporadic, (b) be aggressive intrusion or merely a passive response to dealer overtures, (c) have a rate purpose or only an orderly market objective, and (d) be only purchases, only sales, or both. The initial reaction to any unexpected return of the central bank to the long-term market would be one of caution accompanied by attempts through bids and offers to reach some clarification of intent or purpose in such a procedural departure and to determine the public reaction. Uncertainty as to the size and duration of such operations would inhibit risk taking in long-term maturities until new reference points could be established for market appraisals. This is not to say that an understandable basis for modest intervention in long bonds could not be created, under certain circumstances, but it would depend on an ability to keep any such transactions free from direct association with fixed rate objectives or price support.

There are significant differences in possible impact between Treasury and Federal Reserve intervention in the long-term bond market. These arise out of differences in the functions and powers of those two agencies. The Federal Reserve System has the money creating power and, other things being equal, purchases (or sales) of Treasury obligations increase (or decrease) member bank reserves and thus enlarge (or contract) the ability of the commercial banks to expand (or shrink) loans and investments. The resources of the Federal Reserve System are vast on the purchase side and the possible objectives in terms of reserve or rate impact would be hard to judge. The psychological reaction of the public would be a further imponderable.

On the other hand, Treasury operations would have to be more circumscribed. Purchases would be somewhat limited in purpose, since the Treasury's ability to buy would be governed by its current cash position or by previously earmarked funds while ability to sell would be limited to issued securities available to it for such purpose. Emphasis would be on market stability or orderliness and the moderation of trend. The Treasury's range of capability and its probable objective would both be more limited and hence more susceptible to appraisal.

A meaningful comment on how a dealer's operations would be affected by Treasury or Federal Reserve System intervention in the long-term market cannot be made without a precise statement of official criteria for such operations. Differences in market impact from actions of these two agencies would appear to be those of degree rather than kind.

First Boston Corp.

G and H. We believe the "bills only" policy has strengthened our function as a dealer in longer-term securities. Supply and demand factors control the activity and the price level under present conditions in the Government market. Either can be affected by economic changes or investor preferences. As dealers we must weigh these conditions in assuming the risk of inventories. Often it is difficult. However, it would not be as difficult as trying to anticipate the actions of the Open Market Committee if they were permitted to deal in

other than short-terms because under such conditions their operations might influence long-term interest rates. In the final analysis, we believe that most of the problems of the Government securities market and the interest rate pattern can be solved through sound fiscal, monetary, and debt management policies.

The difference between Federal Reserve operations and Treasury debt operations in the area of longer-term securities is that the Treasury's intentions can be anticipated because they are based on a publicly announced program, whereas the Federal Reserve does not advertise its intentions.

First National Bank of Chicago

If the Federal Reserve System were to operate in the long end of the market in supplying or contracting reserves, the resulting problem to dealers could be serious. Price changes on either the up-side or down-side would be predicated on the Federal Reserve policy of the moment, and the maintenance of dealer positions in any size could be extremely hazardous. By limiting open market operations to bills only, the addition or withdrawal of reserve funds by the purchase or sale of bills obviously has its initial impact on short-term issues where dollar prices react least in response to a change in yield, and where the asset value of a portfolio is least affected. If this policy were changed and the committee operated in the long end of the market, large changes in dollar prices would be necessary to reflect a small change in yield. The risk of a loss in asset value, therefore, would be great and dealers would tend to reduce inventories of long and intermediate maturities to a minimum. Thus, a change in policy not only would create serious problems for dealers, but, in addition, would reduce the efficiency of the market for long and intermediate Treasury obligations. This problem would be more serious than Treasury debt operations in the long market, which, by and large, are an underwriting and distribution or sales problem.

Aubrey G. Lanston & Co., Inc.

If the Federal Reserve were to undertake to deal in other than short-term securities—that is, deal in the intermediate and long-term issue, we would be much less willing to trade in these issues for our own account. Our operations, therefore, would tend to become more of a broker operation under many circumstances, with the execution of customer business awaiting the uncovering of an opposite situation among other customers. We would be extremely cautious in committing ourselves by taking positions in the intermediate and longer-term areas because we would have no basis for coming to a judgment as to what the Federal Reserve System would elect to do in any particular area of the market at any particular time.

For example, during a period of very high and rapidly rising business activity and credit demand it might seem logical to expect that the Federal Reserve might be interested (if they were interested at all in operating outside the short-term area) in applying additional brakes to the economy by selling in the intermediate and longer-term sectors of the market for the purpose of reducing the amount of loanable funds available in the markets for home mortgages, corporate bonds, State and local government bonds, etc. This might seem to be a rational behavior from the standpoint of the Federal Reserve's responsibilities for containing the excesses of a business boom. It

would presumably help to contain aggregate demand for productive resources and to relieve upward pressures on prices. Moreover, it might be presumed that the Federal Reserve ought not to be "unfunding" the debt held by the public but rather should rejoice in the fact that there are as many of such longer-term securities held by the public as there are. A dealer, therefore, might rationally conclude that the Federal Reserve would not wish to buy intermediate and long-term Government securities under boom conditions.

However, the foregoing has not been the kind of action that the Fed would be likely to be advised (and, indeed, pressured) to take by some elements in and out of Congress, by special interests in the building business, and so forth. Much of the recent discussion advocating Federal Reserve open-market activity in the intermediate and long-term sectors of the market seems to stem from the belief that if the Federal Reserve were to do its security buying in these areas, it could some how or another shore up the market and maintain lower yields on these securities than would otherwise prevail. A dealer naturally, therefore, would ask himself some questions. To what purpose would this action be taken? Does the Federal Reserve wish to buy back a portion of the debt held by the public which the Treasury has fought so hard in years past to move out into the intermediate or long-term sectors? If not this, then what would be the purpose behind such a buying program? Would it be merely that the Federal Reserve, the Treasury or the Congress would feel happier if they could see the yields on Treasury issues quoted somewhat lower and the prices quoted somewhat higher than they might be if it were not for such Federal Reserve action? Or, perhaps, the action might be for the purpose of stimulating the bond market in the hope that this would entice private interest and thereby permit the Treasury to sell a much larger volume of new long-term securities than the Federal Reserve had bought back from the market.

Surely, however, the fundamentals of supply and demand of loanable funds are better understood than this—at least among investors, if not elsewhere. It would be naive, indeed, to hope that a regular or periodic program of this kind could accomplish anything positive for Treasury debt management. It would, instead, convince the investing sectors of the public that the Treasury market was rigged against the investor and that investments should rather be made in corporates, municipals, mortgages, term loans, et cetera, et cetera. The shoring-up efforts of the Federal Reserve in the Treasury bond market would only provide a ready facility for investors to get out of their Government issues and into more profitable, unrigged, private issues.

In summary, we can only repeat that we, as a dealer, could find no basis for forming a judgment as to the possible behavior of the Federal Reserve in the intermediate and long-term sectors of the market, were the System to operate there as a matter of regular practice. Therefore, any action which they might take in those sectors would, in our judgment, hit the market as being either capricious or subject to a wide range of confused conjecture. Under such circumstances, the only safe thing for a dealer to do would be to withdraw to the sidelines and to stay there while investors sold.

Operations by the Treasury Department in the long-term market do not have the same implications as do the actions of the Federal

Reserve, because the market thoroughly understands that the Treasury is not dealing with an unlimited amount of money. It is understandable that the Treasury is obliged, from time to time, to invest certain of its agency funds in marketable Government securities at times other than when the Treasury may be issuing new securities. It is also understandable that the Treasury might wish (although usually this is ill advised) to try to dress up its market on occasion, particularly in preparation for an attempt to issue intermediate or long-term securities.

It is possible to guess the maximum limits of Treasury buying for agency account. Hence, dealers look on this pretty much as customer buying.

Other market operations by the Treasury, whether to dress up the market or for other reasons, may be somewhat disconcerting to a dealer but these are recognized to be subject to some limits (as to aggregate amount of purchases or sales) and these, therefore, become a market factor which may be judged on the desirability of the purchases and/or sales. In other words, if the buying were timely—of the sort that might be made by a well-informed investor—it might encourage dealers to buy too; if it were untimely, dealers might welcome it as a means of reducing their inventory.

Morgan Guaranty Trust Co. of New York

If the Federal Reserve System were regularly dealing in long-term Government securities, we would be more wary of operating in this or other sections of the market. A judgment can be made of Treasury operations with regard to the size, timing, and area of financings. On the other hand, it is very difficult, if not impossible, to arrive at a decision concerning the extent or timing of Federal Reserve transactions. Any factor that creates uncertainty in the market tends to act as a restrictive influence on the operations of both dealers and investors.

New York Hanseatic Corp.

If the Federal Reserve were to deal in long-term Government securities we do not visualize any important influence on our operations. As outlined above, our operations seemingly did not change when the "bills only" policy was instigated and we would not expect them to change materially if the Federal reverted to operating in long bonds. On the other hand, if the Federal were to operate in bonds in our currently thin market some rather drastic gyrations might take place in prices. Only a nominal amount of buying would force prices sharply upward while selling would bring about the opposite condition. In either event, our operations probably would not change much because such price movements would be accompanied by only a minor amount of trading.

Treasury debt operations in the long market could go a long way toward reestablishing a real marketplace for Government bonds. Potential sellers are stymied by the loss factor at present so that the supply of long issues coming into the market is small. Rates therefore are too low to attract institutional investors who go elsewhere for more profitable yields. If the Treasury could pay a rate in line with present market conditions, we have no doubt that a satisfactory amount of long bonds could be sold. Then the market would have a supply of long securities selling at or around their issue price and

investors could sell or buy according to their need without being handicapped by serious loss if they are on the liquidating side or being forced to wait many years to realize the part of their yield that comes at maturity when a deep discount security is purchased. Finally, daily trading back and forth in new long-term Governments selling close to par would give the Treasury and dealers an immediate feel of the pulse of institutional investment operations and constantly indicate a rate area where the Treasury might offer another new security.

Wm. E. Pollock & Co., Inc.

It would increase our activity and interest in long-term securities. No—we would adjust our operations accordingly.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

A. If the Federal Open Market Committee were to conduct its operations in long-term securities, the willingness of dealers to position long-term securities could be materially lessened. In determining position policy, amongst other considerations the dealer is forced to gage correctly the future trend of securities prices. If expectations must include an appraisal or guess as to timing and size of Federal Reserve Open Market Committee intervention, the hazards associated with a position in long-term securities are greatly increased.

If, however, the Federal Open Market Committee restricts its operations to short-term securities, the risk associated with positioning such issues is not increased to the same extent because in the area of consideration, yield changes occasion less price fluctuation than is true in long-term securities.

Open market operations in long-term securities would certainly create more problems for the dealers than do Treasury debt operations in long-dated obligations. The Treasury tends to enter the market less frequently and with a lesser element of surprise than perhaps Federal Open Market Committee operations might occasion.⁶

Policies that increase the hazard and risk of dealer operations do not contribute to either breadth, depth, or resiliency⁷ of a market under

⁶ "United States Monetary Policy: Recent Thinking and Experience." Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, Congress of the United States, 83d Cong., 2d sess., sec. 5(a), of Public Law 304, Dec. 6 and 7, 1954, p. 267, par. (43), (44), and (45):

"It is easy to understand why dealers, with their lack of confidence in the Committee's intentions to restore a free market, would be reluctant to go very far in taking positions. To do so would not only involve the risk of being wrong in their evaluation of economic and market trends, but also of being wrong in guessing at what point the Federal Open Market Committee might feel it necessary to intervene. A difference of a few thirty-seconds in the level of prices of such intervention would not necessarily be of great moment to the Federal Open Market Committee, but it might be of real importance to a dealer's operations.

"It is the judgment of the subcommittee that the lack of professional dealer confidence in the intentions of the Federal Open Market Committee is justified, and that it is not enough for the development of an adequate market that the Committee's intervention be held to a strict minimum. It is important that the dealers be assured, if it is at all possible to give such assurance, that the Committee is prepared to permit a really free market in United States Government securities to develop without direct intervention for the purpose of establishing particular prices, yields, or patterns of yields.

"When intervention by the Federal Open Market Committee is necessary to carry out the System's monetary policies, the market is least likely to be seriously disturbed if the intervention takes the form of purchases or sales of very short-term Government securities. The dealers now have no confidence that transactions will, in fact, be so limited. In the judgment of the subcommittee, an assurance to that effect, if it could be made, would be reflected in greater depth, breadth, and resiliency in all sectors of the market."

⁷ *Ibid.*, p. 265, par. 36.

"In strictly market terms, the inside market, i.e., the market that is reflected on the order books of specialists and dealers, possesses depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices."

normal circumstances; less under extenuating or extreme circumstances. It does not follow that I accept the findings of the Committee in all these instances, but I do accept the philosophical concepts as considerations essential to the operation of a free market.

D. W. Rich & Co., Inc.

Since we are short-term specialists, we are unable to answer this question.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) As noted in my answer to section G, our operations and our ability to serve investors would be substantially curtailed if the Federal Reserve System were to deal in long-term Government securities. The possibility that the market at any moment would be subject to the influences of such operations would force dealers to become more hesitant in positioning Treasury issues and would thus contract the size of markets and lessen the ability of investors to move freely in and out of their holdings or to make such exchanges of issues as they might consider desirable.

(2) Operations by the Treasury in the long-term market, it is assumed, would be primarily for purposes of stabilization at the time new offerings are being made. These might be harmful rather than helpful because they might result in temporarily creating a misleading level of prices. Dealers, as noted in answering an earlier question, play an important role in Treasury refundings. A Treasury stabilization operation, at such times, might adversely influence their willingness to take as sizable positions as they do under present Treasury policy.

II. TREASURY DEBT MANAGEMENT

QUESTION

A. Can the Treasury, without disrupting the bond market and without the support from the Federal Reserve, continue to obtain additional funds by borrowing at short-term through raising short-term interest rates?

ANSWERS

Bankers Trust Co.

The answer to this question is "Yes;" the Treasury can continue to obtain additional funds by borrowing at short term through raising short-term interest rates without disrupting the long-term bond market. The validity of this answer is substantiated by the experience of the Treasury in recent months during which it raised substantial amounts of funds through the sale of relatively short-term obligations, without major support by the Federal Reserve, and without disrupting the long-term Government securities market. The increase in short-term money rates from the levels that prevailed in mid-1958 has been, naturally, much greater than the rise in yields on long-term Government bonds during the same period. The offering of higher rates on obligations of relatively short maturity has attracted funds from a great variety of sources but not importantly, so far as we can tell, from investment in long-term Government obligations. In a period of increasing business activity and large credit demands, interest rates normally rise; they did in the current business upturn; their rise in

the present cyclical expansion of business is similar to their normal behavior in the past. Also, again in conformity with past practice, short-term interest rates have risen more than long-term yields in the present period of business expansion. Finally, as has been true generally in the past periods of high-level business activity, short-term money rates are higher than long-term yields. And the important point to note is that these adjustments have been achieved without disrupting the market for long-term obligations. The high levels of short-term rates have attracted a large amount of buying of Treasury obligations, as discussed in the answer to question B.

We should like to add two additional comments. First, while we believe a substantial volume of Treasury short-term financing can be done without disrupting the long-term market, there are some obvious limits to exclusive reliance upon short-term financing. If investors became convinced that the Treasury was embarking upon such a course, inflationary psychology would be given added stimulus because of the inflationary implications of short-term Treasury financing. At some point, this breakdown in confidence would, in all probability, lead to a significant marking up of yields on long-term bonds, including Treasury obligations. Second, it follows that we do not favor a policy of Treasury debt management that relies exclusively upon the sale of short-term obligations, even though we do not feel that the Treasury has yet reached the point at which such practices would have a major adverse effect upon the long-term Treasury market.

Bartow Leeds & Co.

The Treasury for some time now has used mostly the short-term area in which to do its larger financing. How long it can continue to do so under the terms of the question would depend upon how high it would be willing to push interest rates. Continued upward pressure on interest rates would disrupt the market.

Briggs, Schaedle & Co., Inc.

Yes.

Chemical Bank New York Trust Co.

No. At any given time the amount of short-term funds is limited and a continuing supply of new Government securities, even of short term, would tend to disrupt the market. Given enough time, the accumulation of corporate and private savings might provide sufficient funds for investment to take care of Treasury requirements without support from the Federal Reserve. However, if the Treasury's cash requirements are large, and particularly if these requirements coincide with a high level of business activity and a strong demand for credit, it would not be feasible to borrow unlimited amounts through raising short-term interest rates. Under such conditions all available funds would have been absorbed and the Treasury would have to turn to commercial banks for financing, who, in turn, would have to look toward the Federal Reserve for additional reserves. Without additional reserves it would be impossible for member banks to increase investments concurrently with an increase in loans.

C. F. Childs & Co.

This question implies that the Treasury deliberately raises interest rates. Our view is that interest rates rise as a result of total demand

for money, including that of the Treasury, impinging upon a limited supply. The Treasury can continue to obtain additional funds by borrowing at short term as long as (a) the securities can be paid for by credit to tax and loan accounts, and (b) as long as the Federal Reserve makes possible an expansion in member bank reserves sufficient to support the new deposits thereby created. To this extent the support of the Federal Reserve is indispensable. As to disrupting the bond market, under today's conditions, and even with the support of the Federal Reserve System, continued exclusive reliance on short-term financing by the Treasury is bound to have disruptive consequences for the bond market.

Continental Illinois National Bank & Trust Co. of Chicago

Yes. Since mid-1958 the Treasury has financed a huge deficit in an extremely unfavorable market. The pull of higher rates has worked to attract new buyers. For example, the 4¾-percent notes of 1964 brought into the Treasury market a whole new group of buyers because of the rate.

If business continues strong with heavy private credit demands, and the budget continues to generate an inadequate cash surplus for debt retirement, then additional Treasury borrowing at short term will be difficult. Similarly, it will be difficult for the Treasury to float as many intermediate or longer term bonds as would be desirable. The problem is seriously compounded by the 4¼-percent debt ceiling on bonds which has added further to pressures on short rates and helped force the short rate above the long rate. Large Treasury offerings obviously will tend to disturb the market from time to time. Given the conditions we have, all of this is to be expected. But there is no alternative to facing the issue this way if we are to maintain a free market economy and permit the Federal Reserve to do its job. The extent of the disruption can be readily observed by reviewing the past few months when the conditions postulated existed. If the Treasury has to seek new funds at a time when there are other heavy demands for funds, there will be difficulties whatever area of the market is tapped.

The question implies that the Federal Reserve could support the market during Treasury financings and thereby eliminate the impact of Treasury borrowings. Past experience, particularly in the period from the unpegging in March of 1951 to 1953, shows clearly that the Federal Reserve cannot give the Treasury temporary support at the time of a new issue and really accomplish anything in the long run if the basic market climate is unfavorable. We learned then that when the Federal Reserve temporarily supported a Treasury financing during a period of rising interest rates, the ultimate result was to make each financing progressively more difficult. The period of temporary Federal Reserve support had to be terminated shortly after the financing or else the Federal Reserve would have had to buy excessive amounts of securities and create excessive amounts of bank reserves relative to the overall needs of the economy. As soon as the Federal Reserve stopped its support operations, the new issues would go to a sharp discount. After this happens a few times in a period of rising interest rates, the market becomes completely distrustful of Treasury offerings and new Treasury financing becomes more difficult than ever. The only real alternative is for the Treasury to try and price its issues

attractively enough to induce buyers to take the bonds in spite of an adverse market outlook. Furthermore, the basic source of the difficulty should not be forgotten—an errant fiscal policy resulting in a demand for funds when budget surpluses should be occurring.

C. J. Devine & Co.

This policy cannot be continued indefinitely without disrupting the bond market. Progressive reliance on short-term financing could bring about such a rate structure for short-term securities that it could have a serious effect on the market value of longer term Government obligations.

Discount Corp. of New York

There are believed to be limits—not wholly measurable limits, but real ones nevertheless—to the Treasury's ability to continue to obtain additional funds by borrowing at short term through raising short-term interest rates. The Treasury's cash needs in the balance of the calendar year are expected to be in the neighborhood of \$7 billion while time is also adding to the supply of short-term Treasury obligations as maturities move into this sector faster than the Treasury moves them out. A worthwhile answer to this question quite clearly hinges upon the size of the additional funds and the time interval over which they are to be raised.

Treasury offerings of short-term securities are typically underwritten to a large extent by the commercial banks, chiefly because they are made in amounts that exceed the investable cash available to nonbank investors at any given time. The incentive for commercial banks to underwrite is important in the orderly placement of these securities. Recently that incentive as well as the general bank appetite for Treasury obligations has been dulled. But in order to accommodate credit demands from the private sector of the economy commercial banks have been liquidating Government securities through sales to nonbank investors. Nonbank investors are the potential source of new demand for short-term Treasury offerings. If the Treasury were to attempt to draw off funds by borrowing in too large amounts too frequently, without a release of reserves by the Federal Reserve System, the market, being heavily dependent upon nonbank buying, could be overburdened.

The resulting rate impact would sooner or later have a substantial influence on longer term issues as high short-term rate levels attracted funds from other commitments where risk and return make unfavorable comparisons. This would occur because Treasury obligations represent a homogeneous body of debt—uniform as to credit standing—outstanding in an array of maturities ranging over a 30-year span, selling at interrelated rates, and forming a relatively smooth curve of yields.

Various classes of investors (such as individuals, banks, and savings type institutions), each have a range of maturities that particularly suit their needs. They do, however, extend or shorten their maturities on the basis of their appraisal of the income versus price risk factor. Thus, there is a certain quality of substitutability at a rate in their maturity preferences. At the same time, there is also a maturity overlap in the holdings of each of these classes.

These factors of substitutability at a rate and of ownership-overlap link the different maturity sectors of the market together. As a result

a decline or rise in short-term rates tends to bring about similar changes in intermediate and long-term rates as shifts in ownership occur in response to efforts to maximize income within a given rate risk framework.

The really important issue raised by this question is not whether the Treasury can "continue to obtain additional funds by borrowing at short-term through raising short-term interest rates," but whether it should in view of the current structural arrangement of maturities.

First Boston Corp.

There is a saturation point in the short-term market. Beyond absorbing funds available outside the commercial banking system, the Treasury could not continue to borrow indefinitely at short-term without disrupting the bond market unless the pressure on the banking system were relieved either by a decrease in the demand for loans or by reserves supplied by the Federal Reserve System, or both.

First National Bank of Chicago

With interest rates at levels exceeding the ceiling on long-term bonds, the Treasury is virtually forced into the short-term market and will be required to wait for a decline in rates in order to return to the long-term market unless the ceiling is raised or eliminated. This situation could, temporarily at least, disrupt the market as the psychological effect causes investors to shift out of long-term holdings. Furthermore, continued upward pressure on short-term rates by extensive Treasury financing in this medium may be expected to aggravate the situation. On the other hand, future increases in the short-term rate may eventually induce holders or would-be purchasers of equities to shift to the short-term Government market, thus partly alleviating the situation. In my judgment it would be most unfortunate if the Government bond market became so disrupted that Federal Reserve support became necessary. Such support might involve supplying reserves to the banking system when business, economic, and credit conditions would dictate a policy of restraint.

Aubrey G. Lanston & Co., Inc.

The question presumes a situation which has not in fact been the case—that is, it implies that the Treasury has been able to raise funds in the short-term market without disrupting the bond market and without support from the Federal Reserve. The fact that the Treasury has had to raise huge sums of money over the past year or more has been a major factor in adding to the demands in credit. What disruption there may have been in the bond market has been due, in some considerable part, to the Treasury's substantial cash needs at a time when the Treasury should have retiring debt.

It is also worth noting that the necessity for the Treasury to finance in the short market has been a consequence of its untimely cash needs and that this financing has been facilitated by the Federal Reserve System. For example, in the 12-month period from June 1958 to June 1959, during which period the Treasury financed the \$13 billion cash deficit in the short-term market, the Federal Reserve added \$1.2 billion to its holdings of Government securities and increased its discounts and advances to member banks by an additional \$800 million. Further additions to Federal Reserve credit through additional purchases of Government securities were made in July and August of

1959. These increases in member bank reserves, of course, have made possible an additional enlargement in the money supply in the first half of 1959 on the heels of a monetary expansion in 1958 of over \$6 billion.

The Treasury will have to borrow additional substantial sums of money in the next 3 months and it is questionable whether there will be enough of a surplus in the first half of next year to meet attrition, maturities of tax bills, and net redemptions of savings bonds. When business conditions are as strong as they currently are, it is doubtful that such deficit financing can be achieved without further disrupting the bond and credit markets, even with such continued support as the Federal Reserve can find it possible to give to considering its other major responsibilities. The Treasury will doubtless get its funds, but in all probability only at the expense of further sharp increases in interest rates, if the business situation continues strong.

Morgan Guaranty Trust Co. of New York

The Treasury cannot continue indefinitely to obtain additional funds in the short area (with or without Federal Reserve support) without disrupting the financial structure of the economy. If carried out without support from the Federal Reserve the process would eventually result in a concentration of debt in the short area that would virtually preclude complete redistribution of maturing issues and make likely periodic and violent fluctuations in rates. If carried out with support from the Federal Reserve the process would eventually lead to loss of confidence in the dollar which probably would disrupt the economy.

New York Hanseatic Corp.

The Treasury probably can obtain the additional money needed to finance its deficit in the short-term maturity area without disturbing the bond market and without support from the Federal Reserve by paying whatever rates are necessary for the hire of such funds.

The short-term market is pretty much divorced from the long-term bond area in that different types of buyer dominate the two sections. Banks, corporations, and other short-term investors dominate the market for short rates, while insurance companies, savings banks, pension funds, etc., are the principal investors interested in acquiring a fixed yield for a long period of years. When the demand for short funds outruns the demand for long funds it is normal to experience higher short term rates than long term rates. If the Treasury continues to tap the short market, rates probably will rise disproportionately to longer term bond yields but there is no reason to expect that this occurrence will disrupt the bond market. In the present economic atmosphere we should not expect the Federal Reserve System to support Treasury operations where such support might be inflationary in nature. Obviously, therefore, a continuation of the present practice of the Treasury to borrow short term will lead to considerable further pressure being brought to bear on money market rates with correspondingly higher yields.

Wm. E. Pollock & Co., Inc.

The continual borrowing by the Treasury at short term through raising short-term interest rates undoubtedly would disrupt the bond market.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

Presumably the Treasury could, without materially disrupting the bond market and without the support of the Federal Reserve System, convert the entire debt into near-term securities. Any doubt about this possibility presumably stems from the supposition that there is some kind of fixed limit to the supply of short-term funds. This is not necessarily the case, so long as interest rates remain flexible. Were the Treasury to undertake such a program—and I certainly do not believe it should—it would gradually increase short-term offerings as intermediate and longer term securities matured, and as deficits had to be financed. Present holders of short-term debt would maintain or increase their acquisitions as short-term Treasury rates appreciated. Eventually, long-term investors would be induced to shorten their portfolios because of the increasing rate attractiveness of short-dated obligations. Once the conversion had been completed, short-term interest rates on both Government and private debt would be higher, relative to longer term obligations. The yield pattern would tend to be negatively inclined. Although long-term interest rates would tend to be relatively lower than short-term rates, the bond market would not necessarily be disrupted because the conversion would take place, subject to deficit requirements, gradually as longer term securities reached maturity.

D. W. Rich & Co.

It is becoming more and more apparent that the answer to this question is "No."

Salomon Bros. & Hutzler, Girard L. Spencer, partner

If it is necessary for the Treasury to continue to obtain additional funds in the short-term market without the support of the Federal Reserve, particularly to finance a deficit in the budget, short-term rates will, undoubtedly, be pushed higher. Although long-term interest rates eventually reflect changes in short-term rates, I do not believe the long-term market would be "disrupted" by continued borrowing by the Treasury at short term unless market conditions change radically.

QUESTION

B. Is the market for Treasury issues largely limited to current cash flows, or do Treasury offering terms sometimes induce a readjustment of existing portfolios to accommodate the new issues? Why?

If the market for new Treasury issues is largely limited to current cash flows, to what extent are these flows earmarked for particular maturity lengths and for particular degrees of risk? How is such earmarking to be accounted for?

ANSWERS

Bankers Trust Co.

In our judgment, the market for Treasury issues is not limited to current cash flows. The experience of the Treasury in recent months clearly indicates that higher levels of interest rates will attract buyers who, in the absence of more attractive returns on Government obligations, would not have purchased these obligations.

Some of the sources of buying of higher yielding Government obligations in recent months that do not reflect in large part current cash flows are:

1. A shift from demand deposits in the commercial banks into holdings of Treasury obligations. This shift has been definitely encouraged by the attractive returns available on Treasury obligations of shorter maturities.

2. A shift of time deposits of foreign banks, business concerns, and State and local governments into Treasury obligations. Again, the high yields have induced this shift, especially in the light of the ceiling on interest payments at 3 percent.

3. The inflow of foreign funds again attracted by the relatively favorable interest rates obtainable in this market.

We believe there has been some talk of a shift of savings deposits into U.S. Government obligations, but we have the impression that the shift out of savings deposits has been very largely into the stock market.

We disagree with the implication of the second half of this question; namely, that the market for new Treasury obligations is largely limited to current cash flows. As has been pointed out above, shifting of funds in response to the higher interest rates available on Treasury obligations has been a very important factor in the Government bond market in recent months.

Perhaps the best example of current cash flows becoming available for investment in Treasury obligations is the investment of funds accumulated for the payment of Federal income taxes. Normally these funds are earmarked for tax dates or thereabouts, and customarily they are invested in obligations of top quality and, most importantly, in Treasury obligations.

Bartow Leeds & Co.

The market for a new Treasury issue is, to an extent, limited to current cash flows, but then again readjustments of existing portfolios provide much room for the new issue. Liquidity preference, maturity date, yield differentials, etc., all enter the picture and cause these readjustments. In each instance a very real reason exists for the readjustments. The outstanding and motivating reason behind all of it may be the thought that the new issue is attractive.

When cash flows are earmarked for particular maturity lengths, we understand that the needs of the buyer of a new Treasury issue has dividends that fall on a particular maturity date, or that he has a maturity of his own securities, then; it might fall in line with a buyer's work-in-progress payment, or the last lump-sum payment due on a piece of equipment or on a total new plant. Or the reward in owning the greater value of a new Treasury issue overcompensates the buyer for the longer market risk he assumes. This only highlights a portion of this earmarking of funds. To account for this, experience and questioning of buyers of securities are good teachers. Each Treasury borrowing or rollover produces new and different aspects of the question.

Briggs, Schaedle & Co., Inc.

It is very difficult for me to answer this question. There are so many different angles to both sides of it that it would be impossible for me to give you an intelligent answer.

Chemical Bank New York Trust Co.

Yes. The bulk of the demand for Treasury securities arises from current cash flows of corporations and excess reserves of commercial banks, where the emphasis is on short-dated maturities. The balance of the demand is accounted for by individual and institutional savings, where greatest emphasis is on intermediate and longer term issues. A new Treasury offering induces readjustments of portfolios, but such readjustment does not provide any additional funds. The prospective subscriber to a new issue who disposes of an existing holding simply shifts his investment to another investor who thereby exhausts his own buying power and ceases to be a potential subscriber. The earmarking of cash flow for particular maturity lengths is related to the need for liquidity on the part of the various classes of investor. Corporations invest seasonally as their earnings build up cash and as their tax reserves accrue. Early maturities are appropriate. Commercial banks also tend to earmark funds for relatively early maturities for the sake of a high degree of liquidity to provide for credit demands on the part of their customers or withdrawal of deposits. Savings institutions are more permanent investors and as a rule prefer longer maturities.

C. F. Childs & Co.

The market for Treasury issues is by no means limited to current cash flows. Every new issue, to a varying degree, causes shifting within the portfolios of investors. Each investor may have different reasons for a shift. E.g., to realize a loss or to capitalize a profit; to readjust his maturity distribution; to diversify as between maturities or types of Government securities or as between Governments versus other types of investments.

Since we do not believe the market for new Treasury issues is largely limited to current cash flows, an answer to this point is irrelevant. In any case, such earmarking would be done as a result of investors' judgments and not the dealers'.

Continental Illinois National Bank & Trust Co. of Chicago

Whether or not the market for Treasury issues is limited to current cash flows depends on so many factors that it would be difficult to answer except through a long and detailed study. The investment climate at the time, the terms of the Treasury offering, the overall economic outlook, the stage of the inventory cycle, the outlook for expenditures for plant and equipment, the accrual of taxpayment reserves, and many other items might affect the market. For example, it is generally assumed that demand for long-term Treasury bonds depends on the current cash flow of long-term savings institutions. Experience indicates that even this is not necessarily true since the Treasury has been losing its share of the current cash flow of long-term investment institutions for some period of time. On the other hand, the right type of attractive terms on a new Treasury offering at times may induce investors to buy the new Treasury issue and cut down or actually liquidate other issues. The 4¾ percent notes of 1964 showed how new buyers could be brought into the market.

The question of earmarking the current cash flow by investment institutions will likewise depend on changing conditions. Earmarking is common to investment institutions. Many of them tend to have

fairly fixed ideas on maturities. But these ideals are subject to so many exceptions as market conditions change that they cannot be summarized briefly. The difficulty of generalizing is highlighted by a few of the broad changes that have taken place such as the switch from bonds to stocks by many long-term investment funds and the increasing availability of Government-guaranteed mortgages and other high-grade investments which have successfully competed with and taken the place of long-term Government bonds in many institutional portfolios.

C. J. Devine & Co.

For the most part the market for Treasury issues is largely limited to current cash flows. In addition, holders of Government securities will sell old issues in order to buy a new one, either to take advantage of higher rates or to obtain a maturity more appropriate to their purpose.

The extent to which these flows are earmarked for particular maturity lengths and for particular degrees of risk will depend on the type of investor. Corporate investors will be limited to the short-term area, whereas commercial banks will weigh the relative level of their time deposits against their demand deposits in determining an appropriate maturity structure. The policy of savings institutions, pension funds, insurance companies, and other savings-type investors will be determined by the availability of other investment media.

Discount Corp. of New York

The experience of the past decade suggests a negative answer to this question, although there are times when cash flows dominate the short-term market. The nature and extent of ownership transfers of Treasury debt in recent years have reflected a marked tendency for many institutional investor groups to divest Government securities. It appears that the function of Government securities in the portfolios of many investors has changed in a competitive market from an investment to a liquidity role. Some of the reasons for this development have been the natural tendency for financial intermediaries to specialize in debt instruments involving direct personal negotiation with the borrower (e.g., mortgage loans, direct placements, etc.), the tendency for the Government to compete with itself by making available riskless investments with its guarantee on VA and FHA mortgage loans, and a demand for short-term Government securities that has resulted from economic growth.

During much of the past decade it has been a lender's market and Treasury issues of longer term, despite their shiftability and freedom from credit risk, have not been sufficiently attractive at the prevailing rate to withstand the competitive preference for other high-yielding investments of top quality. In a measure this changing position of Treasury obligations has been due to the shifting structure of the marketable debt as time brought increments of debt into the intermediate and shorter term areas faster than the Treasury replaced the maturity shift with new offerings.

It would be a mistake to assume that the demand for Treasury issues is inelastic or rigidly fixed by cash accruals which the various non-bank investor groups earmark for Treasury issues. The Treasury does, of course, have some dependable investors in long maturities

who have specialized or legally circumscribed needs, and it can command a corporate response in the short-term sector. But viewing the market as a whole, Treasury issues can only be sold on a competitive basis (as the present tendency for State funds to liberalize the range of their investment authority illustrates so well); and the constant flow of funds into and out of all sectors of the Government market depends on the terms of the issues the Treasury offers and the comparative spreads between Treasury issues and other alternative forms of investment. This movement of funds is guided by the degree to which rate compensates for loss of liquidity, shiftability, and added risk.

First Boston Corp.

In addition to current cash flows, Treasury offering terms often induce a readjustment of existing portfolios to accommodate the new issues. This might result from various factors, such as (1) willingness to change current holdings for a higher interest rate or a more attractive maturity, (2) exchanging lower coupon issues for tax purposes and replacing with higher current income.

Investment of current cash flows by nonfinancial corporations and public bodies would be influenced greatly and probably earmarked as to maturities, by expectation of when the funds would be needed—such as dividend dates, taxpayment dates, and general liquidity needs.

First National Bank of Chicago

By and large, the market for Treasury issues is limited to current cash flows, but, as your question suggests, the terms of a particular Treasury offering sometimes may induce a readjustment of existing portfolios to accommodate the new issues. For example, and as mentioned in II-A above, the level of yields on forthcoming Treasury issues may prove sufficiently attractive to divert a larger portion of the cash flow of private as well as institutional funds from equity into Government obligations.

On the other hand, when interest rates are depressed, certain investors may adjust their investment policies so that a larger share of their current funds flow into the short maturities in anticipation of a shift in rates and higher yields on longer issues at a later date.

Presumably sound investment policy would include a schedule of maturities as well as "degrees of risk" which would tend to govern the investment decisions of the portfolio manager. These policies obviously would vary widely and would be dictated by the purpose or objective of the fund. For this reason, it seems difficult to answer directly the question posed above. Sound debt management, however, would bear in mind these varying maturity and risk requirements and, consequently, would offer issues of varying lengths so as to attract all investors, regardless of their requirements.

Aubrey G. Lanston & Co., Inc.

The market for Treasury issues is by no means limited to current cash flows. When Treasury offerings are made on terms which are regarded as attractive in comparison with the prevailing market, many investors will readjust their portfolios to include a larger amount of Treasury securities than might otherwise have been the case. Further,

when yields on Treasury securities are high, cyclically speaking, there is a marginal group of investors of some significance who will purchase Treasury securities who would not do so at lower, less attractive yield levels.

A number of important investors as a matter of policy invest their surplus cash receipts regularly in Treasury securities, and their market interest in Treasury issues may be said to be strictly related to the ebb and flow of their cash receipts and expenditures. This group is a diminishing one, we believe. Included in it, for example, used to be State and local government funds, but there has been a marked shift in the authorization under which these funds operate, and today there are very few of these funds that confine their investments as a matter of requirement to the Treasury security market. Many have been sellers of their past-acquired holdings in order to invest in other media. In addition, many corporations who used to confine their investment of cash to the Treasury market now take advantage of attractive situations for investment in commercial paper, Federal agency issues, public housing notes, and short-term State and municipal issues.

To a considerable extent, current cash flows are earmarked for particular sectors of the Government security market. Corporations, for example, tend to confine their investment activities to the under-18-month area. Nevertheless, when yields on intermediate-term securities become attractive, many corporations will invest a portion of their funds in these issues. Similarly, other investors may shift their preferences throughout the spectrum of maturities depending on special opportunities that may develop.

Morgan Guaranty Trust Co. of New York

While influenced importantly by current cash flows, Treasury offering terms tend to induce a readjustment of existing portfolios to the extent that new issues are relatively more attractive than other outstanding obligations.

New York Hanseatic Corp.

In any given maturity area where the Treasury contemplates an offering of new securities, the success or failure of such an offering is largely dependent upon the net amount of new cash which investors can raise in order to participate in the borrowing. As described above, different types of investor dominate different market areas so that it would be rather difficult for any group to readjust existing portfolios in order to completely accommodate a new issue because the securities that had to be sold would have to be picked up by other investors in the same position. To the extent that Treasury borrowing is tailored to the current availability of cash there should be a near pair off between the supply and demand for the security. The portfolio adjustments that go around such an offering tend to bring the market to the yield level of the new security or, the new security adjusts to the market, which is a healthy situation in any financing operation.

Current cash flows are importantly earmarked for particular maturity lengths and for particular degrees of risks. This is accounted for by the fact that different types of investor possess such cash. Long-term investors tie in their anticipated income needs for future years with the availability of investment yields. There is little question that of Treasury issues were to supply the required rate of return,

long-term investors would earmark more funds for this type of holding.

Short-term investors that might need money on short notice naturally earmark new cash for the shorter term low-risk media.

Wm. E. Pollock & Co., Inc.

New Treasury issues cannot always be limited to current cash flows so that readjustment of existing portfolios is sometimes induced for improved return.

A very high percentage of such new Treasury issues as may be limited to current cash flows is earmarked for particular maturity lengths.

Additional earmarkings may be accounted for by the reported positions of dealers and by increased holdings of the larger commercial banks.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

Assuming flexible interest rates, new Treasury issues are not necessarily limited to current cash flows. The competitive position of the Treasury in the capital market is unique because of two factors. First, Treasury obligations are of gilt-edge quality. It is an accepted fact that the Government can always meet its obligations when they become due by exercising the constitutional power to tax or through the creation of new money. Secondly, the Treasury is not limited by profit considerations. Conceivably at any level of interest rates the Treasury can compete successfully with any private borrower if not prevented from so doing by inhibiting legislation, e.g., the provisions of the Second Liberty Bond Act, as amended, relative to rates on Treasury bonds of over 5 years to maturity.

The market for short-term Treasury issues is limited to current cash flows only within the framework of the present risk structure of interest rates. To varying degrees, investors hold such obligations at present rates of interest. These securities are relatively liquid and are riskless as far as the payments of principal and interest are concerned. Hence, investors who, because of the nature of their liabilities, must provide for liquidity and early dated reserves, earmark certain funds for investment in the short area of this media.

Treasury offering terms, at times, do induce a readjustment of certain portfolios because of:

- (1) Investment quality improvement.
- (2) Improvement of maturity distribution.
- (3) Establishment of commitment offsets or specific reserves.
- (4) Income improvement.
- (5) Real or potential tax advantages.
- (6) Considerations pertinent to the overall conduct of operations of a given institution.
- (7) Spread or trend trading^a advantages.
- (8) Bookkeeping considerations which may involve diverse internal policies or practices, e.g., consideration of the participation of various benefit funds or their participation in various classes of income (gross, operational, net, etc.).

While the market for new Treasury issues is not necessarily limited to current cash flow, this consideration should not be ignored. Many

^a Savings Bank Journal, vol. XXI, No. II, p. 46, Trend Trading—"I would define as any purchase and/or sale made from subsequent reversal, predicated solely upon ones judgment or guess of future market levels."

corporation managements insist on establishing reserves for specific occasions of fund inflow or outflow, e.g., tax requirements, dividend requirements, construction disbursements, and other pertinent considerations.

How such earmarking is accounted for is as variable as the many accounting practices of the subjects involved. There are some general considerations or practices, but to my knowledge no uniform code or standard is followed.

D. W. Rich & Co.

This question we find difficult to understand. There are certain times when "new money" is traditionally available, e.g., "January reinvestment demand." However, the shifting of portfolios to accommodate new Treasury offerings is a current practice. It is one of the ways in which a dealer can assist most usefully in Treasury debt operations.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) Treasury offering terms will induce adjustments in existing portfolios of alert investors where the new obligation is more suitable than an issue currently held. This could be because the new security offered a more advantageous rate of return, or more suitable maturity. In addition many long-term investing institutions do their own refunding of Treasury issues as their maturities become too short for their requirements.

(2) If the market for new Treasury issues is largely limited to current cash flows, it is only rarely that long-term funds are available in any appreciable amount. Therefore the Treasury must limit its offerings to maturities that are acceptable to the commercial banking system, to nonfinancial corporations and, to a smaller extent, public welfare funds and a few private pension funds, which are limited to or must maintain a fixed percentage of Treasury obligations.

QUESTION

C. Would it be possible to reduce the Treasury's debt management problem in some measure by making greater use of the auction technique in connection with the issuance of intermediate- and long-term securities, and/or by issuing such securities more frequently, more regularly, and in smaller amounts?

ANSWERS

Bankers Trust Co.

(Answers to C, D, and E:) In our opinion, the use of the auction method in selling intermediate or long-term Governments would be awkward, unsatisfactory and, under certain market conditions, a dangerous procedure. We believe that as a general rule the auction method should be confined to Treasury bills and applied to longer maturities only during favorable bond market conditions and in a limited way. By experience we know that the secondary market for long term Governments offered at auction has been highly unfavorable, and we further believe that this in the long run would serve to destroy any advantage resulting from the fact that a higher price was received at auction. It has been the history of the corporate bond market that issues offered at auction are difficult to distribute except-

ing under favorable market conditions. Only during periods of recession or during an all-out war do substantial amounts of investment funds accumulate for investment in longer term Governments.

Bartow Leeds & Co.

I think it would be highly improper for the Treasury to resort to the technique of auctioning its intermediate- and long-term securities. The story of this operation and its results can be found by recourse to the midthirties. That it didn't work to the advantage of the Treasury then is enough of an example to all concerned that it probably won't work now. I believe that it would be highly improper today because the buyers would submit low bids in their belief that this is only the beginning. There would be a dearth of interest in the secondary market for the same reason.

Briggs, Schaedle & Co., Inc.

No.

Chemical Bank New York Trust Co.

Use of the auction method would not reduce the Treasury's debt management problem in connection with intermediate or longer securities. The auction technique might be advantageous from the standpoint of interest cost to the Treasury during periods of easy money, when bidding would logically be more aggressive. When money is tight the auction technique might result in a higher interest cost. It is difficult to see how the Treasury could issue such securities more frequently than at present. They are already in the market at every favorable opportunity. It might be possible to bring out intermediate or long bonds on a regular schedule, but this could be costly if a financing schedule were adhered to at a time when the particular maturity range involved was not the most appropriate to the existing market. Debt management would be hindered by offering smaller amounts because this would mean more frequent offerings and the result would be simply to keep the market off balance continuously. It is desirable to have sufficiently long intervals between offering dates to permit the market to "rest."

C. F. Childs & Co.

There may be times when it would be possible to reduce the Treasury's debt management problem in some measure by making use of the auction technique, and/or by issuing such securities more frequently and in smaller amounts. However, during periods when money rates are in the process of a change toward a higher level, it is likely that the Treasury's use of this method would cause a greater disruption in the market than when bonds are sold by the usual methods. The public generally is unfamiliar with auctions by the Treasury and we feel that the Treasury would need to rely more on the sophisticated or professional investor, who would scale his bids downward in a poor market, resulting in a higher cost to the Treasury.

Continental Illinois National Bank & Trust Co. of Chicago

Much thought has been given to the use of the auction technique versus the fixed price technique in pricing new Treasury issues. The Treasury has broadened the use of the action technique to a marked degree in the short market with great success on the whole, but we do

not believe that use of the auction technique would help in solving the Treasury's fundamental debt management problem in the intermediate and longer term maturity areas. When you actually get down to computing the specifics and what the market impact might be, you quickly become discouraged with the feasibility of using the auction technique in these maturity areas. Even if the mechanical problems could be solved, it is likely the use of auctions for intermediate and long bonds would lead to serious problems, including greater market distortions in both inflationary and deflationary periods.

The question of whether or not to issue intermediate and longer term securities more frequently, more regularly, and in smaller amounts, depends on conditions at the time. As a general rule, it is desirable for the Treasury to be in the market as infrequently as possible in order to minimize the market disturbances which always are associated with new financing operations. On the other hand, it is desirable that intermediate and longer term issues be held to amounts that can be absorbed by permanent investors within a reasonable period of time. Thus there probably is a happy medium which will depend on changing market conditions. The Treasury has been striving for this happy medium in recent years. This is a difficult and delicate operation. The failure of Congress to remove the $4\frac{1}{4}$ percent interest-rate ceiling on Treasury bonds has complicated the problem seriously and prevented the Treasury from moving ahead on a fairly regular basis with smaller issues of long-term bonds.

C. J. Devine & Co.

The auction technique would do more harm than good. It would cause unnecessary fluctuations in intermediate- and long-term Treasury obligations. The auction technique is suitable only to Treasury bills. The less frequently the Treasury has to enter the market for intermediate- and long-term money, the better it would be for the general condition of that sector of the market. Furthermore, issues of \$500 million or less, from our experience, lose the benefit of a broad market which characterizes issues outstanding in larger amounts. The study (pt. I) made by the Treasury-Federal Reserve and reported to the Joint Economic Committee on July 24, 1959, discusses this problem at length and we subscribe to the general conclusions contained therein.

Discount Corp. of New York

(Answers to questions C, D, and E:) Each of these questions deals with the auction sale of Treasury obligations and all of them can, on that account, be best answered together. Perhaps at the outset it should be said that all three are currently purely academic queries so long as most outstanding Treasury obligations with maturities of over 5 years sell at rates well above the $4\frac{1}{4}$ percent statutory ceiling at which new Treasury bonds can be sold.

The problem of debt management is referred to in the foregoing question II-C without definition. It would appear that the potential for exercising a countercyclical influence is limited; and the wisdom of letting the "market manage the debt" is doubtful. The hard practical rules of good housekeeping now seem like the dependable criteria for immediate action. This is because of the need to regain control

over the size and improve the form of the floating debt, the need for a general structure comprising a wide range of well-spaced maturities of a size that makes refunding operations manageable and the individual issues tradeable, and finally, the absence of a budgetary surplus. It is recognized that in a period of rapid change and economic growth, debt management is partly "trial and error"; and success requires flexibility and a readiness to adopt procedures in the light of changing market conditions. These considerations would suggest that auction finance should be fully explored for its possible application in all sectors of the market. There is submitted below a review of considerations governing the use of auction as a financing technique for the Treasury.

I. What is auction finance?

A. Mechanics:

1. The borrower invites bids on a competitive basis to an offering of a given amount of its securities.
2. Three courses are open:
 - (a) The borrower may set the coupon rate and invite the lender to name a price.
 - (b) The borrower may set the price and invite the lender to name a coupon rate.
 - (c) The borrower may invite the lender to bid on a discount basis (the routine procedure on Treasury bills).

B. Theoretical principles on which auction is based.

1. It assumes that funds be freely available at a range of rates representing varying degrees of intensity of demand.
2. It promises the borrower bids in excess of the amount offered to the extent that some new demand emerges at each higher rate.
3. It is a competitive approach:
 - (a) The borrower makes the strongest competitive claim on available funds by letting investors set their own rate.
 - (b) Investors set their own rates in competition with each other.
 - (c) The borrower thus hopes to get the needed funds at the true "going rate." This should in theory be lower on the average than a fixed rate based on a judgment of market demand and necessarily fixed at a level high enough to meet the needs of the marginal investor.

II. Treasury use of the auction procedure:

A. Since their introduction in 1929, Treasury bills have been successfully and effectively sold on a competitive basis through the auction method. Bill cycles were established and regular maturities were turned over on a revolving basis.

B. Cash sales of special bills have also been generally made on an auction basis.

C. In 1935 the Treasury sold five issues of bonds for cash on an auction basis. These were a reopening of outstanding issues. The Treasury stipulated that bids had to be at par plus accrued interest or better. These sales were made against a background of depressed business, high excess reserves and declining rates. They provide no worthwhile guidance to the use of the auction technique in the sale of Treasury bonds in the present context.

III. Application:

A. Auction is most effectively used where there is a potentially large, very competitive, and elastic availability of funds, such as

exists in the money market. Here funds are highly mobile between a variety of competing uses, and bank credit provides a readily expandable supply.

B. Elements of strength and weakness with auction technique will vary with—

1. The market background and investor psychology.
2. The size and maturity of the issue.
3. The degree to which the financing is for new cash or merely, in effect, a rollover of debt in an orderly cycle.

IV. Elements of strength and weakness:

A. Pricing Treasury offerings: In unbalanced markets where rates are tending to move up or down, Treasury determination of a financing rate involves judgments of existing demand, prevailing psychology, and a weighing of a complex set of investor motivations. The limited guidance provided by a variety of outstanding issues selling at different relationships to par and varying after-tax returns makes pricing a complicated and sometimes uncertain procedure. The arbitrary choice of a coupon in a tense market involves the risks of being—

1. Too generous; in this case—

(a) The Treasury would pay an unnecessary cost.

(b) The Treasury may lead the market to new rate level adding to future costs.

2. Too closely priced; in this case—

(a) The Treasury would invite a failure.

(b) The Treasury might force suspension of Federal Reserve System policy; and Federal Reserve System might have to validate the rate chosen.

In general, however, the market is inclined to accept an official judgment on rate if it is marginally better than the rate on outstanding issues.

The virtue of an auction sale is its simplicity. The market sets the rate on a competitive basis and the Treasury pays only what is required for successful placement. However, in unbalanced markets where rates are on the move, there is a well-defined tendency with a competitive auction for investors either (1) to bid "above" the market for outstanding issues to be sure of being awarded securities when prices are rising, or (2) to bid below the market for protection when prices are declining.

B. Avoiding attrition on Treasury refunding: Because of the size of many refunding operations, auction cannot be regarded as a full solution to the problems of attrition. In using the auction technique, the Treasury places itself entirely in the hands of the market and full coverage is by no means wholly assured at all times. An adequate response will depend on such factors as market expectancy, the size and terms of the issue, the general banking position, etc. Thus there are times when the Treasury will have to render a judgment as to whether it would do better to set its own rate and pay off the marginal investor on attrition, or whether it should assume the existence of an adequate demand and accept the rate impact of keeping the debt placed on the lenders' terms.

C. Initial placement of Treasury offerings: Treasury experience with auction in recent years has been limited to Treasury bill offerings. There is no clear basis for judging investor response to the auction of other kinds of Treasury issues. In general, the market response to

these offerings has been reasonably broad where the buyers could name their own rate and the amount offered was not excessive. There are, however, offsetting influences that will be operative under some circumstances. For example:

1. There is still a tendency for many investors to display some uncertainty in their approach to an auction, believing that success requires an informed, sophisticated judgment of market conditions. This may result in a narrower although not necessarily a smaller response than a fixed-price offering. This tendency can be met in part by liberal provision for noncompetitive awards at the average rate.

2. On cash offerings within an acceptable maturity range, where payments can be made by tax and loan account, the banks tend to preempt the issue. This, however, generally results in a broader and more active secondary market.

V. Conclusions:

A. Auction is one of several necessary and useful techniques for Treasury finance. It should be regarded as a specialized method of debt marketing to be used under carefully defined conditions.

B. It is at best only a procedure, not a solution to the basic problems of—

1. Initial debt placement.
2. Pricing problems in a declining market.
3. Unpredictable cash claims on the Treasury arising out of attrition.

C. The overall capability of auction would seem to be greatest when used—

1. To sell small- or moderate-sized offerings for cash.
2. To reopen outstanding issues, and to revolve issues where maturity schedules are orderly and well established, as for Treasury bills and possibly certificates.

D. Rate impact is greatest during market conditions that characterize well-defined stages of credit restraint and credit ease because of the tendency of bidders to anticipate future changes in market rates.

E. Risks are smallest with relatively short maturities because of the presence of—

1. Mobility of funds between competing uses.
2. Elasticity of demand in response to small rate changes.
3. Broad fluid market where turnover is active.

F. Risks are increased as the maturity offered lengthens because—

1. Markets for longer maturities are narrower and there are fewer investors competing with each other.

2. Differences in investor judgments are greater and less certain about the market; and the range of acceptable rates becomes wider.

3. There is a smaller underwriting response than generally present in the sale of short-term securities. The Treasury, lacking any underwriting syndicate which can make a market judgment of rate and then sell that judgment, would put itself in the position of having to accept an array of bids reflecting unguided and uncertain individual decisions as to the going market rate. The Treasury would be completely at the mercy of the market.

4. Small investors may find themselves at some disadvantage in competing with the sophisticated bidder. Uninformed bidders

may stand aside as the banks to whom they normally look for guidance will have no sure basis for advice. There would thus be an absence of leadership as to market levels.

5. Corporate and municipal bonds are competitive with Treasury bonds and a vigorous response to a Treasury auction would come only at rates related closely to alternative investments.

6. Long-term bond buyers are chiefly institutional in character. That means that investment decisions are made by committees; and committees generally prefer to approve purchase programs at known rates and prices. This factor could limit participation in a Treasury bond auction.

First Boston Corp.

C, D, and E. We do not believe that the use of the auction technique in connection with Government financing is good for the market or desirable from the standpoint of the Treasury. The exception might be cash offerings of short-term securities with a maturity under 1 year. Competitive bidding has been used on various occasions in the past and the results have been generally unsatisfactory. A principal drawback was the poor original distribution which had an impact on the secondary market because of the need for redistribution. In unsettled markets investors other than underwriting banks and dealers might be loath to bid at auction for the new securities because of a lack of confidence in their own market judgment. In an auction, a wide range of underwriting bids might be received which if awarded could have an adverse effect on other sections of the market and result in considerably higher interest costs to the Treasury. We believe that offerings at a fixed price have the greatest appeal and receive the widest support from all types of investors. We are also of the opinion that the auction technique is best understood by the professional investors. We believe the problems of debt management are so great that the Treasury needs the understanding and support of all investors. We believe fixed price offerings would appeal to the greater number of investors.

First National Bank of Chicago

The auction is merely a marketing technique currently used in distributing short-term Treasury obligations.

It seems unlikely that merely changing the marketing procedure, for intermediate- and long-term securities by using the auction, would significantly reduce the Treasury's debt management problem. The problem involves more fundamental issues.

There are, however, two minor differences in the overall effect of the two procedures for issuing Treasury securities. In the auction technique the market is completely free to set the rate on the Treasury offerings, while in the nonauction method there is, at least psychologically, an element of restriction operating in the Treasury's attempt to evaluate the proper terms to be set in the offering. It is here that the second difference is introduced, and that is that the Treasury is, in effect, indicating to the market its own opinion of what conditions are or ought to be. This may have its effect on other investors to whom the terms frequently come as a surprise.

Basically, it does not appear that either technique has any considerable overall advantages.

It has been suggested that the Treasury issue intermediate- or long-term securities more frequently and at regular intervals. This, it is argued, would have some appeal and permit portfolio managers to plan their operations accordingly. Perhaps this would be true. It would seem, however, that the level and trend of interest rates at any particular time are more determining factors.

Aubrey G. Lanston & Co., Inc.

The Treasury has been enlarging the scope of its use of the auction technique. We do not believe, however, that conditions in the intermediate- and long-term market are such as to permit the advantageous use of this technique as a general thing, especially in periods of credit tightness. In order for the auction technique to operate successfully under any and all conditions, there must be a strong professional sector which is prepared to assume market underwriting risks in order that the Treasury may be sure that its offering will be covered at prices which are reasonable in relation to the prevailing market. In the short-term sector of the market such a professional sector does exist. It is comprised of the dealer group, some commercial banks, many nonbank corporations throughout the country and some other types of investors. In connection with an auction in the intermediate and longer sectors of the market, a substantial part of this group could not function at all, and because of the substantial risk exposure in these sectors of the market, other professional underwriting bids would be, in many circumstances, forthcoming only at relatively low prices where the risk of loss would appear at the time to be minimal.

Such auctions have been tried—in the mid-1930's—and were found to be effective largely in depressing prices and increasing yields with only modest amounts of securities being placed. It is our judgment that the bulk of the buying that was done then would have been done anyway, in the market, at higher prices than resulted.

Some profess to see some advantages to the Treasury in selling intermediate- and long-term securities more frequently, more regularly and in smaller amounts. An argument has been made that investors might plan their programs so as to include the earmarking of some funds for investment in Treasury securities provided they had reasonable assurance and expectation that a Treasury offering of intermediate- or long-term maturity would be forthcoming shortly. On the other hand, we have had some experience with this sort of market expectation in periods of credit tightness and the results were not particularly successful. During the first 10 months of 1957, for example, the Treasury made it a practice of offering some securities outside the short-term sector in connection with virtually every refunding. The amounts sold were not large, but the announcements of another new intermediate-term issue seemed to come regularly and on top of one another. In the face of this, the market for Treasury securities was kept steadily off balance and its condition and receptiveness consistently deteriorated. This was not just because of a reduction in credit availability, but also because investors felt that they could count on an additional offering of intermediate-term securities to produce successively lower prices.

The trouble with small offerings is that outstanding issues have to be reopened or new small issues created. The chance of frequent reopenings discourages market buying in outstanding issues. The in-

jection of small new issues means that an increased proportion of the total outstanding debt enjoys a poor, or virtually no, trading market. In our judgment, Treasury offerings should be as infrequent as possible and in as large amounts as the market may be able to absorb throughout a reasonable period of redistribution.

Morgan Guaranty Trust Co. of New York

Use of the auction technique for intermediate- and long-term securities might not prove feasible, at least at this time. The Treasury has demonstrated flexibility in debt management through its recent use of the auction technique to sell longer bills. Probably additional experience in this sector should be acquired before an attempt is made to apply the procedure to longer maturities. Debt management might be aided by issuance of such issues in a regular pattern and in measured amounts.

New York Hanseatic Corp.

We do not believe it would be practical for the Treasury to frequently auction offerings of intermediate- and long-term securities.

Under present procedures, offerings of bond maturities usually are made in conformity with the availability of money in banks, institutions, and pension funds and on terms acceptable to these investors. After directing offerings to specific groups, final allotments have been favoring these investors who originally committed themselves to the success of the Treasury operation.

An auction for bond maturities could work to the detriment of investors who have consistently backed up the Treasury in its borrowing needs. During times of market stress this group probably would be the principal bidders in any auction and would derive benefits about the same as those available under recent practices. However, if the market happened to be rising during a Treasury borrowing, there would be an influx of interest from other sources to compete with the group ordinarily underwriting an operation. Forced to allot to the highest bidders, as would be expected in an auction, the Treasury might place an important part of an offering in wrong hands and consequently penalize the true investor. Thus, the auction might be a one-way street that would be fair and equitable in a weak market but undesirable when prices were rising. Currently, fair treatment can always be accorded long-term investors through the preferential allotment arrangement.

Wm. E. Pollock & Co., Inc.

We do not believe that the auction technique or spaced offerings in smaller amounts would reduce the Treasury's problem.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The Treasury's debt management problem does not lend itself to simple solution. Its total problem involves nearly one-third of all debt in the United States—public and private. Its service or interest cost at present rates exceeds \$8,500 million per annum. In the calendar year 1958 the Treasury issued \$69 billion of new marketable securities and refunded over \$20 billion of Treasury bills. Any resolution of the problem must encompass (a) marketable debt, (b) non-marketable debt, (c) competitive agency and instrumentality debt, and (d), most importantly, congressional assistance in resolving re-

curring fiscal problems arising from appropriations and expenses which exceed Federal income and occasion added deficit financing, as well as the removal of inhibitive legislation.

Consider first the marketable debt. The primary factor, precluding its more orderly financing and sound composition, is the statutory rate limitations of the Second Liberty Bond Act, as amended. Certainly, until this limitation is removed neither auction techniques, nor any other technique will permit entry into the long-bond market while the existing rate structure prevails. In the bill, certificate, and note area it is conceivable that the Treasury might rely more heavily upon the auction technique in marketing its securities under certain conditions. Whether this procedure would reduce the management problem depends, of course, upon one's conception of this problem. If, for example, this problem is thought to consist primarily of the difficulties in accurately pricing an issue, the auction technique might provide a partial solution. In the case of the auction technique, the Treasury entertains bids from prospective investors. In this sense, the market sets the price.

If, however, the chief problem confronting the Treasury is thought to be that of keeping the interest cost of each issue at a minimum, the auction technique would not necessarily provide a solution.

When an investor or dealer subscribes to an issue which the Treasury has priced, he is certain to receive some part of this issue, within the allotment limit, at a known price. When the issue is sold at auction, the investor or dealer cannot know before-hand whether his bid will be competitive. There is the question of tax and loan account credit, which necessarily favors its institutional beneficiary, is adverse to nonbeneficiaries, and serves to induce bids from those so advantaged, while limiting participation of those relatively disadvantaged. There is additional uncertainty or risk for the dealer in a sale at auction. This uncertainty must cost the Treasury something, for over the long run someone must be paid to bear the risks assumed. Thus, the auction technique would not serve the Treasury well under conditions of rising interest rates, and would not necessarily do so under other conditions.

The Treasury could improve the climate of the market for its new issues by regularizing the time pattern of its offerings and by reducing the number and increasing the size of outstanding issues. If new or refinancings were put on a regular schedule, portfolio managers could more readily plan for a regular commitment of funds to this media. If each outstanding issue was relatively large its marketability would be improved. As issues of larger size tend to be held by a larger number of investors, dealers more likely would incur less trading risk, therefore should be more willing to provide a larger and more continuous market for the issues.

D. W. Rich & Co.

The auction method of distribution has proven eminently satisfactory in securities having a usance of 12 months or less. The history of attempts to auction small blocks of bonds at "frequent intervals" is not a happy one.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) As I stated before the committee, I believe that the use of the auction technique in connection with the issuance of intermediate

and long-term securities has definite drawbacks. In periods of declining markets, the interest cost to the Treasury would probably be greater than when an offering is made at a fixed price. On the other hand, in periods of rising bond prices, the Treasury might have great difficulty in preventing undesirable speculative absorption of a major percentage of the offering because the expectation of a further price advance in the market. This would defeat the objective and increase the possibility of unsettlement in the secondary market.

(2) The Treasury could at regular intervals offer for cash a comparatively small amount of long-term securities. I believe that the Treasury should announce that it will sell \$1 billion long-term bonds annually, either in four quarterly offerings of \$250 million each, or two semiannual offerings of \$500 million each. Certain safeguards and provisions would be included in the terms of the offering which should result in channeling the major part of the new issue into the hands of true investors. These regular offerings should not be dependent on market conditions, nor should they be tied to monetary policy. The extension of Treasury debt should be an objective in itself and these periodic sales of long-term bonds should be made regardless of whether the economy is tending toward expansion or recession. Each individual offering, must, of course be priced in relation to current yields on outstanding issues at the time it is made.

QUESTION

D. Might the auction technique, assuming it is feasible, make it possible for the Treasury to increase the average maturity of the public debt during periods of inflationary pressure without impeding the Federal Reserve's ability to apply a restrictive monetary policy?

ANSWERS

Bankers Trust Co.

See answer to question C.

Bartow Leeds & Co.

During periods of inflationary pressure, if the Treasury used the auction technique, it would tend to cause some or very much disruption in the orderly course of general business and in the interest rate structure particularly. The auction process would augment the Federal Reserve's restrictive monetary policy causing a noticeable rise in interest rates. The results of debt lengthening would be apparent in a very insignificant way and eventually the Treasury would prefer not to continue this technique.

Briggs, Schaedle & Co., Inc.

No.

Chemical Bank New York Trust Co.

It is difficult to see how the auction technique would accomplish anything in increasing the average maturity regardless of the monetary policies of the Federal Reserve.

C. F. Childs & Co.

Recognizing that any Treasury deficit financing impedes the Federal Reserve's ability to apply a restrictive monetary policy, we believe

that the auction technique of raising long-term funds would impede the Federal Reserve System no more than the present method of pricing new issues:

Continental Illinois National Bank & Trust Co. of Chicago

No. We do not believe the auction technique, even if it could be done, would make it possible for the Treasury to increase the average maturity of the public debt during periods of inflationary pressure without impeding Federal Reserve policy. During periods of inflationary pressures and rising interest rates, the fundamental problem is one of getting the bonds sold and keeping the debt from shortening too far. Mechanics will not solve the problem, especially in inflationary periods accompanied by an inadequate cash surplus.

With our large debt, there is a real question whether practical techniques could be devised to use the auction technique for intermediate and long bonds in periods of inflationary pressure. Specific problems would be (1) getting adequate bids to cover the issue, (2) getting reasonably broad distribution to avoid serious problems in the market after the auction, and (3) an excessive impact on interest rates.

To a much smaller degree, these problems are present in the auction of short-term issues, but the advantages of the auction technique generally outweigh the disadvantages in the short market. In the short market, the price risk is so much smaller and the market so much broader that any unfavorable impact can be absorbed rather quickly under normal conditions. In the intermediate and long market, it is doubtful that enough underwriters would take the necessary risk to cover the issue except at extreme price concessions. The large underwriting strength of the commercial banks would not be available, except on a limited scale, for auctions of intermediate and long-term securities during periods of inflationary pressure. Banks have had important losses (even including allowance for the temporary Treasury tax and loan deposit created by the financing) on short-term issues. They would not take this risk on longer issues under inflationary conditions. Many of the final buyers of such securities would not participate in the original auction for a variety of reasons including the fact that the funds are not immediately available. Because of the price risk inherent in longer securities, the underwriters would need very large price protection to minimize the possibility of disastrous losses during the redistribution period. Even comparatively small Treasury issues of intermediate or long term carry large dollar amounts of price risk with only moderate changes in interest rates.

C. J. Devine & Co.

No.

Discount Corp. of New York

See answers under question C.

First Boston Corp.

See answers under question C.

First National Bank of Chicago

It is possible for the Treasury to increase the average maturity of the public debt during periods of inflationary pressure without impeding the Federal Reserve's ability to apply a restrictive monetary pol-

icy, provided the Treasury is permitted and willing to pay a rate of interest sufficiently high to attract the required long-term funds from the money market. The issue involved is a matter of price. The marketing technique employed tends to be irrelevant and, as suggested earlier, there would appear to be no particular advantage to using the auction procedure. Furthermore, there is no conflict between the Treasury's endeavor to lengthen the maturity of the debt and a restrictive monetary policy. Lengthening the maturity of the debt tends to channel long-term funds from the market and private investment, for purposes such as construction. This reduces the supply of long-term funds bidding for the productive resources of the community at a time when demand tends to be excessive thus supplementing the restrictive credit policy of the central bank.

Aubrey G. Lanston & Co., Inc.

No.

Morgan Guaranty Trust Co. of New York

Use of the auction technique under such conditions might well have the opposite effect.

New York Hanseatic Corp.

While we do not think too highly of the auction technique for offering bonds for the reason stated above, we nevertheless believe the average maturity of the public debt can be lengthened during periods of inflationary pressure. Adequate rates are all that is necessary to put the Treasury into a competitive position in the long market. Assuming that the canvassing of institutions by the Treasury disclosed a supply of cash that might go into Governments at an agreeable yield, an offering could be made which would draw down these funds for debt extension. With a predetermined interest established as to amount, rate, and term, there would be no need for Federal Reserve participation unless market conditions got out of hand for some unforeseen reason.

Wm. E. Pollock & Co., Inc.

Yes.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

A. The auction technique, if feasible and practicable, might have an effect upon the ability of the Treasury to increase the average maturity of the debt during periods of inflationary pressure, without impeding the Federal Reserve System's ability to apply a restrictive monetary policy. In fact, it might aid and assist such policy, but the cost in terms of debt service could be unacceptable to the taxpayers.

D. W. Rich & Co.

See answers under question C.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

The auction technique probably would have little, if any, effect one way or the other in making it possible for the Treasury to increase the average maturity of public debt during periods of inflationary pressure, nor would it affect the Federal Reserve's ability to apply a restrictive money policy. As stated in answer to question C, in my opinion Treasury debt management, particularly with respect to

lengthening maturity of debt, should not be tied in any way to the functioning of monetary policy.

QUESTION

E. Would greater use of the auction technique in the marketing of intermediate- and long-term Treasury issues affect the stability of the market for Treasury securities in any appreciable way? Would it have any impact, in the longer run, on the behavior of interest rates?

ANSWERS

Bankers Trust Co.

See answers under question C.

Bartow Leeds & Co.

Greater use of the auction method in the marketing of intermediate- and long-term Treasury bonds would, I feel, affect appreciably the market for Treasury securities. As long as the Treasury was to be known as a willing auctioneer of its own securities so would the price of outstanding securities tend to go down in price. Only when general economic conditions made a fixed-income security a desirable thing to own and when the Treasury desisted from auctioning its own bonds would there be a preference for longer term Governments. In the meantime a number of banks, insurance companies, savings banks, etc. and some speculators would show some fine profits. I believe the net result of the use of the auction method would make for higher financing costs.

Briggs, Schaedle & Co., Inc.

The Government security market would probably be less stable if intermediate- and long-term Treasury issues were auctioned and as a result the Government would probably have to pay higher interest rates, on the average, than they do for a bond at a coupon at a price.

Chemical Bank New York Trust Co.

The auction technique would tend to exaggerate market trends. Bids would likely be higher in a rising market as investors anticipated future price levels and would work in the opposite direction during a period of downward price movements. There would be no impact in the longer run on the behavior of interest rates. These rates are set by the longer term factors of supply and demand and would not be influenced by the fact that any given issue would be priced on the basis of the investor's judgment of the existing market rather than on the Treasury's judgment of the proper market level.

C. F. Childs & Co.

Whether sold by the auction technique or by present methods, a market understanding that a continuous procession of new intermediate- or long-term issues is in prospect will tend to limit a rising price trend in a period of falling interest rates, and to accelerate a price decline when rates are rising. In the long run, it should make no difference, since interest rates are determined by savings versus the demand for them.

Continental Illinois National Bank Trust Co. of Chicago

Greater use of the auction technique for marketing intermediate and longer term Treasury issues could have a substantial impact on the behavior of interest rates. This again would depend on the specific circumstances at the time such an operation took place. It might be argued theoretically that demand and supply forces will operate to bring about a certain level of interest rates. Thus, whether or not a specific financing through the auction or some other technique temporarily had a large impact on rates would be only a passing matter and basic demand-and-supply forces fundamentally would bring the market back to the "natural" rate.

As indicated in the previous question, we have serious practical reservations about the possibility of using the auction technique at all for intermediate and longer term securities. We feel the impact could be serious on interest rates and that this impact would not be corrected, under most conditions, in a reasonable time. Thus, the stability of the market would be interfered with seriously except under ideal, theoretical conditions which are hard to visualize at this time.

C. J. Devine & Co.

Any use of the auction technique in the marketing of intermediate and long-term issues would cause unnecessary fluctuations. It would undoubtedly have a temporary effect on the behavior of interest rates, but, in the longer run, the level of interest rates will be determined by general economic conditions.

Discount Corp. of New York

See answers under question C.

First Boston Corp.

See answers under question C.

First National Bank of Chicago

As indicated above, it seems very doubtful that the auction technique would have particularly significant or beneficial results.

Aubrey G. Lanston & Co., Inc.

Yes, it would decrease the stability of the market by detracting from day-to-day buying. Contrary to the auction of bills, auctions of notes and bonds would go at prices determined largely by the marginal speculative buyer (by which we do not mean individuals, but institutions). The result would be to discourage other buyers. We see this in corporate finance. If a company is too steadily in the market, it finds it is obliged to pay higher rates than its credit otherwise might justify. In our own judgment, therefore, a practice of auctioning other than money market securities would render these Government securities less desirable. The interest rates on Treasury issues, therefore, would be pushed close to those of private borrowers such as corporations.

Morgan Guaranty Trust Co. of New York

Greater use of the auction technique probably would not have any appreciable effect on the level of interest rates generally, although it would temporarily exert an unsettling influence on rates in the immediate area of financing. Much would depend on the frequency and amount of offerings. It is considered unlikely that the technique would have an unusual impact on the behavior of interest rates.

New York Hanseatic Corp.

The auction technique for making frequent offerings of Treasury bonds could affect price stability by constantly keeping the market off balance. In any Treasury financing operation there is an important "seasoning period" wherein the new addition to the list gradually adjusts to surrounding issues as more and more securities get "put away" in investor portfolios, and a certain amount of swapping takes place into the new issue at the expense of older Treasury obligations.

Frequent auctions could hinder the seasoning process because the likelihood would be that a new supply of securities might be forthcoming at an early date and add to the total of undigested investments.

In the long run, auctions might hinder the seasoning process importantly during periods of tight money and exaggerate price movement on the upside when interest rates are declining.

Wm. E. Pollock & Co., Inc.

We believe the auction technique would affect the stability of the market appreciatively, and consequently in the long run it would affect interest rates.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr)

Greater use of the auction technique in marketing intermediate and long-term Treasury issues would tend to widen the range of interest rate fluctuations and would, in all probability increase the interest cost of the Treasury flotations. Investor uncertainty in bidding would result in a tendency for the array of bids and resulting interest rates to scatter over a wider range. In addition, the central tendency or average of these bids would tend to be lower because of the uncertainty and risk of the secondary market level. Hence, interest costs would tend to be higher.

The Treasury, too, faces uncertainties when it prices an issue. However, once the price is published, the market is no longer groping for a trading or secondary market level. The terms are known and investment decisions can be made with more assurance.

In the longer run the impact of the use of the auction technique for marketing appropriate issues would have relatively little influence on the behavior of interest rates as opposed to Treasury interest costs on a given issue. We are discussing a mechanism of marketing—its impact is a consideration of the short run. Interest is the price paid for the use of money—in uninhibited free credit markets, interest rates respond to the forces of the supply and demand for funds.

D. W. Rich & Co.

See answers under question C.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) As stated in answer to section C of this question, the auction technique could have appreciable short-term effects on the stability of the market. The reasons were noted there.

(2) In the longer run, it would be only a minor factor, if a factor at all, in the behavior of interest rates.

QUESTION

F. Are there any other possible innovations in the area of debt management which might make it easier for the Treasury to issue securities appropriate to economic conditions (e.g., long-term issues during periods of inflationary pressure), in connection with either refundings or new money operations?

ANSWERS

Bankers Trust Co.

We have considered a number of innovations that have been proposed at various times. Our position, in brief, is that some of these proposals are positively undesirable; others might possibly be of some help to the Treasury; but none of the innovations realistically comes to grips with the problems confronting the Treasury in its debt-management operations.

It has been suggested that the Treasury make an announcement to the effect that it will periodically make offerings of long-term Treasury bonds at stated dates. We think this might enable the Treasury to increase its sales of long-term bonds modestly, since it would permit investment managers to plan the allotment of their flow of investment funds in the knowledge that Treasury bonds would be available.

Another suggestion is that the Treasury use underwriting for its issues. The major objection to this practice is, of course, the additional cost to the Treasury. Whether the increased sales would compensate for the additional cost we do not know. We are doubtful, however, that such a practice would make much of a contribution unless the margins to the underwriters were set sufficiently high to induce their energetic interest in pressing the sale of Government obligations and we feel adequate commissions would encounter political opposition.

Obviously the Treasury must be free to meet the requirements vis-a-vis interest rates.

We should like to stress our considered judgment that solutions to the problems the Treasury now faces in the area of debt management are not to be found in gimmicks or "innovations." The problem of debt management can be solved only by an attack on very fundamental and basic problems. The difficulty the Treasury has been encountering in selling long-term issues, both in periods of business expansion and of business recession, should be of particular importance to a congressional committee, for the Congress must bear a large measure of responsibility for the present situation in the credit markets. There are several basic respects in which the Congress has made it almost impossible for the Treasury to follow a prudent course of debt management:

1. Perhaps the most fundamental cause of our difficulty lies in the area of fiscal policy, to wit, our propensity to spend, which is clearly evident in the record of the current Congress. If the Treasury were now running a surplus consistent with the current high level of business activity in the United States and consistent with the precept of contracyclical budget policy, there would be no real problems in the credit markets and the Treasury would not be facing the almost insoluble situation now confronting it in the area of debt manage-

ment. If the Congress is unwilling to cut back expenditures or levy taxes sufficient to generate large Treasury surpluses in periods of high-level business activity, then there appears to be no real solution to our present problems.

2. The Congress has forced the Treasury to compete with itself through the use of the insurance and guarantee device under which the credit of the Treasury is made available to support the borrowings of literally millions of borrowers. For example, it is utter nonsense to expect the Treasury to be able to sell its general obligations at a yield of $4\frac{1}{4}$ percent or less in any substantial amount when VA and FHA mortgages carrying $5\frac{1}{4}$ percent and backed, in effect, by the credit of the Treasury, are available at a discount. This competition of the Treasury with itself must be curbed if the Treasury is to be able to follow a sensible debt management policy, and only the Congress can take the necessary action.

3. If the Treasury is to compete in the credit market it must be able to pay a competitive rate. Again, the Congress has refused to recognize this elemental fact of financial life.

4. If the Treasury is to sell long-term obligations in a period of inflationary pressures, then it must be recognized that a similar amount of long-term funds will not be available for other users of credit. If we attempt to escape from this basic arithmetic of the financial markets by monetizing the debt in the banking system, obviously we shall be adding to the inflationary potential in the economy.

5. There is in the financial community a widespread acceptance of the inevitability of continued inflation. A number of basic factors contribute to this expectation: our inability to limit wage increases for the economy as a whole to gains in productivity; our unwillingness to achieve significant budget surpluses in periods of high-level business activity; the obsession with easy credit and low interest rates on the part of vocal members of the Congress; the unwillingness of the Congress to raise the interest rate on Treasury bonds. As a result, investment funds are being shifted slowly but gradually into equities and into real estate and other so-called inflation hedges. High on the list of matters that trouble the financial community is the obsession of certain members of the Congress for subnormal interest rates. Unless this inflationary expectation can be eliminated, credit is likely to remain expensive and conceivably to get even more costly. Examination of the interest rate structure in countries in which inflationary psychology has developed great strength and pervasiveness would be most illuminating. There is no effective way to achieve subnormal interest rates and price stabilization over the long run.

Bartow Leeds & Co.

The big question of when is the appropriate time for the Treasury to refund or borrow new money in the long-term market comes right here. I feel that there are no innovations in this area except one: that is to take the step when money is available and use it to the fullest and biggest advantage to the Treasury that circumstances govern. The time for this is when few other borrowers compete for this money—a time, perhaps, which might properly be called a time of business recession. If at such a time the Treasury borrowed \$2,500 million to \$5,000 million it would be "cheap cost" money. It would stimulate business ac-

tivity, and in the end result the Treasury would have borrowed money at lower cost than would be the case where it borrowed the same amount in competition with others during levels of high business activity. I feel confident that such Treasury borrowing at this such time would tend to bring about confidence in the future of the country rather than deter confidence. People have to follow the leader. I feel that the Treasury should confine its operations to the short-term area in times of economic boom and to longer term operations in times of economic recession. I feel very strongly that this policy should be adhered to. The innovation in such a program is to face the issue and determine the best means of handling the floating part of a big debt.

Briggs, Schaedle & Co., Inc.

There is one area where the management of the debt could be made much easier for the Treasury, and that is for the Congress of the United States to lift the rate ceiling so that the Treasury could issue bonds for 5 years at the going rate in the market. It seems to me that sensible men should look for the best interests of the country and allow the Treasury to borrow long-term money at the going rate in the market.

Chemical Bank New York Trust Co.

We have no innovations in the area of debt management to offer other than a number of ideas which we have already discussed with the Treasury and with the New York Federal Reserve. There are three areas which might be explored further, but it is difficult to make a specific recommendation for immediate action.

1. The feasibility of prerefunding a section of the intermediate debt should always be kept in mind as an aid to future debt management. It may be possible, for instance, to offer a 25- or 30-year bond in exchange for all of the optional 2½-percent issues which mature from 1967 to 1972. The immediate effect would not be great but it would open the door to new financing with maturities in the 1967-72 area without piling up too much debt in those years. The long-term result would be beneficial. A program of this kind has many technical difficulties as well as problems of market environment, and there would seem to be no possibility of carrying out such a program under present market conditions.

2. Government dealers other than banks have not been able to play a complete role in the process of underwriting new Treasury issues because in recent periods of tight money it has not been profitable for dealers to buy many of the new issues as they were offered. The reason for this is that new issues were paid for by credit to the Treasury tax and loan accounts at the member banks and it has been possible for banks (whether dealers or not) to buy the new issues at prices which would not be attractive to dealers (who had to make cash settlement). The banks would then frequently dispose of the new issues at a price below acquisition cost, offsetting this loss against the income derived from the investment or from the proceeds of sale of the new issue during the period between issue date and the occurrence of the Treasury calls on the tax and loan account. Perhaps a way could be found to permit dealers to use something equivalent to the tax and loan account method of paying for new issues.

3. Dealers have also been restricted in their ability to aid in the placing of new issues because of small allotments which they have received on several new issues. It has been the practice of the Treasury to handle dealer allotments on the same basis as other noninstitutional investors (institutional investors in this case refers to life insurance companies, savings banks, pension funds, and similar "savings type" subscribers). It would be in the interest of the Treasury if a means could be found to give dealers preferential treatment in the allotment of new issues.

C. F. Childs & Co.

We think of no practical innovations.

Continental Illinois National Bank & Trust Co. of Chicago

Yes. The Treasury has been using new techniques and has proposed a very important new one. Innovations to make it easier to issue greater amounts of longer term securities during periods of stability or inflationary pressures are difficult to devise. Fundamentally, the use of new techniques and innovations as far as specific financings are concerned is not the answer to the problem except to get the practical day-to-day job done. The real answer is having adequate cash surpluses in the budget during inflationary periods so that the Treasury is in a position to reduce its debt as an offset to debt created in recessions. If this were the case, the Treasury probably would be able to extend debt maturities at reasonable rates as it did during the 1920's.

One new technical innovation offers real possibilities for the long run. Congress recently has given the Secretary of the Treasury permission to postpone taxes on advance refunding operations. Just as important as the tax ruling is the effect it should have on nontaxed funds. The tax precedent probably will enable these institutions to follow certain accounting practices which will make them receptive to advance refundings. Thus the new legislation would enable the Treasury to make use of the advance refunding technique for marketable issues, under certain conditions, if it were not for the unfortunate 4¼-percent ceiling on bonds. The technique could be used under inflationary as well as deflationary conditions.

The Secretary has indicated that the advance refunding technique would be used on a moderate scale and probably would not attempt to lead investors into unnatural maturity areas. For example, long-term investors could be given the opportunity to extend maturities before their long-term bonds become intermediate-term bonds and are sold to other investors. In his presentation to the House Ways and Means Committee, the Secretary specifically mentioned the possibility of offering holders of the old long-term 2½-percent Treasury bonds the option of going back out into longer bonds at a reasonable increase in the interest return. Experience shows that if these holders are not induced to go back out into longer term bonds they would sell these intermediates to banks and other shorter term holders, and the Treasury will have lost another long-term investor in Treasury securities. Similarly, banks might be offered an option of extending issues they hold. For example, when time brings an issue to within 1 year or more of maturity, holders might be offered an attractive option to extend back out into the intermediate-term area. Again, experience shows that, when bonds get under 1 year to maturity, many of them

tend to move away from holders who are natural investors in intermediate-term securities into the hands of corporate and other short-term holders. When the bonds mature, these short-term holders are not interested in extending maturities and it may or may not be possible for the market to redistribute the maturing securities to holders who would exchange them for intermediate-term bonds.

This advance refunding technique is a most important development for reconstructing the Federal debt. It probably could be used under some inflationary as well as deflationary conditions. There would be only a rearrangement of maturities within certain investor classes, so the impact on the capital markets is minimized. There would be no attempt to sell new long-term bonds or to pull what are basically short-term holders out into unnatural positions in long bonds.

Thus the technique might enable substantial debt reconstruction without getting into the twin problems of (1) inflationary conditions when investors are not interested in any longer term Governments, or (2) deflationary conditions when there is excessive reluctance to sell longer term bonds because of economic conditions. If, over a period of time, the outstanding debt could be substantially reconstructed through this device, routine debt management problems of new cash offerings and refundings should be minimized.

Finally, one important step could be made toward enabling the Treasury to sell longer term bonds. This is for Congress to stop passing legislation which requires the Treasury to compete with itself. New legislation continually comes along for the Government to guarantee certain types of investments, as for example the ship mortgage bonds. Why should a long-term investor who has no liquidity problem buy long-term marketable Treasury securities at 4 or 5 percent when he can buy Government guaranteed loans, mortgages, or securities at 5 or 6 percent?

C. J. Devine & Co.

Underwriting participation of the various investor groups can be strengthened or improved by giving preferential treatment, to a greater degree, to other institutional investors who, from experience, are known to subscribe to new issues as ultimate investors. We feel that State and other public funds and pension funds could be given better consideration with respect to allotments than in the past, and that they should be given notification prior to the opening of subscription books of the Treasury's intentions so that they will have sufficient time to determine the amounts of their subscriptions. Similarly, subscriptions from commercial banks with time deposits should be given the same consideration as savings-type investors as to allotments, in proportion to their time deposits. More important, individual investors should be offered a savings bond providing a return commensurate with prevailing rates.

Brief reference has already been made to question II C, D, and E above to the debt management problem and the need for emphasis on the housekeeping—as distinct from the countercyclical—approach in debt management decisions. It would appear that effective debt management requires—

1. Full procedural freedom in the management of a disorderly debt structure. This requires the immediate removal of the 4¼

percent rate ceiling on bond finance which has become an anachronism in the present economic setting.

2. A rejection of the idea that innovations and devices by themselves can be developed that would provide a more successful and less painful solution to debt management problems than a fundamental approach to the problem.

3. A sound and constructive climate for debt operations of the kind that would reinforce confidence in fixed income securities. Our suggestions for debt management at this time are as follows:

1. Continue and extend, where indicated, the present program for cycling Treasury bills and certificates as a step toward an orderly floating debt. This would mean steady, consistent adherence to the stated goals of the Treasury to give full definition to the announced program and to integrate further the floating debt into the money market structure.

2. Develop and carry out a program for the advance refunding of certain outstanding maturities of Treasury obligations. Full success with the program for the floating debt will sooner or later require a major effort to restructure the debt beyond 1 year in order to prevent, with the passage of time, outstanding maturities from tumbling in upon the 1-year area at a faster rate than the Treasury can fund or retire them. In view of the present arrangement of outstanding maturities, a sizable amount of debt must be kept from maturing by some form of voluntary exchange. This approach would contemplate that in advance of maturity an offering of a new issue, or issues, to holders of certain outstanding issues would be made. This would be an offering of a longer maturity carrying a higher coupon rate than the outstanding issues to which the right of exchange would be given.

3. Regain control over the budget. This is vital to a basic solution of the debt management problem in terms of investor psychology, success with financing procedures and practices, and less potential conflict with Federal Reserve actions. The Government must handle its fiscal affairs in a way that does not overtax the capacities of the Federal Reserve System in the execution of its responsibilities to the point where an overworked monetary policy throws up roadblocks that may impede debt management. This responsibility rests with Congress. Fiscal prudence is needed for confidence at home and abroad, for controlled debt operations, and for appropriate economic influence.

First Boston Corp.

We know of no particular innovations to solve the Treasury's problem of issuing long-term securities during periods of inflationary pressure. We believe, however, that a program of advance refunding operations, such as described in the Secretary of the Treasury's presentation before the House Ways and Means Committee on June 10, has merit.

First National Bank of Chicago

There undoubtedly are numerous innovations in the area of debt management that could be introduced, but it seems unlikely that these would significantly ease the debt management problems of the Treasury. Aside from the current difficulty—that is, the interest rate

ceiling on Government bonds—the basic issue involves eliminating Federal deficits in times of high business activity, and the willingness of the Nation to pursue a policy of restraint when inflationary pressures are in evidence.

Aubrey G. Lanston & Co., Inc.

The most promising innovation, in our judgment, in the area of debt management would be the use of advance refunding. Under the present refunding techniques, long-term investors tend to sell out their positions in securities as they approach or reach the money market category in maturity and it is evident that in many cases these funds are not reinvested in other long-term Treasury securities. The Treasury, therefore, has been fighting an uphill battle to stabilize—to say nothing of strengthening—the ownership of its debt in savings-type institutions such as insurance companies, savings banks, pension funds, and the like. By offering an attractive exchange for a security while it is still held in significant degree by such investors, the Treasury might induce these holders to continue to invest in the Treasury market instead of losing them to other investment forms. The enactment of legislation at the last session of Congress to make it possible to do such advance refunding without involving profits or losses to the investor was a necessary first step. We have been disturbed to hear that to gain such legislation the Treasury may have had to agree, in effect, not to use it.

Morgan Guaranty Trust Co. of New York

Use of the advance refunding technique could very well be of considerable value at times. As a part of debt management, the Treasury might look to markets in other countries where and when rates appear more favorable. This may be done by tailoring issues to broaden demand from foreign investors and does not necessarily involve sale of securities outside the United States. Also, pursuance of sound fiscal policies would provide the Treasury with considerable aid in the management of the debt.

New York Hanseatic Corp.

We don't think it would particularly help the Treasury to deviate from present financing practice in order to issue long bonds during periods of inflationary pressure. The municipal and corporate markets demonstrate almost daily that a meeting of the minds between borrowers and lenders as to rate, maturity, and amount of securities is required for any successful security offering. These are tried and tested fundamentals that have proven appropriate in times of both rising and declining interest rates. They also apply to Treasury operations, and when we remove all subterfuge and make a practical appraisal of market conditions, our Government certainly can sell long-term debt to investors without innovations or gimmicks whenever it evidences a willingness to pay a competitive rate for its money.

A suggestion which we believe has merit at this point in our economic cycle is that Treasury investment accounts should not be awarded bonds on initial offering terms but instead should acquire their investments in the open market. It is a known fact that underwriters of municipal and corporate bonds and equity offerings frequently support such securities in the market in order to protect the issue price. Often this type of operation spells the difference between

the success or failure of a borrowing during a period of market stress because there always are a few weak investors who make an initial commitment but attempt to sell out quickly if they see that the offering is not a sellout or does not seem to advance to an immediate premium. Underwriters clean up some of these loose bonds and thereby put their market into good trading shape.

Currently, the Treasury offers bonds to the entire public and as soon as the books are closed there is no provision for any type of price support in the event that weak holders attempt to liquidate. Usually Treasury investment accounts subscribe to an issue the same as any other investor. If offerings to the public were overallocated slightly and the investment accounts purchased in the market we would have some assurance of two-way trading whenever a Treasury financing was completed.

Of course, an objection to our suggestion might be that Treasury accounts will have to pay premiums on issues during a rising market and therefore their income would be penalized. However, the accounts will gain income by buying new offerings below issue price in times of market weakness and thereby tend to average out on such operations.

Wm. E. Pollock & Co., Inc.

We believe it would be easier for the Treasury to issue long-term securities appropriate to economic conditions of such offerings were confined to refunding operations only.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The Treasury should continuously explore and study all possible innovations in the field of debt construction and management techniques. Such innovations might fall into several general categories. First, the Treasury might consider new dimensions in debt instruments, such as special purpose issues, appropriate areas for use of tax exemption, tax postponement, and conversion of demand obligations into annuities or pension bonds. Second, the Treasury might consider the feasibility and broader use of new or modified marketing techniques. Conversions, prematurity fundings, forward commitments, and perhaps even the payment of commission for distribution should be explored. There should be neither neglect nor oversight of the area of nonmarketable debt (savings bonds). This area may hold greater prospect for sound reconstruction than the marketable area. This segment of the debt represents \$58-plus billion of the total \$290 billion debt now outstanding. These instruments are basically demand obligations—they are very near to money and under certain conditions could become a matter of grave concern. Means to fund these demand liabilities are not necessarily impossible to find, although satisfactory replacement mediums may present technical and other problems requiring considerable study and congressional cooperation to devise.

Any study leading to a solution of the savings bond ebb and flow must start with consideration of the motives that induced their purchase initially, induces their sale or retention, and will induce their funding. It can be said that among others the following purchase incentives will be recognized :

- (a) Desire—to create a savings fund.
- (b) Necessity—to have a reserve fund.

- (c) Prudence—to accumulate an educational fund.
- (d) Anxiety—to provide a retirement fund.
- (e) Hope—to establish an estate fund.

Such motives may become altered with the passage of time, during which the 40 million holders' ages and incentives to retain the issues also change. With age advances, tax incentives, conversion privileges, and rate considerations, assume new proportions that should not be neglected.

D. W. Rich & Co.

One obvious innovation, and currently the most effective, in our judgment, would be the removal of the $4\frac{1}{4}$ percent ceiling on U.S. Treasury bonds.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) One innovation which might be given consideration in the area of debt management is the offering of serial maturities, particularly in refundings. For example, the financing might consist of four or five securities maturing in 1 to 5 years or longer, with varying coupons and varying yields, and would permit the holder of the maturing right to select any one of the new maturities best suited to his purpose.

An objection to this might be that one or more of the maturities might be outstanding only in very small volume and thus have too limited a market. But the fact that some of the issues of $1\frac{1}{2}$ percent notes into which the investment series $2\frac{3}{4}$'s have been exchanged are very small in size has not interfered with the establishment of a reasonably active market in them.

(2) Another suggestion in the area of debt management which might give the Treasury better control over the issuance of new securities in its refunding operations, and which might help to avoid a repetition of the type of speculative participation that occurred in the refunding of the June 1958 maturities, is as follows:

As part of the terms of each refunding of maturing obligations where the holder is offered the privilege of exchanging into more than one new security, the Treasury will specify that it reserves the right at its discretion to limit allotments in the longer maturity or maturities, if total subscriptions exceed an amount which, in its opinion, the market can satisfactorily absorb. In addition, the terms will provide that, if subscriptions received exceed this figure, allotments, will be made on a pro rata basis and that each subscription will be given the shorter maturity for the balance of the securities presented for exchange.

III. THE CHARACTER AND PERFORMANCE OF THE GOVERNMENT SECURITIES MARKET

QUESTION

A. Has the performance of the market for Treasury securities, as measured by price volatility, been satisfactory in the period since mid-1953? Has this performance been better than in the period prior to mid-1953?

What criteria other than price volatility should be used in evaluating market performance? According to these other criteria, has the market for Treasury securities performed satisfactorily in the period

since mid-1953? In particular, has it performed better than in the period prior to mid-1953?

ANSWERS

Bankers Trust Co.

In our judgment the performance of the market for Treasury securities, as measured by price volatility, has been satisfactory in the period since mid-1953. This performance has been better than in the period prior to mid-1953.

The test of a market, obviously, is not price stability but rather the movement of prices in response to basic market forces. The fact that upon occasion, not only since mid-1953 but before that date, prices of Government obligations have moved rapidly reflects the suddenness of changes in market forces. Price volatility, per se, is not serious unless it assumes proportions that lead to a breakdown in the functioning of the marketplace. Since mid-1953 there has been only one instance in which market conditions, reflected in price movements, came close to being "disorderly". This was in the period around mid-1958 and reflected a combination of circumstances that are well known and need no extensive repetition.

The behavior of the Government securities market since mid-1953 has unquestionably been better than in the period prior to that date.

The implication of this question is that volatility in the prices of Government securities is bad and should be dampened down or prevented. With this underlying premise we are in complete disagreement. Prices must be volatile; they must be able to respond to changes in the market if they are to perform their necessary and important function in the marketplace. Price volatility is objectionable only if it prevents the functioning of the market. This has not been the case; the market has brought buyers and sellers together and is functioning efficiently. Admittedly, there have been some occasions on which the markets for Treasury obligations were thin. But, judged by the standards and performance of other markets, the Government securities market has worked efficiently. It is, of course, possible in theory, and given omniscience on the part of the managers, to iron out some of the erratic fluctuations that inevitably characterize any market.

There have been relatively few occasions when such conditions develop. The danger of trying to iron out these so-called erratic fluctuations is that the managers get involved in taking positions that are contrary to basic economic forces. For example, if the Federal Reserve supports the prices of Government bonds above the market, then the Federal Reserve will end up holding large amounts, with all the undesirable effects upon monetary reserves.

Bartow Leeds & Co.

The performance of the market for Treasury securities as measured by price volatility has been satisfactory in the period since mid-1953. With due consideration for the elements destined by us to be in the psychological classification, but with emphasis on the many other types of real influence that bear on the performance of the market for Treasury securities, I feel that as measured by price volatility the market has acted well, considering the impact of these several factors, related as they are by different common denominators. The word

"satisfactory" in its application here connotes the meaning of the term "acceptability". Dealers are at times suddenly surprised by the volatile market fluctuations that occur. It may be that they understand these fluctuations in prices a day later than that on which they occur. But it must be said that such changes as do occur have to be expected, are being expected and will be expected to recur again and again and all of these changes of themselves tend to be part of the market.

After the mid-1953 period the performance of Treasury securities as measured by price volatility has been relatively stable until mid-1958. There have been, pricewise, ups and downs but none of very serious consequence. Prior to the mid-1953 period where we had fixed rates or pegs set, we had World War II, the Korean war with many uncertain influences and a different Federal Reserve System policy. In this period the performance of the market was not as good as it was in the period after mid-1953.

Briggs, Schaedle & Co., Inc.

I believe that the Government securities market, although it has been more volatile since 1953, has been a broader and more satisfactory market than prior to 1953.

Chemical Bank New York Trust Co.

Since mid-1953 the Government market has followed an erratic course, with rather sudden changes in direction when business swung from recession to boom and as Federal Reserve monetary policies were changed. It is difficult to say whether this performance can be called satisfactory when measured by price volatility, but it is certainly to be preferred over a market which is stabilized by pegging or by artificial means which prevent the proper interplay of natural forces of demand and supply. In the latter sense it would appear that the market has been healthier since 1953 than prior thereto.

The principal criteria to be used in evaluating market performance would be the spread between the quoted bid and asked prices, the size of blocks which dealers are prepared to buy or sell on their quotations, and the speed with which a good sized block of Government securities can be moved or acquired. By these criteria the market at present still leaves much to be desired, but to the extent that comparison can be made it would appear that market performance has been and is reasonably satisfactory.

C. F. Childs & Co.

In terms of price volatility, market performance has been satisfactory since mid-1953; indeed, since the accord. In the sense that price volatility reflects a quicker, more sensitive adjustment to changing conditions and expectations, market performance has been better.

The only other criterion for market performance is the ability of investors to exchange securities for cash and vice versa. We think that both before and after mid-1953 it has been satisfactory.

Continental Illinois National Bank and Trust Co. of Chicago

The Treasury security market has performed satisfactorily in the period since mid-1953. It is hardly worth discussing market performance prior to that time since we had the pegged market until March of 1951 and the next few years after the unpegging were really

a period of transition rather than one on which performance can be judged. Price volatility is not a satisfactory method for evaluating Treasury market performance. Prices have gone through sizable swings, both up and down, as the underlying economic conditions have gone through several cycles. The market should be expected to go through substantial price swings if it is to perform its function in the economy.

One criteria that can be used to judge the Treasury market performance is the performance of other security markets. Critics of the Government market seem to expect that investors should be able to sell large amounts of Government securities of any maturity at any time with little or no price adjustment. It is difficult to understand why some investors and students of the market should think this way, unless their sights are obscured by the deep depression of the 1930's or the pegged markets of the war and early postwar periods.

There is no problem in a period of rising markets as far as buying and selling large amounts of securities. The problem, if there is one, arises during periods of rising interest rates and falling markets. Even in periods of weak bond markets, it is possible for large investors to move substantial amounts of short-term securities with relatively little price impact. It is almost always possible for small investors to buy or sell what they wish at the quoted market regardless of market conditions. What the criticism boils down to is the fact that a relatively small group of large investors cannot sell large blocks of long-term securities quickly in falling markets.

To narrow the problem down to this one group is to answer the question. All will agree that the use of monetary restraint by the Federal Reserve is most important and proper during periods of rising business with inflationary overtones. How can there be monetary restraint if investors can sell large amounts of longer term securities quickly without price impact? Second, we know from specific experience that large blocks of longer term Government securities can be sold in periods of tight money over a reasonable period of time and with surprisingly little price impact. The investor must handle such a transaction carefully and it may take a number of days or weeks to work out the entire amount. However, the fact is that it has been done.

We should contrast the ability in the Government market of the vast majority of investors to buy and sell in reasonable amounts at the quoted market under adverse conditions, along with the ability of large investors to work their problems out in time, with the difficulty of handling such large transactions in other securities markets. Investors wishing to sell large blocks of well-known stocks, even in strong markets, often must resort to the use of secondary offerings which involve substantial concessions from the quoted price. Anyone who has tried to move large blocks of high-grade corporate bonds in weak markets will quickly understand how much greater the problems are here than in the Government securities market. In other words, the Government securities market obviously is not perfect, but a specific examination of the facts will show that its performance has been far better than many of its critics realize.

C. J. Devine & Co.

The performance of the market for Treasury securities on the whole has been satisfactory in relation to the conditions that prevailed in

the period since mid-1953. Fluctuations were pronounced at times, but only in keeping with rapidly changing economic conditions. The market was also adversely affected by large Federal deficits which forced the Treasury to borrow regularly in the open market. While the market was less volatile prior to mid-1953 than in the ensuing periods, comparative performance in two different periods would be of little value in measuring price volatility unless the major economic, political, and technical factors dominating the market in the two eras under examination were largely identical.

In addition to price volatility, many other influences have to be considered in appraising market performance, such as the amounts of Government, governmental agency, corporate, municipal, and other revenue borrowings which increased substantially in the period since mid-1953. In this connection, we present below a recapitulation of U.S. Treasury, municipal, and corporate financing for the period 1950 through the latest available reporting dates:

U.S. Treasury interest-bearing public debt

[Millions]

End of fiscal year	Market-able	Nonmarketable	Special issues	Total
1950.....	\$155,310	\$67,544	\$32,356	\$255,209
1951.....	137,917	80,281	34,653	252,852
1952.....	140,407	78,717	37,739	256,863
1953.....	147,335	76,073	40,538	263,946
1954.....	150,354	76,326	42,229	268,910
1955.....	155,206	73,285	43,250	271,741
1956.....	154,953	69,817	45,114	269,883
1957.....	155,705	65,953	46,827	268,486
1958.....	166,675	61,777	46,246	274,698
1959.....	178,027	59,050	44,756	281,833

Source: Treasury bulletin.

Issuance of Treasury marketable certificates—Notes and bonds other than regular weekly bills

[Millions]

Calendar year	For cash	In exchange	Total	Calendar year	For cash	In exchange	Total
1950.....		\$39,127	\$39,127	1955.....	\$13,236	\$37,531	\$50,767
1951.....		30,636	30,636	1956.....	7,580	30,443	38,023
1952.....	\$4,245	29,516	33,761	1957.....	18,671	46,717	65,388
1953.....	10,129	34,946	45,075	1958.....	17,073	50,884	67,957
1954.....	12,596	49,582	62,178				

Source: Treasury bulletin.

A decade of municipal financing

[Millions]

Calendar year	Long-term loans	Short-term loans	Total	Calendar year	Long-term loans	Short-term loans	Total
1950.....	\$3,694	\$1,611	\$5,305	1955.....	\$5,977	\$2,593	\$8,569
1951.....	3,278	1,637	4,915	1956.....	5,446	2,706	8,153
1952.....	4,401	2,049	6,450	1957.....	6,958	3,274	10,232
1953.....	5,558	2,757	8,315	1958.....	7,449	3,910	11,359
1954.....	6,969	3,350	10,319	1959 ¹	5,604	2,839	8,443

¹ Through August 1959.

Source: The Daily Bond Buyer.

Corporate bond financing (includes public and private placement)

Calendar year:	[Millions]	
	Amount	Calendar year—Continued
1950.....	\$4,920	1955..... \$7,420
1951.....	5,691	1956..... 8,002
1952.....	7,601	1957..... 9,957
1953.....	7,083	1958..... 9,653
1954.....	7,488	

NOTE.—Detail may not add to total shown, as figures have been rounded to the nearest million.

Source: SEC.

In view of the absorption of these substantial amounts of investment media, it is our judgment that the Government bond market performed over this period in a satisfactory manner. Prior to mid-1953 the performance of the market for Treasury obligations was artificial on numerous occasions, due to occasional intervention by the monetary authorities. Hence, while the market gave the appearance of stability, it didn't have the broad distributive qualities that existed after mid-1953. This can be shown by the following figures relating to the percentages of total marketable issues held by the various investor groups as of various dates. The latest ownership statistics available to us were as of May 31, 1959. To maintain a consistent presentation, we have used the same reporting date in prior years.

Maturity distribution of marketable issues

[Millions of dollars]

	Com- mercial banks	Mutual savings banks	Life in- surance com- pan- ies	Casualty insurance com- pan- ies	Federal Reserve Board and Treasury	Others	Total
As of May 31, 1950:							
Bills.....	3,174	21	20	46	4,084	5,676	13,023
Certificates.....	7,723	124	156	350	5,887	9,196	23,437
Notes.....	9,736	130	32	294	1,674	3,719	15,586
Bonds, maturity to 5 years.....	27,916	935	561	1,014	2,361	7,495	40,284
Bonds, maturity 5 to 10 years.....	6,196	278	616	246	262	1,076	8,674
Bonds, maturity over 10 years.....	4,350	9,392	12,892	2,071	8,445	16,687	53,837
Total.....	59,095	10,880	14,279	4,021	22,715	43,852	154,840
As of May 31, 1953:							
Bills.....	3,662	139	294	135	986	14,696	19,913
Certificates.....	4,141	111	47	306	5,150	6,204	15,959
Notes.....	10,507	63	5	526	13,792	5,518	30,411
Bonds, maturity to 5 years.....	19,493	434	88	876	1,789	8,252	30,932
Bonds, maturity 5 to 10 years.....	9,921	1,645	863	1,286	1,880	5,171	20,765
Bonds, maturity over 10 years.....	3,182	5,167	4,964	1,325	4,113	11,466	30,222
Total.....	50,903	7,560	6,261	4,456	27,714	51,307	148,200
As of May 31, 1959:							
Bills.....	4,384	204	399	187	2,079	27,761	35,014
Certificates.....	4,208	201	87	247	19,187	9,914	33,843
Notes.....	12,733	670	161	602	4,264	8,845	27,274
Bonds, maturity to 5 years.....	22,902	783	150	1,409	1,618	11,175	38,037
Bonds, maturity 5 to 10 years.....	6,240	864	426	657	1,412	3,712	13,310
Bonds, maturity over 10 years.....	4,589	3,619	3,599	1,114	4,459	16,086	33,463
Total.....	55,057	6,343	4,819	4,214	33,019	77,489	180,942

N.B. Partially tax-exempt issues to call dates. Taxable issues to final maturity dates.

NOTE.—Detail may not add to totals shown, as figures have been rounded to the nearest million.

Source: Treasury bulletin.

Percentage of total marketable issues by maturity group and investor type

	Com- mercial banks	Mutual savings banks	Life in- surance compa- nies	Casualty insurance compa- nies	Federal Reserve Board and Treasury	Others	Total
As of May 31, 1950:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Maturity within 5 years....	31.4	0.8	0.5	1.1	9.0	16.8	69.6
Maturity 5 to 10 years.....	4.0	.2	.4	.2	.2	.7	5.7
Maturity over 10 years.....	2.8	6.1	8.3	1.3	5.5	10.8	34.8
Total.....	38.2	7.0	9.2	2.6	14.7	28.3	100.0
As of May 31, 1953:							
Maturity within 5 years.....	25.5	.5	.3	1.2	14.7	23.4	65.6
Maturity 5 to 10 years.....	6.7	1.1	.6	.9	1.3	3.5	14.0
Maturity over 10 years.....	2.1	3.5	3.3	.9	2.8	7.7	20.4
Total.....	34.3	5.1	4.2	3.0	18.7	34.6	100.0
As of May 31, 1959:							
Maturity within 5 years.....	24.4	1.0	.4	1.4	15.0	31.9	74.1
Maturity 5 to 10 years.....	3.4	.5	.2	.4	.8	2.1	7.4
Maturity over 10 years.....	2.5	2.0	2.0	.6	2.5	8.9	18.5
Total.....	30.4	3.5	2.7	2.3	18.2	42.8	100.0

N.B. Partially tax-exempt issues to call dates. Taxable issues to final maturity dates.

NOTE.—Detail may not add to totals shown, as figures have been rounded to the nearest 10th of 1 percent.

Source: Treasury bulletin.

Discount Corp. of New York

A balanced appraisal of market performance must give appropriate weight and adequate recognition to the fundamental influences which do so much to condition the attitudes of debt holders. This would, of course, include consideration of the character and strength of economic conditions and the fiscal, debt, and credit policy actions appropriate thereto.

The period prior to 1953 was one of a supported pattern of rates in the Government security market, followed by a transitional era in which rate control was relaxed to give the necessary scope for a flexible credit policy. It would have been strange, indeed, if the amplitude of price and rate swings in the years following 1953 had not been greater than they were in the preceding years. This was a period in which increasingly heavy demands were made upon the market. These were a product of many influences, including the following:

1. Complex problems of managing a growing volume of debt with renewed emphasis on marketable form.

2. Economic growth accompanied by expanded demands for accommodation in all credit and capital markets and an inadequate volume of saving.

3. A broad and active participation in the market and a shifting relative importance of various investor groups, which has accompanied economic growth.

4. Efforts to restore flexible monetary policy in a "free" market during a period when credit restraint was called for much of the time without the support of a balanced budget to reduce the added difficulties thus created for Treasury debt management.

5. The impact on fixed-income securities of inflationary fears.

Viewed in the light of these interacting sources of basic pressure on the market and on the supply of savings, price volatility, despite occasional intervals when fluctuations ran to extremes in response to

unexpected developments, has been moderate and market performance satisfactory, comparing favorably with pre-1953 period. A sensitive market response is needed if flexible credit policy is to be fully effective.

Among the more important criteria for judging market performance are these:

1. The efficiency and speed with which transactions can be arranged and completed.
2. The volume of activity in the market.
3. The breadth of the market in terms of participating investor groups and national scope.
4. Ability to effect transactions on the basis of narrow trading spreads, i.e. bid and asked prices.
5. Ability to meet specialized needs of various groups of investors that participate in the market, e.g., private investors, as well as the Treasury and the Federal Reserve System with their specialized needs.

First Boston Corp.

A general definition of a "satisfactory" market could be one which can accommodate reasonable bids and offerings in an orderly manner and respond to changes in demand-and-supply factors by flexible and adequate changes in prices. "Price volatility" would be an evidence of such flexibility, but would not be an overall test. (The market might be able to cope adequately with a very large volume of buying and selling inquiries with little price volatility, if such inquiries were in balance.) It would seem that a better test of a "satisfactory" market would be whether it could respond successfully to major changes in demand, supply, or other market factors, without demoralization and with continuity of operation.

Prices of Government securities were supported or pegged to a great extent prior to 1951, and to some extent until 1952-53. Under our definition of "satisfactory," we believe the market has given a better account of itself since 1953. In the period 1953-59 the market successfully coped with many periods in which major developments and changes occurred. Except in one or two instances, it demonstrated a high degree of effectiveness in providing continuous accommodation for the needs of buyers and sellers under widely varying conditions.

First National Bank of Chicago

I find it particularly difficult to answer this question. To begin with, I believe the function of a free market is to provide a place or technique where buyers and sellers can be brought together and the purchase-sale be facilitated and completed with dispatch; the price to be determined by the various forces of the economy as they influence the demands, requirements, and expectations of the buyer and seller. The performance of the market for Treasury securities since the accord, as measured by these standards, has been satisfactory. If one introduces the factor of price volatility as a criterion for evaluating the performance of a market, one is obliged to set up tolerable limits or ranges of price fluctuations. Prices which go beyond these limits are sufficient evidence for determining that the market is performing in an unsatisfactory manner. Frankly, I am not willing to accept this criterion. Furthermore, if the fluctuations in bond prices have in-

creased since 1953, as I believe they have, this does not suggest to me that the market for Treasury securities prior to 1953 was necessarily more satisfactory. As a matter of fact, for most of the postwar period prior to mid-1953, we did not have a free market for Treasury securities, but rather one in which a pattern of yields and prices was determined and supported by Government action.

Since a free society such as we enjoy has not yet succeeded in eliminating fluctuations in business and economic activity, prices, of which interest is but one, will continue to fluctuate. So long as men continue to be free to make individual economic decisions, prices, including those for bonds, will continue to trace irregular patterns as they have in the past.

A more satisfactory criterion for evaluating the performance of the market for Treasury securities is suggested by the question posed in B. In other words, a satisfactory market should have sufficient "depth, breadth, and resiliency" so that typical transactions (which for institutional investors would characteristically be rather large) can be traded without unduly disturbing the bond price structure.

Aubrey G. Lanston & Co., Inc.

The performance of the Treasury security market as measured by price volatility has been generally satisfactory, in our judgment, since mid-1953. It is meaningless to compare this performance with that prior to mid-1953, since prior to 1951 the market had been closely controlled, pricewise, and otherwise, by the pegging operations of the Federal Reserve whereas in the period from 1951 through 1952 and even somewhat later—the period of transition—the market had to relearn how to function.

Other criteria for evaluating the market's performance would include whether an investor can buy or sell substantial amounts of securities reasonably promptly should he wish to do so. From this standpoint, market performance is and has been reasonably satisfactory—we are told by customers—although it is true that under certain circumstances large trades may be executed only with realistic price concessions from quoted markets. Here, too, comparisons with the situation prior to mid-1953, particularly prior to 1952, are not meaningful.

An investor, under the pegs, could get a massive transaction accomplished without price change if he were going in the right direction, and if he belonged to a category of holders from whom the Fed was prepared to buy (or sell) bonds. Otherwise, he found that while quotations remained unchanged, he might not get any execution. For example, the Fed frequently would not take all the securities offered at the pegged price, but the then-recognized dealers were not free to quote lower prices in an endeavor to clear the market by bringing in other buyers. Accordingly, sellers would sit with bonds for sale while quoted prices remained unchanged and sometimes nothing would happen for days on end, even though some sellers would have been happy to take less than the pegged prices for their securities in order to sell them.

Another criterion in respect to market performance would be the ability of the Treasury to finance its needs in the market. From this standpoint the market has performed exceptionally well—particularly in the face of staggering Treasury needs.

Morgan Guaranty Trust Co. of New York

The market's performance has been more satisfactory since mid-1953. This viewpoint is based mainly on the fact that prices now only reflect fundamental supply-and-demand forces. Other factors that should be used to evaluate the market's performance include the ability to transact business in the market, the volume of securities that can be exchanged, and the time required to execute such transactions.

Volatility is not a good measurement of the market's performance. Thus, stability does not necessarily make it satisfactory nor does volatility make it unsatisfactory. A far better measurement of performance, in our opinion, is the market's ability to accommodate sellers and buyers in transacting business, with the price level being a secondary consideration. Our records indicate that the market has been more volatile since mid-1953 than in the 6 preceding years.

New York Hanseatic Corp.

The price performance of the Government market since mid-1953 has been generally unsatisfactory. Twice, values rose sharply and later fell drastically. All four movements were out of proportion to basic monetary conditions in our economy. Prior to mid-1953 market prices maintained a reasonable degree of stability.

Aside from price volatility, the most important factor in evaluating market performance probably is the volume of trading between various important investor groups. Since mid-1953 interest in Governments has been concentrated in extended waves of either buying or selling with dealers seldom in a position to pair off investor needs during any period of price movement. In other words, interest usually has been confined to a limited number of investors buying in a rising market or selling during a price weakness. The result has been an exaggeration of value trends. Prior to mid-1953 the volume of trading between different holders of Governments was relatively constant which helped to contain price movement within narrower limits.

Wm. E. Pollock & Co., Inc.

A. Broadly speaking, the market for Treasury securities as measured by price volatility has not been satisfactory in the period since mid-1953 and no better than in the period prior to mid-1953. Other criteria might be taken into consideration such as general economic conditions and international relations. However, even in the light of these, market performance of Treasury securities has not been particularly satisfactory in both the above-mentioned periods.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

A. Price volatility is a questionable measure to use when attempting to determine the performance of the market for Treasury securities or other interest-bearing instruments. This is so because it is not necessarily the common denominator for determining relative values and at certain times can reflect circumstances which are extraneous to considerations of market performance. Perhaps degree of yield change or yield volatility would serve better as the basis for statistical appraisal of performance. Whatever criteria is used as a basis for the construction of any statistical series, it should be extended over a period of sufficient length to fully disclose the rate and nature of change under all conditions so that resultant findings may be considered in terms of relative performance. Isolated time considerations

do not serve to lend plausibility to a presentation. Certainly, periods in 1920-21, 1932-33, 1937-38, 1951-52, 1953-54, 1957-58, and 1958-59, have shown highly erratic performance. One cannot say that performance in terms of yield fluctuation since mid-1953 has been more or less satisfactory other than in a sense relative to some other specific period.

One encounters many difficulties in finding or devising statistically acceptable criteria suitable to measure the Treasury securities markets performance. Criteria indicative of performance, but not necessarily suitable to the construction of statistical series, would be—

1. Breadth.
2. Continuity.
3. Responsiveness.
4. Degree of price spread (bid versus offer).
5. Adequacy of size (bid and offer).

Without statistical support but from continuous firsthand operational experience I would venture the opinion that under normal conditions the market has performed reasonably satisfactorily since mid-1953 and it has performed equally as well or better than during many periods prior to mid-1953.

D. W. Rich & Co.

Except for the war years of a "pegged" market, out of which we can now see one of the causes of the present inflation, volatility has been a constantly recurring incident in the action of the Government securities market since 1917. We do not think the recent performance of the market should be considered as anything unique or disastrous. If some people were upset, that may be considered as one of the prices we must pay for free markets.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) Giving consideration to the economic climate, the overall requirements in the capital market, as well as the very large demand for short-term credit, market performance has been satisfactory in the period since mid-1953, as measured by price volatility.

(2) It is not possible to compare the market's performance in this period with that period to mid-1953 because of the changes that have occurred in the Government's fiscal position, the economic background, credit demands, and investors' preferences among various types of securities available.

The criteria are: (1) the ability of investors to adjust portfolios to their changing financial needs, (2) the ability of the Treasury to achieve its debt-management objectives, to obtain the new funds it requires, and to refund its maturities smoothly and successfully, (3) the ability of the Open Market Committee to accomplish its policy objectives in terms of purchases or sales of Treasury securities.

According to these criteria, it is my belief that the market has performed satisfactorily even though the Treasury has been unable to achieve a large part of its debt-management objective. However, this failure has not resulted from faulty market performance. It has been primarily caused by the huge demands by the Treasury to finance budget deficits, the increase in the demands by the various Government "instrumentalities," and legitimate capital requirements of public and private sources.

QUESTION

B. What meaning do you attach to the phrase "depth, breadth, and resiliency" as applied to the Government securities market?

ANSWERS

Bankers Trust Co.

A market having breadth, depth, and resiliency is one that provides a medium for buyers and sellers to consummate their transactions without market price fluctuations.

In strictly market terms, the inside market (i.e., the market that is reflected on the order books of specialists and dealers) possesses depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices.

Bartow Leeds & Co.

To define and evaluate fully the meaning of the phrase "depth, breadth, and resiliency" as applied to the Government securities market would take us into the far depths of the psychological framework of the market where we feel we are not equipped to go and report properly. However, to attach a meaning to this phrase we would feel it would imply that the Treasury market has some buyers who operate in large size, that the inducement to invest in Government securities involves a large group of companies and individuals who make from time to time large- and small-size commitments and that in the operations of the market, reflecting the whims of both buyers and sellers when they are in action, the market "breathes," or rather, becomes "springy" and "resilient" as such buy and sell orders affect it. The effect of these conditions brings on in varying degrees different descriptions of the market.

Briggs, Schaedle & Co., Inc.

The words "depth, breadth, and resiliency" as applied to the Government securities market usually occurs on a rising market, and the reverse would be usually true on a falling market.

Chemical Bank New York Trust Co.

Depth refers to a condition in the market under which buying and selling in volume will be induced by a relatively small change in price. It indicates active market participation. Breadth would imply participation on the part of a large number of buyers and sellers who would represent divergent groups of investors, speculators, dealers, and others. Resiliency is the faculty of bouncing back and implies a degree of elasticity in the market. The three words taken together indicate a high degree of activity, vitality, and sensitivity.

C. F. Childs & Co.

The meaning of "depth" in this connection is uncertain. It may refer to the volume of transactions. This depends entirely upon the desires of investors and the amounts of securities they wish to trade. "Breadth" may be taken as referring to the widespread distribution of the securities among a growing number of holders. This has increased

in recent years. "Resiliency" may be defined as the ability of the market, without official aid, to check a decline or a rise, stabilize, and recover. This improvement also has been demonstrated.

Continental Illinois National Bank & Trust Co. of Chicago

There are many different interpretations of this overworked and much maligned phrase, but, in general, we assume it to mean a market that functions reasonably well under varying economic and market conditions.

C. J. Devine & Co.

The phrase "depth, breadth, and resiliency" can best be described as the ability to buy and sell in substantial quantities without undue disturbance to the market.

Discount Corp. of New York

This is a term that occurs repeatedly in the Federal Open Market Committee Report of Ad Hoc Subcommittee on the Government Securities Market, November 12, 1952. It is ably defined there as follows in paragraph 36:

In strictly market terms, the inside market, i.e., the market that is reflected on the order books of specialists and dealers, possesses depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices.

First Boston Corp.

We believe the phrase "depth, breadth, and resiliency" describes an active market which could accommodate the desires of its participants to buy and sell reasonable amounts in the usual course of business without undue delay or major change in the price level. The market should also be able to absorb Treasury financings and refundings without adverse effects.

First National Bank of Chicago

The phrase "depth, breadth, and resiliency" as applied to the Government securities market, in my judgment, was accurately defined by the Ad Hoc Subcommittee on the Government Securities Market. The market "possesses depth," the committee said—

when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices.

Aubrey G. Lanston & Co., Inc.

These terms are defined correctly, we believe, in the Federal Open Market Committee Ad Hoc Subcommittee Report on the Government Security Market, November 12, 1952. Paragraph 36 of that document reads as follows:

In strictly market terms, the inside market, i.e., the market that is reflected on the order books of specialists and dealers, possesses depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices.

Morgan Guaranty Trust Co. of New York

Depth, from a technical viewpoint, represents the bids below and offerings above the current price level.

Breadth measures the size of the bids and offerings.

Resiliency concerns the market's ability to develop new bids and offerings upon a change in the price level.

New York Hanseatic Corp.

A market with "depth" is characterized by a volume of exchanges of securities in amounts that reflect true investment moves by important holders of Governments. To elaborate, a steady stream of sizable buy and sell orders provides a dealer with an accurate knowledge of what bonds are worth and how they can be traded in the one-half million dollars to \$1 million blocks in which most institutional investors prefer to operate. Odd lots are hardly of any assistance in this respect.

A market with "breadth" is characterized by a wide latitude of trading throughout the entire maturity spectrum of Governments. To elaborate, ordinarily each Treasury obligation is priced in relation to the value of its neighbors after allowance for slight differences in maturity, premium, or discount level, etc. If we had depth of trading in only one issue as described above, that security conceivably could move out of line with the remainder of the market. However, an ebb and flow of trading throughout the Treasury list maintains values on a comparative basis.

A market with "resiliency" is characterized by a tendency for prices to reflect the basic relationship between the supply of and demand for securities in spite of temporary outside influences. To elaborate, there often are news items, false rumors, and unusual trading situations which force prices out of line with realistic market considerations. The ability of investors to appreciate the temporary nature of such situations, and adjust their holdings accordingly, provides the market with a degree of resiliency of operation.

In summary, "depth, breadth, and resiliency" are present in a market in which there is a volume of trading in a variety of maturities and which has an ability to return to a price level based on fundamental considerations even though temporary factors may momentarily distort values.

Wm. E. Pollock & Co., Inc.

These terms are used to describe the ability of the market to absorb and supply customers' purchase and sale requirements in a satisfactory manner.

Charles E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

Answers to questions B and C: The phrase "depth, breadth, and resilience" as applied to the Government securities market is difficult to define. However, I agree in substance with the ad hoc subcommittees' definitions, which follow:

Depth:⁹ The market possesses depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market.

⁹ Hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report, Congress of the United States, 83d Cong., 2d sess., pursuant to sec. 5(a) of Public Law 304, Dec. 6 and 7, 1954, p. 265.

Breadth:¹⁰ The market has breadth when these orders are in volume and come from widely divergent investor groups.

Resiliency¹¹ The market is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in price.

Charles E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

These terms are an integral part of the ad hoc subcommittee's recommendations that the wording of the directive of the Federal Open Market Committee to the Executive Committee be changed from "maintenance of orderly conditions" in the market for Government securities to the "correction of disorderly conditions."

The recommendation of the committee in this regard was as follows:

The subcommittee recommends, consequently, that the wording of the directive of the Federal Open Market Committee to the Executive Committee be changed to provide for the "correction of disorderly conditions" rather than the "maintenance of orderly conditions" in the market for Government securities. The directive by the Executive Committee to the management of the account in this regard should involve an instruction to notify the Executive Committee whenever conditions become sufficiently disorderly to warrant the consideration of corrective action by the Federal Open Market Committee.¹²

In making this recommendation, the subcommittee takes the position that fluctuations resulting from temporary or technical developments are self-correcting in a really free money market without the necessity for intervention of any kind. This is particularly true of a functioning market characterized by depth, breadth, and resiliency. Of the movements that are not self-correcting, most reflect basic changes in the credit outlook and should not be the occasion for intervention. Of the remainder that do not fall in either of these two categories, the great preponderance, throughout all sectors of the market, will respond readily to arbitrage induced by positive intervention on the part of the committee in the very short sector of the market. In other words, it is only rarely that selling creates a sufficiently disorderly situation to require intervention in other than the very short market. A disorderly condition created by buying is very unlikely to occur if the committee is in a position to absorb reserves by selling the short-term market.¹³

The subcommittee considers a declining market really disorderly in the sense that it requires intervention to meet it when selling feeds on itself so rapidly and so menacingly that it discourages both short covering and the placement of offsetting new orders by investors who ordinarily would seek to profit from purchases made in weak markets. There are occasions when such really disorderly reactions occur in the market. They may lead, if left unchecked, to the development of panic conditions. These must be corrected. In the judgment of the subcommittee, it is in these circumstances, and these circumstances only, that the Federal Open Market Committee would be impelled, by its basic responsibilities for the maintenance of sound monetary conditions, to intervene, and intervene decisively, in other than the very short-term sector of the Government securities market.¹⁴

An indication of the difficulty of operational application of the definitions of depth, breadth, and resiliency, and of a disorderly market, was exemplified by the market conditions that existed following the exchange and cash offerings of June of 1958. Certainly there were many considerations affecting the market's behavior in the period from mid-June through August of 1958. Certain factors later were recognized as fundamental, others were of a technical nature, but confusion and indecision played their roles in the short run.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*, p. 268, par. 53.

¹³ *Ibid.*, par. 54.

¹⁴ *Ibid.*, par. 55.

In professional market circles, areas of disagreement exist in the concept and definition of the adjective "disorderly" when it is used to describe the market for Treasury securities. This is true, in part, because of the committee's definition of the phrase, "depth, breadth, and resiliency," but also because no two appraisals need be alike. There is no uniform unit of measurement.

The ad hoc subcommittee's explanation of "disorderly conditions" is thoughtful and complete. It is, however, apparently not sufficiently precise to avoid confusion or indecision at a critical time.

In broad terms, a disorderly market is characterized by the virtual disappearance of one side of the market. Spreads increase from the usual four thirty-seconds to eight thirty-seconds on long-dated maturities to some longer spread, perhaps a full point. In some cases dealers may refuse to give a quotation for one side of the market. Such a market situation develops when price movements feed on themselves. That is, investors do not base their purchases or sales upon existing prices, but rather upon the rate of change of present prices or the expectancies of future prices. Thus, investor activities will have a destabilizing effect. For example, assume that demand falls off and supply increases. Dealer quotations are adjusted downward. If the market condition is orderly, this downward adjustment in prices will stimulate more demand and will at the same time reduce supply. Thus a new equilibrium will be reached. However, suppose that as prices are adjusted downward, sellers and buyers expect further declines. In this event, sellers will increase their offerings and buyers will withdraw from the market. The dealer is caught in an untenable position. He cannot prudently provide firm bids except to maintain a previously determined position. The market, as a consequence, tends to become disorderly. In this case a market crisis can be prevented only by the intervention of the Treasury through purchases for its investment or sinking fund accounts, or by the Federal Reserve System.

D. W. Rich & Co.

A market where trading in many maturities can be carried on with many transactions, some of large size, with small price changes.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

"Depth, breadth, and resiliency" has become a phrase by which the adequacy of the market to handle the financial requirements of the Treasury and the purchases and sales of investing institutions is measured.

My own definitions are: "Depth"—the size of the market in any individual Treasury issue in relationship to the amount in which it is outstanding. "Breadth"—the size of the entire market of Treasury securities and the ability of the market to accommodate the needs of major investors. "Resiliency"—the measure of the ability of the market to absorb a volume of purchases or sales without undue changes in trading quotations.

Each of the terms within the phrase has a relative rather than an absolute value and, therefore, the meaning of the phrase as a whole at any given time must be predicated on other conditions that directly or indirectly influence the market as well as those within the market itself.

QUESTION

C. What meaning do you attach to the adjective "disorderly" when it is used to describe the market for Treasury securities?

ANSWERS

Bankers Trust Co.

A disorderly market is one in which buyers and sellers cannot consummate their transactions within a reasonable length of time and without marked price changes in the execution of their purchases or sales. It is more likely to develop when a substantial volume of liquidation must take place in the absence of any important buying interest.

Bartow Leeds & Co.

A disorderly market in Government bonds is one where the end-of-day quotations are abruptly higher or abruptly lower than the changes people are used to seeing.

Anyone who sees long-term bonds off seven-eighths of a point at the end of the day may say, "that is a disorderly market." But he doesn't know that all the sellers of that day were among the same group who were expected to buy that day. In other words the factors in the market that make commercial banks, for example, sellers are not factors that make commercial banks buyers. And so it may go with other investors in the Government bond list. I think we have to think of disorderly markets as being permanently with us. They come about because of a sudden realization of many sellers who want to sell, of many buyers who hold back, each group knowing suddenly of a reason for lower prices, such reason being the threat of a war, a change in Federal Reserve System policy, a newspaper article whose writer is close to accurate information, etc. The dealers know these bits of information. Let us assume they do and they finally bid a low and competitive price and buy the bonds. Disorderly market is a relative term and in a democracy we must learn how to live with its meaning. A disorderly market on the up side may, can, and has existed in times past for converse reasons. It is interesting to observe that the persons who contribute most to the widespread swings in the Government list are the ones who are least concerned with the effects of their selling or their buying thus causing the disorderly market conditions which we are objectively trying to define. These groups of persons generally act in concert with important economic considerations.

Briggs, Schaedle & Co., Inc.

We have a disorderly market when there are far more Government securities for sale than there are buyers to purchase them. At that time the market is liable to be disorderly.

Chemical Bank New York Trust Co.

A disorderly market reflects inability to sell blocks of securities without depressing prices substantially. It would indicate little investor demand with substantial offerings. Of course, it is possible to have a disorderly market on the upside where offerings are light and demand is heavy. Such a condition, however, is not likely to develop and will not bring about any difficulties.

C. F. Childs & Co.

A disorderly market may be one in which a panicky, would-be seller, offers securities substantially (in terms of points) below nominal quotations, and is unable to attract a buyer. By this definition, disorder did not exist, for example, in 1958.

Continental Illinois National Bank & Trust Co. of Chicago

It is difficult to pinpoint what a disorderly Treasury security market is. This varies with individual circumstances and changing market conditions. The criterion of absolutely no bids for securities might be considered as good as any. However, there may be conditions when the market is calm, quiet, and inactive, awaiting the outcome of some event, at which time there may be no bids for anything but modest amounts. There may be other times that some might consider disorderly when large amounts of bonds are being pushed into the market and prices are deteriorating rapidly. Yet these large amounts of bonds may be changing hands as in the summer of 1958. My own feeling is that we should reserve the term "disorderly" for extreme conditions and assume that we will have many hectic times but that the free market generally will work itself out one way or another before it becomes disorderly.

C. J. Devine & Co.

A disorderly condition in the Government securities market is generally characterized by a temporary absence of bids and/or offerings, due to any extraordinary event or combination of circumstances which completely and suddenly alter the supply and/or demand factors in the market.

Discount Corp. of New York

This is a relative term for an unbalanced market condition that is hard to define. The basic ingredients of disorder will probably never be twice alike; or at least they will seldom, if ever, be present in the same proportions. Since disorder is a concept that will vary with the characteristics of the market, there is little basis for attempting a precise definition that will have general application.

Some tangible components for developing judgments about incipient disorder are the following interrelated factors:

1. Amount of change in price.
2. Speed with which such change occurs.
3. Degree of continuity in trading at changing prices.

Since each market will have its unique aspects as it approaches the threshold of disorder, the components must be judged in terms of such factors as originating influences, degree of cumulative force that is present, psychological climate, stage and purpose of credit policy, and investor expectancy.

A determination of disorder and the nature and duration of corrective action must rest on informed judgments rendered by the Federal Reserve System. It alone is in position to be in close touch with, and have full information on, developing circumstances. In the correction of disorder, it would seem that the Federal Reserve System can and should only facilitate clearance of some transactions at a changing level of price. The objective should be to moderate the full weight of pressure so that the market can function in some degree and price

can reflect direction of forces. Action should never involve massive support for correction; basic forces should be allowed to reach equilibrium at some real price if order is to be restored, where business can be worked out. Only real price adjustments can recreate markets; either because new buyers (or sellers) are uncovered at changing quotes through the competitive probing by dealers or because dealers themselves are willing to recommit their capital.

First Boston Corp.

The conclusion reached from statements made during the 1959 Treasury-Federal Reserve study was that there was not a unanimous definition of a "disorderly" market. In a general way, disorderliness may be related to a shortage in, or absence of, adequate bids or offerings to accommodate strong forces bearing upon the market. Under these conditions, it may be that wide changes in price do not produce a sufficient increase in bids or offerings. At the same time, psychological forces may cause the price rise or decline to feed upon itself, further impairing the chance for reasonable price changes to develop the needed increase in bids or offerings.

In general, it would seem that a decision as to whether the market is disorderly can only be made at the time, in the light of all circumstances, including psychological conditions, which prevail.

First National Bank of Chicago

The meaning of "disorderly," when applied to the Government securities market, describes a condition when prices are declining and when "sell" orders overwhelmingly dominate the market and it becomes virtually impossible to find buyers. This view tends to coincide with the following description of the ad hoc subcommittee which considered "a declining market really disorderly in the sense that it requires intervention to meet it when selling feeds on itself so rapidly and so menacingly that it discourages both short covering and the placement of offsetting new orders by investors who ordinarily would seek to profit from purchases made in weak markets."

Aubrey G. Lanston & Co., Inc.

Any definition of the term "disorderly," when applied to describe the market for Government securities, should be, we believe, sufficiently narrow as to be applicable only in the most exceptional circumstances. We believe further that it is insufficient to construct such a definition simply in terms of those characteristics which might properly describe conditions as being "disorderly"; that definitions also should specify the characteristics that—if evident—would not warrant such a characterization of market conditions.

For example, the fact that there may be "no bids" in a market should not, by itself, indicate that the market condition is "disorderly." Similarly, the fact that "no offers" are in the market should not suffice. Nor should an absence of bids (or offers) coupled with the fact that price movements are erratic or "professional" be regarded as sufficient evidence that the market is "disorderly."

In judging conditions in a market, few people are gifted with an insight sufficient to determine whether an absence of bids or offerings or a large (rather than a small) price movement is justified by underlying economic or credit conditions, or whether it has occurred simply because prices were too high or too low in the judgment of the invest-

ing public and its institutions. Price movements (up or down) that ensue from a lack of offerings or of bids and that are presumed to emanate from so-called "professional" activity offer participants in the affected sectors of the market an opportunity to make advantageous purchases or sales, as the case may be, if they believe the price movements or the changes in the level of yields are not justified by concurrent underlying or prospective credit and business conditions.

It strikes us that it is particularly difficult to describe any sharp upward movement in prices as a "disorderly" condition, even when that movement may seem to be unwarranted, as some, for example, described the price advance which began in mid-November of 1957. Such upside price movements cannot occur unless the holders of billions of dollars of Government securities remain unwilling to seize upon the higher prices to make sales, which is to say that they accept the price advance as basically warranted by prospective if not by current conditions.

Questions as to whether the market is "disorderly" are more likely to arise in periods of unexpected (or swiftly) receding bond prices. It is our belief, however, that only one set of basic circumstances justifies characterizing conditions in the Government security market as being "disorderly". These circumstances are likely to exist only during moments or periods of domestic or international crises, and then only when an absence of bids has become so marked and the speed of the price declines so extraordinary as to inspire widespread attempts to sell regardless of price.

Morgan Guaranty Trust Co. of New York

"Disorderly" is a comparative term. It implies the inability to develop bids or offerings, and by the above definition, illustrates a complete lack of resiliency.

New York Hanseatic Corp.

The adjective "disorderly" when it is used to describe the Government market reflects a condition in which the basic requirement of a free two-way exchange of investments is lacking. Such a situation may be provoked by heavy liquidation of securities from any source at a time when buying interest is at a low ebb, or, conversely, heavy buying at a time when sellers are scarce. In either case, a preponderance of interest on one side or the other can lead to disorderly conditions, unjustifiably wide price swings, and an inability of the market to perform its basic function of supplying trading quotations.

Wm. E. Pollock & Co., Inc.

The term "disorderly" describes a period when dealers are unable to provide satisfactory firm markets.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

See answers under question C.

D. W. Rich & Co.

A "disorderly" market is one in which the desire to transfer securities produces an erratic shifting of prices, which in turn aggravates the emotional impact to the extent trading becomes difficult, even at times apparently impossible.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

A disorderly market is one which has reached the state which induces liquidation of holdings by nonspeculative investors without regard to price, need, or their normal portfolio objectives.

QUESTION

D. Assuming a specific market price quotation to start with, what magnitude of price change is necessary to effect a transaction in Treasury securities of a given volume? Does the magnitude of the required price change depend in any significant way upon—

- (1) the type of security (e.g., long or short term) traded;
- (2) the market conditions (e.g., credit ease or credit restraint) prevailing;
- (3) the initial or current price of the traded security; or
- (4) the state of expectations in the market?

ANSWERS

Bankers Trust Co.

Price fluctuations essential to the consummation of security transactions vary widely depending upon both the type and the size of the transaction. In the bill market, substantial transactions can usually be effected with only modest market change, and without change under certain market conditions. On the other hand, wide price changes sometimes follow the completion of a buying or a selling transaction in long-term Government obligations.

Bartow Leeds & Co.

The magnitude of price change necessary to effect a transaction of a given volume in Treasury securities would depend upon very significantly, as the question itself suggests, in part the type of security, the market conditions prevailing, the current quotation, the state of expectations in the market, the size of the transaction, the size of the dealer and very importantly how much information has the customer supplied the dealer as to the true size of the transaction; also the dealer will always wonder if other competitors know of the impending transaction. The dealer will make a quick judgment taking into consideration the factors known and unknown to him and having in mind at all times the size of his own position in that issue and in other issues in that area of the market and then will make a bid or an offer which he knows will be competitive or which will not be competitive. If we assume a normal market in quiet times where the influences are only those of supply and demand, for example, a large dealer would probably make a bid or make an offer on the same market that was first quoted to the customer with no price change. As further influences show in the market causing it to become "nervous" and "jumpy," and where uncertainty is the common denominator, large-sized transactions would be difficult to put through without price concessions. Most generally this is worked out satisfactorily; the customer understanding market conditions gives the dealer the order.

Biggs, Schaedle & Co., Inc.

It is impossible to answer this type of question because there are so many factors entering into it. There are many factors which tend to make up the price of a security at a given time.

Chemical Bank New York Trust Co.

The magnitude of a price change depends definitely upon the maturity of the issue in question and upon the depth, breadth, and resiliency of the market. The question of credit ease or restraint has relatively little direct bearing on the spread. We see no connection between the initial or current price of the traded security and the price change required to bring about a sale. The expectations in the market would ordinarily have little effect on the degree of required price change, but occasionally when the market approaches disorderliness there may be some exaggeration.

C. F. Childs & Co.

The magnitude of price changes in the Government market does depend upon the conditions as set forth in this question. However, many large transactions in Government securities are effected even in amounts as high as \$100 million without any appreciable change in prices. It should be understood that current quotations on Government securities are not merely a record of the price at which the last transaction took place. They are indications of the prices which in the dealer's judgment currently serve to balance the wishes of buyers and sellers.

Continental Illinois National Bank & Trust Co. of Chicago

There is no way to answer what magnitude of price change is necessary to effect a transaction in Treasury securities of a given volume. The amount of price change depends significantly on the factors listed—the type of security, the maturity, market conditions at the time, the state of market expectations, and many other items, including the ways in which the investor handles the transaction.

C. J. Devine & Co.

The answer to this question would most certainly depend on the condition of the market at any particular time. The type of security, whether long or short, may or may not necessitate a price change to effect a transaction in Treasury securities of a given volume. Indeed, all phases of this question from (1) to (4) would enter into the equation. The following example may be illustrative: On one occasion \$5 million of bonds could cause a change of one-eighth of a point in price, while on another occasion and under different circumstances \$25 million of bonds of a similar maturity might change hands without any change in price.

Summarizing, the immediate forces influencing the supply and demand factors in the market at the moment of inquiry would be the final determinant.

Discount Corp. of New York

There is no basis for making a useful response to this question no matter how qualified it might be. Any answer would depend on a wide range of well-defined circumstances, including all of the considerations cited in the question.

First Boston Corp.

The magnitude of price change necessary to effect a transaction of a given size in Treasury securities would depend on the maturity of the issue and on the conditions of the market. In many cases there might not be a change in market quotations but if there were, the necessity for the change might be influenced by a wide variety of circumstances, including those listed in the questionnaire.

First National Bank of Chicago

It is not possible categorically to answer this question, for the magnitude of the price change necessary to effect a transaction of Treasury securities of given volume will depend upon market and economic conditions prevailing at the time. As a matter of fact, the magnitude of the price change as suggested by the second part of the question will be determined in large measure by the factors cited, i.e., (1) type of security (either long or short term) traded, (2) the market conditions (degree of credit ease or restraint) prevailing, (3) the initial or current price of the traded security, or (4) the state of expectations in the market. Furthermore, in my judgment, it is impossible to quantify meaningfully any, or the combination of all, of these factors so as to arrive at some magnitude of price necessary to effect a transaction of any given volume.

Aubrey G. Lanston & Co., Inc.

There is no magnitude of price change that can be said to be necessary to effect a transaction of a given volume. In certain circumstances there need be no change in price whatsoever to effect a transaction of a given volume. Under other circumstances and conditions the change will need to be substantial. The magnitude of the change will depend on the maturity sector of the market, the size of the particular issue involved, general market conditions, the market situation at the time in the particular sector involved including the price relationship of the issue in question to other issues, the inventory position of dealers, and the state of expectations in the market.

Morgan Guaranty Trust Co. of New York

The amount of change in price needed to effect transactions varies considerably. All of the factors mentioned in the question and other items as well may have an influence on the needed price change.

New York Hanseatic Corp.

It is impossible to designate any specific price change that should accompany a transaction in a given volume of Treasury securities. Too much depends on the condition of the market at the time the transaction is being completed as well as the actions of investors and dealers involved in the business. Under ideal, all-around conditions it should be possible to effect a sizable exchange in Governments with no change in market prices.

An investor contemplating a reasonably large transaction may protect his own market by working with only one dealer so as to avoid showing his hand indiscretely. The favored dealer, then must be prepared to do his part by not disclosing his objective to competitors and attempting to transact the business with another institutional retail account. If both parties operate thusly there should be no need for a change in market prices.

From experience, we find that the greatest price changes take place when an investor shops his business around to several dealers without taking action with any firm. After having thus disclosed his hand without doing business, the market immediately becomes defensive when he later decides to act. Price changes frequently outrun any normal expectancy for a trade under these conditions.

Occasionally price changes may occur in a particularly scarce, or plentiful, security in spite of all precautions by investor and dealer. For example, a sizable purchase order for a scarce bond such as the partially tax exempt 2 $\frac{3}{4}$ s 1965-60 could lead to a price rise as a dealer might canvass many retail accounts in an attempt to dig out the bonds. Conversely, a sell order in a bond already in plentiful supply could tend to depress prices as several dealers might be in touch with liquidation orders at the same time. However, both of these situations might be characterized as the exception rather than the rule.

Under abnormal market conditions such as we are now experiencing, expectations for a satisfactory execution of most large liquidation orders are remote. At the moment, the majority of investors would rather sell than buy Government securities. This situation frequently forces investors to hold bonds far longer than they desire because of the inability of dealers to find buyers.

Wm. E. Pollock & Co., Inc.

The magnitude of price change which is necessary to effect a transaction in Treasury securities is of minor degree. It depends on all four factors enumerated in your questions.

1. Yes.
2. Yes.
3. Yes.
4. Yes.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The assumption of a specific market price quotation is a valid premise only in relation to market conditions existing at a given time. Quotations, per se, can be mere indications of the level at which it is thought transactions can be effected or they may be firm bids or offers immediately available to the investors. The magnitude of price change necessary to effect a transaction necessarily varies with the character of the market, the nature of market expectations, and the type of the security concerned. Under favorable conditions, substantial transactions in certain issues can be effected without involving any price change. Under less favorable conditions the magnitude of price change increases; under extreme conditions the magnitude of price change essential to effect transactions can be considerable. In each of the above conditions it is not solely price change that is important; rather, it is the effect of price change on "yield" that is important. The magnitude of price change necessary to provide a yield level which is attractive to the buyer or seller is the essential consideration.

D. W. Rich & Co.

You, in your subsequent questions, have really answered your own original question in the affirmative.

Generally, short-term securities trade in a larger volume than long term, with smaller price change.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

(1) The magnitude of price change necessary to effect a transaction in Treasury securities of a given volume depends on the characteristics of the particular issue (e.g., its size, its maturity, its return compared with other issues of similar maturity, and the type of institution holding the major percentage of the issue). Because under normal conditions there is a broader participation in short-term as compared with long-term Treasury securities, the price change necessary to effect a given volume in short-term issues is substantially less than that in a longer maturity. In addition, dollar price changes for short maturities have a greater effect on yields than to similar price changes for longer-term issues.

(2) Market conditions, to a lesser extent, have an effect on the required price change necessary to consummate any given transaction.

(3) The initial price has little if any effect. On the other hand, when the current price of the traded security is out of line with other issues of similar maturity, this can have a significant bearing on the required price change.

(4) The state of expectations in the market has an important influence on the entire price structure for Treasury securities. This may be reflected in the magnitude of the price change necessary to effect any given transaction.

QUESTION

E. What is the outside limit on the amount of securities the Federal Reserve System can sell (or buy) per period of time without "disorganizing" the market for Treasury securities? Upon what factors does this limit depend? Has this limit increased, decreased, or remained constant over the last few years?

ANSWERS

Bankers Trust Co.

It is impossible for us to suggest any limit on the amount of securities the Federal Reserve System can buy or sell per period of time without "disorganizing" the market for Treasury securities. In the light of past experience we can recall no market having become disorganized because of open market operations by the Federal Reserve.

Bartow Leeds & Co.

What is the outside limit on the amount of securities the Federal Reserve System can sell (or buy) per period of time without "disorganizing" the market for Treasury securities? As a dealer in these securities we seek every bit of information about them and there are compiled weekly the purchases and sales figures in them that are done for System account. Beyond relying upon these figures we would never go so far as to ask their people what was their actual volume of transactions in any period of time. We regard the New York Federal Reserve Bank in the same manner as we regard our other customers, in other words, with a very high regard. Each of our customers has his own and, perhaps different reasons for doing identical things and we don't ask questions about them. In the case of the Federal Reserve System we feel positively sure that all of their operations are destined for the continued welfare of the country especially as they affect favorable employment, growth, and price levels. It is

a dedicated proposition. Americans should be comforted by this safeguard. In the open market operations of the Federal Reserve System their "outside limits" that might bring on a disorganized market in Treasury securities must be known to their people. If they have statistics to cause open market activity it is presumed that they know what they are doing. The factors that limit the size of their operations are contained in their estimate of the statistics which govern their operations.

With the full knowledge that nearly all segments of the country have grown over the last few years and especially the figures and financial statistics that are the concern of our Federal Reserve System one could rightly conclude that whatever "the outside limit" on the amount of securities the Federal Reserve System can sell (or buy) per period of time without "disorganizing" the market for Treasury securities has become larger as the country expanded.

Briggs, Schaedle & Co., Inc.

This question is impossible to answer, inasmuch as the conditions change, depending on whether the Federal Reserve is contracting or expanding the banks' reserve positions. These factors have not changed over the last few years.

Chemical Bank New York Trust Co.

The amount of securities the Federal Reserve System can sell or buy is related to the type of securities involved. Hundreds of millions of bills can be bought or sold without bringing about a disorderly condition, but the same volume of long-term bonds would certainly upset the market for Treasury securities. There is no basis for believing that the outside limit has changed over the last few years.

C. F. Childs & Co.

We do not know, because to our knowledge the Federal Reserve by its actions has never disorganized the market.

Continental Illinois National Bank & Trust Co. of Chicago

No figure can be set as the outside limit on the amount of securities the Federal Reserve System can buy or sell during a specific period of time without "disorganizing" the market for Treasury securities. For example, during a period of rising interest rates when the market is under pressure, the Federal Reserve could seriously jolt the market if it came in and asked several dealers to bid on only a million or two of bonds from the open market account. On the other hand, during the same period of time, the Federal Reserve might buy literally tens of millions of dollars of Treasury bills with only a minor impact on price. Over the last few years the amounts which the Federal Reserve could buy or sell have changed rapidly both up and down with changing market conditions and particularly with changes in the basic underlying economic conditions. At any given time, however, the System can operate in significantly larger amounts of bills with smaller price repercussions than in any other Treasury securities.

C. J. Devine & Co.

It is difficult to visualize Federal Reserve open market operations in terms of rigid limitations; flexibility in this instance is of the essence. Federal Reserve open market operations are usually under-

taken to give effect to short- and long-term monetary objectives of Federal Reserve policy. We assume they are pursued to the extent considered essential to achieve these ends without, of course, creating new problems by seriously disorganizing the securities markets.

We have no recollection of the Federal Reserve System ever causing a disorderly market through its purchases or sales of Government securities. The specific amount and the definite period of time would depend primarily on business activity, and on the supply of and demand for funds from the public and private sectors of the market.

Discount Corp. of New York

As in question D of this section, there is no basis for a responsive answer. The outside limit on the amount of securities the Federal Reserve System can sell (or buy) per period of time without "disorganizing" the market would, of course, be greatest in the case of Treasury bills where the market is broadest. Such a limit would depend upon many factors, including the following:

1. The issue or issues in question.
2. Dealer positions.
3. Seasonal demand and supply of funds.
4. Federal Reserve credit policy—direction and intensity.
5. Market expectations.
6. Treasury's operations.
7. Technique of purchase and sale used.
8. The banking position.

Such a limit would depend on which of these factors are dominant influences and in what degree. Without a basis for comment on the size of such a limit, we have no view as to whether or not it has changed over the last few years.

First Boston Corp.

This is a broad and difficult question which we feel we are not qualified to answer properly. In our judgment the Federal Reserve bank, having access to the many figures and facts involved, is in a position to determine the prevailing market conditions at any given time.

First National Bank of Chicago

This question, in my opinion, also does not lend itself to any one answer for, as in the answer to D above, it varies with market and economic conditions, including expectations, prevailing at a particular time. It depends on countless factors impossible to enumerate. It would include, however, the type of issue traded, the condition of the money market in general, the level and trend of bond prices, and, above all, the expectations of traders, investors, and the others concerned with the market.

Regardless of the size of "outside limit" which the Federal Reserve could trade without "disorganizing the market," one could argue that as our economy has grown so has the flow and store of available investment funds. This suggests that the limit that could be traded has increased in recent years.

Aubrey G. Lanston & Co., Inc.

No single figure or area of amount can be given, since that figure would depend on a large number of factors with respect to the market at the time. The size of the transactions which the Federal Reserve

can effect will generally depend on the sector of the market in which they may operate. If the Federal Reserve confines its activities to Treasury bills, transactions can run into several hundred millions of dollars without straining the market, to say nothing about disorganizing it. The market for short-term securities has steadily increased—in its breadth, depth, and resiliency—over the past 8 years.

Morgan Guaranty Trust Co. of New York

The limit referred to will be governed by numerous outside influences, including type of security, condition of the market, current trend of market, economic conditions, fiscal operations, and conditions of other markets.

New York Hanseatic Corp.

Any limitation that we can visualize on the amount of securities the Federal Reserve System could sell or buy per period of time without upsetting the market for Treasury securities would have to be closely tied in with the ever fluctuating money position of the banking system. Of course, we are assuming that this question refers to operations only in Treasury bills.

At the present time, with money extremely tight, the Federal could sell only a small amount of bills into the banking system before short-term rates would rise sharply. Realignment of other investment yields in proper proportion could lead to further liquidation of security portfolios and disorganization in the market. On the other hand, the Federal probably could buy a relatively large amount of discount bills in any tight money period as holders could find other more profitable uses for their funds.

The amount of bills the Federal could sell without disorganizing the market has decreased appreciably over the past few years of generally stringent money conditions and rising interest rates. Constant growth in the demand for money, as evidenced by increases in gross national product, has resulted in the banking system steadily liquidating Governments in order to finance economic expansion. Now the ability of the commercial institutions to reacquire bills would appear to be drastically limited.

William E. Pollock & Co., Inc.

The Federal Reserve System may buy or sell any reasonable amount of securities without disorganizing the market. The limit would depend upon general economic conditions. The limit has increased over the last few years.

Charles E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The limit, or aggregate, of purchases or sales possible for the Federal Reserve System to make without disorganizing the market is dependent on many considerations. The amount cannot be defined without the consideration and evaluation of all market factors existing at a given time. Since adoption of the "bills only" policy, the market's willingness to absorb Federal Reserve System sales, in times of an appropriate economic climate and under normal market conditions, has increased. Disorganization of the market, as the result of Federal Reserve System sales, is a considerably less likely occurrence under a policy that, in other than extreme conditions, precludes System intervention in areas of the market other than the short area.

D. W. Rich & Co.

There is no crystal globe which can limit quantitatively the Federal Reserve open market transactions. It depends on every sort of factor. But we can say, as specialists, that open market operations have increased importantly in the last few years and the market has accustomed itself to this development, and, consequently, eased the problem of the Open Market Committee.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

Under the "bills only" policy, and as long as it remains in effect, I believe there is no practical limit to the volume of transactions for Federal Reserve account that could be accomplished without disorganizing the market. If anything, if ever such a limit has existed, it has increased over the last few years due to the expanded volume of short-term securities outstanding and the resultant broadening of this sector of the market. Should the "bills only" policy be substantially modified, the question of such a limit would require reexamination.

QUESTION

F. Has the "bills only" policy of the Federal Reserve System strengthened the market for Treasury securities in any way? Has it increased the depth, breadth, and resiliency of the market as the 1952 report of the Ad Hoc Subcommittee on the Government Securities Market said it would? If so, how?

Has this policy had the effect of reducing or of increasing the amount of speculative activity in this market? Why?

Would it be desirable to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Treasury securities? Would this significantly reduce speculative activity in Treasury securities?

Would a reduction in speculative activity in Treasury securities be helpful from the point of view of conducting monetary policy and debt management in the interest of economic stability? For example, has such speculation actually hindered monetary policy, or the issuance of long-term debt during boom periods, in the years since the accord?

ANSWERS

Bankers Trust Co.

The "bills only" policy of the Federal Reserve has contributed to the establishment of a self-reliant market for Government obligations. It has enlisted the resources of the dealers in taking positions in the market which tend to reduce the amplitude of price fluctuations; it has increased confidence of the dealers in their ability to analyze market prospects. Also, it has put investors in a position where they can depend upon their own judgment of the future and are willing to take positions in line with that judgment. Action by the Federal Reserve across the board in Treasury obligations would pose major imponderable for the dealers and for investors; namely, when will the Federal Reserve change its support policy?

If the Federal Reserve tried to support prices of Government securities above levels dictated by supply and demand forces in the market, the Federal Reserve would be forced to acquire a large volume of

Governments. Federal Reserve buying could conceivably, within limits, create the appearance of an orderly market, but only temporarily. For it would be recognized that the Federal Reserve could maintain prices substantially above those dictated by market forces for only a relatively limited period of time and would have to reduce its bid or its buying operations. This would cause investors to hasten to unload their holdings on the Federal Reserve before it could change its support policy. And this in turn would contribute to erratic markets. Also, the initiation of support operations would mean that many holders would not be firm holders of Governments but would hold these obligations in hope of achieving profits with changes in support operations. Consequently, we believe that the "bills only" policy has, in effect, increased the depth, breadth, and resiliency of the market.

In our judgment, the "bills only" policy has had the effect of reducing the amount of speculative activity in the Government securities market in comparison with that which would have obtained previously had the Federal Reserve been trading across the board. In practice, speculative activity in the Government securities market is based on the prospect of a decline in interest rates; in practice, there are no short sales of consequence as the result of speculation on the prospect of a rise in interest rates. Investors may adjust their portfolios by lengthening maturities if they believe the prospects are for lower interest rates, but it is assumed that this is not "speculation" as within the meaning of this question. In an environment in which the expectation is for a decline of interest rates, purchasers may acquire Government obligations through borrowings by one device or another.

The most recent example of large scale "speculation" in Government securities is that which followed the shift in credit policy in October-November 1957. Following this shift in credit policy, the credit markets experienced one of the sharpest declines of interest rates on record. And these declines were very apparent in the yields on medium- and long-term Government securities, despite the fact that the Federal Reserve was not buying these obligations. Had the Federal Reserve been buying medium- and long-term Treasury obligations in this environment, presumably the declines in rates and increases in prices would have been even sharper. This would have whetted even more the anticipation in the marketplace of further declines and the result would have been quite probably even more speculation.

In our judgment, speculative activity in the Government securities markets has helped monetary policy and debt management policy in the years since the accord. The period from October-November 1957 to date is most illuminating in this connection. When the shift in credit policy became evident in the early winter of 1957, the financial community interpreted this shift as foreshadowing further declines of interest rates. In this situation, speculative activity which involved the purchase of Treasury obligations in the expectation of realizing on capital account assisted the Federal Reserve in attaining a rapid downward adjustment in interest rates. Presumably, this was in accord with the then current objective of credit policy. Also, in this period speculative activity doubtless increased the amount of financing the Treasury was able to do in sectors other than those of short term

maturities. In this period, therefore, which ran from the closing months of 1957 to about mid-1958, speculative activity helped both monetary and debt-management policies.

Later, in about mid-1958, when another shift in credit policy was indicated due to the upturn in business activity and the resurgence of inflationary psychology, the fact that some of the previous speculation had been ill considered also operated to help the Federal Reserve to achieve a readjustment of interest rates consistent with the new objective of credit policy. To the best of our knowledge there were no instances of significant failures arising out of the speculative activity in the period of declining interest rates, although, obviously, some speculators took substantial losses when the market turned. When the change in the business economic and financial environment that took place in mid-1958 was obvious, it became very difficult for the Treasury to sell long-term obligations. Perhaps the extent of the speculation in the first half of 1958 may have contributed to the difficulty of doing longer term financing in the second half of the year, but it was not, in any event, the major factor.

Thus, we conclude that speculative activity in Government securities operates to assist monetary policy, rather than the reverse. This is true both in a period when the expectation is for declining interest rates and when it is for rising interest rates. In both cases, monetary policy is facilitated by speculation.

The problems of a prudent debt management policy have been discussed in the answer to II (F) above, and need not be repeated here. Much has been made on occasion of the discouragement of investment in Treasury obligations that arises out of all the movements in prices of Treasury obligations. Sophisticated holders of Government obligations recognize that the market prices of all credit obligations, including Treasury obligations, fluctuate in response to changes in interest rates. If holders wish to avoid the risk of fluctuation in market prices due to change in interest rates they can, of course, invest in savings bonds.

Bartow Leeds & Co.

The "bills only" policy of the Federal Reserve System has strengthened the market for Treasury securities by relieving it of the anxiety that an unexpected operation in large volume might at any moment take place in certificates, notes or bonds. There are generally enough situations in the market to cause uncertainty as to which way it may go without adding another situation further to complicate the judgments of those concerned. So to the extent that the Federal Reserve System does not involve the certificates, notes or bonds in open market operations so to that degree the marketability of securities in these three sectors is helped and even strengthened. This is a general observation. At times of distress there may be a big question as to whether purchases of bonds would be helpful in the long run. In the summer of 1958 such purchases, momentarily, helped to slow down the decline of bond prices, but it was at the expense of momentarily expanding the money supply which fact was not in accord with Federal Reserve System policy.

In the "bills only" policy of the Federal Reserve System it is now certainly well known that speculators did enter the Government securities market, particularly in a large scale in the middle of 1958. In

a smaller scale, the speculators have been in it before. They are bargain seekers who, in the main, are content to receive a small short-term gain in their efforts, but who would prefer the more profitable long-term taxwise gain if they could get it. Their judgments, as are witnessed by their 1958 activities, leave much to be desired both from their own point of view and from the view of those who are directly concerned with the market movements of Treasury bonds.

In the event that the Federal Reserve System were to concern itself not only in the "bills only" policy but, to include in that policy Treasury notes and bonds, I fear that the speculators would try to relate their activities to those of the Federal Reserve System. In other words, where the System was a known buyer of bonds at a time this fact would be conveyed to the speculators who would "join in." How the speculators would know this, I have no idea. I just believe that they have ways of finding out, and the ensuing complications resulting in the market could well give us bigger headaches than ever before through the wide swings in prices that might well result.

I have enough confidence in the Federal Reserve System to want not to judge against them, but rather, to judge with them because theirs has been the best judgment so far. The "bills only" policy finally does allow the Government bond market to stand on its own feet. All investors when this policy is maintained have reason to know that Government bond prices are not rigged and the Treasury Department and the Federal Reserve System could not be accused of rigging their market against the real investor and the speculator.

Would it be desirable to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Treasury securities?

If it were to be presumed that commercial bankers generally were careless with their customers and permitted them to take all sorts of commitments without sufficient margin, then I would know that it would be a deep concern to the System. But, that is not the case among good commercial bankers. Whatever arrangements they make with their customers are at their own and known risk, and I feel that bankers know fully well what they are doing.

I feel confident in saying that no useful purpose would be served by the intervention of the System into private banking arrangements and I feel such intervention would not be desirable.

Depending upon the degree of stringency in the margin requirements I feel confident that System intervention in this field would have, no doubt, a deterring effect and thus reduce speculative activity in Treasury securities. Such intervention might bring about undesirable consequences for the whole market.

However, I strongly feel that the Treasury should appraise the important role that the speculator takes, for without the venture of his money, without his perspective view of the future, without his confidence in his judgment and without his implacable faith in the country's growth we would not be where we are today in the greatness of our United States.

Would a reduction in speculative activity in Treasury securities be helpful from the point of view of conducting monetary policy and debt management in the interest of economic stability?

Speculative activity in Treasury securities at most times is a helpful adjunct to the conduct of monetary policy and debt management

insofar as it does good and not harm to economic stability. I might add that when misjudgments of the speculators occur as was the case in midyear 1958 a new set of conditions arose that changed the views of many persons in authority, particularly of those who deal in Treasury securities and of officials of the Government bent on conducting monetary policy and debt management. This misjudgment was unfortunate because it disrupted through the heavy selling that took place the plans of all concerned, even the very plans of those who did the selling.

In perspective we should regard the misjudgments of the speculators last summer as part of the toll paid in a growing country where its people want to make money. The existence of a miscalculation of this magnitude is a lesson in itself. It will be referred to again and again in the public press as a reminder of what did happen and that it could happen again.

The possibility of a recurrence of 1958 will be pressed upon the minds of men for year to come. Yet the speculators will be ever present, and through them and with them they will in the long run help in the conduct of monetary policy and debt management, their misjudgments notwithstanding.

In the years since the accord speculation in Treasury securities did not mount large until the middle of the year 1958. It doesn't exist unless there is a profit potential. Thus during boom periods it could fairly be said that speculation is almost nonexistent. It is at the end of boom periods or during periods of business recession that speculation in size becomes apparent.

The speculator with his uneven cash flow does not hinder monetary policy and he is not a buyer of long-term debt during boom periods. More likely, and this can be proved, I would judge him to be in the stock market in boom times.

I feel that the speculator has a rightful role to play in our economy and that our country would not be as far ahead in growth were we without him.

He contributes much to the national welfare and to the well-being of himself and his neighbor. He belongs among us and as one of a large group with varying resources he adds much to the employment of our people, to the growth of our country, and to the depth and breadth of the Treasury bond market.

Briggs, Schaedle & Co., Inc.

The answer to the first part of this question is yes; the answer to the second part of this question is yes, the reason being that if the Federal Reserve should start to buy Government securities longer than Treasury bills, the market would be much thinner and the fluctuations much wider, as the market would not know, when the Federal is buying or selling, how big it would be and therefore the tendency would be for the market to draw back and not do anything, which would create a "disorderly" market, so that the "bills only" policy tends to have a stabilizing effect on the Government security market. I do not think that the "bills only" policy affects in any way the speculative activity in the market.

I do not think it is necessary to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Government securities. I think these margin require-

ments should be left to the discretion of the commercial bank from which the money would be borrowed. By and large, the margin requirements are satisfactory at the present time.

I do not think that speculation has hindered monetary policy in any way. I think that with the democratic economy there must always be speculation to a certain degree. If this is eliminated, then all incentive ceases and you might just as well print greenbacks.

Chemical Bank New York Trust Co.

It is impossible to compare the 1959 market for Treasury securities with that of 1951 or earlier periods because so many factors have changed. The best we can do is try to compare actual conditions of the past several years, during which "bills only" policy has been in effect, with what might have been the situation without "bills only." Even this is a difficult task. We can theorize that if the Open Market Committee had engaged in long-term securities transactions the market for notes and bonds would not have enjoyed the depth, breadth, and resiliency which has actually existed. By limiting open market operations to bills, dealers and others are able to operate freely in the other segments of the market without fear of sharp fluctuations in price as a result of the Federal's actions. Because of the large volume of bills being traded the bill market absorbs the impact of Federal action more quickly than if they operated in the longer market. Furthermore, when the Open Market Committee wishes to decrease Government holdings, bills may be allowed to mature without sale in the open market, whereas long bonds would have to be sold, with a consequent repercussion on the price and condition of the market.

It is difficult to see how this policy has had any substantial effect on speculative activity.

It is extremely doubtful that control of margin requirements to cover borrowing against Treasury securities is needed or that it would be in the public interest at all times. It is particularly hard to see why governments should be singled out for regulation when margin requirements have not been deemed necessary in connection with bonds of railroads, industrial corporations, or municipalities. There should be no objection to regulation by the Federal Reserve Board of borrowing against bonds of any kind through the imposition of such margin requirements as may appear appropriate from time to time. Severe restriction of borrowing would reduce speculative activity and would probably impair the healthy processes of seasoning of new issues. It would be essential to differentiate between dealers and others in order not to prevent the proper functioning of dealer activity.

It is our opinion that a reduction in speculative activity would be detrimental to the conduct of monetary policy and debt management. There may have been one or two occasions in the past 10 years when excessive speculation hindered monetary policy, but the greater part of the time speculative commitments have been essential to the flotation of new issues. It is too much to expect investors to absorb an entire new issue on the date of offering, and temporary holders must fill this gap by buying with the expectation or hope of a profit on resale in a relatively short period.

C. F. Childs & Co.

Yes; the market has been strengthened in the sense that it is able to perform satisfactorily without official intervention. Breadth, depth, and resiliency have improved, and in the terms set forth in the answer to (B) above, and in our answers to (G) and (H) in section I.

In large part, whether speculative activity has been increased or decreased by the "bills only" policy will depend upon a definition of speculation. We would define it as an operation undertaken in the expectation of a profitable change in price, as opposed to a purchase aimed at obtaining regular and assured income. During the period of the "pegs" prices maintained a fairly dead level, fluctuations being quite small. Thus, there could be little expectation of profit, and hence little reason for speculation. In this sense, speculation has increased. This is due, however, not primarily to the "bills only" policy, but to the accompanying removal of the pegs. During the period of the pegs, bank loans on Government securities, to others than dealers, were at a very high level. This might imply a large degree of speculation during that period. However, this was a time when money rates were extremely (artificially) low, and many were borrowing, for the "carry." After removal of the pegs, these loans diminished. Thereafter, the speculator came back into the market whenever sophisticates believed the trend of interest rates would be downward.

In our opinion, we do not consider it desirable to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Treasury securities. It would not significantly reduce speculative activity in Treasury securities.

Such activity is conditioned by expectations of profit to a far larger degree than by resources for borrowing money. Purchases made with a speculative motive, for cash, with the buyer using his own funds, are a powerful influence in the Treasury market. The Treasury-Federal Reserve study of the Government market found that only one-sixth of the operations in this market during the spring of 1958 were financed with borrowed money.

We do not see how a reduction in speculative activity would be helpful, nor how its presence has hindered monetary policy or the issuance of long-term debt. Indeed, such activity has contributed greatly to the volume of securities the Treasury has been able to sell. Also, speculation contributes greatly to the depth, breadth, and resiliency referred to above, by increasing the volume of transactions, the number of participants, and the market's ability to adjust quickly and flexibly to changing conditions.

Continental Illinois National Bank & Trust Co. of Chicago

The "bills only" policy of the Federal Reserve System has strengthened the market for Treasury securities in relation to what it might have been had the Federal Reserve continued to operate in all maturity areas. This assumes that the economic, political, and other factors affecting the market since 1952 would have been the same if the Federal Reserve had operated in all maturity areas. It cannot be proved one way or the other. A case can be made that the market might have got accustomed to moderate Federal Reserve operations in other maturities and functioned smoothly. The central bank generally operates in all maturity areas of the money market in other economically advanced countries.

A much stronger and more likely case can be made that Federal Reserve open-market operations in all maturity areas would have seriously compounded the problems in the Treasury market during the period under consideration. Our money market traditions are different than those abroad. More importantly, the market already had become completely disillusioned with Federal Reserve attempts to cushion Treasury financing operations by the time the "bills only" policy was adopted. As discussed above, these attempts led to increasing distrust of the level of the market and caused more and more investors to stay out of financings which led to increasing problems in getting the Treasury financed. Presumably, the major need for Federal Reserve cushioning operations in the period since 1952 would have been when the market was under pressure. At such times, the likelihood is that the Federal Reserve would have had to buy more and more bonds in successive financings as pressures continued. Thus the Federal Reserve would end up creating more reserves than called for by the economic situation.

Attempts to offset purchases of longer term issues with sales of shorter term issues could have led to equally serious problems. The demand for money in these tight periods exceeds the supply. Federal Reserve sales of short issue would put more pressure on short rates, lead to higher interest rates and greatly compound the problem of excessive cash turn-ins on maturing issues or getting adequate subscriptions for cash offerings of new Treasury issues, including the weekly bill offerings. This chain of events automatically could lead to pressures for more direct controls over the financial area of the economy in order to get the Federal Reserve out of the box of having to create excessive bank reserves by buying too many longer securities which could not be offset adequately with sales of shorter term issues.

Demands that the Federal Reserve buy long maturities and sell short issues began a few months ago when yields on short terms were substantially below long-term rates. Would this course of action be advocated as actively now that short rates have risen above long rates? It should be noted that during tight-money periods this relationship often prevails and the short market may be placed under severe pressure. Thus aiming Federal Reserve purchases at the area of the market that someone thinks is the weak area at the moment may give very unrewarding results in terms of overall market stabilization. Furthermore, since the huge bulk of the Federal debt is subject to periodic refunding into short maturities, the cost to the Treasury of pushing short rates rapidly higher would also reduce the attractiveness of this procedure to its proponents.

Finally, it is quite possible that Federal Reserve operations to cushion the impacts of tight money might have heightened investors' fears of inflation, just as any Federal Reserve attempts to support the long-term market at the present time would lead many investors to question further the future value of the dollar. This could lead many buyers both here and abroad to reduce their purchases of Treasury securities. Again it should be remembered that the problem is one of inadequate fiscal policy and an unwillingness to face the necessity of living within our means. As a result we have had excessive amounts of Treasury financing operations which have been difficult. These difficulties will not disappear until the basic issues are faced.

It is doubtful the "bills only" policy has had any impact on speculative activity in the market. There is little speculative activity during periods of weak markets and rising interest rates; the real problem is to get enough temporary buyers (or underwriters or speculators, or whatever one might call them) to underwrite new Treasury offerings. It might be argued that the Federal Reserve could dampen excessive speculation in rising markets such as we had during early 1958 by selling long bonds to hold down the rapid rise that took place in bond prices during the recession. But would the Federal Reserve have wanted to do this? After all, what criticism there was at the time was directed at the Federal Reserve because long-term interest rates did not decline enough—rather than too little. Federal Reserve sales of bonds to offset speculative activity would have been in contradiction to basic Federal Reserve policy which was seeking to create conditions of ease in the bond markets. It might be concluded that speculative activity actually would increase in the sense that the whole market would be speculating from minute to minute as to what the Federal Reserve might buy or sell next; the inducement to this kind of speculation would tend to be greater the longer the maturity.

The question of margin requirements on Government securities to reduce excessive speculation is a complicated one that currently is the subject of exhaustive examination by a joint Federal Reserve-Treasury study group. At the moment, it appears that margin requirements are not the answer to the problem. This question has come up due to the very unusual situation we had in the market during the spring and summer of 1958. The likelihood of such a unique combination of circumstances arising again is remote. Therefore, it hardly seems to call for more and more controls. More germane to the problem is the question of whether or not there was a need to permit money conditions to become as easy as they did at that time. On hindsight, it appears that the benefits of easy money could have been obtained without driving interest rates to the extremely low levels they reached in the spring of 1958. Speculative activity would not have been eliminated but might have been on a much lesser scale if short-term rates had not gone so terribly low. Unless we are going to go to a completely controlled economy, there will always be speculation and speculators will find a way to operate.

Free financial markets are an integral part of our free, competitive economy. How one could reduce speculative activity to just the desired level (whatever that is) without seriously endangering our whole free market concept is difficult to see. In any case, it is doubtful, taking the longer run viewpoint, that speculative activity has had a predominant impact on the formulation and execution of monetary and debt management policies. Again, it should be recalled that basic problems of monetary policy and debt management are associated with the basic problems discussed above of inadequate fiscal policy, resulting in heavy expenditure programs and increasing public debt, and other inflationary biases in the economy. These might be mitigated by various technical regulations and devices but the impact on the basic problems would be small. Against this must be weighed the price to be paid if we are to resort to additional controls and regulations.

C. J. Devine & Co.

The "bills only" policy of the Federal Reserve has had the effect of creating a more normal, or true, market for Treasury securities other than Treasury bills. This conclusion is based on the previously presented tabulation showing the present distribution of the marketable debt, as compared with prior years.

The "bills only" policy, if anything, has tended to reduce speculation, since this policy has made it clear to everyone that the Federal Reserve System would not conduct open market operations in any maturity range other than Treasury bills.

We feel that, as a result of the comprehensive Treasury-Federal Reserve study of this subject, the Treasury Department and the Federal Reserve Board would be in a better position to determine the wisdom of effecting regulatory measures in this direction.

While a certain amount of speculative activity is essential to the successful underwriting of Treasury financing operations, an excessive amount of speculative activity is always detrimental in the market. During boom periods in the economy, speculation does not exist to any appreciable degree and, therefore, does not hinder monetary policy, because the type of speculator who might be harmful to the market does not buy long-term bonds during a period of rising money rates.

Discount Corp. of New York

Has the "bills only" policy of the Federal Reserve System strengthened the market for Treasury securities in any way? Has it increased the depth, breadth, and resiliency of the market as the 1952 Report of the Ad Hoc Subcommittee on the Government Securities Market said it would? If so, how?

Has this policy had the effect of reducing or of increasing the amount of speculative activity in this market? Why?

Would it be desirable to extend the Federal Reserve System's control over margin requirements to cover borrowing for the purpose of buying Treasury securities? Would this significantly reduce speculative activity in Treasury securities?

Would a reduction in speculative activity in Treasury securities be helpful from the point of view of conducting monetary policy and debt management in the interest of economic stability? For example, has such speculation actually hindered monetary policy, or the issuance of long-term debt during boom periods, in the years since the accord?

"Bills only" is a procedural arrangement adopted by the Federal Open Market Committee early in 1953. At the time, the Committee made the following statement of policy:

It is not now the policy of the Committee to support any pattern of prices and yields in the Government securities market, and intervention in the Government securities market is solely to effectuate the objectives of money and credit policy (including the correction of disorderly markets). (See p. 88 of Annual Report of Board of Governors of the Federal Reserve System for 1953.)

These steps were taken to implement further Federal Reserve System efforts to assure a complete break with the war and early postwar rate support operations, which had increasingly tended to neutralize or subvert monetary and credit policy as a constructive influence. "Bills only" was a part of the System's total efforts to implement a

flexible monetary policy. Actually, significant steps in this direction preceded "bills only" and the latter, adopted in the interest of simplicity and general public understanding, became a formalization of procedural arrangements which were largely operative already.

There can be no empirical evidence of the market impact of "bills only." There is only the record of actual events and no way of knowing "what might have been." It is impossible to separate those influences flowing from a climate and condition of free competitive markets and those ascribable to the particular procedural form of policy implementation chosen. It can be said, however, without any attempt to attribute cause and effect that since 1952, the market, in the broad sense, has achieved an increased degree of self-reliance and a greater ability to function independently with the creation of a firmer basis for price judgments.

The reemergence of a greater degree of freedom in the Government security market has brought with it a pronounced change in atmosphere and a greater sensitivity to environmental influences. It has also imposed new disciplines to which all market participants have had to accommodate their actions. For the Federal Reserve System, this has meant that the market is more capable of a quick sensitive response to the course of financial and economic events, at times running to unwarranted extremes, but generally providing usable guides to policy action. The Treasury, in its turn, has been forced to compete on equal terms for the supply of available funds and has become more accountable to the censorious judgment of the marketplace. For the investing public at large, this freedom has meant intense competition on both the demand and supply side of all credit markets, with a greater instability and a wider range of fluctuations in credit rates. The dealers, in discharging their responsibilities, have found significant shifts in the relative importance of investor groups and their attitudes toward Government securities, a change in the character of, if not an increase in, speculative participation, and a pronounced tendency for major investor groups to become sophisticated in their market operations and to adopt a more competitive approach in the execution of their transactions as opportunities and risks have increased. The record of recent years has demonstrated the unique ability of the negotiated market and the competitive efforts of dealers to handle effectively the heavy and changing demands made upon it. The adequacy and efficiency of the market is attested to by the heavy volume of turnover and the high degree of fluidity or shiftability—as measured by published changes in ownership—that has been an outstanding feature of the Government securities market.

There is no present need to extend Federal Reserve System control over margin requirements to cover borrowing for the purpose of buying Treasury securities. This conclusion is based upon the following considerations:

1. The 1957-58 experience is not a sound basis for action; it was an extraordinary combination of events not likely to be repeated. There were disciplinary and educational aspects to this experience which should exercise a salutary influence on all market participants. Much of the speculative activity was not credit based and would not have been reached through margins. The excesses of this period were not related to the functioning of the dealer market.

2. Margin regulation of the Government security market would be complicated and difficult to administer because of the risks of narrowing the market, interfering with Treasury finance and its underwriting, and with legitimate and vital dealer operations.

3. The voluntary approach should be exhausted first, and sources of credit information available to the Federal Reserve System should be broadened to promote an earlier identification and a greater awareness of unsound speculative activity. This will enable the Treasury and the Federal Reserve System to take corrective action through channels now available to each agency—the Treasury through its offering terms and the Federal Reserve System through moral suasion and general credit controls.

4. Some banks can and should, in their role as credit arbiters, play a large voluntary part as competent, experienced, regulated professionals in credit-making decisions by tightening up on credit standards. Both State and National supervisory agencies could assist in this connection.

Positive evidence is lacking that speculative activity in the market for U.S. Government securities since "the accord" has hindered monetary policy or the issuance of long-term debt. Speculation has been greatest during periods of monetary ease and has tended to go hand in hand with a combination of credit availability at cheap rates and active or sizable Treasury finance in the intermediate and long sectors of the market. It has at such times actually facilitated the initial cash sale of Treasury offerings by enlarging the underwriting response.

In general, speculative activity has helped monetary policy in recent years. It has done this in periods of depressed business by facilitating an expansion in the money supply. To the extent that it encouraged debt extensions, it has also reduced the liquidity of investors as the economy entered an expansionary phase and credit policy shifted toward restraint, thus reinforcing credit policy actions.

The chief deterrents to the issuance of long-term bonds during boom periods have been:

1. Strength of competing demands for funds and the rates paid by private borrowers.

2. Government competition with itself through guarantees on VA and FHA mortgage loans which have become an acceptable substitute for Treasury obligations for some investors.

3. Hesitation of the Treasury in selling long-term bonds in worthwhile amounts at the rates required for a full response and in risking the attendant impact on capital market activity that aggressive efforts to preempt funds would entail.

An inadequate fiscal policy in a period of economic growth has been the greatest single obstacle to sound debt management and credit policy.

Despite an apparent harmony on economic objectives, the full potential for influence in the areas of fiscal, debt management, and credit policy went largely unrealized. In the context of expanding congressional spending and uncontrolled budgets of recent years, too much was expected from monetary policy. The Treasury, faced with a critical and complicated refunding problem, found its capabilities

curtailed by the urgency of raising new cash at a time when all theories of sound debt management called for debt retirement.

First Boston Corp.

We believe the "bills only" policy has strengthened the marketability of longer term Government securities. We referred to this in our answer to part I (G and H). We do not believe a good Government securities market can be half free and half pegged. In our opinion, such a market would have no "breadth, depth, and resiliency," would tend to cut desirable speculation and professional participation to a minimum, and possibly create a more difficult atmosphere for Treasury financing.

The question of margin requirements is complex, as indicated by the hearings in the Treasury-Federal Reserve study of the Government securities market. The effects of margins would depend upon the nature and scope of the requirements contemplated, the application of margins to different classes of institutions, dealers, etc.

The Treasury-Federal Reserve study points out that a continuing professional speculative activity is widely considered to be one of the essential characteristics of the Government market. Such activity can be valuable in assisting the authorities to carry out monetary and debt management policies. Elaborate and extended analysis would be required to determine, from a long-range point of view, whether speculative activity had been "excessive," to what extent, and whether monetary or debt management policy had been hindered. For instance, it would be difficult to determine to what extent the market decline in the summer and fall of 1958 could be attributed to changing fundamental conditions, and whether speculative activity did more than accelerate a decline which has since gone much further than it did in 1958.

First National Bank of Chicago

(1) In my judgment, the policy changes in the operations of the Open Market Committee which resulted from recommendations of the Ad Hoc Subcommittee on the Government Securities Market have increased "the depth, breadth, and resiliency of the market" and in doing so have strengthened the market for Treasury securities. These policy changes included (1) the modification in the directive to the Federal Open Market Committee from one of maintaining "orderly conditions" to one of correcting "disorderly conditions" and (2) the decision to confine operations to the short end of the market. These decisions removed an unpredictable and overpowering element of uncertainty from the market. For further discussion, see answer to question part I(H).

Admittedly, there may have been instances since 1953 when the market lacked the desirable degree of "depth, breadth, and resiliency." However, I believe that the market for Treasury securities, as measured by the aforementioned characteristics, has improved since 1953. On the other hand, it seems to me that it is not possible to do more than generalize in this particular area.

(2) The policy probably has contributed to an increase in speculative activity in that it has eliminated the uncertainty of intervention by the Open Market Committee in the longer maturities which are subject to wider price changes relative to given changes in inter-

est rates than are short-term issues. However, insofar as this speculative activity smooths out and equalizes prices over time and place, I would cite this as a gain to the efficient performance of the market.

(3) I do not believe it would be desirable to extend the Federal Reserve System's margin requirements to cover borrowing for the purpose of buying Treasury securities. While certain speculative excesses may have occurred in June 1958 in a free market, there is a self-correcting mechanism in operation; namely, the risk of loss. The imposition of margin requirements while possibly curbing the abuses that may have occurred on occasion also would tend to discourage participation in the market and the normal speculation that facilitates the efficient functioning of any free market.

(4) I am not persuaded that a reduction in speculative activity in Treasury securities would be helpful from the point of view of conducting monetary policy and debt management in the interest of economic stability. On the contrary, the so-called speculative activities of professional traders contribute to the efficiency of the market for U.S. Government securities and thus facilitate Treasury financing. There are much more significant obstacles to sound monetary policy and debt management than speculative activities in Government securities. Two specific instances come to mind: First, the difficulty of soundly financing a Federal deficit during periods of rising economic activity; and, second, the present interest-rate ceiling on Government bonds. These, in my opinion, considerably complicate monetary policy and the management of the public debt.

Aubrey G. Lanston & Co., Inc.

We believe that the so-called—and erroneously called—bills only policy has strengthened the market for Treasury securities and has increased the depth, breadth and resiliency of the market—to the advantage of the Treasury, the Federal Reserve, and the public in general—compared with what it would be if the policy in question were not in effect. It has had this result because it has increased the willingness of dealers to deal for their own account and because the public now can buy and sell in accordance with its own judgments of concurrent credit and business conditions, free of the wide range of conjecture that would prevail if Federal Reserve officials were to put their judgments (and buying and selling power) against those of such investors.

The policy in question has contributed to the kind of healthy intelligent speculation (using the term in its proper sense) that is necessary to the efficient functioning of a free market. We doubt that it has had any influence on the get-rich-quick kind of speculation that on occasion has invaded the market largely at its own expense.

We do not favor control over margin requirements on Treasury securities by the Federal Reserve or any agency of the Government. If such margins were to be imposed, for example, would margins also be applied to other fixed-income obligations such as corporate and municipal bonds? If so, the functioning of all credit markets may be impaired. If not, why place another obstacle in the way of a demand for Treasury securities? Remember, only the successful speculator returns to the market. The successful speculator also has to be one whose purchases and sales have an overall stabilizing effect, generally

speaking. The unsuccessful speculator can return to the market only so long as his capital lasts—so why worry about him.

Lending practices on Treasury securities are generally sound, although an unusual degree of laxness developed in the spring of 1958—a laxness that could largely be controlled by the bank supervisory authorities in the course of their examinations and, indeed, has been eliminated by dint of the lessons learned by others.

We see no need to attempt to reduce speculative activity in Government securities. Such speculation has not interfered with the broad conduct of monetary policy. It more generally has helped the Treasury in the issuance of long-term debt since the accord, and the Government might do better to encourage successful speculation than to try to curb or kill it.

Morgan Guaranty Trust Co. of New York

The “bills only” policy of the Federal Reserve System has permitted prices to become more responsive to normal forces of supply and demand, an accomplishment that has improved the stature of the market. The market seemingly has moved in the direction of the objectives established in the 1952 report of the ad hoc subcommittee on the Government securities market.

There seems to be no direct association between speculative activity (measured by the volume of security purchases backed solely by credit as against those representing cash outlays) and the “bills only” policy. It has, however, tended to increase the risk element in speculative operations.

It is doubted that there is much to be accomplished through an extension of the Federal Reserve System’s control of margin requirements to cover borrowing for the purpose of buying Treasury securities. Speculation arising from the use of credit seemingly plays a minor role in establishing market levels. On the other hand, such speculation performed in its customary role has aided the Treasury in its debt operations.

New York Hanseatic Corp.

The “bills only” policy has strengthened the market for governments to the extent that prices for certificates, notes and bonds come closer to reflecting a true meeting-of-the-mind between buyers and sellers than would have been the case if the Reserve authorities were influencing values by operating in nonbill media. While the depth, breadth, and resiliency of the market have deteriorated since the “bills only” policy was inaugurated, the change can be attributed mainly to rising interest rates and not to the Federal Reserve program.

The “bills only” policy, in our opinion, has tended to reduce the amount of speculative activity in the Government market. Whatever commitments speculators have made in governments in recent years have been based on a knowledge that the market was not being officially supported. If there had been Reserve action in bonds and their objectives became known, the encouragement to speculate would have been increased greatly. During the postwar years of supported markets the amount of speculation was unquestionably much heavier than anything witnessed since the “bills only” policy went into effect.

It would not be desirable to control margin requirements against Treasury securities in all instances. Rank speculation by individuals

uneducated in the mechanics of the Government market certainly should be discouraged in every way possible. Substantial margin requirements could solve this problem. Professionals and dealers that serve a worthwhile purpose in assisting the Treasury in its financing and provide a market for government obligations should not be hindered in any way that would hamper the scope of their operations.

An area of reasonable speculation attends almost any market under a free enterprise system. Such activity is healthy for the Government market and is entirely within the interest of sound debt management and economic stability. It increases market activity and thereby creates improved trading conditions. Funds placed in Governments by speculators are sterilized as far as their potential influence on prices elsewhere is concerned which tends to protect the value of our currency.

Any speculation in the market certainly would aid in the issuance of long bonds during boom periods. It is academic that the more buyers that can be found to buy long bonds at a time when it may be difficult to market this type of investment, the stronger the position of the Treasury.

Wm. E. Pollock & Co., Inc.

The "bills only" policy of the Federal Reserve System has not strengthened appreciably the market of Treasury securities. It follows that it has not increased the depth, breadth, and resiliency of the general market in all Treasury securities.

The "bills only" policy has little effect on speculation.

The Treasury now prescribes margin requirements in connection with subscriptions for new issues. We do not believe that it would be desirable to extend the Federal Reserve System control in the area of marginal requirements, since our lending banks now fulfill this function.

We do not think that the reduction in speculative activity in Treasury securities would materially influence the effects of monetary policy and debt management in the interest of economic stability. Speculation has not hindered monetary policy or the issuance of long-term debt during boom periods, in the years since the accord.

Chas. E. Quincey & Co. (Maurice A. Gilmartin, Jr.)

The "bills only" policy has strengthened the market for Treasury securities. It has lessened dealer apprehensions, except under unusual or abnormal conditions. In deciding whether to position long-term securities, the dealer must judge as well as he can the future trend in interest rates and securities prices. As is true of all economic forecasting, this task is a difficult one to perform. If the Federal Open Market Committee were to conduct open market operations in long-term securities, the dealer would not only have to forecast economic conditions but also the timing and extent of Federal Open Market Committee intervention.

In other words, a departure from the "bills only" policy would increase the degree of uncertainty confronting the dealer. To compensate for this greater uncertainty, the dealer would tend to lower his bid and raise his offer quotations. Such a widening of trading spreads is tantamount to withdrawing from, or limiting participation in, the market. Under such conditions, the market becomes

"thin." If, on the other hand, the Federal Open Market Committee restricts its operations to bills, spreads tend to narrow, the dealer is usually more willing to take a position in long-term securities, and the market generally is improved. The dealer is not deterred from taking a position in short-term securities by Federal Open Market Committee operations in bills because of their short maturity. Unlike long-term instruments, the prices of short-term securities do not fluctuate widely with given changes in interest rates. Hence, the danger of loss from a position in short-term securities tends to be less than in the case of longer dated obligations. It should be pointed out that many critics of the "bills only" policy have cited the "thin" markets of recent years as evidence of the failure of the doctrine. However, these thin markets have resulted from the downward trend in bond prices and do not represent a shortcoming of the "bills only" policy. A dealer cannot make a profit as readily by going short when the trend of bond prices is downward as he can by going long when the trend of bond prices is upward.

When a dealer offsets a position he may technically go short, but he must purchase or borrow the security to make delivery. He hopes to replace the borrowed security at a later date in a lower market. In the meantime, however, he not only has to pay accruing interest to the lender of the securities, but also a lending fee of one-half of 1 percent. Moreover, it is often difficult to borrow the security in question, particularly if it is a small issue and not widely held. Consequently, during a period of falling bond prices, the dealer will tend to be reluctant to sell short and thus will not be actively buying to cover a short position. Hence, "thinness" appears as both buyers and sellers find the dealers backing away from the market. During periods of rising bond prices, dealers are more willing to go long because they do not have to borrow securities to do so. Hence, both buyers and sellers find dealers providing a broader market in such circumstances. Regardless of the trend in bond prices, dealers provide better markets with the "bills only" policy than they would otherwise provide.

The "bills only" policy affects chiefly dealer position policy rather than the policy of institutional and other investors. Since dealers are in some sense speculating whenever they undertake either a short or a long position, the "bills only" policy tends to increase speculation on the part of dealers. At the same time, it must be pointed out that this is precisely the kind of speculation which is required to make a broad market. Consequently, it is a desirable form of speculative activity.

I do not believe it would be desirable to impose margin requirements upon borrowing for the purpose of buying Government securities. I am opposed to such controls because they amount to direct intervention of the Government into portfolio decisionmaking and because they would hinder desirable speculative activity. Depending upon the severity of the requirement, such controls would reduce speculative activity. This would be particularly undesirable in the case of dealers. They could not make as broad a market because of the limitation upon borrowed capital used to augment their risk capital. It is true that during periods of rapidly changing interest rates, dealers will tend to go with the market. But since they have limited capital-at-

risk, they cannot by themselves be expected to reverse a market trend. Moreover, such speculative activity on the part of both dealers and others may be of actual benefit to the monetary authorities in bringing about a movement in interest rates, which is desirable from the point of view of overall economic stability. Speculative activity is restricted largely to periods of rising bond prices because of the difficulty of borrowing securities and associated costs when going short. Consequently, speculative activity has not tended to interfere with monetary policy or Treasury funding operations during periods of increasing interest rates. Its effects have not been measured and should not be judged solely on the circumstances that may have existed during any specific period. Rather, speculative activity must be considered in the proper perspective as a desirable economic function.

D. W. Rich & Co.

Referring again to our limited experience (short-term), we shall venture to say that if the Open Market Committee were a frequent buyer or seller in long-term securities as part of its monetary operations, one of two conditions would develop, either of which, in our opinion, would be highly regrettable:

1. A "pegged" market.

2. A market where price levels would become so unpredictable that bids and offers in large amounts would be hard to obtain.

In its entirety, what is called "speculation" is an integral part of our free market. The opportunity to make profit or risk loss by owning and exchanging securities is part of the very fiber of our investment system. Human emotion is one of the most important forces in our society, as we all know, and must be allowed its place, or the system dies. What is really meant when "speculation" is used as something undesirable is an excess of that emotion—either optimism or pessimism—beyond what prudence would indicate. Arbitrary controls are dangerous defenses against what, after all, is one of the most necessary and accepted factors in our financial system.

Salomon Bros. & Hutzler, Girard L. Spencer, partner

As I stated before the committee, and for the reasons outlined in the answers to section E above, I believe that the "bills only" policy is the correct policy, and that it has been a basic factor in maintaining as sound a market for Government securities as has been possible under the financial and economic conditions that have existed during this period. While the "bills only" policy has perhaps not of itself increased the "depth, breadth, and resiliency" of the market, it has been of vital importance in maintaining the overall adequacy of the market for Treasury securities, as measured in these terms.

I know of no means of measuring the effect of the "bills only" policy in this respect. However, it is my opinion that if it has had any influence at all, it has tended to limit rather than increase speculative activity, because it has lessened the uncertainty of the possible effect of Federal Reserve market activity.

I see no objection to extending the Federal Reserve System's control over margin requirements to cover borrowings for the purpose of buying Treasury securities, as long as any regulations imposed would not hamper the operations of the legitimate dealers in the Government market. Tightening of margin requirements for other

participants in the Government market could eliminate some fringe speculation, but it would not, in itself, result in a significant reduction in speculative activity in Treasury issues. Experience in the past has indicated that there has been no lack of cash available to cover margin requirements even if the requirements were to be substantially increased over those imposed at present. The ease of financing commitments in Governments was, of course, a factor, but not the predominant one in the excessive speculation that took place in the spring of 1958.

If the term "speculation" is defined as the buying of Treasury securities on thin margin credit by "amateurs," the answer is "Yes" on all counts.

But if speculation is defined in broader terms, as I believe it should be, to include purchasing of Government securities whether financed on credit or not, with the anticipation of later resale at a profit, then a reduction in such speculative activity would be harmful rather than helpful. Within the framework of this broader definition, speculation in the years since the accord, has been of important assistance to the Treasury in carrying out its debt management objectives, including its ability to issue long-term debt, its ability to obtain its cash requirements, and its ability to refund maturing obligations. In the same terms, speculation has not hindered monetary policy in this period.

SUPPLEMENTARY STATEMENTS SUBMITTED BY FIVE OF THE DEALERS

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Charles E. Quincey & Co.

THE FEDERAL RESERVE SYSTEM'S "BILLS ONLY" POLICY: A SUGGESTED INTERPRETATION

David I. Fand¹ and Ira O. Scott, Jr.²

I

The Federal Open Market Committee, charged with the formation of Federal Reserve System open-market policy, authorized at its meeting on May 17, 1951, an ad hoc subcommittee to study the effect of its operations upon the functioning of the Government securities market.³ The subcommittee was organized during April and May, 1952.⁴ Beginning on June 9, 1952, the subcommittee conducted secret hearings with various Government securities dealers as witnesses.⁵ On November 12, 1952, the ad hoc subcommittee presented its report.⁶ The principal recommendations of the subcommittee were adopted by the Federal Open Market Committee at the March 4-5, 1953, meeting.⁷ The new "ground rules" were rescinded on June 11, 1953,⁸ but were reinstated by the Federal Open Market Committee on September 24, 1953.⁹

The ad hoc subcommittee began with two assumptions: (1) That central bank control of bank reserves requires the use of open-market operations, and (2) that, in order to facilitate open-market operations, the Government securities market must have "depth, breadth, and resiliency."¹⁰

According to the subcommittee, "the inside market, i.e., the market that is reflected on the order books of specialists and dealers, possesses

¹ Economist, Committee for Economic Development.

² Associate professor of economics, University of Minnesota.

³ "United States Monetary Policy: Recent Thinking and Experience," hearings before the Subcommittee on Economic Stabilization of the Joint Committee on the Economic Report (83d Cong., 2d sess. [Washington, D.C.; Government Printing Office, December 1954]) (hereinafter referred to as "hearings"), p. 260. Through purchases or sales of Government securities, the Federal Open Market Committee is able to induce monetary ease or tightness.

⁴ The subcommittee was composed of William McC. Martin, Jr., Abbott L. Mills, Jr., and Malcolm Bryan, with Robert H. Craft as technical adviser (ibid.).

⁵ Ibid.

⁶ For the complete report see ibid., pp. 257-286.

⁷ Fortieth Annual Report of the Board of Governors of the Federal Reserve System Covering Operations for the Year 1953 (Washington, D.C., 1954), pp. 86-89.

⁸ Ibid., pp. 94-96.

⁹ Ibid., pp. 99-100.

¹⁰ Hearings, p. 259. When the Federal Open Market Committee buys, bank reserves increase. When it sells, reserves decrease. The Board of Governors of the Federal Reserve System can also change percentage reserve requirements. But frequent use of this alternative is avoided for reasons to be discussed below.

depth when there are orders, either actual orders or orders that can be readily uncovered, both above and below the market. The market has breadth when these orders are in volume and come from widely divergent investor groups. It is resilient when new orders pour promptly into the market to take advantage of sharp and unexpected fluctuations in prices."¹¹ In other words, a Government securities market that is functioning properly is characterized by (1) orders to buy and sell both above and below the current market price; (2) a large volume of such orders; and (3) small fluctuations in price.

The subcommittee found that the market was characterized by thinness in all issues other than Treasury bills. In these [other] issues, there has prevailed persistently since the [Treasury-Federal Reserve] accord a wide gap between the prices at which the least firm holders are willing to sell and potential buyers are willing to purchase.¹²

The subcommittee concluded, after hearing testimony, that "the Federal Open Market Committee bears a real measure of responsibility for part of the lack of depth, breadth, and resiliency in the Government securities market." First, there had been a long history of closely controlled bond markets. Second, the Open Market Committee never defined what it meant by "free market for U.S. securities." Third, the Open Market Committee in the 1951 report maintained that it was still committed to "the maintenance of orderly markets."¹³

The Government securities dealers, therefore, felt they were operating in a fluctuating market subject to unpredictable intervention by the Federal Open Market Committee. A dealer ordinarily functions with a large proportion of borrowed funds.¹⁴ Thus even a modest depreciation of a long¹⁵ position would unduly endanger his invested capital. The subcommittee states its position on this point as follows:

It is easy to understand why dealers, with their lack of confidence in the Committee's intentions to restore a free market would be reluctant to go very far in taking positions. To do so would not only involve the risk of being wrong in their evaluation of economic and market trends, but also of being wrong in guessing at what point the Federal Open Market Committee might feel it necessary to intervene. A difference of a few thirty-seconds in the level of prices of such intervention would not necessarily be of great moment to the Federal Open Market Committee, but it might be of real importance to a dealer's operations.¹⁶

Among the various procedural reforms suggested by the subcommittee were the following recommendations: (1) Confine the Open Market Committee's intervention in the market to that necessary to supply and withdraw bank reserves; (2) operate exclusively in bills or other short-term securities; (3) assure the market that these ground rules will prevail; and (4) change the directive to the manager of the Open Market Account from "maintaining orderly conditions in the Government securities market" too "correcting disorderly condi-

¹¹ *Ibid.*, p. 265.

¹² *Ibid.*, p. 266. The Treasury-Federal Reserve accord, of Mar. 4, 1951, marked the return to a flexible interest-rate policy following more than a decade of rigid support of bond prices by the Federal Reserve System.

¹³ *Ibid.*

¹⁴ Margin requirements typically imposed by lenders who finance the dealers vary from 2 percent on long-term bonds to zero on 91-day Treasury bills.

¹⁵ A dealer is said to have a long position when he holds either long-term or short-term securities in his portfolio. He has a short position when he has sold either short-term or long-term securities that he does not own. Thus, a dealer may be long longs or shorts. Or he may be short shorts or longs.

¹⁶ Hearings, p. 267.

tions."¹⁷ Apparently, these rules have governed open-market operations since their final adoption on September 24, 1953.

II

The Government securities dealers perform three major functions. They participate in the underwriting of Treasury flotations; they facilitate the adjustment of commercial-bank money positions and the portfolio shifts of nonbank financial intermediaries; and, finally, the dealers smooth out the open-market operations of the central bank. The ad hoc subcommittee felt that greater elasticity of dealer supply and demand, necessary for the efficient performance of these functions, could be assured by reducing the degree of uncertainty in the Government securities market. The Federal Open Market Committee controls the degree of uncertainty pertaining to the specific maturity level at which the Open Market Account conducts selling operations. Dealers with long positions in bills could tolerate open-market sales at the short end because of the relatively elastic demand for short maturities. Demand for longer maturities, however, is characteristically inelastic. Open-market sales at the long end would cause sharp declines in bond prices. Dealers with long positions in bonds would find the risk of such price declines intolerable. Consequently, increased elasticity of demand on the part of the dealers could be obtained by public announcement of the "bills only" policy. In other words, if the central bank refrained from intervention in the bond market, a better reception in this sector of the term structure would be accorded the Treasury and the various financial institutions by the Government securities dealers. Hence, the "bills only" policy was adopted in order to prevent the sale of bonds from the Open Market Account.

The views expressed by the dealers and reflected in the ad hoc subcommittee report seem reasonable. If it is desirable to have an efficient Government securities market and if it promotes the efficiency of this market to have dealers who are willing to take positions in bonds, the bond market should not be subjected to sharp, periodic price declines. Moreover, a given reduction in reserves can be achieved with more limited fluctuations in securities prices when short-term maturities are the vehicle. In addition, as is often the case, open-market operations are the means whereby the Federal Open Market Committee probes the money market prior to making a decisive move. Again, short maturities provide the more facile instrument of policy.¹⁸

More generally, the reduction in uncertainty through "bills only" contributes to an improved bond market in the following manner. Suppose, for example, that a dealer contemplates moving into a short position in bonds in order to accommodate customer demand. Assume that the System is not committed to "bills only." It is possible, therefore, that the open market account would buy bonds in order to adjust bank reserves or prevent an undue decline in bond prices at precisely the same time that the dealer is attempting to cover his short position. Would not the market compensate for this uncertainty by

¹⁷ *Ibid.*, pp. 267-68, 285.

¹⁸ Although sales of bills may induce declines in bond prices through arbitrage, such declines will not have the unfavorable effect of direct intervention in the bond market. This is due to the fact that, in the former case, arbitrage operations will be performed to a large extent by the dealers themselves (*ibid.*, p. 267).

enabling the dealer to add a few 30 seconds to the offering side of the short sale?

Consider, on the other hand, a decision to position bonds in order to accommodate customer supply. In this case the dealer would be confronted by the possibility of open-market sales of bonds. This uncertainty would presumably lead to the subtraction of several 30 seconds from the bid side of the market.

Greater uncertainty, therefore, results in higher asked and lower bid quotations—a widening of the market spread. A reduction in this kind of uncertainty through "bills only" narrows this spread and thus improves the market in accordance with the definition of the ad hoc subcommittee. This seems to be a plausible explanation of the subcommittee's views regarding uncertainty.¹⁹

III

The problem in the receipt period, however, has not been so much a matter of uncertainty as of the trend in interest rates. Critics of "bills only" have cited the fact that dealers have still eschewed long positions in bonds as evidence of the failure of the policy. But the period since the Treasury-Federal Reserve accord has for the most part been one of rising interest rates. Given the kind of expectations induced by such a trend, is it any wonder that dealers have refused to inventory bonds?

In addition to the trend in interest rates, the dealer's life has been further complicated by the negative carry, which is associated with tight money conditions. The largest available coupon on a Treasury bond is 4 percent, while the banks have charged the dealers as much as 4½ percent for demand money used to finance long positions.²⁰ To some extent the banks have been circumvented through the use of repurchase agreements with nonfinancial corporations.²¹ However, the availability of repurchase money is necessarily beset by uncertainties and costs not characteristic of bank accommodation, since nonfinancial corporations are not regularly in the business of lending, and the discovery of lendable funds may entail substantial overhead.

Nor is a short position less difficult to manage. Typically, Governments are not traded on a futures basis. Rather, delivery of the securities sold must be made. Thus, someone who holds the securities must be found and prevailed upon to lend them until the dealer's short position is covered. Moreover, low-supply elasticities con-

¹⁹ Though typically the trader's reaction to a change in uncertainty is to widen his spreads until the impact of the event in question becomes more clear, it is conceivable that a change in uncertainty of various kinds could lead to a shift in both supply and demand curves without affecting the spread. In the above discussion, however, the state of market trend is assumed to remain constant, and the greater uncertainty caused by a change from "bills only" leads the dealer to want to avoid either a longer or a shorter position. He accomplishes his by "withdrawing" from the market—by widening his spreads. It is possible, of course, that this reaction is preceded by unwinding his existing long and/or short position.

²⁰ The coupon, rather than yield to maturity, is used by dealers in this calculation, since they are conducting a trading, rather than an investment, operation.

²¹ According to the terms of these arrangements, a dealer sells securities to a corporate lender, agreeing to repurchase the same securities at a specified date in the future. Interest charges are normally less than bank rates.

Typically, these loans are noncallable but carry the stipulation that the borrower may substitute securities. Perhaps 10 percent are callable. Then the agreement is made on a day-to-day basis.

tribute to the difficulty of unwinding the short position.²² In the meantime, coupon interest plus the usual charge of one-half of 1 percent must be paid the lender of the securities. Thus, dealer reluctance can hardly be attributed to the failure of "bills only."

IV

The fundamental issue of the "bills only" debate is the proper degree of Federal Reserve intervention in the Government securities market. The ad hoc subcommittee emphasized the role of uncertainty and its effect upon the willingness of the dealers to make a market. This argument involves an operational statement regarding the nature of this particular market. The debate, however, has encompassed other questions, which can be decided only on administrative or political grounds. Two of these issues will be discussed briefly.

"Bills only" has been defended on the ground that this policy provides the Federal Reserve System with greater independence from Treasury influence than would be the case if all maturities were fair game. This view bears a peripheral connection to the basic question of the relationship between the Treasury and the central bank. During the war and its aftermath the System supported Treasury financing operations. Eventually, however, the problem of economic stability led to rebellion and the accord of March 1951. It was in this context that the ad hoc subcommittee hoped to introduce an open-market policy which clearly established the priority of the stabilization objective. Hence, "bills only." Formalization of Federal Reserve independence to this extent, of course, presumes differences with the Treasury regarding either stabilization objectives or the methods for achieving a given objective.

Proponents of "bills only" have also argued that, while the responsibility for overall stability is readily acknowledged, it is not the function of a central bank to determine the structure of interest rates.²³ A stable price index, for example, is consistent with various interest-rate structures. Faced with the threat of inflation, the Federal Reserve will wish to reduce member-bank reserves. If this is to be accomplished, and if the necessity of deciding upon a proper mix of short- and long-term securities is to be avoided, a single maturity will be sold in the open market. If long-term securities were sold, the impact of shrinking reserves would be reinforced by the strong liquidity effects of falling bond prices.²⁴ The force of the latter effects, however, is difficult to estimate. But more important is the fact that, in the kind of bond market which typifies an inflationary situation, the bond vehicle is not susceptible to "feeling one's way," so necessary in the every-day execution of monetary policy. Thus Treasury bills are

²² In a rising market, demand tends to be elastic, and it is relatively easy to unwind a long position. In a declining market, on the other hand, the dealer may find supply is relatively inelastic when he tries to cover his short position. This may be the result of a lockin due to the desire to avoid taking a capital loss.

It should be noted that the existence of such supply inelasticity does not imply incorrect forecasting on the dealer's part. Rather, the reference is to the inelasticity of a particular supply curve, which may nevertheless be shifting over time.

²³ If Treasury debt-management policy were geared to the stabilization objective, a particular maturity level would be chosen according to cyclical needs. The precise relationship among various rates of interest would not be determined, since the object of policy would be the liquidity effects of operations at various levels, not the term structure.

²⁴ Indeed, the anticyclical debt-management implications of open-market policy dictate operations exclusively at the long rather than the short end. That is, the public's portfolio should be lengthened at the same time that reserves are absorbed and vice versa.

the chosen instrument. The effects of the change in short rates and the accompanying change in bank reserves may then be passed along by the market to the rest of the interest-rate structure.

Of course, operations at any level will affect the structure of interest rates. This is due both to the change in the relative supplies of various maturities in the hands of the public and to the effect of a change in the aggregate level of economic activity. The latter can in no case be avoided, since a change in the aggregate is the objective of policy. The former, however, could be avoided if the central bank would enforce its restrictionist policy by raising reserve requirements. This alternative must also be rejected. It is true that reserve requirement changes could be reduced to any desired degree of fineness, and they could be reversed at will. But changes in reserve requirements cannot be used, as can open-market operations, to probe the money market in a gingerly fashion. A change in reserve requirements would presumably affect all banks or at least all banks in a particular class. Open-market sales, on the other hand, would affect first the reserves of the banks which regularly meet the needs of dealers for borrowed funds. These banks are presumably prepared for such contingencies.²⁵ Then, if the securities are sold by the dealers to other banks, the latter's reserves are lost via the market mechanism. Only in the case of dealer sales to nonbanks would the loss of reserves assume the bluntness of increased reserve requirements and then only in the case of the banks involved. These reasons and the time involved in communicating changes render the reserve requirement instrument an unacceptable substitute for open-market policy.

V

Critics of "bills only" have emphasized the limitation which the policy places upon the ability of the Federal Reserve System to give direct support to all sectors of the capital market. If, for example, the mortgage market needs bolsetering, this can be done most effectively by entering the long-term market directly. Thus, criticism of "bills only" has been cast largely in the framework of depression. This we believe to be a fact of great significance for the interpretation and evaluation of the "bills only" policy. To point up this fact, our discussion of the doctrine has been deliberately couched, for the most part, in anti-inflationary terms. Espoused during a reaction to the pegged-market regime, the "bills only" policy was nurtured during the renaissance of "tight money." In these circumstances, it has been an eminently realistic policy. We predict, however, that in the event of a serious decline in employment "bills only" would be rejected with dispatch. In order to prevent a liquidity crisis, the Federal Reserve System would buy aggressively at long, as well as short, maturity levels.²⁶ The upward movement of bond prices would be reminiscent

²⁵ In fact, most bank loans to dealers are provided by just two of the money-market banks. The withdrawal of most banks from the dealer-loan market is presumably due to the fact that these loans are treated as marginal from the viewpoint of earnings. If, on the other hand, dealer loans were considered from the standpoint of liquidity, they might appear in a more favorable light. For example, a demand loan which is collateralized by Treasury bills is surely more liquid than the bills themselves. Hence, it seems reasonable to suppose that the interest rate on such a demand loan would permit a positive carry.

²⁶ In fact, the availability of long-term Governments would doubtless imply the aggressive purchase of these securities by the commercial banking system. Consequently, the much-referred-to stickiness of the long rate would appear only in the private sector, implying, perhaps, the need for a reappraisal of the open-market instrument as now constituted.

of World War II financing. And dealers would be more than compensated for the relatively unimportant increase in uncertainty or the minor inroads upon profits through arbitrage that a rejection of "bills only" might entail. Gone would be the administrative problem of "dealing" with the Treasury. Investors would scramble for its new issues. The question of determining the structure of interest rates would remain. But this problem would pale into insignificance if a serious depression ever came.

The doctrine of "bills only" has provided a rationalization of the only open-market policy that has been compatible with the Board's market-improvement objective. Its critics have for the most part erected a strawman. They have taken the Federal Reserve System too literally in that they have criticized "bills only" as a general theory of central banking, when, in our view, the System had in mind only a tactic in the specific context of the postaccord bond market.

It is true that even though the Federal Reserve System never falls into the error feared by its critics, namely, adhere to "bills only" in a serious depression, there remains the question whether the ability of the central bank to recognize a situation that requires action in the long-term sector will be hampered by the existence of the doctrine. This, and not the possibility that the Federal Reserve System would use "bills only" in a situation where it was clearly inappropriate, is perhaps the main shortcoming of the policy.

Aubrey G. Lanston & Co.

EXCERPT FROM TESTIMONY OF AUBREY G. LANSTON BEFORE THE SENATE
COMMITTEE ON BANKING AND CURRENCY, AUGUST 14, 1959

(Referred to in part I, question F)

I would like to deal briefly in a practical way with the question of whether purchases and sales of U.S. Government securities—regardless of the purpose of such transactions—can be held appropriately to be lending and borrowing transactions.

First, I would like to say that considerable confusion exists with respect to the meaning of words and this, of itself, has led to much confusion and controversy.

For example, what is a security transaction, that is, one involving a Government security? And what is a loan transaction?

Every issue of Treasury securities that is launched by the Treasury is governed by the Second Liberty Loan Act, as amended. In other words, a loan act governs the issuance of Treasury or U.S. Government securities.

Shortly after the turn of the century, the Treasury sold three issues known as Panama Canal loans. Two of these issues later were made convertible into issues officially called the 3-percent conversion bonds of 1946-47.

The financing of World War I was conducted via liberty loans. The loans offered were in the form of securities, of course.

The financing of World War II likewise was accomplished via various war loans and a victory loan. Again, of course, the loans took the form of various types of Treasury securities.

It is commonplace for the Treasury, for the press, for investors and others to speak of Treasury financings as borrowings.

I could give you further illustrations of the interchangeability with which we use the words "securities" and "loans" and "borrowings" because, in effect, a Treasury security is evidence of a loan and a borrowing. And, were the matter of the negotiability of the various kinds of such paper to be introduced, this would add to, rather than reduce, the confusion that is borne of everyday semantic expression.

However, in connection with the hearings in the House on the Financial Institutions Act, Federal Reserve Chairman Martin stated, in effect, that transactions which the Federal Reserve undertakes (contingent to actual written repurchase agreements) have the attributes and take the form of a sale of securities. This is a fundamentally sound position and, by illustration, I should like to demonstrate why it is.

To begin with, it should be kept in mind, as we examine certain illustrative transactions, that most of those involving specialists in Government securities—primarily dealers—are consummated with institutions, corporations, and other investors who are as familiar with the handling of Government security transactions as the dealer. In other words, the bulk of the transactions may be said to be between individuals who, in such matters, are professionals.

Further, only in unusual instances will one of the parties to a transaction deliver his Government securities to the other except against payment.

And, finally, although some transactions in Government securities run into amounts as large as \$10 million, \$25 million, \$50 million, or more, the risks that either party will be unable to perform in accordance with the contract is measured in pennies or hundreds of dollars or thousands of dollars; in most cases, a few thousands of dollars would be the maximum.

All of this means that if we, as a dealer, purchased securities from an institution that happened to go out of business before it delivered the securities to us—it still would hold the securities in its possession and we would not have paid that customer a cent. If we happened to have resold the securities that we had purchased, we would be obligated to cover our resale of these in the market. In such event, however, we either would pay slightly more or slightly less so the risk involved actually is limited to the difference between the market value of the securities involved, over the period between (1) the time at which the transaction is arranged, and (2) the time at which it finally is consummated by the delivery of the securities versus payment.

Now, generally speaking, there are four types of Government security transactions. Modifications in the details of these may frequently be made but the general forms of such transactions remain inherently unchanged. These four types of transactions have been widely used over a long period of time and they are universally accepted as being in good standing.

These transactions are:

1. Cash transactions;
2. Regular transactions;
3. Future-delivery (or deferred-delivery) transactions; and
4. Delivery-when-issued (DWI) transactions.

The principal differences between these four kinds of transactions are important.

A cash transaction is one in which the seller agrees to deliver his securities to the buyer versus payment on the same day that the transaction is negotiated.

A regular transaction (in U.S. Government securities) is one in which the seller agrees to deliver his securities to the buyer versus payment on the next business day following.

A future-delivery (or deferred-delivery) transaction is one in which the seller is not expected to deliver his securities to the buyer, nor is the buyer expected to accept delivery of the securities versus payment until some agreed-upon date in the future.

A delivery-when-issued (DWI) transaction is, in a general way, a future-delivery transaction. Without this kind of a transaction many problems would confront the issuers and underwriters of all kinds of new security flotations. This goes for the U.S. Treasury and the Government securities market, too.

With these differences clearly noted, we may examine the various exhibits. First, let's use an illustrative transaction between the Federal Reserve Bank of New York and a dealer. This is truly "a repurchase agreement."

Dealers keep on file with the New York Reserve a general pledge and collateral agreement (exhibit B). This is required if a dealer is to be able to sell Government securities to the New York bank "under repurchase agreement."

When such a sale is made a confirmation of sale (exhibit A-1) will be sent by the dealer to the bank along with a form letter (exhibit C), which carries the clear caption "Repurchase Agreement." In other words, there can be no doubt that a bona fide, formal agreement to repurchase exists. Further, when the dealer repurchases the securities, he will send along a confirmation of purchase (exhibit A-2), along with another form letter (exhibit D). These will complete the record that was begun with the letter that outlined the terms of the repurchase agreement.

So much for the form and the formalities of a real repurchase agreement with the New York Reserve Bank.

An outright purchase and sale is much more simple. It is acknowledged by us only by a confirmation of sale or a confirmation of purchase—on the same forms which appear as exhibits A-2 and A-1. These, for all practical purposes, also are the same as those in use by other Government security dealers.

Incidentally, the Federal Reserve sends no confirmation to the dealer on either type of transaction, as is true of about half of our customers. The other half send us comparable advices.

Let us now turn to some illustrative transactions with a fictitious customer, the Glen Bank & Trust Co., of Cleveland, Ohio—exhibits A-3, A-4, and A-5. You may observe that exhibit A-3 covers a sale (by us) made on August 13 (yesterday) and it is for cash. In other words, it is a cash transaction. The securities shown on the confirmation will be delivered to the Public Trust Co., of New York, correspondent of the Glen Bank & Trust Co., of Cleveland, on the same day—August 13—and our clearing agent will receive payment therefor.

You also may observe from exhibit A-4 that we made a purchase from this fictitious bank on the same date. This purchase (by us) on August 13 calls for delivery and settlement of similar securities at the Public Trust Co. by the Glen Bank & Trust Co. on Friday, August 14. This transaction is a regular transaction. On August 14, the Public Trust Co. of New York will deliver the same issue of securities to our clearing agent (but not necessarily the same ones) and will receive payment therefor for the account of our fictitious bank customer.

We're now through with exhibit A-4 and turn to exhibit A-5—another illustrative purchase from this same bank. Please assume that the only other thing that has happened is that on August 13 we made the sale that is evidenced by our confirmation—exhibit A-3.

In the case of exhibit A-5, we agreed to purchase a like amount of the same Government security that we sold this bank. Both transactions were agreed to on August 13. Our purchase contract, however, does not call for delivery versus payment until the following Wednesday, August 19—6 days later. Therefore, this is a future-delivery transaction.

In these illustrative transactions with this customer, both the purchase and the sale by the bank were arranged on the same day and involve the same issue (but not necessarily the same securities) for delivery versus payment back and forth on different dates. We have here what is loosely and incorrectly, but conveniently sometimes, called a repurchase agreement, or a buy-back. However, no letters or other agreements are involved in the transaction—only the standard confirmations of sale and purchase. And these may consist solely of the ones rendered by the dealer. The transactions do not take the form of or involve notes. There is no written agreement such as the general collateral agreement that we keep on file at the Federal Reserve bank (exhibit B). The securities that we sold to this customer for cash on August 13 were not delivered in the form of or as collateral. They were delivered to the bank's agent, the bank paid for them, and the bank owns them until such time as, pursuant to our purchase (exhibit A-4), we accept delivery and pay the bank for them.

Such transactions involve an extension of credit, and the kind of extension of credit that is involved is the same regardless of whether the transaction is a cash transaction, a regular transaction, or for future delivery. The only difference between these transactions lies in the lapse of time that takes place between (1) the moment during a business day when the transaction is agreed to and (2) the moment later during that day, or a following day, when the securities will change hands versus payment.

This is the same kind of extension of credit without which the banking business of the Nation could not be conducted and without which most forms of modern day business could not be conducted.

It is true that sometimes the risk that is assumed by each party, in extending credit to the other party, pursuant to a security purchase or sale transaction, amounts to a real one. But the amount of the actual risk has proven to be sufficiently negligible as to be nil in connection with dealings with Government security dealers. It gives me gratification, and it is with some pride that I say to you that, in the 40-odd years during which the existing Government security market mechanism has been developed, no Government security dealer, to my knowledge, has failed to live up to his purchase and sale contracts.

As a Government security dealer I am proud also to say that the prerequisites to being in the Government security business are an acknowledged high character, unquestionable integrity, know-how, and an assured capacity to perform pursuant to the obligations that are undertaken to purchase and sell Government securities. And the extension of credit that is involved here is confined to that wherein our customers credit us with having such attributes. We, of course, extend them this kind of credit, too—not just in regard to the institution, corporation, and so forth, but in regard to the men and women on their staffs with whom we deal.

Now as far as I can recall, there have been few instances throughout the years when a Government security dealer purchased or sold obligations of the United States pursuant to a repurchase agreement per se except with the Federal Reserve. By this I mean that purchases and sales of U.S. Government securities hardly ever are made pursuant to—and, therefore, “under”—a letter of agreement or other written document such as that used by the Federal Reserve Bank of New York. And the fact that investors and market people have used loose semantics in referring to certain Government security transactions, such as those with the fictitious Glen Bank & Trust Co., as repurchase agreements and/or as buy-backs has nothing whatsoever to do with either the form or the character of those transactions.

Frankly, it seems to me to be quite clear that it is just as erroneous to claim that transactions of this sort are loans and borrowings as it would be to say that the purchase from us by the Glen Bank & Trust Co. of a Government security and the sale of this issue by that bank (on the same day) would constitute lending and borrowing on the part of the bank. Outright purchases and sales of Government securities, as with outright purchases and sales of commercial paper, finance company paper, bankers acceptances, and comparable media are alternatives open to the investor who wishes to put idle money to work. In the same vein, dealings in U.S. Government securities of the type that I have used in illustration are an alternative to each such alternative, just as all of these are alternatives to the placing of money out on loan and, for that matter, the borrowing of money.

EXCERPT FROM THE REPORT OF THE SENATE COMMITTEE ON BANKING AND CURRENCY ON LENDING AND BORROWING POWERS OF NATIONAL BANKS, 86TH CONGRESS, 1ST SESSION,

(Rept. 731, p. 5)

The deletion of the words “in the form of notes” does nothing more than make this exception applicable to all loans secured by Government obligations regardless of the form of the obligation. The elimination of these words carries no implication that any particular type of transaction is or is not to be regarded as a lending transaction.

EXCERPT FROM THE REMARKS OF SENATOR ROBERTSON

(Congressional Record, Aug. 24, 1959, p. 15400)

“One witness, a Government bond dealer, appeared at the hearing and objected vigorously to a ruling by the Comptroller of the Currency that certain repurchase agreements involving Government bonds

are lending transactions and subject to the restrictions of section 5200, The dealer objected to this amendment because he thought it might be construed as a ratification of the Comptroller's ruling. The Comptroller took the position that the amendment did not have any bearing on the disputed ruling. The committee made it clear in the report that the amendment was not intended to have and would not have any effect on this issue."

CONFIRMATION **AUBREY G. LANSTON & CO. INC.**

EXHIBIT A1 **DATE 8/13/59**

SPECIALISTS IN U. S. GOVERNMENT SECURITIES

CHICAGO 4, ILL. NEW YORK 5, N. Y. BOSTON 9, MASS.
231 SO. LA SALLE ST. TWENTY BROAD ST. FORTY-FIVE MILE ST.
STATE 2-8490 WHITEHALL 3-1200 HANCOCK 6-6483

1463

AS PRINCIPALS WE CONFIRM SALE TO YOU TO-DAY

PAR	SECURITY	MATURITY	PRICE	AMOUNT
5,000M	U S Treasury 3 1/4	5/15/60	99.7 flat	PRINC. 4,960,937.50 INT.
INTEREST FROM TO DELIVERY: Cash				TOTAL 4,960,937.50

Federal Reserve Bank of New York
33 Liberty St.
New York 5, N Y
Att: Mr. C. K. Mount, Sec. Dept.

AUBREY G. LANSTON & CO. INC.

E. & O. E.

DELIVERY BY IRVING TRUST COMPANY, ONE WALL ST., NEW YORK

CONFIRMATION **AUBREY G. LANSTON & CO. INC.**

EXHIBIT A2 **DATE 8/19/59**

SPECIALISTS IN U. S. GOVERNMENT SECURITIES

CHICAGO 4, ILL. NEW YORK 5, N. Y. BOSTON 9, MASS.
231 SO. LA SALLE ST. TWENTY BROAD ST. FORTY-FIVE MILE ST.
STATE 2-8490 WHITEHALL 3-1200 HANCOCK 6-6483

2012

AS PRINCIPALS WE CONFIRM PURCHASE FROM YOU TO-DAY

PAR	SECURITY	MATURITY	PRICE	AMOUNT
5,000M	U S Treasury 3 1/4	5/15/60	99.7 flat	PRINC. 4,960,937.50 INT. 2,893.89
INTEREST FROM TO DELIVERY: Cash				TOTAL 4,963,831.39

Federal Reserve Bank of New York
33 Liberty St.
New York 5, N Y
Att: Mr. C. K. Mount, Sec. Dept.

AUBREY G. LANSTON & CO. INC.

E. & O. E.

PLEASE DELIVER TO IRVING TRUST COMPANY, ONE WALL ST., NEW YORK

CONFIRMATION **AUBREY G. LANSTON & CO. INC.**

EXHIBIT A3 **DATE 8/13/59**

SPECIALISTS IN U. S. GOVERNMENT SECURITIES

CHICAGO 4, ILL. NEW YORK 5, N. Y. BOSTON 9, MASS.
231 SO. LA SALLE ST. TWENTY BROAD ST. FORTY-FIVE MILE ST.
STATE 2-8490 WHITEHALL 3-1200 HANCOCK 6-6483

1507

AS PRINCIPALS WE CONFIRM SALE TO YOU TO-DAY

PAR	SECURITY	MATURITY	PRICE	AMOUNT
5,000M	U S Treasury 3 1/4	5/15/60	99 flat	PRINC. 4,950,000.00 INT.
INTEREST FROM TO DELIVERY: Cash				TOTAL 4,950,000.00

Glen Bank & Trust Co.
1150 Highway St.
Cleveland, Ohio

Public Trust Co. of N Y
Fed Funds

AUBREY G. LANSTON & CO. INC.

E. & O. E.

DELIVERY BY IRVING TRUST COMPANY, ONE WALL ST., NEW YORK

CONFIRMATION

AUBREY G. LANSTON & Co. INC.

SPECIALISTS IN U. S. GOVERNMENT SECURITIES

DATE 8/13/59

EXHIBIT A4

CHICAGO 4, ILL.
231 SO. LA SALLE ST.
STATE 2-8480

NEW YORK 5, N. Y.
TWENTY BRAD ST.
WHITEMALL 3-1200

BOSTON 9, MASS.
FORTY-FIVE MILK ST.
HAWDOCK 6-8483

1605

AS PRINCIPALS WE CONFIRM PURCHASE FROM YOU TO-DAY

PAY	SECURITY	MATURITY	PRICE	AMOUNT
5,000M	U S Treasury 3 1/4	5/15/60	99	PRINC. 4,950,000.00 INT. 446.88

INTEREST FROM _____ TO _____ DELIVERY: 8/14

Public Trust Co. of N Y
Fed Funds

TOTAL 4,950,446.88

Glen Bank & Trust Co.
1150 Highway St.
Cleveland, Ohio

AUBREY G. LANSTON & Co. INC.

S. O. C.

PLEASE DELIVER TO IRVING TRUST COMPANY, ONE WALL ST., NEW YORK

CONFIRMATION

AUBREY G. LANSTON & Co. INC.

SPECIALISTS IN U. S. GOVERNMENT SECURITIES

DATE 8/13/59

EXHIBIT A5

CHICAGO 4, ILL.
231 SO. LA SALLE ST.
STATE 2-8480

NEW YORK 5, N. Y.
TWENTY BRAD ST.
WHITEMALL 3-1200

BOSTON 9, MASS.
FORTY-FIVE MILK ST.
HAWDOCK 6-8483

2020

AS PRINCIPALS WE CONFIRM PURCHASE FROM YOU TO-DAY

PAY	SECURITY	MATURITY	PRICE	AMOUNT
5,000M	U S Treasury 3 1/4	5/15/60	99 flat	PRINC. 4,950,000.00 INT. 2,681.25

INTEREST FROM _____ TO _____ DELIVERY: 8/19

Public Trust Co. of N Y
Fed Funds

TOTAL 4,952,681.25

Glen Bank & Trust Co.
1150 Highway St.
Cleveland, Ohio

AUBREY G. LANSTON & Co. INC.

S. O. C.

PLEASE DELIVER TO IRVING TRUST COMPANY, ONE WALL ST., NEW YORK

EXHIBIT B. GENERAL PLEDGE AND COLLATERAL AGREEMENT

In consideration of purchases and sales of bills, notes, acceptances, bonds, securities, and other property, effected between the Federal Reserve Bank of New York (hereinafter called the Reserve bank) and the undersigned by virtue of agreements from time to time entered into between the parties, and other good and valuable consideration, and as collateral security for any and all indebtedness, obligation, and liability of any kind of the undersigned to the Reserve bank now or hereafter existing and whether absolute or contingent or due to or to become due (hereinafter called liabilities), the undersigned hereby pledges and agrees to pledge to the Reserve bank all moneys, credits, negotiable instruments, bonds, stocks, commercial paper, securities, mortgages, choses in action, claims, demands, rights, interests and property of every kind which are now in, or which may at any time hereafter come into, the possession or control of the Reserve bank, or of any of its agents or correspondents, or which may now or hereafter be in transit to the Reserve bank or any of its agents or correspondents, and which belong to, or are held for account of or subject to the order of, the undersigned (all of which are hereinafter collectively referred to as the collateral); and the undersigned further gives and agrees to give to the Reserve bank, as collateral security for the liabilities, a lien, right of offset, and other appropriate security interest in any of the collateral which by its nature is or may be incapable of pledge.

The undersigned shall, whenever requested by the Reserve bank, deliver to the Reserve bank such collateral and such additional and further collateral, rights, and property as the Reserve bank in its discretion may deem necessary to secure properly the payment of the liabilities.

Upon default in the payment of any of the liabilities including any interest thereon, or in the performance of any obligation of the undersigned to the Reserve bank, or in case of the failure of the undersigned to furnish additional collateral as herein provided, or if the undersigned shall suspend or discontinue business, or shall be adjudicated bankrupt or insolvent, or shall make an assignment for the benefit of creditors or a composition with creditors, or shall

file a voluntary petition, or an answer admitting the jurisdiction of the court and the material allegations of an involuntary petition, or shall consent to an involuntary petition, pursuant to any bankruptcy, reorganization or insolvency law of any jurisdiction, or if any order shall be entered pursuant to any such law approving an involuntary petition seeking reorganization of or to effect an arrangement or plan for the undersigned or appointing any receiver or trustee or or for the undersigned or of or for all or any substantial portion of the property of the undersigned, or if the undersigned shall apply for or consent to the appointment of such a receiver or trustee, then, and in every such event, any and all of the liabilities shall, at the option of the Reserve bank, immediately become due and payable without presentment or demand or notice of any kind, all of which are hereby expressly waived, notwithstanding any provision to the contrary in any instrument evidencing any of the liabilities. In any such event, the Reserve bank is authorized to sell, assign, and deliver, in its discretion, the whole or any part of the collateral at public or private sale or at broker's board (being at liberty to become the purchaser if the sale is public or at broker's board), with or without demand, advertisement, or notice of the time or place of sale or adjournment thereof or otherwise, upon such price and terms as the Reserve bank may deem advisable, the undersigned hereby waiving and releasing any and all equity or right of redemption. In case of any such sale, after deducting all costs, attorney's fees and other expenses of collection, sale, and delivery, the Reserve bank may apply the net proceeds of sale to the payment of any or all of the liabilities whether due or not, as the Reserve bank may deem proper, the undersigned remaining liable for any deficiency with legal interest, and the balance of such net proceeds, if any remain after payment in full of all liabilities, shall be paid to the undersigned.

The Reserve bank may assign or transfer the whole or any part of any obligation or liability of the undersigned and may or may not transfer as collateral security therefor the whole or any part of the collateral, and the transferee shall have the same rights and powers with reference to such obligation or liability and the collateral transferred therewith as are hereby given to the Reserve bank.

This instrument shall constitute a continuing pledge and agreement between the undersigned and the Reserve bank applying to all future as well as existing transactions between said parties (and, in case the undersigned is a partnership, shall not be affected, impaired, or released by the death, resignation, or addition of any partner), and shall not be terminated by the closing at any time of all transactions between said parties but shall apply thereafter to any new transaction or transactions and shall continue in full force and effect until notice is received in writing by either party from the other of the intention to terminate it. Any such termination shall have the effect of canceling this agreement only as to transactions thereafter entered into.

In witness whereof the undersigned has caused these presents to be executed this ____ day of _____, 19__.

 (Name of dealer)
 By -----
 (Signature)

 (Title)

EXHIBIT C. REPURCHASE AGREEMENT

(September 16, 1949)

 (Date)

FEDERAL RESERVE BANK OF NEW YORK,
 New York 45, N.Y.

GENTLEMEN: We hand you herewith United States Government securities (with all unmatured coupons, if any, attached), having a total par value of \$-----, listed below, which we have today sold to you for \$-----. In consideration of the purchase by you of such securities we hereby agree to repurchase them from you at any time at your or our option on or before -----, at the same price plus interest thereon at the rate of __ percent per annum for the number of days that said securities are held by you. It is understood that, if any of the attached coupons mature before we repurchase the securities as provided above, you will, upon notice by us, deliver such

coupons to us or collect them for our account. Our obligations hereunder are secured by and subject to the terms and conditions of our general collateral agreement with you.

Very truly yours,

By _____
 (Name of dealer)

 (Signature)

 (Title)

SCHEDULE OF SECURITIES COVERED BY ABOVE AGREEMENT

Description of issue _____
 Maturity _____
 Amount (par value) _____

EXHIBIT D

AUBREY G. LANSTON & Co., INC.

SPECIALISTS IN U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Chicago—New York—Boston

FEDERAL RESERVE BANK OF NEW YORK,
 33 Liberty Street,
 New York, N.Y.

(Attention: Securities Department, room 929.)

GENTLEMEN: We wish to repurchase for delivery on the following securities held under repurchase agreement:

Date of agreement _____
 Description of issue _____
 Par value _____
 Against payment of _____

Very truly yours,

By _____
 AUBREY G. LANSTON & Co., INC.,

BARTOW LEEDS & Co.,
 New York, N.Y., September 25, 1959.

Re Study of employment, growth, and price levels.

Hon. PAUL H. DOUGLAS,
 Chairman, Joint Economic Committee,
 Senate Office Building, Washington, D.C.

DEAR SIR: I wish to acknowledge receipt of your letter of August 19, 1959, with which was enclosed the list of questions relating to the committee's general study of employment, growth, and price levels.

A brief survey of the questions themselves leads me to the belief that complete answers to each of them would take up pages of material. The lengthy answers would in each case require the delving into much more than plain facts; satisfactory answers, rather, would include the study of all psychological aspects of each question, if these aspects apply. For what might be the simple answer from the dealer's point of view would not take into consideration the points of view of why sellers want to sell or of why buyers want to buy, etc. It comes down to the fact that as psychology enters the picture, so to varying degrees does complexity enter in. Therefore, the answers

will be given in the light of experience. I feel that possibly some helpful information can be gained from the answers, but where these answers involve delving into the climate of psychology I will stop without opening that door. This is merely an attempt to bring into focus the obvious without going deeply into the subjective considerations which govern in large measure all reasoning.

With this brief description of the area where I will not attempt to tread, I will proceed in the light of the known facts and supply the answers as best I can.

Respectfully yours,

FRANCIS D. BARTOW, JR.

SALOMON BROS. & HUTZLER,
New York, N.Y., October 6, 1959.

HON. PAUL H. DOUGLAS,
*Chairman, Joint Economic Committee,
Congress of the United States, Washington, D.C.*

DEAR SENATOR DOUGLAS: Enclosed herewith are the answers to the questions which accompanied your letter of August 19.

I would like to make the point here that these are my answers as a partner of Salomon Bros. & Hutzler. My partners may or may not agree with all of them, but I take full responsibility for the opinions expressed.

With best wishes,
Sincerely yours,

GIRARD L. SPENCER.

CONTINENTAL ILLINOIS NATIONAL BANK
& TRUST CO. OF CHICAGO,
Chicago, Ill., September 30, 1959.

HON. PAUL H. DOUGLAS,
*Chairman, Joint Economic Committee,
Congress of the United States, Washington, D.C.*

DEAR SENATOR DOUGLAS: We are glad to give you our opinions on the Joint Economic Committee's questionnaire of August 19 for the study of employment, growth, and price levels.

We, of course, are vitally interested in this question of how best to encourage a high rate of employment and an adequate rate of economic growth accompanied by reasonable stability in the general price level. The problem of achieving these overall objectives in the context of our free market economy is an ever-challenging one. Progress has been made in this area, particularly on some of the financial aspects discussed below in reply to your questionnaire.

Over the years the Joint Economic Committee itself has made a real contribution toward these objectives in the fiscal and monetary field. We well recall the study made by the committee in 1949 under your chairmanship which came out so strongly for flexible monetary policies. This was a vital step in freeing the economy of the artificially maintained supported Government bond market. We are sure today's problems would be much more serious if the pegged market had not been abandoned.

Unfortunately, the recommendations of the Joint Committee at that time, as well as those made in the extensive studies of 1952 under the chairmanship of Representative Patman, never came to pass adequately in the field of fiscal policy. While we have made progress from time to time in budget affairs, we do have a serious problem of inadequate cash surpluses and thus a lack of debt reduction during periods of prosperity. This subject is omitted from your questionnaire, but it must be mentioned here at least in a general way. We think you will agree that the most serious problems for debt management and monetary policy can be traced directly to inadequate budget policy. The Federal Reserve would have a much easier task if there were substantial budget surpluses and debt reduction during prosperous periods such as 1955-57 and today. Similarly, the Treasury would have nowhere near the debt management problems it is facing if there were large cash surpluses rather than a narrowly balanced budget or, as in the recent past, a very substantial budget deficit to finance at a time economic activity was expanding.

In thinking about the specific questions you ask, it is extremely important to keep in mind this overall problem of the absolute size of the Federal budget and the lack of adequate cash surpluses during periods of prosperity. In many ways, a number of the questions asked are minor, secondary issues compared to the budget problem. They tend to assume major importance for those of us actively in the market, and they are serious since the debt must be handled in some way even though budget policy is inadequate.

As a matter of fact, the Treasury has made a great deal of progress in debt management, considering the generally adverse climate in which it has had to operate. It is just unfortunate that the sheer necessity of getting maturities refinanced and meeting the huge cash needs has prevented more progress in putting the debt on a sounder, longer term basis. It is especially unfortunate that the 4¼ percent ceiling on bonds is preventing more progress today.

At the same time, the Federal Reserve has been called upon to carry too much of the anti-inflationary burden because of our tendency to increase spending rather than to reduce debt as budget receipts increase. This has created difficult problems at times in the money markets, but certainly the Federal Reserve has pursued the only possible course. The only alternative would be for the Federal Reserve either to create too much money and thereby add to inflationary pressures, or else resort to a whole series of direct controls which no one wants and which worldwide experience indicates do not work.

One final thought of a general nature which affects many of our specific answers to the questionnaire has to do with Federal Reserve action in the Government security market. There has been much discussion recently whether the Federal Reserve should give temporary support to the market or perhaps what might better be described as temporary cushioning of the market over periods of stress, as during a Treasury financing operation. The question of Federal Reserve support must be looked at in the broad context of basic changes in the market over recent years.

Many still think of Federal Reserve open market operations in the context that prevailed some years back. Prior to the 1951 accord, and even for some time after, the Federal Reserve generally was able to

stabilize market prices in a desired range with comparatively moderate purchases or sales. There was a strong tendency for those in the market to assume prices would stabilize at the level set by Federal Reserve operations and to govern their own purchases and sales accordingly. If the Federal Reserve was buying bonds at a certain price, the market assumed that that particular price or interest rate level probably would prevail and market participants would be willing to go ahead and purchase securities.

This whole trend of market thinking has changed in recent years. Many fail to realize that the Federal Reserve no longer can cushion a rise or decline in interest rates through moderate sized purchases or sales. The market has become much more sophisticated and, as a consequence, Federal Reserve purchases or sales probably would tend to accentuate price and interest rate swings rather than minimize or cushion such swings. For example, take the situation of July 1958, when the Federal Reserve announced it would purchase other than short-term securities and actually did buy some longer bonds in an attempt to cushion sharply declining prices. It is true that a number of people felt this announcement and action would stabilize prices at the then existing levels so some sellers stopped pushing bonds on the market and some buyers appeared. But the market, after a short pause, continued to decline sharply. The experience has completely disillusioned this particular group of investors; they no longer could be expected to operate on such a theory.

On the other hand, many other market participants at that time were quick to offer bonds in large amounts to the Federal Reserve or any other buyers. These people reasoned that the trend of interest rates would continue upward as economic recovery progressed. Under the circumstances, they were delighted to find enough buyers for the bonds they wished to sell. The Federal Reserve quickly realized that such was the case and withdrew support from the market in a very short period of time. The Federal Reserve reasoned, and rightly so, that any attempt to go counter to basic market trends would result only in buying an extremely large amount of securities. This would be contrary to any reasonable open market policy and would create even more serious problems later when the Federal Reserve would have to try and offset the excessive reserves created by the purchases. As discussed in detail later, offsetting sales of short-term issues would not be a satisfactory solution to this problem of excessive reserve creation.

The case of 1958 should be kept clearly in mind when it is suggested that the Federal Reserve might moderate market pressures from time to time through judicious purchases and sales of various securities. The 1958 experience was complicated by a number of other serious problems, but the basic reasoning above is valid. Leaving out theoretical arguments, we feel strongly that this type of temporary cushioning operation, under current conditions, is no longer practical.

You will appreciate that our general comments are an integral part of the answers to the specific questions.

Yours very truly,

JOHN H. PERKINS.