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The Government Securities Market

SUMMARY OF TREASURY-FEDERAL RESERVE STUDY

(Joint Statement Relating to the Treasury-Federal Reserve Study of the Government Securities Market by Robert B. Anderson, Secretary of the Treasury, and William McChesney Martin, Jr., Chairman of the Board of Governors of the Federal Reserve System (presented for the record in connection with Secretary Anderson's appearance before the Joint Economic Committee, 10 a.m., EDT, July 24, 1959).)

The objectives of national financial policy as pursued by both the Treasury and the Federal Reserve System have meaning, of course, only as they contribute to the sound functioning of our nation's economy. For our economy to remain healthy and growing, market mechanisms must perform their essential function of providing a meeting place where the forces of supply and demand can operate to achieve the best utilization of resources. One of the problems which has constantly confronted us as a nation has been how to protect freely competitive markets from forces which would hamper or restrict the performance of this essential function. Only as everyone concerned remains alert to new developments in marketing techniques and organization can we be assured that distortions and restrictive practices have not crept in, to the detriment of healthy growth. This is, of course, just as important and necessary in the financial sector as it is in other areas of the economy.

Developments in the Government securities market a year ago led the Treasury and the Federal Reserve System to undertake a joint study of current techniques and organization in that market. This joint statement is devoted to a discussion of the progress of the study thus far.

OBJECTIVES AND CONDUCT OF STUDY

The immediate background of our joint study was the wide and rapid price fluctuation in the Government securities market during the economic recession and revival of 1957-58. These market movements were naturally a matter of concern to the Treasury in view of its debt management responsibilities. They were of equal concern to the Federal Reserve because of its responsibilities for over-all credit and monetary conditions.

In undertaking the study our purposes were to find out how organization and techniques in the Government securities market might be improved, and by what means the danger of future speculative excesses in this market might be lessened. The first step, we felt, was to provide the widest possible basis of factual information. Accordingly, we undertook a detailed and analytic study of the underlying causes of the 1957-58 movements. At the same time we undertook a broad re-examination and reconsideration of the market's general organization.

While experience of the Government securities market during a particular recent period thus provided a specific occasion for initiating this special study, both the Treasury and the Federal Reserve have recognized for some time the need for such a study. The last such study, with somewhat more

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restricted objectives, was made in 1952 under the auspices of the Federal Reserve's Open Market Committee. The Treasury did not participate in that study since it was primarily concerned with the interrelationship of the market and Federal Reserve operations. Since that time there have been many new developments in the market's machinery and practices, and both the Treasury and the Federal Reserve felt that these developments needed careful evaluation.

The published version of our study will consist of three parts. Part I, which is being made available for public release next Monday, consists, first, of a summary of informal consultations—some conducted in person and some through written communication—held with informed observers of the Government securities market and important participants in that market. Part I also includes a special technical study of the possibilities of an organized exchange, or auction market, to take care of the major part of the huge volume of Government securities transactions. These are handled at present, as you know, in the over-the-counter or dealer market, where more than \$1 billion of transactions are handled in a typical trading day.

The informal consultations represented one of the major phases of our study program. These consultations had three objectives: first, to obtain informed impressions and judgments on basic causes of last year's market experience, especially toward mid-year and after; second, to find out how market observers and participants viewed and appraised existing market processes and mechanisms; and third, to get the benefit of whatever suggestions might be made for improving and strengthening the market. While our consultations were limited by the special purposes of the study to those who were thoroughly acquainted with market

practices, our aim throughout was to seek out the means whereby the Government securities market could function best in the public interest. In our inquiry the needs of the small buyers and sellers were considered carefully, along with those of the Government and of institutional and other large investors.

Consultants included various officials of large commercial banks, of insurance companies and savings banks, and of investment banking firms; primary dealers and intermediary brokers in the Government securities market; financial officers of several large nonfinancial corporations; a number of members and officials of the New York Stock Exchange; a group of financial economists; and a group of academic economists. In all, approximately 75 persons participated in individual or group consultation and about 30 others provided written comments. The individual and group consultations were held in Washington, D. C. and in New York City, and each lasted from an hour to a full day. The discussions with financial and academic economists were on a panel basis, but the remaining consultations were held separately on an informal basis with one or more individuals from a single organization.

Part II of our study is a factual analysis of the performance of the Government securities market from late 1957 to late 1958. Rapidly changing market conditions in this period presented an unusually wide range of problems. To obtain the most complete information possible on the market forces at work, special questionnaire surveys were addressed to all major lenders and participants in the market. On the basis of the answers received, we were able to compile much new data relating especially to

market developments from spring through early fall of 1958.

Concerning this second part of the study, it is gratifying to report that the responses to our detailed requests for new statistical information were exceptionally good—indeed, virtually 100 per cent.

Part III of the joint project consists of four supplementary and technical studies growing out of the suggestions and findings of the first two parts. We comment later on their particular focus and scope. Neither Part II nor Part III has been printed as yet, but both are being made available in preliminary form also for release Monday morning.

Before turning to the substance of the entire study itself, a word should be added about how the project was staffed. Both the Treasury and the Federal Reserve System assigned to the study senior personnel experienced in the observation and analysis of the Government securities market. In addition, the Treasury retained the services of a former staff official, having both debt management experience in the Treasury and practical experience in the market, as technical consultant on the study. Federal Reserve personnel were drawn mainly from staffs of the Board of Governors and the New York Federal Reserve Bank, but selected personnel from other Reserve Banks also shared in the work. A central Treasury-Federal Reserve staff group was given full responsibility for carrying out the project, and since early spring the members of this group have devoted a major share of their time to it.

INTERPRETATION OF THE 1957-58 MARKET EXPERIENCE

As noted earlier, our study of the Govern-

ment securities market was focused on the wide swings in market prices and yields of Government securities from late 1957 through the fall of 1958, with special attention paid to the mid-1958 market experience. Through systematic re-examination of available data and the development of new data, we endeavored to find out what lessons could be derived from this experience which would be of benefit to investors generally as well as to those who are responsible for fiscal policy, debt management policy, and monetary policy.

We have not had sufficient time as yet to make a complete evaluation of all the data which have been brought to light by the joint study. Four general observations relating to private investment and credit extension, fiscal policy, debt management, and monetary policy, however, are pointed out by the staff group, as follows:

First, for purchasers of marketable Government securities and for lenders, the risks of speculation on anticipated cyclical price movements of fixed-income Government securities, and particularly of speculation on slim margin, credit-financed holdings, have been widely learned.

Second, in the area of fiscal policy, there is the problem that recession deficits often run to very large size and are delayed beyond the turn in the economy; as a result they provide stiff financing competition when growing demands for the financing of recovery must be satisfied from a more slowly growing savings supply, and this competition for savings funds may have significant, but largely unavoidable, effects on securities prices and interest rates.

Third, in the area of debt management, there is the problem as to whether, in periods when easy credit conditions lend investor

favor to longer term, higher yielding issues, a large and rapid shift in the maturity structure of the debt may result in supply and demand distortions, which may later have upsetting and disruptive effects on the market.

Fourth, in the area of monetary policy, there is the problem as to whether easy credit conditions and accelerating monetary expansion for counter-cyclical objectives may be carried to the point where banks and other lenders respond too actively to speculative demands for credit, so that lenders, in their zeal to keep their funds employed to fullest advantage, may too easily relax the credit standards which long experience has taught to be sound.

These broad conclusions arising out of our study point up a major financial dilemma which is faced in coping with recession in a free enterprise, market economy.

We all agree that reduction of economic instability is one of our major objectives. National financial policy—which refers to fiscal policy, debt management policy, and monetary policy in combination—is the primary means available to the Federal Government for cushioning recession and stimulating recovery.

Yet, the vigorous use of financial policy to promote economic stability runs the risk of being accompanied by instability in the financial markets, where flexible movement is an essential part of market mechanism. This appears to be a risk which we must take, while doing everything we can to minimize the incidence of instability in these markets.

We know, of course, that many difficulties arise in the effective use of fiscal policy in recession. Deficits in recession are incurred either automatically because of reduced tax

receipts and increased social insurance payments or because of specific public policy actions taken to combat recession. These in turn have a direct impact on the prices of Government securities.

The additional burden of increasing debt in such periods—particularly when preceded by inadequate budget surpluses for debt reduction during the preceding rise in the economy—may also have a psychological effect on investors. This may be expected because of the fact that investors are concerned about future budgetary policies as well as the size of the particular financing needs of the moment.

There are other perplexing dilemmas in periods of general economic instability which arise from the very flexibility of our market mechanisms. Investors, for example, are faced in recessionary periods with either keeping their funds highly liquid (with low earnings) or attempting to obtain higher yields available only on longer term investments and thus sacrificing liquidity. Concentration on liquidity would, of course, accentuate recession tendencies, while emphasis on higher yields would help to counteract such tendencies.

The Treasury faces difficult choices during a recession. The orthodox theory of debt management emphasizes short-term financing when resources are not fully employed. At such times, however, the long-term market is receptive to offerings—perhaps for the first time since the middle part of the previous upswing in the business cycle. When the Treasury enters such a period with a large and growing floating debt, it would seem advantageous to re-finance some part of this debt at longer term. Such a course is also desirable to provide greater leeway in choosing financing alternatives when the recession-induced

* deficit is sooner or later encountered. And since a recession deficit when it occurs must be financed within a relatively short period of time, the Treasury must look forward to making heavy calls on available savings during the deficit financing period. In the second half of 1958, for instance—a recovery period, but one coinciding with heavy deficit financing requirements—the Treasury was obliged to absorb the equivalent of a third or more of the total new savings funds then available. The Treasury's problem of maintaining a debt structure adaptable to changing circumstances without itself contributing to instability of the economy is a formidable one.

Monetary policies, if they are to contribute to resolving our problems of general economic instability, must be deliberately and appropriately adjusted to combating recession and they must be shifted when an upturn is evident. The timing and extent of monetary actions—like those in the fiscal field—must surely be determined by other considerations in addition to their impact upon interest rates and the prices of securities. Again, however, such effects are not to be ignored.

SOME FINDINGS ABOUT MARKET FUNCTIONING

While the study indicated certain broad lessons from the 1957-58 experience for both investors and national financial policy, and also highlighted some of the fundamental and conflicting dilemmas inherent in such a period, it focused on the functional and mechanical aspects of the Government securities market in a setting of recession and recovery. A specific interest was the speculative and credit excesses that developed. Our objective in studying these

developments was to arrive at possible adaptations of public policy and also of market institutions which might lessen the market's exposure to such excesses in the future.

The excesses which occurred last year were associated with the build-up in the Government securities market prior to the Treasury's offering in late May 1958 of a 2½ per cent, seven-year bond as one option available in its June 15 refinancing of \$9.5 billion of maturing obligations held by the public. The other option was a one-year 1¼ per cent certificate. Altogether the holders of about \$7.5 billion of the maturing issues preferred the 2½ per cent bonds—a figure which was more than double what had been estimated by the financial community or by Government agencies as true investor demand. This was a surprise to the market and suggested that a sizable amount of the newly acquired securities were speculatively held. Nevertheless, there was general market agreement after the announcement was made that the market would be able to absorb the excess supply over a period of time.

About this same time, however, market observers were beginning to realize that the Federal deficit in the year ahead would be the largest since World War II, and that most of it would have to be financed in the second half of 1958, coinciding with the period of heavy Treasury seasonal borrowing. At least part of the flow of economic information in the first half of June had been mildly encouraging; but it was not until around mid-June that market observers took into account that economic recovery might already have begun and that conditions of active ease in credit markets might be coming to an end. In this setting, liquidation of temporary holdings of 2½ per cent

bonds began and gathered rapid momentum, with an accompanying sharp decline in market prices of Government securities and an associated sharp rise in security yields. As you know, the opportunity for either profits or losses on the price behavior of a longer term bond is much greater than on short-term securities for a given change in interest rates.

This liquidation period, you may recall, occasioned intervention in the market, first by the Treasury in late June and early July to relieve the market of some of the excess supply of 2½ per cent bonds issued at mid-June, and second by the Federal Reserve later in July to correct a disorderly condition which developed around the time of the international crisis in the Middle East and a Treasury financing.

Many observers have placed principal blame for this upsetting market episode on excessive speculation in the June refundings, financed by the use of credit extended on unduly thin margins. Our study shows that there was indeed a substantial volume of credit-financed participation in the June refunding—about \$1.2 billion. Considering that \$7.5 billion of the 2½ per cent bonds were issued, it is obvious that at least four-fifths of the subscriptions represented outright holdings. A significant share of these were probably also temporary holdings purchased in the hope of speculative gain. The outright holdings largely represented subscriptions on the part of commercial banks and business corporations.

In retrospect, one key to this widespread speculation may have been the absence of adequate information about current tendencies in the Government securities market itself, which is, of course, the pivotal market in this economy's financial organization.

Much more important, however, is the fact that too many speculatively motivated exchanges into the 2½ per cent bonds were apparently based on investor judgments that recession would continue for some time, and that long-term interest yields would decline further.

Speculation financed by credit created a particular problem in this instance because there were large blocks of holdings acquired by newcomers to the market who bought or made commitments to buy Government securities on very thin margin—or in many cases on no margin at all. Several Stock Exchange houses made large commitments themselves and acted between lenders and speculators. Some commercial banks and business corporations, actively seeking higher yielding outlets for funds than were provided by Treasury bills and other short-dated securities, directly or indirectly helped to finance these operations.

The activities of one Stock Exchange member specializing in money brokerage facilitated the financing of a substantial volume of the June rights. These operations were found to be in violation of Stock Exchange rules. The enforced unwinding of these very large positions came at a particularly sensitive stage of the market decline and, combined with other liquidation of speculative holdings, put the market under severe supply pressure. The New York Stock Exchange has since modified its rules so as to prevent a repetition of this kind of speculative financing activity in the future.

While positions financed on credit were not the largest speculative element in the market at the time of the June refunding, they were certainly important in initiating and accentuating the June-July decline in market prices which accompanied the eco-

conomic upturn. Once liquidation of the new Treasury bonds was under way and prices were declining sharply, it was inevitable that some margin calls and related selling to protect lenders' positions would occur. At the same time, there was substantial liquidation by holders who had done no borrowing at all as they realized that profits were not in prospect and sought to minimize or avoid losses by selling out. The development of the Lebanon crisis in mid-July and the growing awareness of the prospects of large Treasury deficit financing in a period of rising private demand for loan funds and accompanying expectations of tightening credit conditions, based in part on rumors of a shift in Federal Reserve policy, heightened market uncertainties during this period of liquidation. There also was considerable uneasiness due to fears that the large budgetary deficit would induce renewed inflationary pressures.

Over this entire period of rapid market change, the figures compiled for the study indicate that dealers operated chiefly in their normal primary function as intermediaries. As the June financing approached, dealers were called upon to absorb large amounts of short-term issues that were being sold to meet corporate liquidity needs over dividend dates and the June tax period. As a result, dealers' holdings of Government securities increased substantially. The enlargement occurred mainly in Treasury bills and in June "rights" (maturing issues eligible for the exchange), and these rights were largely exchanged for the 2½ per cent bonds.

To make matters more difficult over the period covered by the June financing, dealers had to meet large maturities of repurchase agreements which they had made with nonfinancial business corporations. Under these agreements, corporations ac-

cumulating funds in earlier months invested a large portion of them by arrangements to buy Government securities and, at the same time, agreeing to resell the securities to dealers on a fixed date in June—again to cover cash needs related to dividend and income tax disbursements at that time. The short-term securities underlying these arrangements had to be refinanced in June through placement by dealers with banks or other lenders.

When the June exchanges were completed dealers undertook to accomplish a distribution of their underwriting holdings of the new 2½ per cent bonds. Such underwriting can result in losses as well as profits to dealers because of the market risks assumed by them. These risks proved to be real in the June financing. Normally, the distribution of the securities acquired in underwriting would have proceeded throughout the remainder of June and July. In view of the then-existing market uncertainties, dealers intensified their distribution efforts and cut back on their total positions generally. These activities also contributed to supply pressures in the market.

Once market decline had set in, investors, speculators, and dealers were obliged to make market judgments in the light of their own portfolio and speculative situations and their individual appraisal of current and future uncertainties. There were times in this period, we were told by market participants, when dealers in order to protect their own capital positions would accept large-size orders to sell only on an agency basis, promising to make the best effort possible to carry out the customers' requests. The volume of Government security transactions by the dealer market, however, continued large throughout the decline.

The question still to be answered from our

examination of the 1957-58 market experience is just what specific findings and interpretations may be drawn about market excesses and mechanisms. While any specific conclusions at this stage are subject to later modifications or supplement, the following are the main ones drawn by the study group in the preliminary version of Part II of the study (Chapter VIII).

“(1) Investor and speculator judgments in the late spring period preceding the June refunding were made largely in the light of information pertaining to an economic situation of one to two months earlier. This lag in the flow of economic information was a factor of basic import in conditioning expectations in this critical period of market development. The role of changing market expectations as to the economic outlook in this period of 1958 clearly emphasizes the need for an adequate supply of current information about trends in the economy generally to facilitate the orderly functioning of financial markets.

“(2) Underlying the late spring speculative positioning of Government securities was a very low absolute level of short-term market interest rates, as well as an unusually wide spread between short- and long-term market yields. This low short-term rate level, together with the prevailing yield structure, vitally influenced the shaping of market expectations of further increases in Government bond prices. It further provided the incentives that led to unusual adaptations of customary credit instruments and terms, which facilitated a rapid swelling in the market's use of credit. This development made the market vulnerable to liquidation pressures.

“(3) These conditions in the market, along with investor expectations of still higher prices of Government bonds, re-

sulted in a situation whereby market participants in the June refunding were encouraged to convert an undue amount of short-term issues into longer term issues, thus oversupplying the longer term area of the market and at the same time sharply reducing the market supply of short-term instruments. Pressure on earnings created by the low level of short-term yields led many banks and some corporations to reach out for the higher yields available in the June financing in an effort to protect their earnings.

“(4) Speculative positioning of 'rights' to the June refunding on the part of outright owners, together with the conversion into 2 $\frac{5}{8}$ per cent bonds of a disproportionate amount of their investment holdings of the maturing issues, was of greater volume than speculative positioning by investors who financed by credit. A large number of banks and business corporations participated in this outright speculative positioning.

“(5) Although speculation on an outright basis in the June financing was larger than credit-financed speculation, the latter was excessive considering the size of the refunding operation. Moreover, liquidation of credit-financed positions appeared almost immediately upon the settlement date for the refunding for various reasons and both triggered and accentuated the declining phase of the market.

“(6) The equity margins put up in this period by credit speculators were, in too many instances, either nonexistent or too thin. Despite the low margins, the losses suffered on credit-financed transactions were incurred chiefly by the borrowers rather than the lenders.

“(7) In the speculative market build-up, the use of the repurchase form of

credit financing as a vehicle to carry the speculative positions of nonprofessional and unsophisticated participants proved to be unsound. Use of this particular type of financing instrument, in effect, resulted in lenders' advancing credit to unknown borrowers of unknown credit standing or capacity.

“(8) Even among known borrowers of professional standing, the use of the repurchase agreement device was stretched in terms of the types of the security which it covered. In the past, this instrument was employed in the dealer market mainly to finance securities of the shortest term. In its 1958 market usage, the instrument was extended in numerous instances to longer term securities where the maturity bore little or no relationship to the date of termination of the agreement.

“(9) Where used in the mid-1958 period to finance holdings of longer term securities, the repurchase agreement technique in some cases provided a convenient means to circumvent owners' equity requirements that would have been applicable on loans, through margins required by lenders.

“(10) The use of forward delivery contracts in the pre-June market build-up involving 'rights' to the June exchange offerings, though of lesser magnitude than repurchase financing, nevertheless facilitated an excessive amount of speculative positioning in this issue without any commitment of purchaser funds.

“(11) In the pre-June market build-up, dealers and brokers were not always aware that their credit standing was in effect used by others to underwrite speculation with no equity. The preponderance of June 'rights' among the forward delivery contracts would suggest a strong preference for 'new'

Treasury issues as the mechanism for this speculation.

“(12) The total number of commercial banks outside New York City and also the total number of nonfinancial corporations drawn into the credit financing of the mid-1958 speculative build-up was relatively small, and the major portion of the credit extended was from only a few banks and business corporations.

“(13) In the late spring market build-up, some lending by New York City banks, collateralized by Government securities, was at rates and margins that, under the prevailing market psychology and the then-existing conditions, were conducive to the financing of speculative positions.

“(14) The sizable increase in dealer positions prior to the Treasury's June 1958 financing was partly associated with the heavy volume of market trading in that period. Although largely concentrated in short-term securities, the expanded dealer positions did provide a market for these issues which facilitated the lengthening of portfolios and speculative positioning by many investors during the period, particularly banks.

“(15) Even though dealer positions at the time of the June refunding were heaviest in the short-term maturities in the market, liquidation of these positions in the following three months, though largely necessary to protect dealer capital positions, did add significantly to the supply pressures otherwise present in the market during this liquidation phase.

“(16) The extensive use of the repurchase instrument for financing all types of Government securities in late spring of 1958 resulted in very large repurchase maturities in mid-June coincident with other churning in the money market in connection with

settlement for the Treasury refunding. The necessity of refinancing the securities underlying these repurchase transactions put the Government securities market under heavy internal strain at that time.

“(17) The absence of a Treasury tax anticipation security maturing at mid-June led to much corporate interest in the June maturities as corporations made use of these issues to invest accumulating funds to meet their June tax and dividend needs. This accounted for a considerable part of the market churning at the time of the refunding.

“(18) The availability of regularly issued statistical information about the market itself might have succeeded to some extent in forewarning market participants and interested public agencies of potential speculative dangers around mid-1958. The fact of the matter, however, is that no such objective information was available to either group to gauge the extent of the speculative forces that were present in the market.

“(19) In the closing months of 1958, when many commercial banks were experiencing seasonal credit demands, study data show a movement of funds from the Government securities market to the banks effected through the vehicle of the repurchase agreement. In other words, some dealers were functioning as money brokers, acting as principals in obtaining funds from business corporations under repurchase arrangement and in turn supplying funds to banks under a reverse repurchase arrangement (resale agreement) with them. Question can be raised regarding the appropriateness of a money brokerage function as part of the dealer operation.

“(20) Most of the decline in market interest rates on Government securities, following confirmation in the late fall of 1957

that economic recession had set in, was effected within a short time span—less than four months. The sharp rise in market rates on Treasury issues, following confirmation after mid-1958 that economic recovery had begun, was likewise effected in a short time span—about four months. Although liquidation of Government security positions, built up in hopes of speculative gains in the June refunding, played a central role in accentuating the rise in market interest rates after mid-1958, it does not necessarily follow that the upward interest rate movement of the entire recovery period would have been smaller if the earlier speculative distortions had been avoided. Upward pressures on interest rates from cyclical Federal deficit financing in combination with expanding private demands for financing, given the savings supply over these months, would still have resulted in a substantial, if not identical, rise in market interest rates.”

AN ORGANIZED EXCHANGE OR A DEALER MARKET?

At the hearing of the Joint Economic Committee earlier this year on the President's Economic Report, there was some discussion of the functioning of the Government securities market. The question was raised whether the market might not be more effective if it were a formally organized exchange or auction-type market, with maximum current publicity on transactions, rather than an informal over-the-counter dealer market, subject to more limited public observation.

As part of this current study of the Government securities market, accordingly, we not only raised this question with market participants but asked our study group to

provide a special technical evaluation of the suggestion. The New York Stock Exchange also gave very careful consideration to the question and reported its conclusions to us.

A specialized market tends to develop in a particular form as the individual participants compete to serve more efficiently and economically the needs of buyers and sellers of the kind of security or commodity traded. The present market mechanism for Government securities has grown as a specialized market ever since World War I. Transactions in Treasury issues in the 1920's were carried out both on the New York Stock Exchange and through the over-the-counter dealer market. Even during the early 1920's, however, a steady decline in transactions on the auction market represented by the Exchange and a steady rise in the volume handled on dealer markets was taking place. By the mid-1920's, the dealer market was dominant and agency transactions of the Federal Reserve Bank of New York for the account of the Treasury were moved to the dealer market.

Only marketable Treasury bonds are listed on the New York Stock Exchange and this has been true throughout its history. Therefore, the introduction of the Treasury bill in 1929 and its subsequent development as the primary liquidity instrument of the money market—a development accelerated by war and postwar financial trends—further added to the importance of the over-the-counter dealer market. The growth in the Federal debt in the 1930's and during the war years, together with the broader participation of large financial institutions in the market, greatly increased the size of typical market transactions in Governments. Large transactions are more efficiently managed in a dealer-type market, and con-

sequently the number of transactions that could be effectively handled through the auction mechanism of the Exchange continued to decline. By 1958 trading in Government bonds on the Exchange had dwindled to an insignificant volume in comparison with trading in such securities in the over-the-counter dealer market.

The standards of performance to be applied in evaluating the present dealer market are, of course, related to the specific job which the market has to do as well as to the public interest in a well-functioning market economy. The job to be done first of all is the matching up of purchases and sales by investors and traders. But it also involves the Treasury as issuer of new securities and the Federal Reserve through the execution of its monetary policies. It is the conclusion of our joint study to date that both the broad public interest and the special interests of the Treasury and the Federal Reserve—which are, of course, designed only to serve the public interest—are being effectively served through the present market. Those who participated in our study, including a broad range of investors as well as dealers and brokers, were virtually unanimous in the view that the present type of over-the-counter dealer market in Government securities is preferable to an exchange, auction-type market. Even if confined to bonds, and therefore excluding bills, certificates and notes, the exchange-type market was regarded as an unsatisfactory alternative.

Probably the most important standard of performance required of the Government securities market in serving existing interests is its ability to handle without disruptive price effects the typically large transactions that arise as large institutional holders

adjust their liquidity and investment positions. These individual transactions—by commercial banks in adjusting their reserve and portfolio positions, by corporations in adjusting to their cash flow needs around dividend and tax dates, or by savings institutions or other institutional investors in making portfolio changes—often run to many millions of dollars, particularly in short-term issues. If these holders were unable to purchase and sell readily in such large amounts, their interest in Treasury issues would decline.

The dealers in Government securities appear to have developed better facilities and techniques for handling large transactions promptly and without excessive price effects than would be possible in an organized exchange. They do this by purchasing and selling for their own account; by maintaining substantial inventories of securities in different maturity categories; by a chain of transactions with other dealers—purchases, sales, and exchanges or swaps; and by keeping themselves informed, through their nationwide organizations or correspondent networks, of major sources of supply and demand for Government securities throughout the country. In its operations, the dealer market acts as a buffer to equalize hourly and daily movements in supply and demand, and to absorb the impact of large individual transactions that might otherwise result in abrupt price effects or undue delays in execution of orders.

The specialized dealer market provides a number of other services that institutional customers consider to be valuable. The cost of a transaction in this market is very small because of the large volume of business, because of keen competition among dealers, and because dealer profits do not depend solely on trading margins. A significant part

of dealers' earnings is derived from managing their own portfolios and from supplying, through repurchase agreements, investment instruments which have the exact maturity date needed by customers. Such operations also, of course, involve risk of loss.

The dealer market is effectively organized to serve customers throughout the country even though its organization is informal. Transactions are completed promptly by telephone and customers know the price or price range when the order is placed for execution. Moreover, through their intimate experience with the highly technical aspects of each Treasury issue as well as the ways in which the Treasury, the Federal Reserve, and the money market operate generally, dealers provide specialized market advice that customers value. The primary dealers further provide important services in the secondary distribution of new Treasury issues. They also provide a convenient point of contact for Federal Reserve open market operations in short-term Government securities.

The major defects attributed by some critics to the dealer market in U. S. Government securities reflect three features: first, the market is concentrated in a relatively small group of primary dealers and therefore may not be as competitive as an organized exchange market; second, there is little information about its operations, without supervision or formal rules governing its practices, despite its special public interest; and third, the market is not geared to handling small and odd-lot transactions nor is it especially interested in them.

As to competition, there is no question that the primary dealer market is very highly competitive, even though it comprises only twelve nonbank firms and five bank dealers, most of whom have central offices in New

York City. There is necessarily spirited competition between the dealers for the available volume of trading business. Any offers to sell at a price even slightly below the market usually are quickly taken advantage of, as are offers to buy at anything above whatever the price may be at the moment. In volume, the Government securities market is by far the largest financial market in the country. It handles each year a dollar volume of transactions approximating \$200 billion, or more than five times as much as the dollar volume of transactions in all corporate stocks as well as bonds on the New York Stock Exchange.

The dealers are principally wholesalers and their customers consist of several hundred nonfinancial corporations, several thousand commercial banks who submit orders both for their own account and for customers, other security brokers and dealers handling transactions for customers, hundreds of insurance companies, mutual savings banks, pension funds, and savings and loan associations throughout the country, the special funds of State and local governments, personal trust accounts, and some individual investors of substantial means. These investors and traders who use the market to buy or sell are generally themselves expertly informed and experienced in investment matters: each is seeking the best return on the funds he places in Government securities; each is continuously comparing these returns with those on alternative investment opportunities; and each of the larger investors, who regularly use the services of several dealers, is constantly comparing the relative performance of the dealers with whom he is in contact.

In this type of highly competitive market, the dealer who succeeds must execute the

buy or sell orders of these numerous and varied investors promptly and efficiently and the business must be handled in accordance with high ethical standards. Moreover, if he is to obtain future business, such investment advisory services as the dealer renders his customers must stand the test of time.

Each of the primary dealers, through one means or another, operates throughout the country because broad coverage is essential to the maintenance of a sufficient volume of business for profitable operations. This is probably a major reason why there are not more dealer firms active in the market. Another reason, according to information received in this study, is that the number of qualified and experienced personnel available to staff new firms is relatively small.

Regarding the criticism of market mechanics, it is true that the dealer market makes available to the public practically no information on its operations other than market bid and offer quotations. There is no requirement for making available either to the public or to a duly constituted authority the records of dealer net positions in securities or amounts borrowed, such as are required of members of the New York Stock Exchange.

The lack of formal rules, supervision, and adequate information leaves the market open on occasion to suspicion that it may not always be operating in the public interest. It has been suggested that in instances dealers' interests may conflict with those of customers, that dealer operations may unduly accentuate swings in securities prices, and that dealer advice may not be entirely accurate. There was, however, little or no evidence gathered in the study that such problems are common in the dealer market. All of the market customers consulted in the present study expressed their

full confidence in the Government securities dealers, individually and as a group, and testified to their high standards of integrity and business practice.

Concerning small transactions in the market, consultants to the study have indicated that they generally go through other brokers and dealers and commercial banks, and that when they reach the market they are handled promptly by dealers at a relatively low cost that is in part subsidized by the large transaction. As the dealers are organized primarily to handle large transactions, it is understandable that they view the small deals as an accommodation, and do not actively encourage them. It seems clear that if facilities designed more specifically to serve small investors' interests in marketable bonds are to be established, there would have to be some additional incentive provided.

The New York Stock Exchange, prompted by our study, reviewed the potentialities for re-establishing a vigorous auction-type market in Government securities on the Exchange. After extended consideration of the matter, however, Exchange officials concluded that, even though such a development was theoretically possible, problems raised by the suggestion would be insurmountable unless both the Government and the Exchange shifted a number of fundamental policies.

One specific problem to be resolved is the difficulty under existing conditions of encouraging Exchange specialists to take the financial risk of making a market in Government securities. The specialist would be in competition with established Government securities dealers. In addition, they might on many occasions need to build up very large positions in Government securities, since this is a heavy volume market

and, when sharp price movements occur, quotations on maturities throughout the list tend to move together much more so than in the market for specific corporate stocks or bonds. Finally, because of the public nature of transactions at Exchange trading posts, specialists taking positions to make orderly and continuous markets would be unduly exposed to possible raids by non-member dealers and other large traders.

There is also the problem of developing an adequate incentive for handling Government securities on the Exchange through a commission schedule that would be competitive with narrow spreads prevailing in the dealer market.

Other conditions set by the Exchange for an effective auction market under its auspices would be:

(a) A larger supply of long-term Government bonds in the market, especially of bonds attractive to individual investors through tax exemption or other special features since these investors now find only limited interest in Governments other than savings bonds.

(b) The placing on the Exchange of all Federal Reserve agency transactions in bonds, possibly plus official support of the Exchange market; and

(c) A potential requirement for the execution of all transactions of member firms in Government bonds on the Exchange, except for some "off-floor" trades in special circumstances.

(d) Some protection of the position of member firms who are acting as Government security dealers.

The Exchange did not suggest that its facilities could be adaptable at all to trading in Treasury bills, certificates of indebtedness, or notes, which together constitute more than half of the outstanding market-

able Federal debt and are also the issues in which the overwhelming volume of market transactions takes place.

These conditions make it clear to us that it would be difficult to develop an auction-type market for Government securities on a broad scale under the existing organized exchange mechanism.

The alternative approach of improving the mechanism and institutions of the present Government securities market, by carefully studying and remedying defects in the dealer market as they come to light, appears to us to promise results that will serve the public interest. At the same time, the New York Stock Exchange should be encouraged to develop further the auction facilities it now provides for transactions in Government bonds. The total market cannot be harmed and may indeed be improved by more active competition between the Exchange market and the dealer market in bond trading.

AREAS FOR IMPROVING MARKET MECHANISMS AND FUNCTIONING

Our study was launched, as stated earlier, in the hope that the suggestions advanced and problems revealed might indicate certain improvements in the way the Government securities market operates, with particular emphasis on the prevention of future speculative excesses in the market. In the light of consultants' suggestions and of findings of our factual review of the 1957-58 market experience, our study group initiated four supplementary studies to evaluate possible means of improving the market's functioning. These are in the nature of working papers for consideration by Treasury and Federal Reserve officials. As their preparation has just been completed in pre-

liminary form, they have not yet been reviewed. Hence, they cannot be interpreted as reflecting any official recommendations for market improvement. There may also be other supplementary studies undertaken as we re-examine market processes and mechanisms and we naturally intend to pursue this phase of our inquiry as far as will serve a constructive purpose.

A first area of supplementary study pertains to the adequacy of statistical and other information relating to the dealer market. As mentioned earlier, it is commonly recognized that openly competitive and efficient markets are characterized by informed buyers and sellers. A broad range of objective information needs to be available to serve effectively the interests of all market participants, including the Treasury as issuer of securities for the market and the Federal Reserve as it participates in the market in regulating over-all credit and monetary conditions. In this light the present flow of information relating to the market is inadequate, a point that was agreed to by many of our study consultants.

As a result, our study group undertook a thorough analysis of the information that ought to be regularly available. We were encouraged in this by the excellent cooperation received from dealers and other market participants in supplying information for our review of market experience in 1957-58. We believe, therefore, that a reporting program can be worked out by the Federal Reserve and Treasury staffs to put an adequate information program into active operation in the not too distant future.

A second area of supplementary study is the credit financing of Government securities transactions. Last year's market experience has clearly indicated that at times an undue amount of speculation financed on

thinly margined credit can be detrimental to the market and that competition of lenders in extending credit to prospective holders may result in deterioration in appropriate equity margin standards. This experience raises the question of the need for some action to assure that sound credit standards will be consistently maintained by lenders in credit extension backed by Government securities and also to keep the total volume of such credit from expanding unduly at times.

Our study has indicated 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 its jurisdiction indicating minimum margins to be adhered to as standard; second, a requirement that each investor participating in the exchange of maturing Treasury issues for new issues state his equity position in those securities in compliance with Treasury standards (plus the continuing requirement by the Treasury of appropriate deposits on subscription to its new issues offered for cash); and third, the introduction of 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, of course, require Congressional action, since present law specifically exempts Government securities from this type of credit regulation. It must be emphasized here that these are merely possible approaches; they have not yet been fully appraised by either Treasury or Federal Reserve officials and other alternatives may be developed in the light of additional study.

A third area for special study is the use of the repurchase arrangement in credit financ-

ing of Government securities. This is not a new method of credit financing, but it is a method that is easy to apply to Government securities transactions and, because of its flexibility and adaptability, has become much more popular in recent years. Government securities market activity last year brought to light certain uses of repurchases that were not in the public interest when such financing was arranged without the borrower putting up adequate margin. The study discusses various alternatives which might be applied to prevent future abuse.

A fourth area of special study of the existing mechanism of the Government securities market relates to its present lack of formal organization. In our consultations, a number of market participants and observers suggested that the market might be improved and strengthened through cooperative action of primary dealers themselves, working through a dealers' association. Various specific functions that an association might perform to improve the market's functioning were indicated, including: (a) the adoption of standard rules to assure fair treatment of buyers and sellers in both large and small transactions; (b) the development of standard practices to help maintain dealer solvency; and (c) greater liaison between the Treasury and the dealers in Treasury financing operations. It was also suggested that a dealers' association could be useful in identifying primary dealers in Government securities both to improve dealer service and to apply any market rules which may be adjudged in the public interest. Since the possible advantages of such an organization as well as its possible disadvantages obviously require careful and detailed examination, the task of this supplementary study has been to make this much-needed evaluation,

A question that naturally arises at this point is whether in the light of the present study there will be any occasion later for special legislative requests pertaining to the operation of the Government securities market. This question cannot be answered yet. Before it is, we must try to determine what can be accomplished in improving market processes and mechanisms without legislative action and then ask whether these improvements are enough. The fact of the study itself, together with educational efforts undertaken by the Treasury and Federal Reserve System, has already set in process a fuller appreciation on the part of market participants of the undesirable effects of certain market practices. If we find that desired improvement of market mechanisms and institutions requires new statutory authority, we will propose appropriate legislation to the Congress.

Markets are dynamic economic institutions. They require successive adaptation

to changing needs. From the standpoint of the public interest, study of these adaptations is never ending. Study efforts may be intensified from time to time, as in the case of the present Treasury-Federal Reserve study, but they are basically continuous. Continuing observation and study of the Government securities market is a responsibility which both the Treasury and the Federal Reserve recognize.

In conclusion, we repeat that improvement in the processes and mechanisms of the Government securities market will in no way solve our problems of fiscal imbalance. Nor can they correct our problems of too much short-term public debt; of our need for continuous flexibility in our approach to monetary policies; of attaining a volume of savings which will match our expanding investment needs; or of the cyclical instability of our financial markets. These are basic problems. We must all work toward their ultimate solution in the public interest.

THE GOVERNMENT SECURITIES MARKET AND ECONOMIC GROWTH

(Statement of William McChesney Martin, Jr., Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, July 27, 1959.)

In this opening statement, I would like to comment first on one aspect of the problem you are considering—the importance of freely competitive markets to maximum economic growth. In so doing, I do not wish to understress the importance of any other conditions necessary to healthy economic growth. Indeed, if there is one essential for sustained growth that stands out above all others, it is the maintenance of a volume of real saving and investment sufficient to support continuous renewal, adjustment, and expansion of our total capital resources. As you know, the maintenance of adequate saving and investment depends upon

broadly based and justified confidence in a reasonably stable dollar.

ROLE OF FREE MARKETS

No one here would deny that free markets are essential to the vital and vigorous performance of our economy. No one would urge that we encourage monopolistic practices or administered pricing; and few would advocate Government interference with the market process as a general principle. On the contrary, nearly everyone would agree that such developments are injurious to the best use of our resources, that they distort

the equitable distribution of final product, and that they interfere with economic progress.

Differences of viewpoint on free markets arise only when the complexities of specific market situations make it difficult to discern whether markets are, in fact, functioning as efficiently as we might reasonably expect. Well-informed and well-intentioned observers will disagree as to whether an appropriate degree of competition exists in particular markets and, if not, as to what corrective steps, if any, it is appropriate for Government to take.

If the policies we follow in the financial field are to be fully effective in promoting growth and stability, they must be able to permeate the economy through the mechanism of efficient markets. This generalization applies to all markets, for all types of goods and services. Naturally, the Treasury and the Federal Reserve are most immediately concerned with financial markets, both because we have some direct responsibility for these markets, and because they represent the main channel through which the Government financial policies to foster growth and stability must pass.

THE MARKET FOR GOVERNMENT SECURITIES

We are especially concerned with the market for U. S. Government securities. With a Federal debt of \$285 billion, Government securities are a common and important asset in the portfolios of businesses, financial institutions, and individuals. An efficient market for Government securities is obviously needed for the functioning of our financial mechanism. We are fortunate in this country to have such a market. From the standpoint of the Federal Reserve, it is hard to conceive of the effective regulation

of the reserve position of the banking system without some such facility through which to conduct open market operations of large magnitude.

The initial results of our study of this market with the Treasury are encouraging in many ways. As was pointed out in the summary of the study made available to you on Friday, huge transactions are carried out every day in an orderly fashion and at very small cost to ultimate investors. One cannot fail to be impressed by the fact that there are dealers who stand ready, at their own initiative and at their own risk, to buy or sell large blocks of securities. Frequently, single transactions run into millions of dollars. Despite the absence of any assurance that a given purchase will be followed by an offsetting sale, dealers quote bid and ask prices that typically have a spread of less than one-fourth of 1 per cent on the price of long-term bonds and range down to a few one-hundredths of 1 per cent on Treasury bill yields.

If you have had an opportunity to examine the preliminary study manuscripts, you are aware that they do suggest that some improvements in the Government securities market may be in order. We would hope that these improvements can be made within the framework of existing authority and through voluntary cooperation with various market participants. There is, however, a possibility that further authority might be necessary or desirable. We expect to have a clearer idea about how to accomplish desirable improvements after we have had an opportunity to consider carefully the findings of the staff study just completed last week.

There is one possible change in the organization of the Government securities market that would not, as I view it, lead to improve-

ment. That change would be the enforced conversion of the present over-the-counter dealer market into an organized exchange market. The reasons why this change would not be constructive or even practicable are set forth in the joint statement on the study's findings. On the other hand, any efforts on the part of existing organized exchanges to extend or strengthen the facilities now made available to buyers and sellers of Government securities should certainly be encouraged. There is no reason why better exchange facilities would not prove to be a helpful supplement to those provided by the present dealer market.

Another change affecting the Government securities market that has been suggested relates to Federal Reserve participation in it, and pertains in particular to the extension to longer term maturities of Federal Reserve open market operations. Some discussion of this suggested change is appropriate here, for it is not a matter encompassed by the Treasury-Federal Reserve study.

SYSTEM OPERATIONS IN SHORT-TERM GOVERNMENT SECURITIES

Since the Treasury-Federal Reserve accord in 1951, the System's day-to-day trading in Government securities has largely been in short-term issues. In 1953, after extensive re-examination of System operations in the open market, the Federal Open Market Committee formally resolved to make this a continuing practice.

I think that nearly everyone who has studied these matters would agree that the bulk of Federal Reserve operations must be conducted in short-term securities; that necessarily means largely in Treasury bills. The short-term sector of the market is where

the greater part of the volume of all trading occurs. Dealer positions are characteristically and understandably concentrated in these shorter issues. Differences of view on whether System trading should extend outside the short-term area hinge upon whether or not some small part of our regular buying and selling should be done in the longer term area.

To appraise this difference in viewpoint, we need first to consider the basic economics of System open market operations. Federal Reserve operations in Government securities influence prices and yields of outstanding securities in three fundamentally different ways:

- (1) They change the volume of reserves otherwise available to member banks for making loans and investments or paying off debts;
- (2) They affect the volume of securities available for trading and investment; and
- (3) They influence the expectations of professional traders and investors regarding market trends.

Of these effects, the first is by far the most important. Under our fractional reserve banking system, additions to or subtractions from commercial bank reserves have a multiple expansive or contractive effect on bank lending and investing power. Other things being equal, this means that any given change in System holdings of securities will tend to be accompanied by a change in commercial bank portfolios of loans and investments several times as large. Unlike many other institutional investors, commercial banks maintain Government security portfolios with a wide maturity distribution although the largest component will be short-term securities. Hence, the major effect on market prices and interest rates will

result from the actions subsequently taken by commercial banks to expand or contract their asset portfolios, and the impact will be distributed throughout the market.

With regard to the effect on the availability of securities in the market, substantial System purchases or sales of short-term securities exert a minimum influence on the market supply. For example, most of the \$35 billion of bills outstanding is in the hands of potential traders. On the other hand, much the largest part of the marketable longer term issues is in the hands of permanent investors. Current trading in them is confined to a very small fraction of the outstanding volume. For this reason, the long-term area of the market shows greater temporary reaction than the short-term area to large purchase or sale orders.

Any attempt to use System operations to influence the maturity pattern of interest rates to help debt management would not, in my opinion, produce lasting benefits—I emphasize the word “lasting”—and would produce real difficulties. If an attempt were made to lower long-term interest rates by System purchases of bonds and to offset the effect on reserves by accompanying sales of short-term issues, market holdings of participants would shift by a corresponding amount from long-term securities to short ones. This process could continue until the System’s portfolio consisted largely of long-term securities. Accordingly, the System would have put itself into a frozen portfolio position.

The effect of thus endeavoring to lower long-term yields, without affecting bank reserves, would be to increase the over-all liquidity of the economy. Not only would the supply of short-term issues in the market be increased, but also all Government bonds outstanding would be made more

liquid because they could be more readily converted into cash. The problem of excess liquidity in the economy, already a serious one, would be intensified. The Treasury now, even with the present interest rate ceiling, would have no difficulty in reaching the same result. It has merely to issue some \$20 billion of short-term securities and use the proceeds to retire outstanding long-term debt. Fortunately, it is not contemplating any such action.

The effect of System open market operations on the expectations of market professionals can be of critical importance depending upon the market area in which the operations are conducted. In the longer term area of the market, dealers, traders, and portfolio managers are particularly sensitive to unusual changes in supply and demand. One important reason is that long-term securities are subject to wider price fluctuation relative to given changes in interest rates than are short-term issues. Therefore, trading or portfolio positions in them incur a greater price risk.

These traders and investors in long-term securities are aware that the System holds the economy’s largest single portfolio of Government securities. They also know that the System is the only investor of virtually unlimited means. Consequently, if the System regularly engaged in open market operations in longer term securities with uncertain price effects, the professionals would either withdraw from active trading or endeavor to operate on the same side of the market as they believed, rightly or wrongly, that the System was operating.

If the professionals in the market did the former, the Federal Reserve would become in fact the price and yield administrator of the long-term Government securities market. If they did the latter, the total effect might

be to encourage artificially bullish or bearish expectations as to prices and yields on long-term securities. This could lead to unsustainable price and yield levels which would not reflect basic supply and demand forces. The dangerous potentialities of such a development are illustrated by the speculative build-up and liquidation of mid-1958, described in detail in the Treasury-Federal Reserve study.

Either of these effects would permeate, and tend to be disturbing to, the whole capital market. Accordingly, instead of working as a stabilizing force for the economy, such open market operations in long-term securities could have the opposite result. In other words, if the Federal Reserve were to intrude in the adjustment of supply and demand in order directly to influence prices and yields on long-term securities or in a way that resulted in unsustainable prices and yields, it would impair the functioning of a vitally important market process.

Some public discussion of the Federal Reserve's present practice of conducting open market operations in short-term securities implies, it seems to me, that the System has assumed an intractable and doctrinaire position on this matter. This is not a correct interpretation of what we have done. We adopted this practice after a careful study of experience and of the effects of our operations upon the market and the banking system. In this review, we were naturally mindful of the specific tasks of the System, namely, to regulate the growth of the money supply in accordance with the economy's needs and to help maintain a stable value for the dollar.

The practice or technique was adopted, not as an iron rule, but as a general procedure for the conduct of current operations.

It is subject to change at any time and is formally reconsidered once each year by the Federal Open Market Committee in the light of recent experience. Exceptions can be, and have been, authorized by the Committee in situations where either Treasury financing needs, conditions in the money market, or the requirements of monetary policy call for such variations. The System at times has been a subscriber to longer term issues in Treasury exchange offerings when appropriate, and at other times has purchased such securities in the market.

In other words, we endeavor to apply this practice flexibly as we do all of our practices in the administration of monetary policy. As I have stated to this Committee on other occasions, flexibility is an essential ingredient of our entire reserve banking operation. When reserve banking loses flexibility, it will no longer be able to do the job that is required of the central bank in the market economies of the free world.

MEASUREMENT OF ECONOMIC GROWTH

Before concluding my statement, I want to mention one entirely different matter that has special relevance to the broad scope of this Committee's interest. That is the measurement of growth. As you know, one of the frequently used indicators of growth in the industrial sector has been the Board's index of industrial production. One of the great lessons we learn from the compilation of this index, which we try to do as carefully and competently as we know how, is that the mere matter of measuring growth is a very tricky thing.

As the structure of the economy keeps changing, the job of combining measures of its many parts into a single index cannot

be done, despite our best efforts, without having to make major revisions every few years. We again have under way a basic revision, the final results of which will be available soon. The nub of what this revision shows is that the growth rate in the sectors covered by the Board's index has been materially greater over the past decade than has appeared from the unrevised index.

The statistical data that we have to use from month to month can only be cross-checked in a comprehensive way when we have available the results of a full census. Congress authorized the Department of Commerce to conduct one of these in 1947, and another as of 1954. The immense task of digesting and reappraising the results of these censuses, and then refitting all of the monthly data into these basic benchmarks, has now progressed far enough to indicate that the revised index, with the 1947-49 period as the starting point at 100, will show a level of around 165 at mid-1959. That is 10 points higher than the figure shown by our unrevised index for June.

Some of this difference results because we are now able to include, with appropriate proportional weight alongside other items, more of the fuel and energy production that has been going on all the time without being represented in the index. More than half of the difference, however, results from improvements in measurement of presently included industries. The monthly movements of the revised and present indexes are quite similar, so that the main effect of the revision in the total is to tilt upward

this measure of industrial growth over the past decade. For example, it now appears that industrial output of consumer goods on a revised basis has risen at an average annual rate of 3.8 per cent as compared with 3.2 per cent shown by the unrevised index for the consumer goods sector. Population growth has been at a rate of 1.7 per cent per year.

Industrial production, to be sure, is only one of the ways that growth might be measured, but it is a measure in real terms and so is free of price influences. Crude measurements of growth in aggregate dollar terms can be seriously misleading, not only with respect to what the economy has done but also in marking out guidelines as to how we may reasonably expect the economy to grow in the years ahead. It is no achievement to have a rise of 10 per cent in the general price level such as occurred in the months after the Korean outbreak—even though that does puff up the figures on gross national product quite handsomely. The increase of 15 per cent in the current dollar value of gross national product from 1955 to 1957 was only half of what it seemed to be because it was inflated by a general price increase of 7 per cent.

Throughout its entire history, this economy has grown by staggering magnitudes. It is because I, for one, want to do everything I can to keep it growing that I urge the maintenance of free markets and reasonably stable prices as primary objectives of public policy.