FEDERAL RESERVE BANK
OF NEW YORK

MONTHLY REVIEW

NOVEMBER 1966

Contents

Volume 48 No. 11

Monetary Policy in an Overheated Economy*

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I am very glad indeed to have this opportunity to address a distinguished gathering of this kind in Dallas. For one thing, it is the first occasion I have had to come here since my association with the Federal Reserve, although I have had the pleasure of working closely with my highly respected colleague, Bob Irons, for more than ten years. Incidentally, as you probably know, Bob is the dean among Reserve Bank presidents. I suppose that a New Yorker is sized up pretty carefully out here in this great and growing part of the country. But actually I am sure that these East-West differences are very much overdone—that all of us are seeking pretty much the same goals. I assume we all wish to give private enterprise and the market economy maximum scope, while at the same time seeing that the public interest is adequately protected through the activities of Government—all for the purpose of achieving maximum sustainable economic growth, with high employment of resources and substantial price stability, together with near-equilibrium in our international payments.

Today I would like to share with you some of my thoughts on what monetary policy has been trying to do in 1966 to further these goals and to what extent it has run into difficulties. I would be the first to admit that the record of monetary policy this year has been largely one of careful improvisation rather than of following some clearly mapped path. To some extent, of course, monetary policy is always a matter of adapting policy flexibly to changing circumstances; but this year the changes in circumstances were more abrupt and the uncertainties more pronounced than usual. Some of the steps we have taken I would not regard as particularly useful measures over a longer period, although they did meet a pressing temporary need. To my mind, the overall record of Federal Reserve policy this year is one of substantial and meaningful achievement, although naturally the record is not perfect.

Of course, the major factor dictating the general shape of our policy has been the clear emergence of inflationary pressures, as a rapidly expanding defense effort has been superimposed on a growing civilian economy that was already—by late 1965—employing virtually all usable resources of labor and plant capacity.

If I lay greater emphasis today on the goal of price stability than that of economic growth, it is not, I assure you, because I consider price stability more important. Rather it rests on my view that—notwithstanding the improved performance of some price indicators in recent months—now seems to be a time when the danger of inflation is clear and present, whereas the danger of recession is problematical and relatively remote. Even after due allowance for some recent cooling in the hectic pace of several sectors of the economy, I believe that overall production and consumption are still heading upward from their current all-time high levels, sparked mainly by the rapid expansion of defense spending and of business outlays on plant and equipment and supported by rising consumer income and expenditures. The strength of aggregate demand has for some time permitted—indeed encouraged—producers of goods and services to raise their prices on a broad front; and, with employment of resources close to a practical maximum, shortages of skilled labor are now tending to exert strong pressure on wage rates. Furthermore, the increase in the consumer price index, which proceeded at less than 1½ per cent per annum in the years 1961-64, has accelerated to a rate of 3 to 4 per cent. Recent price increases fortunately have been much less rapid than they were during the Korean war.

* An address before the joint meeting of the boards of directors of the Federal Reserve Bank of Dallas and its Houston, El Paso, and San Antonio branches in Dallas, Texas, on Wednesday, November 9, 1966.

Nevertheless, these price increases have brought renewed and widespread interest in cost-of-living escalator clauses —which are almost an invitation to futher inflation—and have given rise to demands for wage increases far in excess of prospective overall national gains in productivity, thus threatening the so-called guideposts with extinction. If these demands are granted—and there seems to be not enough determination to resist them—there will be inevitable upward pressure on prices, although profits may have to bear some of the initial brunt of this cost push.

An additional reason for my emphasis on price stability is that, whereas economic growth seems to have countless strong advocates, both in and out of Government, the fight against inflation has a much less numerous and devoted following. In fact, I am disturbed by the degree of complacence on inflation one finds in this country. All too many citizens, including some leading businessmen, seem to assume that "a little inflation" is a reasonable price to pay for continuing economic growth. When "a little" meant a rather steady upward drift of about 1½ per cent per annum, there was something to be said for this view. But at 3 to 4 per cent per annum a different view must be taken. There is no time tonight to go into all the reasons why inflation *is* an insidious danger, involving all sorts of threats of inequity besides carrying within itself the seeds of business excesses and subsequent business recession. But if the domestic consequences of inflation are not sufficiently disturbing, I need only mention the additional grave danger that inflation poses for the international standing of the dollar. It is not too much to say that our basic hope for international payments equilibrium rests on a reversal of the recent deterioration in our trade balance—and in the long run such a reversal in turn depends very largely on the avoidance of inflation of American costs and prices. The current bulge in imports may be cured by a slowdown in the rate of business expansion; but our competitive position, which has been benefiting from our relatively good performance in the past few years, would be permanently damaged by a higher cost-price structure. That leads me to stress the most pernicious aspect of inflation, i.e., the fact that it is virtually irreversible, in the light of the political and social realities of our economy. Those who are unwilling to run some risk of a mild and temporary slowdown in the expansion of the domestic economy in order to win the battle against inflation are overlooking this basic difference in the degree of *permanence* of the damage involved.

Monetary policy has long been recognized as one of the most useful general tools available to the national Government to make possible the achievement of our country's economic goals. It exercises a broad and pervasive influence, with minimum interference with individual economic decisions; it avoids a system of direct Government control of individual transactions, a system most of us would not want to see. However, as has been said so often by Federal Reserve officials, it would be a serious mistake to assume that appropriate monetary policy alone is sufficient to assure a well-balanced economy. If monetary policy is relied on too heavily and is pressed too far, there is always a real danger that it may lead to a financial crisis or a serious reversal of the economy, or both. So in recent years there has been much talk of the policy "mix", with a very logical development of economic thinking, and more recently of political thinking, along the lines of giving fiscal policy an important role in the search for sound economic growth and stability.

When we speak of deliberate use of fiscal policy we have in mind control over Government expenditures and over tax rates. In contrast with our readiness to accept scientific and industrial innovation, the United States has been rather late, among nations, to accept the deliberate use of fiscal policy to influence the state of the economy. But most foreign industrialized countries, though well ahead of us in accepting this theory, have not been especially successful in putting it into practice. I believe our actual record in using fiscal policy as a stabilization device is as good as that of most other countries.

The outstanding example of successful use of fiscal policy in this country was undoubtedly the combination of stimulative measures taken in 1962-64, including the 7 per cent investment credit and liberalized depreciation rules and culminating in the general reduction in personal and corporate income tax rates early in 1964. There is no doubt in my mind that the country's remarkable economic record of those years owes much to these measures. Yet many of those who favored the tax cuts did so less because of belief in fiscal policy than because they simply thought taxes are always too high and should always be cut if possible. Still others resisted the tax cut because it did violence to a strong belief in a balanced budget *per se*. My own opinion is that, from the point of view of economic stabilization, the appropriateness of a particular level of Government expenditures and a particular level of tax rates must be judged primarily in the light of their implications with respect to aggregate demand as compared with available real resources. When, around mid- or late 1965, our economy passed from a stage of sound expansion to a stage of overheating, there should have been a general willingness to consider timely use of fiscal policy in the reverse direction, i.e., as a means of deliberately slowing the pace of the economic expansion.

In view of the difficulty of effecting a major cut in Federal expenditures in a timely manner—more particularly in the light of the rising Vietnam outlays—meaningful fiscal policy meant a general tax rise. A good many leading economists—and, I might add, many Federal Reserve officials—have been urging such a course since early this year. I was among the advocates of a tax increase then, and I feel the same way today. Of course a number of measures raising Federal tax receipts were put into effect this year, but these did not include a general tax increase. Unfortunately, besides the natural political reluctance to increase taxes, the proposal met with only a very lukewarm attitude on the part of business leaders in general, many of whom felt that higher taxes would merely be regarded as an "invitation to raise Federal expenditures". This never struck me as a logical position. It seemed to me to ignore the considerable efforts of the Administration to hold down outlays in many categories of nonmilitary spending—an effort that I trust will continue—and it represented a degree of defeatism on the whole application of fiscal policy which I was, and am, unwilling to accept. I have dwelt at some length on the failure of fiscal policy to do more to contain inflationary pressures over the past year, primarily because this provides a necessary background for my comments on the monetary situation.

Let me review very briefly the means by which the Federal Reserve traditionally influences the financial and economic position of the country. Essentially our influence is exercised through our ability to control, within limits, the rate of expansion of bank reserves. Since reserves are closely related to deposits, and since bank credit is the counterpart of bank deposits, this means an ability to influence the course of both bank credit and bank deposits. And since demand deposits are the major component of the money supply, we can include the latter among the economic variables subject to strong Federal Reserve influence. In connection with bank credit, I would like to point out that this is only one form of credit, with total credit flows of all kinds, originating largely in savings, greatly exceeding the flow of bank credit in any given period. Nevertheless, bank credit is a highly important component and often constitutes a marginal source of credit having great influence on the terms on which total credit demand and supply can be matched off. The Federal Reserve System is constantly trying to evaluate the expansion of total credit and bank credit, and various measures of liquidity, always having in mind the whole situation of the economy, in order to decide how much or how little restraint to place on the banks' reserve position.

We in the Federal Reserve are sometimes accused of a predilection for high interest rates. This I would deny categorically. Speaking for mystelf, I have a predilection for whatever level of rates is consistent with a balancing of credit demand and supply at a level that will aid in the achievement of our national economic goals. I would add an important proviso, i.e., that too rapid or extreme interest rate movements, or very exaggerated rate levels in either direction, can cause new problems of their own. A few years ago we were greatly troubled, for example, by the prospect of excessively low interest rates which would have had an adverse influence on our balance of payments. More recently, it has been fear of excessively rapid and sharp upward movements that has given us pause and has indeed been a principal reason for our seeking a helping hand from fiscal policy.

While rates can be influenced by the System, they are to a much greater degree the resultant of market forces. Frankly, most of us in the System were surprised by the amount and speed of the climb in interest rates in 1966, and especially in the summer of 1966—which is another way of saying that the force of credit demands was even stronger than we had expected. When the ceiling on time deposits under Regulation Q was set at 5½ per cent by the Board of Governors in December 1965, most of us thought merely that ample leeway was being provided to permit the free play of competitive forces, with little likelihood that actual rates would soon reach the ceiling. Yet the force of credit demands was so great that the ceiling was reached (on long-term certificates of deposit) within four months. For one thing, economic activity moved up much more rapidly than previously, with the Vietnam acceleration playing a crucial role and with business outlays on plant and equipment also contributing a major stimulus. With the speedup in the expansion of the economy came heavy credit demands, including those needed to support a larger investment in inventories and receivables, besides a growing investment in plant and equipment. While corporate cash flow was still rising, it was not doing so rapidly enough to meet all these needs. In fact, cash flow, which had slightly exceeded corporate needs in 1964, has recently been falling far behind these needs. To these "real" credit requirements was added considerable anticipatory borrowing, founded in the fear that interest rates would rise still further or that credit might actually become unavailable. By midsummer, we were beginning to feel that the limits of monetary restraint were not far distant. Interest rates had already reached such extreme levels (by historical standards) that they were contributing to a real fear of financial crisis; and this factor, in conjunction with the prospect of heavy Treasury financing, was acting as a stimulant to more anticipatory borrowing.

All of this was happening in spite of the fact that actual bank credit was expanding at a very substantial pace—something like 8 per cent per annum in the first eight months of the year, only moderately below the very rapid 10 per cent gain in 1965. In no sense was the economy being starved for credit by a tight-money policy. On the contrary, there was every reason for Federal Reserve policy to remain firm as we tried to check a credit expansion which was clearly too rapid in relation to the real growth capability of the economy on a noninflationary basis. Some have contended that the System should have pressed even harder through monetary policy in the first half of 1966, in order to prevent as sharp a bank credit expansion as actually occurred. While this sounds easy, my reply would be that we were indeed trying to step up our pressure on the banks' reserve position—for example, net borrowed reserves of the banking system increased in the first half of 1966 from around $50 million to $350 million—but the strength of credit demands was so great that, despite this pressure, bank credit continued to rise very rapidly. Moreover, if we had tightened reserve positions much more than we did, we would certainly have speeded the escalation of interest rates that was already giving us and the financial markets much concern. Although we had made it quite clear to the banks that the Federal Reserve would not provide the reserves to permit as large an expansion of overall bank credit as occurred in 1965, the banks apparently could not overcome their competitive urge to meet an excessive proportion of the credit demands of their good customers, including a fair amount of anticipatory borrowing. In fact, it apparently took considerable reeducation of commercial bank lending officers before banks could get their loan expansion in line with the resources that were available to them.

The System always must be, and is, conscious of its responsibility to help avoid disorderly market conditions and any serious threats to the general soundness of financial institutions. During the summer, many of us were surprised by the extent of loose talk in the market and in the press to the effect that the System was determined to press its restrictive policy "ruthlessly" and might even welcome crisis conditions in the markets. Actually, we were doing our best to walk a knife-edge; we were seeking to restrain excessive credit expansion while avoiding such heavy pressure or the development of such sharp or extreme market movements as to foster an atmosphere of panic. We were conscious of the fact that the banks, in their scramble to obtain funds to meet pressing loan demands, were tending to liquidate securities at a pace which the market could not sustain. While total bank credit was growing at an annual rate of about 8 per cent during the first eight months of the year, banks were on balance staying barely even on their investments while total loans were rising at an annual rate of over 12 per cent and business loans at about 20 per cent. It was largely to make clear our concern over this general situation that the System issued its statement of September 1, which included an assurance that we wished to see continuing growth of credit, but at an appropriate pace; that the Reserve Banks' "discount windows" were available, as always, to meet any seasonal or unusual pressures, including those caused by heavy deposit losses; and that we wished to encourage the banks to slow down the excessive growth rate of their business lending as a means both of reducing the rate of total bank credit expansion and of relieving very heavy pressures in the markets for municipal securities and other credit instruments.

We had shared the market's feeling of worry over a possible severe loss of deposits by savings institutions. This worry had become acute around midyear as the July 1 interest payment period approached. The actual experience was much better than had been feared, partly because of defensive rate increases put in effect by savings institutions at about the time of the interest date; and the loss of deposits at the October 1 interest date was less than it was at midyear. Since then, both savings banks and savings and loan associations have been showing deposit gains. Nevertheless, this continues to be an area of concern and to some degree a factor limiting the scope for monetary restraint. Of course the essence of the problem is twofold. Many of these institutions are locked into long-term assets, principally mortgages, to a very high degree and hold only a small amount of liquid assets. In contrast, the bulk of their liabilities are short-term and, in fact, are regarded by the holders as payable on demand (this view being encouraged by the institutions themselves). Thus the savings institutions were in a much less flexible position than the commercial banks when it came to raising deposit rates to meet the competition of other forms of savings media. They lack the commercial banks' flexibility both as to variety of investment outlets and as to possibilities for varying deposit rates among different types of depositors.

There can be all kinds of recriminations as to how so many of these institutions were allowed to become as vulnerable to general interest rate movements as they did; but the System has had to deal with the situation as it exists. Of course, there are other Government agencies that have a more direct responsibility for supervising and assisting the savings institutions. I very much hope that ways can be found in the coming years to strengthen the liquidity of certain groups among the savings institutions, and to establish a better balance of their assets and liabilities with respect to maturity. For the time being, the greatly improved atmosphere in the capital markets and the substantial decline in interest rates from the summer peaks have relieved the pressure on the savings institutions and removed fears of impending crisis. Taking a longer view, I think it is worth emphasizing that the Federal Reserve System has ample power, both through the discount window and even more importantly through open market operations, to make available whatever massive addition to bank reserves may be needed at any time to avoid a financial crisis, even if this should mean a temporarily greater growth of bank credit than we would choose to encourage on economic grounds.

Let me digress for a moment on Regulation Q. To begin with, I have real reservations about the desirability of fixing maximum interest rates by regulation (let alone by legislation). Like Chairman Martin and others in the System, and like President Kennedy's Committee on Financial Institutions in 1963, I have expressed the hope in the past that we might ultimately dispense with Regulation Q entirely, except as a standby authority for use in emergencies. However, I readily admit that a favorable opportunity to cut loose from the Regulation has not presented itself in the last year or so. On the other hand, I hope we shall not fall into the habit of assuming that the setting of interest ceilings is a normal and desirable practice for permanent application. In the circumstances of the last year, when bank credit was growing much too fast, and when the savings institutions were facing especially difficult problems, there was something to be said for using Regulation Q as a deliberate means of putting added pressure on the banks to reduce their rate of credit expansion, since the ready availability of certificates of deposits, at rising rates, had been a factor that had lessened the banks' sensitivity to reserve pressures exerted by the System. But there are distinct limitations to such deliberate use of Regulation Q as an instrument of general monetary policy. For one thing, it involves the System and other regulatory agencies in an almost hopeless task of deciding the "equities" among different types of institutions—commercial banks, mutual savings banks, savings and loan associations, etc.—when the "equities" might better be left to the decision of market forces. For example, the level of the interest ceilings on thrift accounts recently established for mutual savings banks and savings and loan associations raises questions with respect to the present 4 per cent ceiling on member banks' savings deposits. Furthermore, all our solicitude for certain classes of institutions cannot prevent market forces from diverting a large share of total credit flows to direct investment by lenders in market instruments, to the detriment of *all* financial intermediaries. This is exactly what has been happening in 1966, for example. While up-to-date statistics are not available, it is noteworthy that such direct nonintermediated credit flows were, as a percentage of total credit flows, more than twice as large in the first half of 1966 as in 1965. Beyond financing an increased share of private demands, the public also picked up an exceptionally large share of the heavy flow of new Federal Government and agency issues. If a given type of borrower wants credit badly enough and is willing to pay for it, he can always resort to borrowing in the open market. So the concept of using Regulation Q to discourage commercial bank intermediation and thereby to help the savings institutions is a path with very obvious limitations, both theoretical and practical.

The same general line of comment applies to efforts to use monetary policy as a means of allocating more credit to what may be considered socially desirable uses. To my mind, the emphasis on business borrowing in our September 1 letter relating to the discount window was fully warranted in the light of the need to restrain an excessive growth of bank credit. In the light of the extremely high rate of business loan expansion earlier in the year, it was virtually inevitable that an effective slowing of expansion in total bank credit would depend on a serious effort by banks to limit the pace of growth of this loan sector. Moreover, some banks had been so eager to raise funds to meet burgeoning loan demands that they had been liquidating certain types of investments at a pace that threatened the stability, and perhaps even the viable functioning, of the markets for certain types of securities. Under such conditions, a slowing of the growth of business lending seemed logical and essential, as many of the bankers themselves had explicitly recognized for some time. But I can see grave dangers in trying to go too far either with this specific emphasis on business lending or indeed with any emphasis on credit allocation in the application of monetary policy. On the first count, I can see serious drawbacks to placing too much of the blame for current inflationary tendencies on excessive business spending and, indirectly, on excessive lending to business. Admittedly, accelerated business expenditures on plant and equipment, as well as on inventories, have contributed importantly to the excessive level of aggregate demand. But it seems to me that a too stimulative Federal budget is also a major contributory cause; and in any case, it does not follow that the most desirable cure is a sharp and deliberate reduction in private plant and equipment outlays, whether through monetary or fiscal measures. After all, plant and equipment expenditures should make an important long-run contribution to increasing productivity and hence to offsetting upward wage pressures. It might prove decidedly better, from the standpoint of future price stability, to emphasize a slower growth in consumption as a means of reducing aggregate demand. As for the widespread solicitude over the decline in new housing construction for the past year, some of this is doubtless justified by the severity of the drop; but some considerable decline from earlier peak levels was probably a very useful means, in a situation of growing inflationary pressures, for releasing resources to other sectors, including defense, in which there has been a rapid run-up in spending.

More broadly, I believe monetary policy should concern itself with specific credit allocation only in exceptional circumstances, as when market pressures and critical institutional developments began to reach a danger point last summer. In my opinion, the Federal Reserve System's position of independence within Government would be seriously jeopardized if we were to make it a regular practice to try to influence the direction of credit flows.

It would hardly seem reasonable to discuss monetary policy with you without mentioning the discount rate and the administration of the discount window. On a purely theoretical basis, the discount rate should be higher than it is. On the other hand, there have been a variety of cogent reasons against increasing it in the circumstances prevailing in recent months. I am glad to say that the potentially excessive use of the discount window has not become a problem, partly because of "policing" by the Reserve Banks and partly because of the traditional reluctance of many member banks to get into debt at the window. This reluctance may have been enhanced by some degree of uncertainty now prevalent in the market as to the criteria of window administration, about which I shall say more in a minute. I do want to emphasize that changes in the discount rate have proven to be useful in years past, and that I see no reason to abandon this tool of monetary policy.

With respect to discount window administration, I believe the important point to emphasize is that the Reserve Banks are still running their discount windows under the terms of, and in accordance with the spirit of, Regulation A, as has been true for a good many years. The System's September 1 statement signaled a modification, in the form of a decision to use the incident of borrowing from the Reserve Banks as an occasion, along with other formal or informal contacts with member banks, to emphasize the desirability of slowing the rate of growth of business lending. This specific step to meet a specific set of circumstances—presumably temporary—does not, in my judgment, justify all the loose comment one hears about the "revolution" that is alleged to have occurred in the procedure for borrowing at the Reserve Banks.

In closing, I should perhaps say a few words on future prospects. As I said at the outset, this has been a year of great difficulty for the Federal Reserve, and I fervently hope that the problems of the coming year will be easier. There is no doubt in my mind that, after several years of relatively easy credit conditions, Federal Reserve restraint has really been "biting" in 1966. There is inevitably some lag in the effects of a tighter credit policy, so that we may still see further effects of our past actions over the coming months. In my view, the System has risen to meet its responsibilities to combat inflation—as it must if sound economic growth is to be achieved. And it has done so without losing sight of its responsibilities for the proper functioning of the financial markets.

At long last, there seems to be rather solid evidence that bank credit expansion has slowed materially in the past several months, which is of course much to be desired. In some degree, this slower credit growth may merely reflect a high level of borrowing earlier in the summer, both anticipatory and related to the speedups in tax payments. Certainly the continuing strength of the economy would suggest that credit needs will remain heavy for some time. I would hope, however, that the rate of bank credit growth would remain appreciably below the rate of the first half of the year. It is well to remember, too, that to the extent that the commercial banks are playing a smaller intermediary role because of the loss of certificates of deposit, a given shrinkage in the growth of bank credit does not signify as tight a general credit situation as would exist if this so-called disintermediation were not taking place.

I am sure all of us are pleased with the much greater stability that has characterized our financial markets in the last couple of months, with all that this means for the health of our financial institutions. Whether we can count on the continuance of this improved market atmosphere depends on many factors that are still uncertain, including future developments in Vietnam and the degree to which monetary policy will be working in an environment marked by appropriate policies in other areas of Government, especially the tax area. I have no doubt that the proper mix of fiscal and monetary policies can bring about a better balance in the economy and can assure a continuance of the more settled conditions that have recently prevailed in the financial markets. I am hopeful that all of us have learned something from the trials through which we have passed in the last twelve months. For it is only through enlightened cooperation among all elements of the economy that we can hope to approach those shining goals to which I am sure we all subscribe.

The Business Situation

Heavily influenced by rising defense expenditures, the business expansion accelerated during the third quarter, but the rate of growth remained below the hectic pace that had characterized the opening months of 1966. A few measures of business activity—generally those that had undergone especially sharp rises in earlier months—even paused toward the end of the quarter, while construction expenditures continued to decline. Nevertheless, aggregate demand remains excessive, cost pressures are strong, and the presence of inflationary forces continues to pose a threat to the economy.

Gross national product (GNP) showed a substantial advance during the third quarter. The main impetus was supplied by defense expenditures, business purchases of machinery and equipment, and personal consumption. The quarter's strong performance was again accompanied by substantial price advances, but at a rate below first- and second-quarter experience. The overall improvement in the behavior of prices was also reflected in the near stability of industrial wholesale prices in the last two months of the quarter as well as in October. The outlook for prices, however, remains disquieting in view of the continued heavy pressure on resources and of the accelerating trend toward higher labor costs that has resulted in part from the substantial increases in the cost of living since late 1965. The shortage of skilled labor shows no sign of abating. Although the rise in both industrial production and retail sales was interrupted in September, their quarterly advances were strong and there is little evidence of an underlying change in the uptrend. Moreover, new orders for durable goods rebounded sharply in September, reaching a new record and pushing the volume of unfilled orders still higher, while consumers experienced a further strong increase in disposable personal incomes.

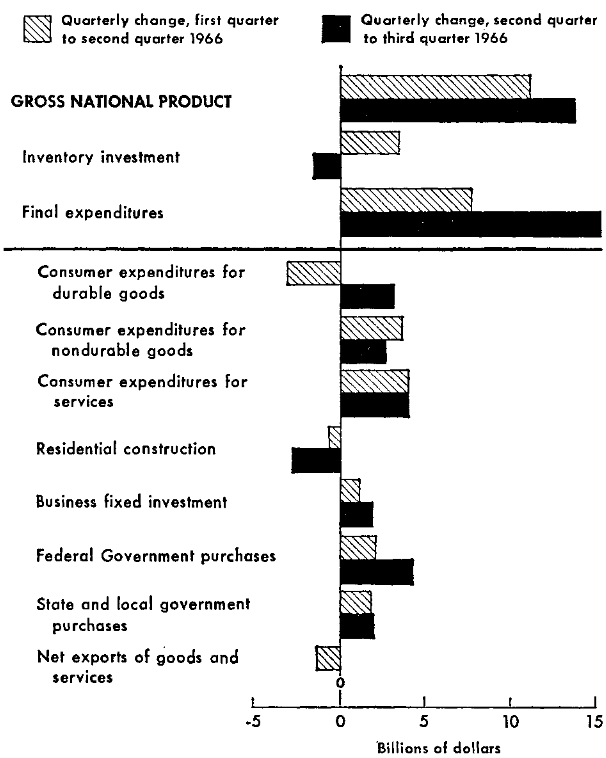
GROSS NATIONAL PRODUCT IN THE THIRD QUARTER

The nation's output of goods and services, according to the preliminary estimates of the Department of Commerce, rose by $13.7 billion during the third quarter (see Chart I), reaching a seasonally adjusted annual rate of $746.0 billion. This advance, amounting to an annual growth rate of 7½ per cent, was approximately halfway between the very high 9½ per cent rate recorded in the first quarter and the lower second-quarter gain of 6¼ per cent, and was roughly in line with the average growth experienced throughout the present expansion. More than one third of the latest quarter's increase in the dollar value of GNP, however, merely represented higher prices rather than real growth. Indeed, the implicit GNP deflator—the broadest measure of price trends in the economy—rose at

Chart I

RECENT CHANGES IN GROSS NATIONAL PRODUCT AND ITS COMPONENTS

Seasonally adjusted annual rates



Source: United States Department of Commerce.

an annual rate of 2.8 per cent. Although this rate of price increase was substantially lower than that recorded in the first and second quarters of 1966, it was nevertheless the highest rate for any other quarter since early 1958. Measured in real terms—that is, excluding the effects of price rises—output expanded in the third quarter at a 4½ per cent annual rate, as against 6 per cent and 2 per cent gains in the first and second quarters, respectively. The main features of the third quarter's increase in current-dollar GNP included an upsurge in defense expenditures, a large rise in personal consumption, and a further increase in business purchases of machinery and equipment, which was partly offset by a substantial decline in construction outlays.

Defense expenditures jumped by $4.2 billion in the third quarter of the year, reaching an annual rate of $61.3 billion or more than $10 billion higher than a year ago. The third-quarter upsurge in defense expenditures accounted for almost one third of the quarter's rise in GNP, thus underlining the impact of the war in Vietnam on the economy. At the same time, Federal spending for nondefense goods and services increased on balance only slightly, and the total increase in Federal spending on goods and services was held to $4.3 billion. State and local government purchases of goods and services, on the other hand, rose by $2.0 billion, substantially more than the average increases of the past few years.

The faster rise in personal consumption expenditures, following the modest second-quarter advance, had been expected because of improved trends in disposable income. During the second quarter, the growth in disposable personal income had been held down by large Federal income tax payments, arising primarily from the higher tax-withholding rates that began in May but also from the unusually large final payments in April of remaining 1965 tax liabilities. During the third quarter, on the other hand, disposable income was boosted by pay raises for Federal Government civilian and military personnel as well as by the start of the Medicare program. Largely as a result of these factors, disposable personal income increased by $7.4 billion in the third quarter, a gain more than 50 per cent larger than in the second quarter. Consumer spending rose even more strongly than disposable income, however—by $9.9 billion, as against a $4.5 billion gain in the second quarter. Expenditures for durable goods, which had declined in the second quarter (see Chart I) because of the fall in automobile sales, advanced sharply in the third quarter, with automobiles and parts accounting for roughly half of the increase. Consumer outlays for services rose by about as much as in the second quarter, while those for nondurable goods rose somewhat less.

Business fixed investment expanded by $1.8 billion in the third quarter of the year. This was an appreciably larger increase than that of the second quarter, but nonetheless remained below the quarterly gains recorded from the summer of 1965 to the spring of 1966. While the growth of investment in producers' durable equipment, at $2.4 billion, was the second highest for any quarter of this expansion, spending for nonresidential structures declined for the second consecutive quarter by $0.6 billion.

At the same time, total business spending for additional inventories, at $10.8 billion, was somewhat less in the third quarter than in the second. The $12.3 billion second-quarter spending increase, however, had been inflated by the rise in stocks of new automobiles in the hands of dealers that accompanied the decline of retail automobile sales. In the third quarter, on the other hand, dealer automobile inventories were reduced. Outside the automotive category, inventory accumulation was strong in the third quarter, reflecting in good part a buildup in durables manufacturers' investment in work in process. There was a marked slowing down during the quarter in the rate at which manufacturers increased their inventories, but even so the September accumulations remained very high.

Residential construction continued as a major weak spot in the economy. Total expenditures for this purpose, after declining by $0.6 billion in the second quarter, fell by another $2.8 billion in the third quarter. This development, which had been expected because of the preceding sharp decline in housing starts, provided some offset to the spending gains in other areas of economic activity. While housing starts remained stable in August and September following the earlier sharp declines—thus suggesting that the downtrend in residential construction might soon bottom out—fresh uncertainties for this industry have developed out of recent legislation, temporarily suspending the applicability of accelerated depreciation on new apartments (and other buildings) costing more than $50,000.

After having dropped in each of the preceding four quarters, net exports of goods and services remained unchanged in the third quarter, as both imports and exports rose by substantial amounts. At $4.7 billion, however, net exports are at their lowest rate in three and one-half years, and this depressed level has seriously impaired the efforts to improve this country's balance-of-payments position.

PRODUCTION, PRICES, AND EMPLOYMENT

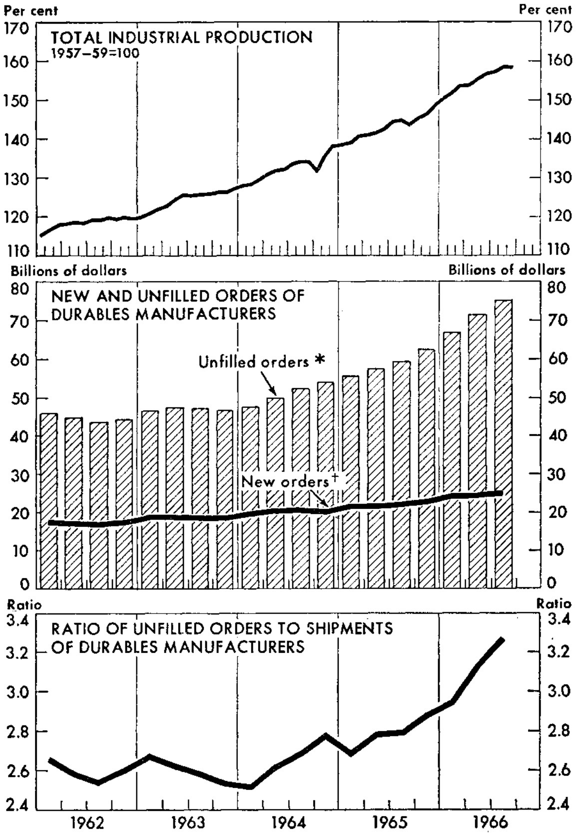
September witnessed a pause in the growth of industrial output, as the Federal Reserve Board's seasonally adjusted production index declined by 0.1 percentage point to 158.2 per cent of the 1957-59 average (see Chart II).

For the third quarter as a whole, however, industrial output expanded at an annual rate of 7 per cent—a slower but more sustainable pace than that reached earlier in the year, and one more closely in line with the growth rates experienced throughout most of 1965. The virtual stability of total industrial production in September resulted from steadiness in most of the index's major components. Automobile production, however, advanced substantially from the depressed level of the preceding month. The output of business equipment, reflecting the continuation of heavy investment outlays, was also up for the month, while defense production similarly continued to rise. Steel production, on the other hand, declined for the second consecutive month but still remained close to record levels.

Chart II

INDICATORS OF BUSINESS ACTIVITY

Seasonally adjusted



* End-of-quarter data.

† Quarterly averages of monthly data.

Sources: Board of Governors of the Federal Reserve System; United States Department of Commerce.

New orders received by manufacturers of durable goods rose by an almost unprecedented $1.7 billion (seasonally adjusted) in September, thus much more than recouping the decline registered in the preceding month. The volume of new orders received during the whole third quarter thus fully equaled the record established in the preceding quarter (see Chart II). As shipments did not rise perceptibly, the backlog of unfilled orders rose to a new high. At the end of September, unfilled orders on the books of durables manufacturers totaled $75.6 billion (seasonally adjusted)—a $2.3 billion increase over August and the equivalent of three and one-third months of shipments at present rates (see Chart II).

On the demand side, consumers have continued to provide important support for the economy's growth. While retail sales (seasonally adjusted) declined slightly in September, according to preliminary data, this followed a strong performance in August, when retail sales volume achieved one of its biggest monthly advances of the year. For the entire third quarter, retail sales grew at an annual rate of close to 10 per cent, or at roughly the same rapid pace as in the first half of the year. At the same time, personal income continued to grow strongly, increasing by $4.1 billion in September. Despite the present tight monetary conditions, the availability of consumer credit appears by and large to have been maintained by banks and other primary lenders. To be sure, the September rise in consumer credit outstanding was the smallest in almost two years, as new instalment credit extensions declined by 1.7 per cent (seasonally adjusted). These extensions, however, remained at a very high level by historical standards, and only four months, all in 1966, exceeded the September reading. For the third quarter as a whole, consumer instalment credit extended was 7 per cent (annual rate) higher than in the second quarter, while consumer credit outstanding rose by $1.7 billion, with credit for automobiles and other consumer goods advancing strongly.

After having risen by 3.8 per cent in the preceding twelve months, the wholesale price index remained unchanged in September and declined by 0.6 per cent in October to 106.2 per cent of its 1957-59 base. Prices for farm products and processed food, taken together, rose somewhat in September but fell markedly in October as supply conditions improved; they nevertheless still remained substantially above year-ago levels. On the other hand, the industrial commodities grouping, which accounts for three quarters of the index, remained unchanged during the last three months. Within the industrial sector, the prices of crude materials declined from July to October, while those for intermediate materials remained roughly unchanged and those for finished goods rose. The prices of hides, skins, and leather dropped sharply during this period, reflecting increased livestock slaughter as well as export restrictions, while the decline of residential construction activity continued to exert its impact on lumber and wood products prices. Nonferrous metal prices also declined, but iron and steel prices, despite some recent weakness, were slightly higher than in July. Price declines were also reported for textiles and rubber products. In contrast, however, capital goods prices continued their steady rise. Wholesale automobile prices, after being lowered in August and September as producers granted rebates to help clear dealers' inventories prior to the introduction of the 1967 models, rose again in October.

The consumer price index, on the other hand, has given no sign of flattening out. It rose by 0.3 per cent in September, despite a 0.2 per cent decline in food prices and even larger reductions in the prices of 1966 model automobiles. The cost of services continued to trend upward, and there were sharp rises in apparel prices.

Despite the improved recent performance of industrial wholesale prices, the general outlook for price developments continues to be a cause for concern. On the cost side, wage pressures appear to be accelerating, and unit labor costs—which have been trending upward since the beginning of the year—are likely to rise more sharply, as the effect of the large settlements reached in the past few months begins to be felt. On the demand side, too, rising personal consumption expenditures, large-scale business outlays on fixed investment, and especially the mounting requirements of the Vietnam war are likely to continue exerting a heavy pressure on productive resources in general. One particularly serious bottleneck is, of course, skilled labor, and the situation did not improve in this respect in September or October. The overall unemployment rate, which had fallen by 0.1 percentage point in September to 3.8 per cent, rose by an equal amount in October, thus returning to the 3.9 per cent level at which it had stood in July and August, and around which it had hovered during the first half of the year. The unemployment rate for married men stood at 1.9 per cent in October. Continued tightness in the labor market was also indicated by the fact that average weekly hours of production workers in manufacturing remained at the very high levels of 41.5 hours in September and 41.3 in October. It is noteworthy that the number of major labor market areas with an unemployment rate in excess of 6 per cent shrank in September to eight; there were ten such areas in August and nineteen at the end of last year.

Recent Banking and Monetary Developments

The nation's banking system was subject to increased pressure during the third quarter of 1966. Reduced nationwide reserve availability, coupled with mounting difficulties in competing for short-term funds, contributed to a noticeable slowing of the growth of bank deposit liabilities and bank credit. Loan demand remained strong, on balance, though there was some moderation following the very heavy borrowing associated in part with accelerated payments of business taxes in the spring and early summer months and in part with anticipations of tighter loan terms. Reflecting pressure from a wide spectrum of borrowers, banks reduced their holdings of all types of securities as a means of obtaining funds for loans. They also raised their prime lending rate from 5¾ per cent to 6 per cent in mid-August, the fourth time in a span of nine months that this rate had gone up. Throughout the third quarter, moreover, banks continued to bid aggressively for reserves in the Federal funds market, and many with branches in Europe were very active in seeking funds in the Euro-dollar market. In addition, some banks increased their resort to the "discount window" in order to satisfy their residual reserve needs.

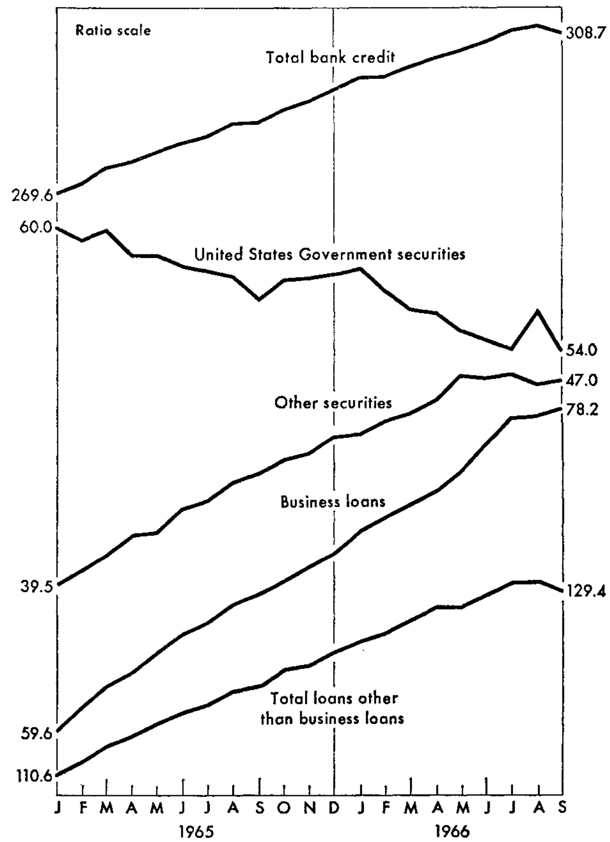
One major factor bearing on bank lending and investing policies during the third quarter of the year was the growing difficulty of attracting and keeping time deposit funds—especially those obtained through issuance of large negotiable time certificates of deposit. Since banks have been limited under Regulation Q to a 5½ per cent offering rate on these instruments, many money market investors were increasingly attracted to higher yielding short-term investments available elsewhere, and banks found the volume of their certificates of deposit (C/D's) actually shrinking. Moreover, banks exercised more loan restraint because they had already drawn heavily on their holdings of liquid investments and had permitted their loan-deposit ratios to rise steeply in the course of satisfying much of the heavy demand for funds in the first half of the year.

The slowing of total deposit growth at commercial banks, together with the reduced rate of growth this year of the public's claims on savings and loan associations and mutual savings banks, has contributed to a much slower rise of total liquid assets held by the nonbank public. Indeed, relative to economic activity, there was another decline in the nonbank public's liquidity during the third quarter of the year, as liquid assets grew at less than half the rate of gross national product (GNP). This trend in liquid assets has been in progress since late 1964, but it accelerated in the past quarter. The slowing of the growth of liquid assets in part reflects reduced intermediation of credit flows by depository and other liquidity-creating intermediaries. Over the past year, an increasingly large share of total credit growth has taken the form of direct purchases by the public of securities sold by borrowers in the open market, a substantial proportion of which is long-term nonliquid claims.

BANK CREDIT AND BANK LIQUIDITY

Total loans and investments at all commercial banks moved higher, on balance, over the third quarter but at a 2.9 per cent seasonally adjusted annual rate, compared with an 8.2 per cent growth rate during the first six months of the year (see Chart I). The behavior of bank credit ordinarily tends to be highly erratic over very short time periods, which makes it extremely difficult to assess underlying trends. This has been especially true in the period since February, as the volume and spacing of business credit demands have been affected strongly in that period by the acceleration of corporate income tax payments, by the changed pattern of corporate remittances to the Treasury of withheld income taxes and social security contributions, and by borrowing in anticipation of further credit tightening. The changes in payment schedules contributed to an unusually rapid expansion in business loans during the second quarter when business tax payments rose sharply. Subsequently, business loan demand moderated as corporate tax payments returned to more normal levels in the third quarter. On balance, of course, business loan demand arising out of tax payments added to total borrowing in the first nine months of the year. Nonetheless, total bank credit for the nine-month period ended September expanded at an annual rate of only 6.5 per cent (seasonally adjusted), down from the 10.2 per cent increase during all of 1965 and the roughly 8.5 per cent annual rate of growth in the first four years

Chart I
RECENT DEVELOPMENTS IN BANK CREDIT AT ALL COMMERCIAL BANKS
Billions of dollars; seasonally adjusted



Source: Board of Governors of the Federal Reserve System.

of the current business expansion.

During the third quarter specifically, total bank loans outstanding increased at an annual rate of only 5.5 per cent, well below the 13.3 per cent rate of growth in the first six months of the year and the 14.7 per cent gain registered in all of 1965. A substantial part of the slower bank loan growth was attributable to actual net reductions in securities loans and in loans to nonbank financial institutions, with the combined decline in these two categories amounting to $2.5 billion. In part, the weakness in securities loans may have reflected the improved atmosphere in the corporate and state and local bond markets during the latter part of the quarter, which enabled dealers in these securities to lighten their inventories and hence to reduce their bank borrowings. But perhaps more important, bank lending rates continued to rise on both securities loans and loans to nonbank financial institutions, thus encouraging borrowers to economize on their credit needs or to seek funds elsewhere. For example, the rate charged securities dealers on new call loans by the major New York City banks rose from an already high 6⅛ per cent rate at the end of June to 6½ per cent at the end of September. Similarly, the further increase to 6 per cent in August in the prime loan rate at banks encouraged finance companies to divert a greater share of their borrowing into the commercial paper market.

The third-quarter advance in business loans also fell below the pace recorded in recent periods. These loans grew at a seasonally adjusted annual rate of 12.7 per cent, bringing the growth rate for the first nine months of 1966 to 17.3 per cent, which is about in line with all of 1965. As noted above, the underlying trend in business loan demand has been obscured by the special corporate payments to the Treasury. Nevertheless, it seems clear that the underlying business loan demand has remained strong, in view of the continued heavy spending by nonfinancial corporations on fixed investment and inventories. In order to bring the demand for loans in line with reduced availabilities of loanable funds, banks not only raised their prime rate once again but also firmed their loan terms in other respects. In addition, banks became more reluctant to enter into loan agreements with corporate borrowers other than their established customers. It was also in recognition of this strong demand that the Federal Reserve System suggested, on September 1, that "the national economic interest would be better served by a slower rate of expansion of bank loans to business within the context of moderate overall money and credit growth".[1]

On balance, bank holdings of United States Government securities continued to decline on a seasonally adjusted basis during the third quarter. Although banks took most of a $3.0 billion issue of tax anticipation bills in late August, they apparently had disposed of a large portion of these acquisitions by late September. The $0.5 billion net drop in the third quarter was only about one third the size of the liquidations in each of the first two quarters of the year (see Chart I). Bank holdings of other securities, on the other hand, declined slightly on a seasonally adjusted basis in the third quarter, after rising steadily since 1960. The much smaller reduction of United States Government securities in the third quarter than in other recent periods, and the decline in other securities, may indicate that many banks are now unwilling or unable to dispose of their remaining holdings of United States Governments, a large part of which may be needed as collateral for government deposits.

With the expansion of loans continuing to take place at the expense of investments, bank loan-deposit ratios increased further in the third quarter from their already high levels. The aggregate loan-deposit ratio at commercial banks moved up to 65.5 per cent at the end of September from 65.1 per cent in June. In New York City, where much of the strong business loan demand has been centered and where a sharp decline in deposits has occurred, the rise in loan-deposit ratios was even more pronounced. At weekly reporting New York City banks, the ratio rose by a substantial 3.5 percentage points from the end of June to the end of September, to a level of 77.3 per cent.

BANK DEPOSITS AND RESERVES

Total commercial bank deposits and related liquidity measures also expanded at a more moderate pace in the third quarter (see Chart II). Both private and United States Government demand deposits moved lower during the quarter, contrary to the inverse relationship that frequently exists between these two deposit components over short periods of time. With demand deposits falling, the money supply actually declined slightly. The growth rate for the first nine months of 1966 now stands at 2.6 per cent, in contrast to the 4.7 per cent gain for all of 1965.

Commercial bank time and savings deposits grew in the third quarter at a seasonally adjusted annual rate of 9.6 per cent, slightly below the reduced rate in the first half of the year and sharply lower than the 16.0 per cent advance in 1965. This slower growth, together with the net decline in the money supply, resulted in a third-quarter rise in the combined total of time deposits and the money supply of only 3.8 per cent (annual rate), bringing the nine-month growth rate to 6.2 per cent as compared with the 9.7 per cent increase in all of 1965.

The rate of growth of total bank time deposits continued to be restrained by declining passbook savings accounts. At weekly reporting banks, for instance, such deposits fell by $1.2 billion from June through September, following a $2.0 billion drop in the previous quarter. The decline in passbook savings accounts of $3.5 billion for the first nine months of 1966 compares with a $3.6 billion rise over the same period in 1965. To be sure, not all the recent drop in savings accounts resulted in an outflow of funds from commercial banks as a whole. Many of these deposits undoubtedly remained in the banking sys-

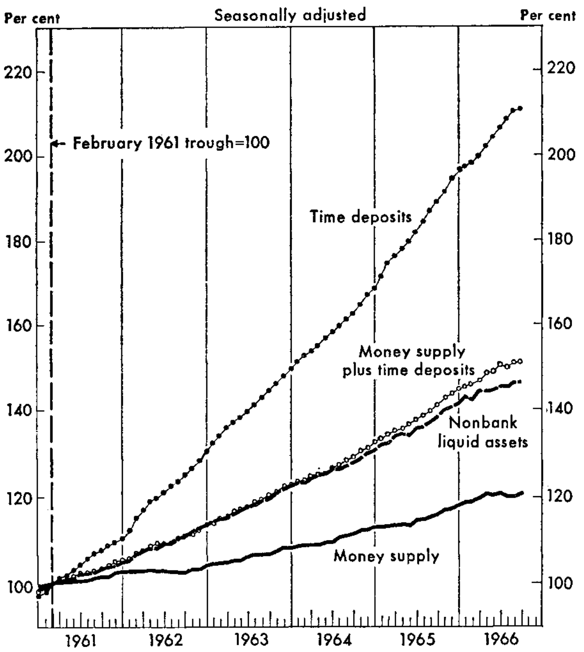
[1] See this *Review* (September 1966), page 209.

tem (and, in some cases, at the same bank) in the form of consumer-type time deposits, which banks have aggressively promoted throughout the year. Indeed, the category of "other" time deposits (which includes consumer-type time deposits but excludes C/D's in denominations of $100,000 or more) rose at reporting banks by $2.9 billion in the third quarter, a sizable gain approximately in line with the advance in the preceding quarter.

The developing bank competition this year for consumer savings—competition effected primarily through promotion of consumer time deposits—has in some instances resulted in shifts of funds from other savings institutions to banks. To help reduce such shifts, the Board of Governors of the Federal Reserve System took two steps during the quarter to lower the rate ceilings on certain types of bank time deposits that are offered primarily to small investors. Effective July 20, 1966, the Board, acting under the limited authority then available to it, set a maximum rate of 5 per cent that member banks may pay on new multiple-maturity deposits of ninety days or more, and a maximum rate of 4 per cent on such deposits with maturities of less than ninety days. Previously, the maximum rates for both these time deposit categories had been 5½ per cent. Then, with passage of new legislation increasing its powers to set maximum deposit rates, the Board, effective September 26, reduced to 5 per cent from 5½ per cent the maximum rate of interest that member banks may pay on any time deposit less than $100,000.[2]

Chart II

GROWTH OF MONEY SUPPLY, TIME DEPOSITS, AND NONBANK LIQUID ASSETS



Note: The money supply and time deposits are monthly averages of daily figures. Nonbank liquid assets are end-of-the-month observations.
Source: Board of Governors of the Federal Reserve System.

These moves to restrain excessive competition in the markets for consumer savings came at a time when banks were already experiencing a net outflow of C/D money obtained in denominations of $100,000 or more. The maximum rate banks may offer has remained at 5½ per cent. Although banks have moved their issuing rates to the allowable maximum, the higher yields available on competing money market instruments have proved increasingly attractive to corporations and other large investors. (This factor has also affected other thrift institutions as well, particularly while money market rates were especially high in September and early October.) At weekly reporting banks, large C/D's fell by $1.3 billion net in the third quarter as a whole, compared with a $600 million increase in the comparable period last year. At the same time, the average maturity of large C/D's outstanding declined, as banks generally were competitive only in the short maturities, even though they were paying the maximum permissible rate on all maturities during much of the quarter.

During the third quarter, the Board of Governors of the Federal Reserve System increased in two steps the reserve requirements against time deposits (other than savings deposits) in excess of $5 million at each member bank. The first increase went into effect July 14 for reserve city banks (July 21 for all other member banks), and raised the reserve requirements from 4 per cent to 5 per cent. Another increase, to 6 per cent, went into effect beginning September 8 for reserve city banks (September 15 for all other member banks). These measures were taken by the Board "to temper the aggressive competition for funds among commercial banks and other financial institutions, and at the same time to assure an orderly and moderate rate of growth in bank credit in order to restrain inflationary pressures".[3]

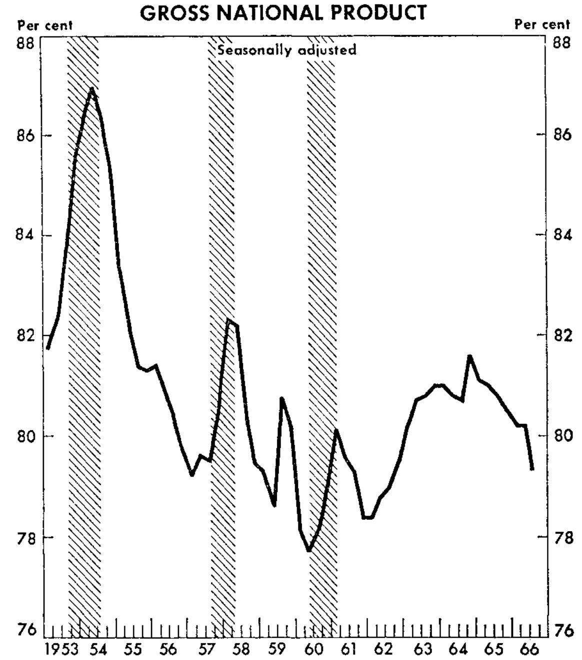
[2] This action was taken under the new authority signed into law on September 21, 1966, giving the several regulatory agencies of commercial banks and other depository institutions greater flexibility for establishing rate ceilings on the interest-bearing deposits of the regulated institutions. For a more complete description of these rate ceilings, see this *Review* (October 1966), page 221, footnote 2.

[3] See *Federal Reserve Bulletin* (September 1966), page 1338.

The growing pressures on the banking system were reflected in an increase of member bank borrowings at Federal Reserve Banks from a daily average of $674 million in June to $766 million in September. At the same time, net borrowed reserves (excess reserves less borrowings) increased from a daily average of $352 million in June to $374 million in September. On a seasonally adjusted basis, nonborrowed reserves declined in the third quarter by about 2.9 per cent (annual rate), as contrasted with gains of 3 per cent and 4.3 per cent annually in the first six months of 1966 and all of 1965, respectively.[4]

Chart III

NONBANK LIQUID ASSETS AS A PERCENTAGE OF GROSS NATIONAL PRODUCT



Note: Shaded areas represent recession periods, according to National Bureau of Economic Research chronology.

Sources: Board of Governors of the Federal Reserve System; United States Department of Commerce.

NONBANK LIQUID ASSETS

Total liquid assets owned by the nonbank public[5] rose at a reduced seasonally adjusted annual rate of only 3.0 per cent in the third quarter, notably below the 7.1 per cent annual growth during the first six months of the year and the 7.8 per cent increase for all of 1965. As already noted, there was a fairly marked decline in the rate of growth of commercial bank time and savings deposits and an actual drop in the private money supply. In addition, seasonally adjusted net savings flows to mutual savings banks during the third quarter remained at about the reduced rate of the first half of the year. Share accounts at savings and loan associations (seasonally adjusted) remained unchanged, on balance, although August and September were distinctly stronger than July. As noted, all depository institutions have been affected by the attractive yields obtainable on competing open market instruments.

In contrast to the moderate growth in total nonbank liquid assets, GNP advanced by 7½ per cent (seasonally adjusted annual rate) in the third quarter,[6] or two and one-half times as fast as the rate of expansion in liquid assets. As a result, the ratio of nonbank liquid assets to GNP fell 0.9 percentage point to 79.3 per cent (see Chart III). This ratio has been trending downward, beginning with the fourth quarter of 1964, and is currently at the lowest reading since mid-1962.

The continuing decline since early 1965 in this broad-gauge measure of liquidity is indicative of the developing financial tightness throughout the period. As market rates of interest have risen, financial savings have increasingly bypassed those financial intermediaries which issue deposits and other liquid claims, flowing instead into direct (unintermediated) investment in market securities. Because a large proportion of open market borrowing and lending transactions involve long-term, nonliquid claims, this diversion of savings into the securities markets and away from intermediaries has been associated with proportionally less liquidity creation for any given amount of total credit expansion.

[4] In the calculations of the rate of change for nonborrowed reserves, an adjustment has been made to eliminate the effects of the recent changes in reserve requirements on time deposits.

[5] Total liquid assets of the nonbank public are defined to include demand deposits and time deposits (adjusted) at all commercial banks and currency outside banks—all measured on a last-Wednesday-of-the-month basis—as well as deposits at mutual savings banks, savings and loan shares, postal savings deposits, United States Government savings bonds, and the nonbank public's holdings of United States Government securities maturing within one year—all measured on an end-of-the-month basis. A quarterly average of monthly figures is used in this section for the growth rate computations and in deriving the ratio of liquid assets to GNP.

[6] For more information on third-quarter movements in GNP, see "The Business Situation" in this *Review* (November 1966), especially pages 241-42.

The Money and Bond Markets in October

The money and bond markets settled down in October. There was growing confidence among market participants that the factors underlying the tense financial atmosphere of late summer had been largely overcome and that a period of greater interest rate stability lay ahead. In the view of many observers, the severe pressures which had beset the credit markets in earlier months primarily reflected the inflationary pace of domestic economic expansion and the nation's military involvement in Vietnam. In October, the conviction became quite widespread that some of these pressures would soon be alleviated, either as a result of a Federal tax increase, improvement of the situation in Vietnam, or some moderation in the rate of growth in the civilian sector of the economy. In addition, the money and bond markets were bolstered when the belief grew that the monetary authorities were concerned with avoiding any recurrence of the strong upward pressures on interest rates which had developed in midsummer. The money market was notably free of stress in October, amid signs that the demand for bank credit had slackened somewhat, at least temporarily.

A surge of demand for Treasury bills from a wide range of investors both reflected and contributed to the more confident climate which spread through the money and bond markets in October. As a result of the sharp rise in demand, pronounced scarcities developed in the bill market, particularly at the short end of the maturity scale, and rates moved progressively lower.

Prices of Treasury notes and bonds edged irregularly higher over the month as a whole, reflecting increased demand from dealers and investors. The Treasury was able in its November refunding to achieve some debt extension and the market reaction to its late October offering was quite favorable. The corporate and tax-exempt bond markets were in a very strong technical position in October, and both new and seasoned issues were generally well absorbed at rising prices.

THE MONEY MARKET AND BANK RESERVES

The money market displayed a generally firm undertone in October. However, no real pressure was evident in the market and conditions became relatively easy on a number of occasions. Except for a short period at the beginning of the month, Federal funds traded predominantly at rates below 6 per cent in October, whereas they had traded at 6 per cent or even above in early September. This absence of stress was more noteworthy than the week-to-week variations in reserve statistics during the month (see Table I).

In this money market climate, the major reserve city banks experienced no particular difficulty in adjusting to the sizable swings that occurred in their basic reserve positions from week to week (see Table II). There was for a time a tendency for heavier borrowing by the major reserve city banks from their Reserve Banks than in earlier months, but this proclivity appeared to diminish as the month progressed. Member bank borrowings from the Reserve Banks ranged between $928 million and $518 million on a weekly average basis. Treasury bill rates declined during the month, and dealers in bankers' acceptances generally lowered their offering rates by ⅛ of a per cent. Government securities dealers, who were primarily faced with posted call loan rates of 6 per cent to 6½ per cent at the New York City banks, often were able to finance their positions through other sources at lower rates.

Bank credit extended by the large weekly reporting banks contracted by $1.8 billion on a seasonally unadjusted basis from the last Wednesday in September through the final Wednesday in October. The decline compared with a $1.5 billion expansion a year earlier. The contraction in seasonally unadjusted bank credit at the weekly reporting banks in October followed an apparent slackening in the growth of bank loans and investments which developed in the third quarter of the year.[1]

A slower rate of growth in bank loans to business has also been apparent recently. Loans extended by the weekly reporting banks to commercial and industrial borrowers,

[1] For a more detailed discussion of bank credit developments in the third quarter of 1966, see this *Review* (November 1966), pages 245-46.

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, OCTOBER 1966

In millions of dollars; (+) denotes increase, (—) decrease in excess reserves

Factors	Changes in daily averages—week ended Oct. 5	Oct. 12	Oct. 19	Oct. 26	Net changes
"Market" factors					
Member bank required reserves*	— 234	+ 355	+ 117	— 289	— 51
Operating transactions (subtotal)	— 214	— 370	+ 583	— 63	— 64
Federal Reserve float	— 372	+ 55	+ 275	— 112	— 154
Treasury operations†	+ 344	+ 36	— 23	— 227	+ 130
Gold and foreign account	— 7	— 11	+ 7	+ 21	+ 10
Currency outside banks*	— 270	— 443	+ 171	+ 258	— 284
Other Federal Reserve accounts (net)‡	+ 89	— 7	+ 154	— 4	+ 232
Total "market" factors	— 448	— 15	+ 700	— 352	— 115
Direct Federal Reserve credit transactions					
Open market instruments					
Outright holdings:					
Government securities	+ 496	— 20	— 448	+ 194	+ 222
Bankers' acceptances	+ 1	+ 3	—	+ 1	+ 5
Repurchase agreements:					
Government securities	+ 10	— 10	—	+ 79	+ 79
Bankers' acceptances	+ 7	+ 37	— 44	+ 18	+ 18
Member bank borrowings	+ 178	+ 100	— 138	— 272	— 132
Other loans, discounts, and advances	+ 3	+ 4	— 4	—	+ 3
Total	+ 695	+ 114	— 634	+ 20	+ 195
Excess reserves*	+ 247	+ 99	+ 66	— 332	+ 80

	Daily average levels				
Member bank:					
Total reserves, including vault cash*	23,614	23,358	23,307	23,264	23,386§
Required reserves*	23,300	22,945	22,828	23,117	23,048§
Excess reserves*	314	413	479	147	338§
Borrowings	828	928	790	518	766§
Free reserves*	— 514	— 515	— 311	— 371	— 428§
Nonborrowed reserves*	22,786	22,430	22,517	22,746	22,620§

	Changes in Wednesday levels				
System Account holdings of Government securities maturing in:					
Less than one year	+1,293	— 497	— 537	+ 468	+ 727
More than one year	—	—	—	—	—
Total	+1,293	— 497	— 537	+ 468	+ 727

Note: Because of rounding, figures do not necessarily add to totals.
* These figures are estimated.
† Includes changes in Treasury currency and cash.
‡ Includes assets denominated in foreign currencies.
§ Average for four weeks ended October 26.

Table II

RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS OCTOBER 1966

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended Oct. 5	Oct. 12	Oct. 19	Oct. 26	Average of four weeks ended Oct. 26
Eight banks in New York City					
Reserve excess or deficiency(—)*	19	32	7	13	18
Less borrowings from Reserve Banks	265	234	96	7	151
Less net interbank Federal funds purchases or sales(—)	5	656	437	— 22	269
Gross purchases	*915*	*1,443*	*1,330*	*999*	*1,172*
Gross sales	*909*	*786*	*893*	*1,021*	*902*
Equals net basic reserve surplus or deficit(—)	— 251	— 858	— 525	28	— 402
Net loans to Government securities dealers	472	299	370	395	384
Thirty-eight banks outside New York City					
Reserve excess or deficiency(—)*	25	30	14	31	25
Less borrowings from Reserve Banks	96	345	335	126	226
Less net interbank Federal funds purchases or sales(—)	819	856	896	824	849
Gross purchases	*1,811*	*1,855*	*1,881*	*1,844*	*1,848*
Gross sales	*992*	*999*	*985*	*1,020*	*999*
Equals net basic reserve surplus or deficit(—)	— 890	—1,171	—1,217	— 919	—1,049
Net loans to Government securities dealers	148	119	151	312	183

Note: Because of rounding, figures do not necessarily add to totals.
* Reserves held after all adjustments applicable to the reporting period less required reserves and carry-over reserve deficiencies.

Table III

AVERAGE ISSUING RATES* AT REGULAR TREASURY BILL AUCTIONS

In per cent

Maturities	Weekly auction dates—October 1966: October 3	October 10	October 17	October 24	October 31
Three-month	5.408	5.471	5.424	5.246	5.234
Six-month	5.673	5.750	5.651	5.536	5.513

Maturities	Monthly auction dates—August-October 1966: August 25	September 27	October 25
Nine-month	—	5.807	5.567
One-year	5.844	5.806	5.544

* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

which had increased at a lower rate in the third quarter of 1966 than both earlier in the year and in 1965, apparently continued to grow at a slower pace in October. This slowdown occurred despite large corporate payments to the Treasury in October arising from the accelerated remittance of withheld income taxes and social security contributions. Over the four weeks ended October 26, business loans at weekly reporting banks expanded by only $84 million, compared with a $112 million rise a year earlier.

Approximately $5.2 billion of negotiable time certificates of deposit (C/D's) outstanding at large commercial banks matured in October. Certificates outstanding at the weekly reporting banks declined by about $1.1 billion, on balance, over the four weeks ended October 26, partly reflecting the October 19 maturity of a large block of certificates that had originated in mid-September in connection with the financing of an industrial merger. Toward the end of the month, however, the banks apparently were able to renew a larger portion of their maturing certificates, as their C/D rates became more competitive following the decline in a number of other money market rates. Throughout the month, banks generally continued to pay the 5½ per cent ceiling rate on all maturities of new negotiable time certificates of deposit of $100,000 or more.

THE GOVERNMENT SECURITIES MARKET

The improved tone which had emerged in the Treasury bill market during the last third of September intensified in October. A broadly based demand from public funds, corporations, and other sources encountered mounting scarcities in the available market supply of bills, and rates moved considerably lower during the month (see the left-hand panel of the chart on page 252). Demand from dealers also expanded, as they sought to replenish their inventories, in part because of improved financing opportunities.

On October 5, the Treasury announced that it would auction $3.5 billion of tax anticipation bills on October 11, for payment on October 18. The sale consisted of an addition of $1.5 billion to the outstanding issue of bills maturing in April 1967 and $2 billion of new bills maturing in June 1967. The announcement was favorably received by the market—particularly since some participants had expected a larger offering—and demand for outstanding issues remained quite spirited. To some extent, this demand reflected increased interest on the part of small investors, who were apparently attracted by the high levels to which bill rates had climbed in late summer.

Commercial banks were permitted to make full payment for the new tax bills through credits to Treasury Tax and Loan Accounts, a privilege which some participants estimated might be worth about 30 basis points for the April issue and just over 20 basis points for the June issue. Consequently, at the auction, interest in the new bills was generally confined to commercial banks. Average issuing rates were set at 5.484 per cent for the April issue, for which demand was quite aggressive, and 5.587 per cent for the June maturity, for which bidding was more restrained. After the tax bill auction, a broad investment demand for outstanding bills reappeared and bill rates once more moved downward. The decline was most pronounced in the short maturity area where market supplies were quite limited. At the same time, however, a fairly good investor interest also spilled over into the longer maturity area and, despite the $3½ billion addition of tax bills to the market supply, rates on bills maturing beyond ninety days also receded.

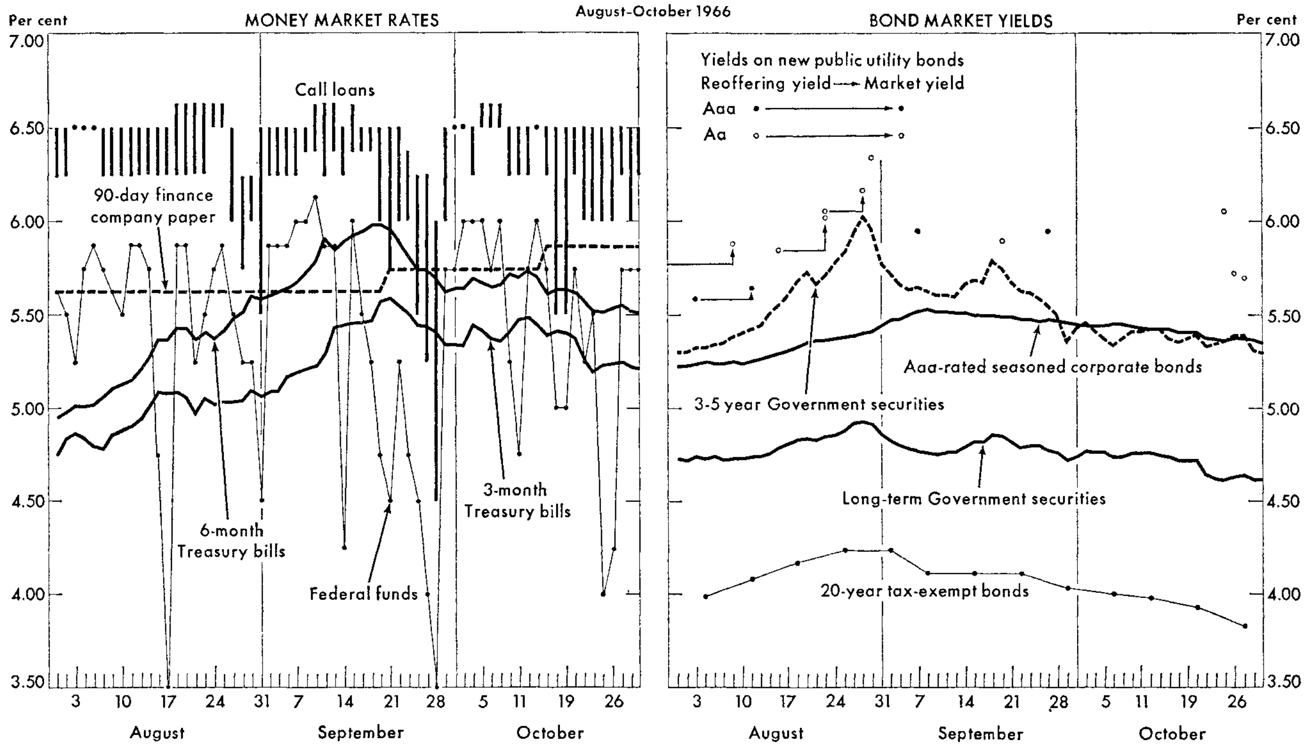
At the regular monthly auction of new nine- and twelve-month bills on October 25, average issuing rates were 5.567 per cent and 5.544 per cent, respectively, 24 and 26 basis points below average rates set a month earlier. At the final regular weekly auction of the month on October 31, average issuing rates were set at 5.234 per cent for the new three-month issue and 5.513 per cent for the new six-month issue, 27 and 29 basis points, respectively, below the average rates at the final weekly auction in September (see Table III).

Prices of Treasury notes and bonds moved in a fairly wide range during the first half of October, reflecting a cautious market appraisal of a number of reports concerning the domestic economic outlook, the future course of interest rates, and the chances for improvement in the Vietnam situation. At times during this period, prices rose sharply in largely professional trading when the market responded favorably to peace rumors, to talk that the pace of economic expansion might slow in 1967, and to the strong tone of the Treasury bill sector. However, these price gains were periodically pared, as the feeling emerged that each of the rallies might have been overdone. Throughout the period, however, a generally confident undertone was evident in the coupon sector.

As the month progressed, participants became progressively more confident of the viability of prevailing yields. Market optimism over the outlook for a moderation of the Vietnam conflict continued to exert a strengthening effect, as did increasing discussion that, if the conflict persisted and defense expenditures remained heavy, the Administration might move to raise taxes. Demand for coupon issues from dealers and investors expanded, and prices of Treasury notes and bonds moved higher. (The right-hand panel of the chart illustrates the decline in yields which accom-

SELECTED INTEREST RATES*

August-October 1966



Note: Data are shown for business days only.

* MONEY MARKET RATES QUOTED: Daily range of rates posted by major New York City banks on new call loans (in Federal funds) secured by United States Government securities (a point indicates the absence of any range); offering rates for directly placed finance company paper; the effective rate on Federal funds (the rate most representative of the transactions executed); closing bid rates (quoted in terms of rate of discount) on newest outstanding three- and six-month Treasury bills.

BOND MARKET YIELDS QUOTED: Yields on new Aaa- and Aa-rated public utility bonds are plotted around a line showing daily average yields on seasoned Aaa-rated corporate bonds (arrows point from underwriting syndicate reoffering yield on a given issue to market yield on the same issue immediately after it has been released from syndicate restrictions); daily averages of yields on long-term Government securities (bonds due or callable in ten years or more) and of Government securities due in three to five years, computed on the basis of closing bid prices; Thursday averages of yields on twenty seasoned twenty-year tax-exempt bonds (carrying Moody's ratings of Aaa, Aa, A, and Baa).

Sources: Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, Moody's Investors Service, and The Weekly Bond Buyer.

panied this rise in prices.) From about October 20 onward, market attention began to focus on the Treasury's approaching November refunding. The feeling of confidence prevailing among market participants was sufficient to suggest to many observers that the market would be receptive to a Treasury refunding offering beyond the short-term maturity area.

On Thursday, October 27, the Treasury stated that it would borrow approximately \$4.1 billion through the issuance of new fifteen-month and five-year notes (priced at par), and would use the proceeds to redeem in cash a like amount of obligations maturing on November 15. The Treasury's offerings (both dated November 15, 1966) consisted of \$2.5 billion of 5⅝ per cent notes, maturing on February 15, 1968, and \$1.6 billion of 5⅜ per cent notes, maturing on November 15, 1971. The maturing outstanding securities which are being replaced include \$1.3 billion of 3⅝ per cent bonds, \$1.7 billion of 4 per cent notes, and \$1.1 billion of 4¾ per cent certificates. The subscription books were open on Tuesday, November 1, with the settlement date scheduled for November 15. Payment for the new securities may be made either in cash or in the maturing securities. The Treasury's announcement brought a quick improvement in the prices of outstanding coupon issues which had moved lower for a time before the announcement. Good investor and professional short covering was in evidence and the month closed on a firm note.

After the close of business, on November 4 the Treasury announced the results of the refinancing. Both offerings were heavily oversubscribed; the Treasury accepted about $2.6 billion of the subscriptions for the 5⅝ per cent notes of 1968 and $1.7 billion of subscriptions for the 5⅜ per cent notes of 1971. Subscriptions from governmental institutions and official accounts were allotted in full, as were subscriptions from other sources up to $100,000. Subscriptions in excess of $100,000 were subject to a 30 per cent allotment in the case of the new 5⅝ per cent notes, and 10 per cent in the case of the new 5⅜ per cent notes, but subscribers were assured of a minimum award of at least $100,000.

In the market for United States Government agency issues, good investor demand was evident throughout the month and prices edged higher, especially in the longer maturity area. In line with the Administration's fiscal and budgetary programs announced in September, no additional new money was raised through the sale of Government agency obligations in the open market during the period. However, several agencies offered refunding issues to the public and raised some new cash through additional direct sales of their obligations to Treasury trust accounts. On October 14, the Federal Home Loan Banks offered $700 million of one-year notes, replacing a maturing $506 million issue and raising additional funds. Treasury trust accounts purchased $250 million of the issue, and $450 million was publicly offered. The notes, which were priced to yield about 6.05 per cent—significantly below the record 6.20 per cent yield on a comparable issue floated in mid-September—were accorded a fairly good reception. On October 18, the Banks for Cooperatives offered $256 million of 5.95 per cent six-month debentures, priced at par. Treasury trust accounts purchased $111 million of the issue, providing new cash to the agency. The remainder of the issue, which was used for refunding purposes, was well received when publicly sold. The other agency offerings that reached the market in October also were accorded good receptions.

OTHER SECURITIES MARKETS

Prices of corporate and tax-exempt bonds edged steadily higher during the month. The volume of flotations reaching the market was relatively light. In the corporate sector, new offerings with call protection were well received, while offerings carrying no special protection moved slowly at first but were subsequently sold out. As a result, dealers' unsold balances of recent corporate issues were very light during most of the month. Investor resistance to the decline in yields began to build up, however, as the month closed. In the tax-exempt sector, underwriter bidding for the month's flotations became fairly aggressive. Even at the higher reoffering prices that resulted, the new issues were subsequently accorded fair to good investor receptions. As a result, the Blue List of advertised dealer inventories generally remained in a relatively low $300 million to $375 million range during the month.

Over the month as a whole, the average yield on Moody's seasoned Aaa-rated corporate bonds declined by 10 basis points to 5.35 per cent. *The Weekly Bond Buyer's* series for twenty seasoned tax-exempt issues (carrying ratings ranging from Aaa to Baa) fell by 20 basis points to 3.83 per cent (see the right-hand panel of the chart), the lowest point since June. These indexes are, however, based on only a limited number of seasoned issues and do not necessarily reflect market movements fully, particularly in the case of new and recent issues.

Publications of the Federal Reserve Bank of New York

The following is a selected list of publications available from the Public Information Department, Federal Reserve Bank of New York, New York, N. Y. 10045. Copies of charge publications are available at half price to educational institutions, unless otherwise noted.

1. MONEY: MASTER OR SERVANT? (1966) by Thomas O. Waage. Revised edition. A 48-page booklet explaining the role of money and banking in our economy. Includes a description of our monetary system, tells how money is created, and relates how the Federal Reserve System influences the cost and availability of credit. No charge in limited quantities.

2. MONEY, BANKING, AND CREDIT IN EASTERN EUROPE (1966) by George Garvy. A 167-page booklet which examines the role of banking and credit policy in seven communist countries and focuses on developments arising from the recent changes in economic policy. $1.25 cents per copy (65 cents per copy to educational institutions).

3. KEEPING OUR MONEY HEALTHY (1966). Revised edition. A 16-page illustrated primer on how the Federal Reserve System works to promote price stability, full employment, and economic growth.

4. MONEY AND ECONOMIC BALANCE (1965). Revised edition. A 27-page teacher's supplement to *Keeping Our Money Healthy* that provides a fuller explanation of how the economy operates and how the Federal Reserve works.

5. THE NEW YORK FOREIGN EXCHANGE MARKET (1965) by Alan R. Holmes and Francis H. Schott. A 64-page booklet about the New York market for foreign exchange, and the large exchange operations in that market. 50 cents per copy.

6. ESSAYS IN MONEY AND CREDIT (1964). A 76-page booklet containing eleven essays on technical problems of monetary policy, Treasury debt and cash operations, and the Federal Reserve's daily work. It also contains several analyses of money and securities market instruments and of banking problems and policies. 40 cents per copy.

7. OPEN MARKET OPERATIONS (1963) by Paul Meek. A 43-page booklet describing for the interested layman how open market operations in United States Government securities are used to cope with monetary stresses and promote a healthy economy. No charge in limited quantities.

8. THE MONEY SIDE OF "THE STREET" (1959) by Carl H. Madden. A 104-page booklet giving a layman's account of the workings of the New York money market and seeking to convey an understanding of the functions and usefulness of the short-term wholesale money market and of its role in the operations of the Federal Reserve. 70 cents per copy.

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