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Contents

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The Business Situation

Economic activity continues to move ahead. According to the preliminary estimates of the Department of Commerce, the nation's real output of goods and services rose in the third quarter at the same rate as in the second, and the price level moved sharply higher. Inventory accumulation stepped up in the third quarter, while the growth of final sales was down somewhat—especially after adjustment for the nonrecurrent jump in Government spending resulting from the midyear Federal pay increase.

The various monthly indicators were generally mixed and difficult to interpret during the summer quarter but tended to take on a stronger cast as the fall season began. Housing starts, which have reflected the impact of this year's tight credit conditions more clearly than most other series, extended their downward trend through July and were about unchanged in August, but then recovered rather sharply in September. New orders for durable goods also showed little strength in July and August, but they too turned in a large and broadly based increase in September. At the same time, signs of an easing of inflationary pressures have remained elusive. The consumer price index rose sharply further in September, and industrial wholesale prices, which had climbed at an accelerated pace during the third quarter, turned in an October advance that was the most rapid in seven months.

Taken together, the latest readings on the business situation present a stronger picture than was the case a month ago. However, as stressed in the last issue of this *Review,* statistical swings of this sort must be expected when an economy is operating at full capacity, particularly since there are inherent random elements in the statistics and all are subject to some measurement error as well. On balance, it appears that the basic economic situation has not changed significantly and that inflationary expectations are still dominant. Looking ahead, a major uncertainty is whether fiscal policy will continue to contribute to needed overall restraint in view of the scheduled termination of the 10 percent surtax and the pressures for increased domestic Federal spending.

GROSS NATIONAL PRODUCT IN THE THIRD QUARTER

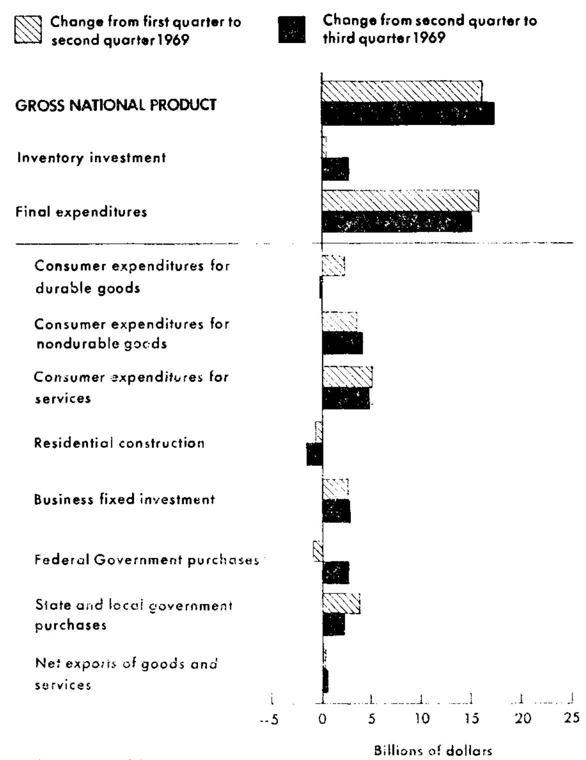
The market value of the economy's total output of goods and services (GNP) increased by $17.5 billion in the third quarter (see Chart I), reaching a seasonally adjusted annual rate of $942.3 billion. The latest advance was a bit larger than the second-quarter gain of $16.1 billion, but the difference was more than accounted for by the July Federal pay increase, which directly added about $3 billion to the rate of Federal Government purchases. Real output—that is, GNP adjusted for price increases—rose at a 2 percent annual rate in the third quarter, equal to the gain registered in the second. The GNP price deflator—the broadest available measure of price trends in the economy—rose almost 5½ percent at an annual rate, compared with just over 5 percent in the previous three-month period. However, after allowance for the extra push exerted on the deflator by the Federal pay increase, the third-quarter rise came to about 4¼ percent, down from the first- and second-quarter pace but otherwise in line with earlier high rates of increase.

In terms of its composition, the most recent GNP gain was boosted by some step-up in inventory spending, while final sales rose more slowly, especially after adjustment for the effect of the Federal pay increase on the Government's purchase of goods and services. A drop in residential construction activity, little change in consumer spending on durable goods, and a much more moderate rise in outlays by state and local governments were the principal factors behind the slower growth of final purchases of goods and services. The acceleration in inventory spending in the third quarter gave rise to some upward movement in the ratios of inventories to business sales. However, the ratios in August did not appear particularly high in terms

Chart I

RECENT CHANGES IN GROSS NATIONAL PRODUCT AND ITS COMPONENTS

Seasonally adjusted



Source: United States Department of Commerce.

of recent experience, and there are indications that September may have seen some downward movement.

Total consumer spending rose a modest $8.8 billion in the third quarter, less than in either the first or the second quarter, despite a record climb in disposable income. The weakness of consumer spending was centered in purchases of durable goods, as auto buying slackened a bit. Outlays for services continued their sharp climb, in part reflecting an especially rapid price rise, and consumption of nondurable goods was also up, about in line with the rate of gain in the first half of the year. At the same time, disposable income rose an estimated $16.8 billion in the third quarter, or nearly twice as much as consumer spending. The large Federal pay increase figured importantly in this surge of spendable incomes, but an even more important factor was the reduced flow of tax payments, following the completion in the second quarter of large final settlements on 1968 personal tax liabilities. Indeed, the growth of pretax personal income actually slowed in the third quarter despite the Federal pay increase.

Consumers are estimated to have saved nearly half of the third-quarter increase in disposable income. As a result, the saving-income ratio climbed by better than a percentage point to 6.4 percent, the highest reading in over a year. With saving already high relative to income, the 10 percent surtax scheduled to expire next year, and a large social security benefits increase virtually assured, consumer spending may strengthen in coming months. However, recent surveys of buying intentions have found the consumer to be cautious, while the trend of retail trade figures has shown little buoyancy for some time. Retail sales in the third quarter of the year were a bit below the level of the second quarter. Sales volume fell rather sharply in July, recovered about all of that loss in August, and according to the revised report turned down again in September despite a sharp temporary improvement in new car sales. Third-quarter sales of new domestic autos were at an annual rate of less than 8½ million units, off about ¾ percent from the second-quarter pace. Moreover, October deliveries dropped back to an annual rate of 8.3 million units after the surge to above 9 million in September.

Fixed investment spending by the private sector rose $1.1 billion in the third quarter. The nonresidential (business) component increased by $2.7 billion, but residential construction outlays dropped by $1.6 billion. The increase in business fixed investment was fully as large as that of the second quarter, and served to underscore the momentum of the plant and equipment spending boom that got under way in mid-1967. Recent surveys of businessmen's plans have indicated that capital spending will probably move higher in the next few months but at a slower pace than heretofore. A large September increase in new orders for machinery and equipment reinforces the likelihood of further near-term gains.

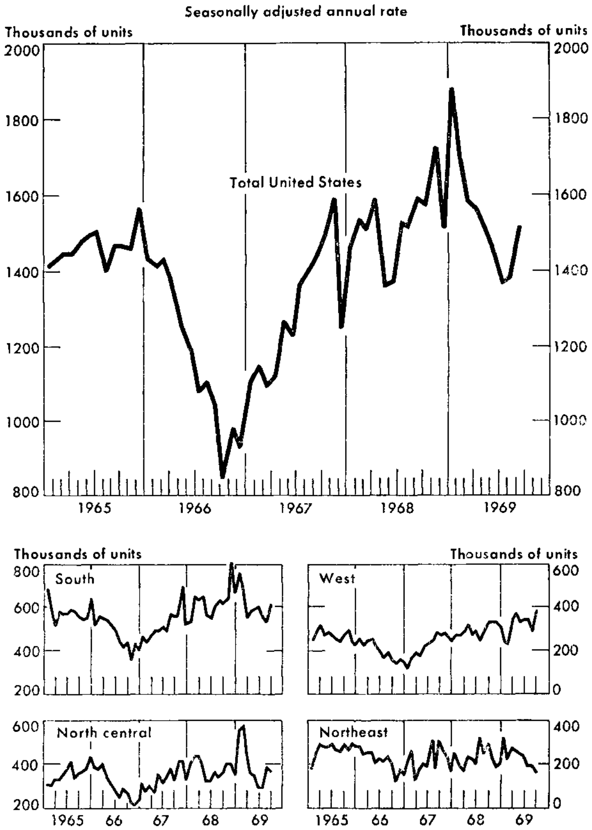
The third-quarter decline in home-building activity reflected the progressive downward movement of housing starts that has occurred this year. New private housing units were started at an annual rate of 1.7 million in the first quarter of the year, 1.5 million in the second quarter, and a still smaller 1.4 million in the third. However, the trend of housing starts did appear to strengthen as the third quarter progressed (see Chart II). Starts reached their low for the year in July at an annual rate below 1.4 million. They were then fractionally higher in August and up sharply in September to a pace of more than 1.5 million, the highest since April. However, building permits weakened further in September to their low point for the year, suggesting that starts in the next few months are unlikely to hold at their September level.

The geographic distribution of housing starts has been rather uneven in recent months (see Chart II, bottom panels). In the western region of the country, they are now at the highest level in several years and in the third quarter were up 15 percent from the same period of 1968. Starts in the north central states over the same period were off, but by only 3 percent, and the south experienced nearly as mild a decline—8 percent. In contrast, however, the northeast suffered a drop of fully 38 percent in private housing starts over the year ended this past quarter. The pattern of state usury laws limiting the maximum rate chargeable on home mortgages appears to have played a key role in this uneven national housing experience. The western states generally have the most liberal practice, whereas the usury ceilings in the northeast tend to be quite restrictive at today's interest-rate levels.

Chart II

NEW PRIVATE HOUSING STARTS*

Seasonally adjusted annual rate



*Including farm housing starts.

Source: United States Department of Commerce, Bureau of the Census.

As recorded in the GNP accounts, total purchases of goods and services by all levels of government rose $4.9 billion in the third quarter, the largest dollar increase in over a year. The Federal Government accounted for more than half of this spending surge. Both nondefense and defense spending moved higher, the latter quite sharply. However, but for the roughly $3 billion jump due to the pay increase, total Federal purchases would have been about unchanged. State and local governments increased their expenditures by $2.2 billion in the third quarter, the smallest gain in two years. This slowing followed three consecutive quarters of large gains averaging about $3.5 billion. It is likely that the exceptionally tight conditions that progressively developed in the tax-exempt bond market this year played a role in the recent slowdown of spending by state and local governments, since interest rates in the market frequently exceeded those which many of these governments may legally contract to pay.

PRODUCTION AND ORDERS

Industrial output declined somewhat further in September, on a seasonally adjusted basis. Following an August drop of 0.3 percentage point, the Federal Reserve Board's production index fell by another 0.5 point in September to an estimated 173.8 percent of the 1957-59 average. The downturn in August and September, which was the first two-month decline in industrial production since early 1967, almost exactly matched the July advance and thus brought the index for September to a level virtually identical to the June reading. The stabilization of business equipment production has been a factor contributing to the sluggishness of the overall index in recent months. Business equipment output rose sharply throughout the first half of the year, registering an advance from December to June of nearly 7½ percent at an annual rate. The following three months, however, saw virtually no change in the equipment index. The midyear shift from rapid growth to stability appears to have been centered in the output of commercial and industrial equipment, and thus may well reflect the more moderate rate of advance in planned capital spending.

The output of automobiles and related products dropped off in September to approximately the June level, while production of other consumer goods was about unchanged. The decline in the automotive sector, which accounted for a sizable share of the decrease in the overall production index, was largely traceable to work stoppages that cut into new car production. Domestic-model autos were assembled in September at an annual rate of just under 8.7 million units (seasonally adjusted), down from a bit more than 9 million in both July and August and a little above the June pace. Some strike activity continued to affect the auto industry in October. Though manufacturers' original schedules had pointed to a rise in the seasonally adjusted production rate, the assembly pace was in fact down from September.

Steel industry ouput, seasonally adjusted, edged up a bit in September after a steep drop in August, and production of materials was virtually unchanged on balance. The materials production index has been roughly stable since June, following a sizable advance from late 1968 through mid-1969. Through much of that period, a strong expansion in steel industry activity contributed significantly to the overall rise in materials output. While the rate of steel production remains high—indeed not far below the pace sustained through much of 1968 when users were hedging against a possible strike—it has drifted off since the spring, and October saw a further decline that about offset the small September rise.

A strong September increase has been reported in the volume of new orders for durable goods. Moreover, the figures for both July and August have been revised to appreciably higher levels, primarily because of large revisions in estimated ordering of transportation equipment. While the orders data still show a dip in August, the aggregate volume now estimated for the third quarter is substantially higher than the second-quarter figure, and bookings in September marked a new high by a sizable margin. The September advance resulted from an increased flow of orders over a broad range of durables manufacturing—with the notable exception of defense bookings which, after dropping steeply in August, edged off a bit further to a figure only marginally above the low June level. A sharp rise in orders received by the machinery and equipment industries marked a break from the general stagnation that had characterized that sector since the April bulge, which is generally thought to have been associated with the President's request for repeal of the investment tax credit. Shipments by durables manufacturers also moved to a new high in September, though the advance was smaller than that in new orders. Since the volume of bookings exceeded shipments, the orders backlog expanded to a figure very near the record established last spring.

PRICE DEVELOPMENTS

The rise in overall consumer prices accelerated in September. The aggregate index moved up at an annual rate of more than 5½ percent, somewhat above the third-quarter pace as measured from June to September though below the rate in the first half of the year. The September increase was dampened, relative to those of the preceding months, by a sharp reduction in the rate at which food prices advanced. The fact remains, however, that the month's small increase in food prices was counter to the usual seasonal pattern of a decline in September. Costs of consumer services continued to rise rapidly, and apparel prices, which usually increase in September, registered a more than seasonal gain. The prices of new and used cars in the September consumer index reflected the reductions posted prior to the introduction of the new models. Any actual increases represented by the prices of the new 1970 vehicles, after allowance for quality improvements, were not reflected in the September consumer price index but will influence the figures published for October.

Higher quotations for autos were a factor contributing to October's sharp advance in the wholesale price index for industrial commodities. With price increases recorded for a number of other nonagricultural goods as well, the rise in the industrial commodity index accelerated to an annual rate of more than 5 percent. At 113.7 percent of the 1957-59 average, the industrial index in October was 3.5 percentage points above the reading for last December—an increase of more than 3¾ percent at an annual rate. Following a sharp spurt in agricultural prices around midyear, the index for farm and food products has edged off a bit, largely because of a reversal in livestock prices. Despite a slight further decline in the agricultural index in October, the overall wholesale index rose at an annual rate of more than 3 percent.

Banking and Monetary Developments in the Third Quarter

The pressures of continued strong monetary restraint were clearly evident in the third quarter of 1969. The major banking and monetary aggregates all grew more slowly, or fell more rapidly, than they had during the first half of the year, and interest rates moved to still higher levels. Over the span of the quarter, total bank credit outstanding actually declined somewhat after seasonal adjustment, the shrinkage of time deposits at commercial banks accelerated sharply, and the growth of the narrowly defined money supply slowed to a barely perceptible pace. Though commercial banks continued to reduce their holdings of investments in order to meet loan demands, the cumulative impact of restraint was also reflected in a slower expansion of the aggregate loan portfolio of banks and of the major individual loan categories as well. The evidence also suggests that the impact of monetary restraint was felt to an increasing degree by banks outside the major money centers.

In the face of further heavy deposit losses, banks continued to exploit various channels for attracting nondeposit funds. The borrowing of Euro-dollars from foreign branches and other banks abroad has for some time been a very important source of such funds. Recent months, however, have seen a proliferation of other devices, the most important one being issuance of commercial paper by bank holding companies which, in turn, may purchase financial assets from their affiliated banks. The volume of bank-related commercial paper expanded rapidly over the quarter. The rise in domestic banks' liabilities to their foreign branches, on the other hand, moderated during the summer, and September saw an actual decline. To some extent the latter development may have been related to two regulatory actions by the Board of Governors of the Federal Reserve System. These actions were aimed at removing a special advantage to those member banks that have access to Euro-dollar borrowings as a means of adjusting to domestic credit restraint. First, the System acted early in the summer to eliminate some of the attractiveness of Euro-dollar borrowing by closing a loophole in the regulations governing reserve requirements. Effective July 31, member banks were required to include in demand deposits subject to reserves the so-called "bills payable checks" and "London drafts" issued in settling transactions with foreign branches. Then, effective early in September, marginal reserve requirements were placed on member bank borrowings from their own foreign branches or from other banks abroad, on domestic assets sold by member banks to their foreign branches, and on credit extended to United States residents by such branches.

INTEREST-RATE DEVELOPMENTS AND MEMBER BANK RESERVE POSITIONS

The pressures of sustained monetary restraint, coupled with persistent demands for credit, resulted in a continued rise in market interest rates throughout the third quarter. Yield advances on United States Government securities were especially pronounced, partly reflecting continued selling by commercial banks. The rate on three-month Treasury bills climbed 65 basis points over the quarter to an average of 7.08 percent in September, while the average yield on Government securities maturing in three to five years rose 94 basis points to 7.58 percent. Yield increases on intermediate- and longer term Treasury issues were particularly sharp in September, when the Treasury carried out a large refunding in a period which also saw a very substantial volume of new corporate issues reach the markets. The Treasury offering included three notes of varying maturities priced at the highest yields on comparable issues in more than a century. The average rate on new issues of high-quality corporate bonds rose about 40 basis points over the quarter to 8 percent in September, and rates on commercial paper and bankers' acceptances also continued to move higher. Throughout the period the offering rates quoted by commercial banks on large certificates of deposit (CD's) remained at the Regulation Q ceilings, which range from 5½ percent on the shortest maturities to 6¼ percent on the longest, yet banks experienced an increased attrition of these deposits as competing interest rates rose further. After the interest-crediting period at the end of the second quarter, banks also lost substantial amounts of other time and savings deposits.

Reserve positions of member banks remained under pressure from open market operations during the third quarter. In addition, the amendment to the Federal Reserve Board's Regulation D, requiring banks starting July 31 to count as deposits subject to reserve requirements bills payable checks and London drafts arising out of transactions with their foreign branches, had the effect of raising required reserves rather substantially for some banks. This action resulted in an immediate increase of approximately $3 billion in "net demand deposits"—deposits subject to reserve requirements—centered largely at the major New York City banks. There was a small decline in total member bank reserves during the third quarter, and nonborrowed reserves — those supplied through open market operations—were virtually unchanged between June and September. Net borrowed reserves fluctuated throughout the quarter around the very high June average of about $1 billion. The effective rate on Federal funds increased from an average of 8.9 percent in June to 9.2 percent in August, and stayed at that level in September.

BANK CREDIT

The pressures on bank credit availability intensified over the summer. The expansion of loans and investments at banks had already slowed in the first half of the year, when growth fell to a 3 percent annual rate from 15 percent in the last half of 1968. In the third quarter, a small rise in July was not quite large enough to offset declines in August and September, and bank credit actually declined about ½ percent at an annual rate (see Chart I).

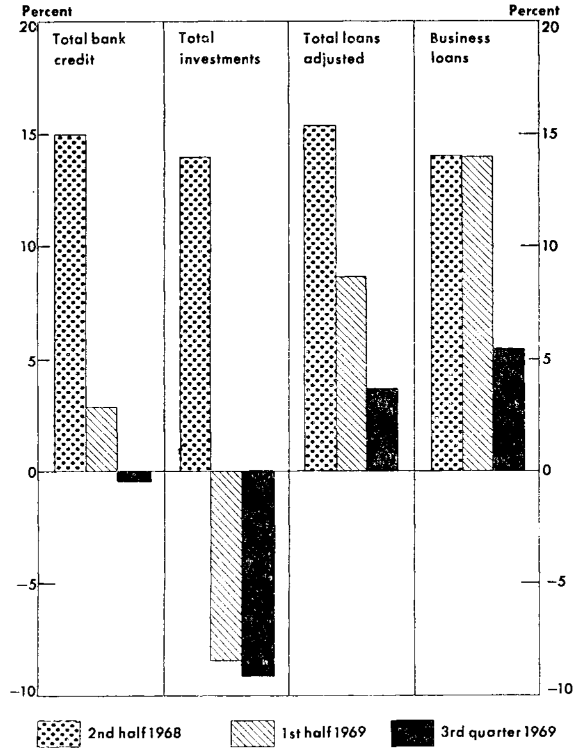
Throughout the first nine months of the year, banks reduced their securities investments in order to accommodate borrowers. The aggregate runoff of investments was a bit steeper in the third quarter than in the first half of the year. Holdings of other securities, comprised largely of tax-exempt state and local obligations, fell at a sharply faster rate, but the decline in United States Government securities moderated substantially. The rate of loan expansion slowed appreciably in the third quarter, suggesting that banks were finding it increasingly difficult and expensive to finance loan growth through sales of securities. It might be noted, however, that the interpretation of bank credit data has become increasingly complicated this year, as banks have resorted in growing measure to the sale of loans—mainly to their foreign branches and to affiliated holding companies—in an attempt to adjust to the pressures of monetary restraint. Such sales result in an understatement of the volume of credit originated through the banking system. The available data suggest, however, that these loan sales have not been of sufficient magnitude to distort the general picture of a progressive slowdown in bank credit that is evident from the trends in banks' balance sheet positions discussed below.

A decline in bank loans to securities dealers, following a moderate rise in the second quarter, contributed to the third-quarter slowdown in aggregate loan expansion. Securities loans tend to vary with dealers' inventories, and these remained stable throughout most of the summer at a volume about one half as large as that during the summer of 1968. Nevertheless, the growth of loans other than securities loans was also restrained. Without adjustment for bank sales of loans, total loans excluding securities loans expanded at a seasonally adjusted annual rate of 4½ percent in the third quarter, compared with a 10½ percent rate of increase registered in the first half.

There was a considerable reduction in the growth rate of business loans during the third quarter (see Chart I). These credits, which generally account for about one third of total bank loans outstanding, grew at a seasonally adjusted annual rate of 5½ percent during the July-September period, far below the rate of about 14 percent registered in both the first half of 1969 and the second half of last year. However, the sale of loans to foreign branches and domestic affiliates often involves business loans and thus can be assumed to have limited the rise this year in business loan holdings reported on bank balance sheets. Nevertheless, even after adjustment for the effect of such loan sales, there was still a substantial moderation in business loan growth in the third quarter following some slowing in the preceding quarter. Data from the weekly reporting banks, not adjusted for seasonal variation, indicate that the weakness in business loans during the third quarter was concentrated at banks outside New York and Chicago. Business loans at these banks declined by almost $800 million during the third quarter, compared with virtually no change over the same period in each of the two preceding years. On the other hand, there was a strong increase in business loans at banks in New York City, while the volume outstanding at banks in Chicago remained at about the June level. This pattern was strikingly different from that of the first half of this year and suggests that banks outside New York and Chicago were beginning to feel the burden of restraint more keenly.

The deceleration in the growth of real estate and consumer lending, which initially appeared in the first quarter, continued into the third. Real estate loans showed the more pronounced slowdown, growing at an annual rate

Chart I
CHANGES IN BANK CREDIT AND ITS COMPONENTS AT ALL COMMERCIAL BANKS
Seasonally adjusted annual rates



of 4 percent in the third quarter as compared with 10½ percent in the first six months of 1969. Bank loans to consumers, after expanding at a 7½ percent rate over the first half of the year, slowed to about a 6 percent growth rate in the summer.

The volume of outstanding loans to nonbank financial institutions turned down in June and continued to fall on balance through the third quarter. Over the quarter as a whole, the decline was at an annual rate of 9½ percent, seasonally adjusted. Interest-rate differentials may have been a factor in this development. In June, the month in which the recent downturn began, banks raised the prime lending rate a full percentage point to 8½ percent. Although market interest rates continued to advance over the summer, the commercial paper market remained an attractive alternative to borrowing from banks. Thus the seasonally adjusted volume of directly placed commercial paper—paper primarily issued by finance companies—registered a considerably larger increase in the third quarter than it had in the second.

Commercial bank holdings of United States Government securities declined on a seasonally adjusted basis for the fourth successive quarter. The pace of the runoff has slowed, however. The $1.5 billion drop in the third quarter virtually equaled that of the preceding three months but was only about one third the size of the liquidation in the first quarter of the year. On the other hand, seasonally adjusted bank holdings of other securities—principally state and local government obligations—fell by $1.4 billion in the July-September period, compared with a decline of only $0.5 billion in the second quarter. Banks reduced their positions in municipal securities at a time of considerable uncertainty about Congressional action that might affect the tax-exempt status of state and local obligations. The stepped-up pace of liquidations of other investments relative to investments in Government securities may also indicate that banks were finding it difficult to make further reductions in Government securities portfolios. A large proportion of Government securities is pledged as collateral against Government demand deposits with banks.

MONEY SUPPLY AND TIME DEPOSITS

The rate of growth of the narrow money supply was markedly reduced in the third quarter. The daily average money supply—privately held demand deposits plus currency in circulation outside banks—remained about unchanged on a seasonally adjusted basis during the third quarter, down from a rate of about 4¼ percent in the first half of the year. The slowdown brought the money supply growth rate for the first nine months of 1969 to 3 percent, sharply below the increase of a bit more than 7 percent registered in 1968.

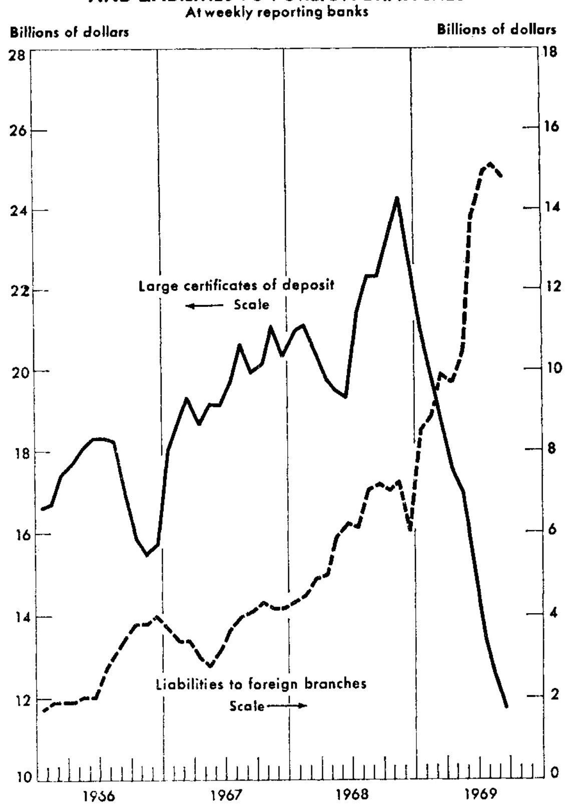
The regular annual revision of the money supply statistics was released in September. As is usual, this revision incorporated new data provided by the semiannual commercial bank call reports and a recalculation of seasonal adjustment factors. This year, in addition, the demand deposit component was subject to a further revision—first published on an interim basis in August—to correct for an understatement introduced by the growing volume of cash items in process of collection associated with Euro-dollar transactions. In the bank data used in estimating the money supply, aggregate demand deposits are reduced by the amount of cash items in process of collection, to avoid a double counting of deposits. Under previous procedures, certain checks written in the settlement of transactions involving banks' foreign branches were counted in cash items by banks receiving them but were not required to be counted in the deposits of the banks remitting them. This resulted in an understatement of demand deposits in the hands of the public and thus a growing downward bias in the money supply. The understatement ceased as of August, when Federal Reserve regulations were amended with respect to the definition of member bank demand deposits subject to reserve requirements. At that time, data were collected for an estimate of the magnitude of the past understatement. The net result of this change, together with the regular September revisions, was to raise the money supply growth rate in 1968 and the first half of 1969 to a slightly faster pace than had been previously reported.

The decline of time and savings deposits at commercial banks accelerated in the third quarter. Daily average time and savings deposits, seasonally adjusted, fell at an annual rate of 13 percent, compared with a 4 percent rate of decline in the first six months of the year. The sharp increases in market rates on competing short-term securities led to an increase in CD attrition at many banks. Banks not only continued to experience heavy losses of maturing large CD's—those in denominations of $100,000 or more —but also found it increasingly difficult to retain other time and savings deposits, especially after interest payments had been credited at the end of the second quarter. Weekly reporting bank data, which are not adjusted for seasonal variation, indicate that time deposit losses in the third quarter centered at banks outside the major financial centers. About two thirds of the $3.5 billion third-quarter decline in large CD's outstanding at weekly reporting banks (see Chart II) occurred at banks outside New York and Chicago. These banks also sustained more than one half of the total reduction of $2.4 billion in other time and savings deposits. These third-quarter developments represented a shift from the pattern in the first half. In that period, CD losses had been concentrated at New York and Chicago banks, which accounted for $4.5 billion of an aggregate $7.5 billion decline. By the same token, weekly reporting banks in New York and Chicago experienced a moderate decline in other time and savings deposits in the first half of 1969, while banks outside those cities had increased somewhat their holdings of such deposits. The third-quarter shift in the pattern of deposit losses at weekly reporting banks further suggests that the impact of restrictive monetary policy was being felt in growing degree by banks outside the two main financial centers. It remains true, nevertheless, that over the first nine months of 1969 banks in New York City and Chicago lost a volume of CD's equal to about two thirds of the amount outstanding at the end of 1968, whereas the loss at banks outside these centers was only about one third of the end-of-1968 level.

Chart II

LARGE CERTIFICATES OF DEPOSIT AND LIABILITIES TO FOREIGN BRANCHES*

At weekly reporting banks



* Outstanding on the last Wednesday of each month.

Source: Board of Governors of the Federal Reserve System.

In an effort to replace funds lost in the outflow of time deposits, the larger banks continued to rely upon the Euro-dollar market as a source of funds. However, the $1 billion third-quarter increase in commercial bank borrowings from their own foreign branches was considerably smaller than the advances of almost $4 billion registered in both the first and second quarters. Bank liabilities to their own foreign branches in fact declined by about $400 million in September after the Board of Governors of the Federal Reserve System amended its Regulations D and M, placing 10 percent marginal reserve requirement on member bank Euro-dollar borrowings above those outstanding in a base period. Banks also used the domestic commercial paper market as a source of funds throughout the third quarter. Indeed, the volume of outstanding commercial paper issued by bank-affiliated holding companies and subsidiaries increased by more than $1.2 billion during the period to a level of $2.5 billion. In many cases a holding company or subsidiary purchases loans from its affiliated bank, and thus channels funds it obtains through the issuance of commercial paper to the bank for lending and investing. However, on October 29, the Board of Governors of the Federal Reserve System announced that it was considering an amendment to its Regulation Q that would subject such bank-related commercial paper, or similar obligations, to the interest-rate ceilings that apply to large CD's. The Board stated that the proposed changes are necessary because the purposes of reserve requirements and interest-rate ceilings were in danger of being frustrated, to a substantial degree, as a result of the issuance of bank-related commercial paper. Moreover, in a separate but related action, the Board ruled that commercial paper issued by subsidiaries of member banks is in the same status as obligations issued directly by the banks and is, therefore, covered by existing provisions of Regulations Q and D.

THRIFT INSTITUTIONS

The continued increase in market rates of interest cut heavily into savings deposit growth at thrift institutions during the third quarter. Paralleling the experience of commercial banks, both the savings and loan associations and the mutual savings banks sustained small outflows of funds in July, on a seasonally adjusted basis, after quarterly interest payments were credited to funds held on deposit during the April-June period. Subsequently, flows to these institutions began to improve somewhat, but the seasonally adjusted 2 percent annual rate of deposit growth posted in the third quarter was only half the second quarter's gain. Despite the pressure of reduced deposit growth, mortgage lending by savings and loan associations and mutual savings banks slowed only slightly during the third quarter. Mortgage holdings grew at about a 6 percent annual rate during the period, compared with a 7½ percent expansion in the second quarter. Over the first nine months of this year the increase in mortgages held by the thrift institutions was somewhat larger than the increment recorded during the same period of 1968. The Federal Home Loan Bank Board has actively supported the mortgage market this year by reducing the requirements for savings and loan associations' liquid asset holdings and by maintaining an expansive policy with regard to advances made to the associations. During the third quarter alone, the savings and loan associations increased their borrowing from the Federal Home Loan Banks by $1.5 billion, bringing the total net borrowing for the year to $2.7 billion or only about $400 million less than funds obtained through increases in deposits.

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The Money and Bond Markets in October

Interest rates on intermediate- and long-term securities began to decline sharply in early October after successively reaching new record highs during September. Fresh hopes of peace in Vietnam and a growing belief that domestic inflationary pressures were easing led many investors to conclude that interest rates had reached their peaks. The shift in sentiment spurred demands for longer term issues especially, and by the third week of the month their prices had more than retraced the steep declines posted in September. At the peak of the market rally, yields on intermediate- and long-term Treasury coupon issues had declined from 50 to 100 basis points, and new corporate and tax-exempt offerings were being marketed at yields as much as 25 basis points below their earlier highs.

While a swing in sentiment was sufficient to trigger the rise in bond prices, the more substantive support needed to sustain the advance proved lacking. Underwriters, aware that prior market rallies based on expectations of lower interest rates had been short-lived, became somewhat more cautious in bidding for new debt issues as the month wore on. At the same time, the President's impending address on the Vietnam situation, scheduled for November 3, became a source of uncertainty to the market, and earlier data pointing to an economic "cooling" were followed by contrary news. Big September jumps in the consumer price index, housing starts, and durable goods orders, all reported after mid-October, were disappointing reminders of the strength of inflationary forces. As a consequence, late October witnessed sharp upward readjustments in securities yields, in some cases back to the levels early in the month.

In the money market, restraint on bank reserves continued during October. Member banks' net borrowed reserve positions remained deep, and Federal funds traded above 9 percent through midmonth, then dropped below for a time before firming a bit (see Chart I). Short-term rates declined on balance, and longer term Treasury bill rates were lower over the month as well.

BANK RESERVES AND THE MONEY MARKET

Money market conditions remained generally unchanged during October, although an easier tendency appeared when reserves shifted to the money center banks. Member bank net borrowed reserves averaged $1,017 million (see Table I), $274 million deeper than in September when Treasury cash management had resulted in a temporary easing of bank reserve positions around midmonth. Excess reserves declined $109 million to a level of $173 million, and borrowings averaged $1,190 million, an increase of $164 million.

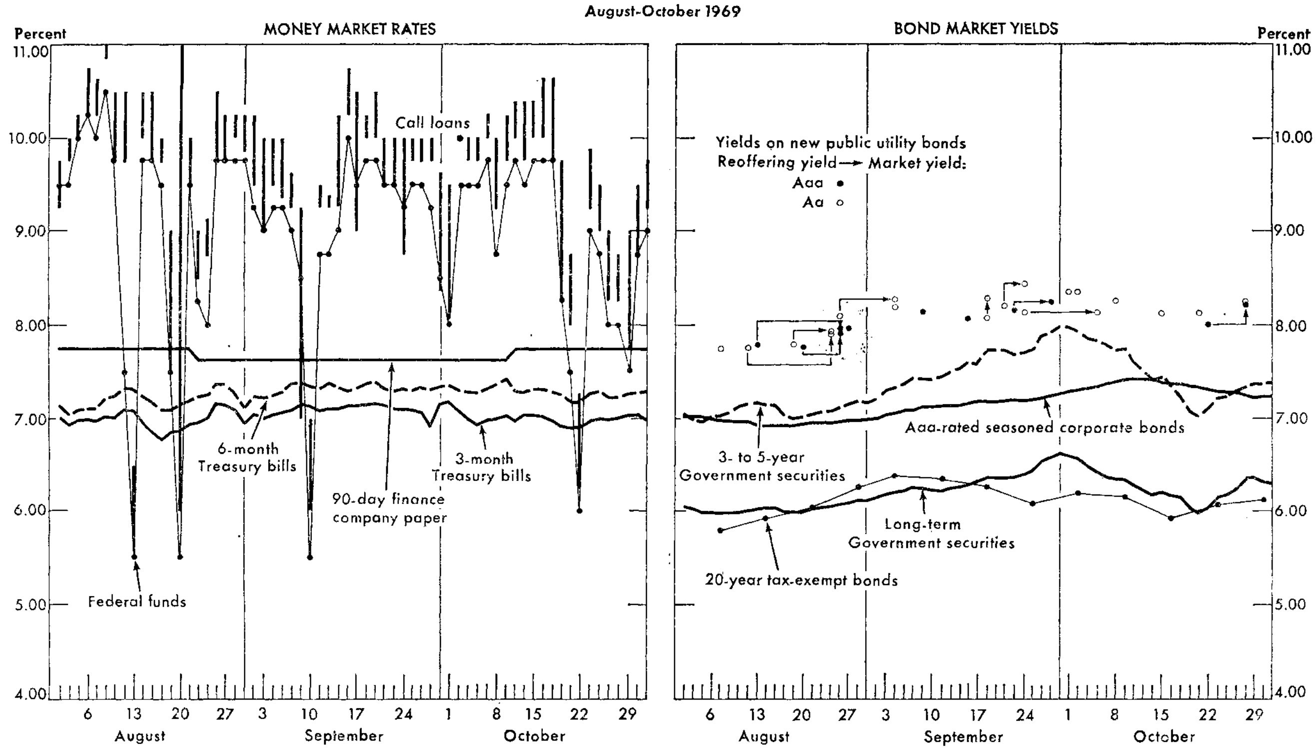
The monetary aggregates were mixed during October. Total member bank deposits subject to reserve requirements (adjusted to include Euro-dollar liabilities) fell at a 9 percent annual rate, although sales of commercial paper by bank holding companies provided a partial offset. On the other hand, the narrow money supply advanced at a 1.2 percent annual rate in October, after declining in the previous two months.

Despite continued monetary restraint, domestic short-term market rates did tend to move a bit lower over the month. For instance, dealer-placed prime four- to six-month commercial paper at the month end was quoted at 8⅛ percent, off ¾ percentage point from late September, and bankers' acceptances edged down ¼ to ⅜ percentage point. Short-term Euro-dollar rates also moved lower during October. After closing September at about 11¼ percent, the three-month rate fell almost without pause throughout most of October, although some of this decline was retraced in the closing days of the month and the rate ended the month around 10 percent. Part of the drop reflected a reflux of funds out of Germany into the Euro-dollar market when speculative positions in marks were unwound after the mark was allowed to float. At the same time, additions to Euro-dollar borrowings became relatively more expensive for United States banks by virtue of the new marginal reserve requirement, established under Regulations D and M, which had to be met beginning with the week ended on October 22. However, United States banks were able to attract foreign official funds to domestically issued certificates of deposit (CD's). These are not subject to the interest-rate ceilings of Regulation Q, and reserve requirements on time deposits are 4 percentage points less than the 10 percent applying to increases in Euro-dollar liabilities. At New York City banks, for example, CD's issued to "others" (a category which includes foreign governments and international institutions) advanced almost $450 million between October 1 and October 29. In contrast, large CD's subject to the Regulation Q ceilings fell by more than $50 million during the same period.

On balance, operating factors tended to absorb bank reserves during all but one of the statement weeks ended in October. Week-to-week swings in float were somewhat larger than usual. For instance, movements in float added almost $900 million to bank reserves during the week ended on October 22 and then absorbed about $600 million during the following week. Borrowings at the discount window also tended to fluctuate from week to week in response to the reserve impact of market forces, the thrust of open market operations, and the distribution of reserves between large money market banks and others.

In general, the nationwide distribution of reserves followed a fairly regular pattern during the month. The large money market banks experienced outflows until midmonth, principally from calls on Treasury deposits (see Chart II). Thereafter, the Treasury's cash position improved as proceeds from the auction of April tax bills

Chart I
SELECTED INTEREST RATES
August-October 1969



Note: Data are shown for business days only.

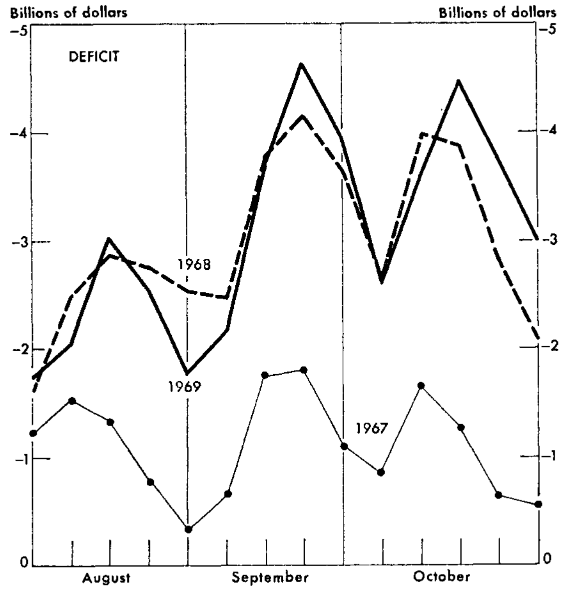
MONEY MARKET RATES QUOTED: Daily range of rates posted by major New York City banks on call loans (in Federal funds) secured by United States Government securities (a point indicates the absence of any range); offering rates for directly placed finance company paper; the effective rate on Federal funds (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 (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 seasoned Aaa-rated corporate bonds; daily averages of yields on long-term Government securities (bonds due or callable in ten years or more) and on 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.

Chart II

BASIC RESERVE POSITION OF MAJOR MONEY MARKET BANKS



Note: Calculation of the basic reserve position is illustrated in Table II.

flowed in. Also, private demand deposits began to increase at the major money market banks after midmonth, with the basic reserve position of New York City banks benefiting a little sooner than that at large banks elsewhere (see Table II).

Pressures in the market for Federal funds were at their peak during the weeks ended on October 8 and October 15, when the large banks moved to cover their reserve deficiencies. In the first of these two periods, the rate on Federal funds was mostly 9½ percent to 9¾ percent before declining on the final day of the period. In the October 15 week, demands were strong throughout the period. Some trading took place at rates as high as 10½ percent, when a buildup of deficiencies coincided with the large aggregate reserve absorption by "market" forces. Open market transactions injected reserves, primarily through outright purchases of Government securities, to offset much of these pressures.

Aggregate market factors reversed course after midmonth, and positions at money market banks began to improve at the same time. The week ended on October 22 was the first during which reserves had to be maintained on Euro-dollar liabilities under the new provisions of Regulations D and M. This development added about $400 million to total required reserves for that week. Reserve strategy by large banks appeared to be cautious as the week opened; reserve excesses were built up through the weekend and Federal funds held at the 9¾ percent level. The subsequent distribution of these excesses, aided by a jump in float of almost $900 million, pushed the funds rate down to a range of 6 to 8¼ percent for the last three days of the week. Reserve pressures were also less severe during the final October statement week. Federal funds traded mostly between 7½ percent and 9 percent, as large-bank reserve deficiencies were again pared and market factors added to reserve availability. Under these circumstances, the Federal Reserve absorbed reserves through matched sale-purchase transactions.

THE GOVERNMENT SECURITIES MARKET

Short-term Treasury bill rates were mostly steady to lower throughout October, while longer term issues generally moved down rather sharply during the first three weeks and then turned upward as the month drew to a close. The technical position of the bill market was strong throughout most of the month, and dealer interest in regular weekly auctions was usually on the aggressive side (see Table III). Distribution of the new bills encountered little investor resistance at the lower levels. The three-month bill closed October at a 6.99 percent rate, little changed over the month. Demands for longer bills mounted strongly toward midmonth, bringing yields on six-month and one-year maturities down by as much as 26 to 39 basis points. Much of this movement appeared to be the result of expectations of reduced inflationary pressure and progress in Vietnam.

The Treasury raised $5 billion in new funds during October through the sale of two issues of tax anticipation bills (TAB's). On October 8, $2 billion of TAB's maturing in April was auctioned at an average rate of 7.283 percent and, on October 23, $3 billion of June TAB's was sold at an average rate of 7.205 percent. Both auctions were dominated by banks, which could make payment by crediting their Treasury Tax and Loan Accounts to the extent of 50 percent of their purchases in the first auction and 100 percent in the second. While these new TAB offerings did not produce a strong upward thrust to rates, the process of distribution by the banks did inhibit somewhat the easing of longer bill rates.

Rates on longer bills, as well as coupon issues, turned back up in the final ten days of the month amid a sharp reversal of market sentiment. The Defense Department statement on October 22 expressing opposition to any

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, OCTOBER 1969

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

Factors	Changes in daily averages—week ended on Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29	Net changes
"Market" factors						
Member bank required reserves	— 353	+ 25	— 137	— 259	+ 367	— 357
Operating transactions (subtotal)	— 154	— 98	— 679	+ 621	— 211	— 521
Federal Reserve float	— 639	+ 122	— 163	+ 864	— 594	— 410
Treasury operations*	+ 64	+ 222	— 198	+ 174	+ 8	+ 270
Gold and foreign account	+ 11	— 11	+ 18	— 1	—	+ 17
Currency outside banks	+ 270	— 225	— 410	— 410	+ 439	— 336
Other Federal Reserve accounts (net)†	+ 138	— 206	+ 74	— 7	— 64	— 65
Total "market" factors	— 507	— 73	— 816	+ 362	+ 156	— 878
Direct Federal Reserve credit transactions						
Open market instruments	+ 291	+ 318	+ 515	— 51	— 348	+ 725
Outright holdings:						
Government securities	+ 87	+ 217	+ 536	+ 172	— 181	+ 831
Bankers' acceptances	—	+ 1	+ 3	— 1	—	+ 3
Repurchase agreements:						
Government securities	+ 211	—	+ 12	— 205	— 108	— 90
Bankers' acceptances	— 4	+ 32	— 2	— 18	— 15	— 7
Federal agency obligations	— 3	+ 68	— 34	+ 1	— 44	— 12
Member bank borrowings	+ 332	— 474	+ 384	— 333	+ 168	+ 77
Other loans, discounts, and advances	—	—	—	—	—	—
Total	+ 623	— 156	+ 899	— 384	— 180	+ 802
Excess reserves	+ 116	— 229	+ 83	— 22	— 24	— 76

Member bank:	Daily average levels: Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29	
Total reserves, including vault cash	27,400	27,146	27,366	27,603	27,212	27,345‡
Required reserves	27,080	27,055	27,192	27,451	27,084	27,172‡
Excess reserves	320	91	174	152	128	173‡
Borrowings	1,438	964	1,348	1,015	1,183	1,190‡
Free, or net borrowed (—), reserves	—1,118	— 873	—1,174	— 863	1,055	—1,017‡
Nonborrowed reserves	25,962	26,182	26,018	26,588	26,029	26,156‡
Net carry-over, excess or deficit (—)§	113	171	101	143	108	127‡

System account holdings of Government securities maturing in:	Changes in Wednesday levels: Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29	
Less than one year	— 818	+ 376	+1,049	—1,505	+ 890	— 8
More than one year	+ 695	+ 128	—	—	—	+ 823
Total	— 123	+ 504	+1,049	—1,505	+ 890	+ 815

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† Includes assets denominated in foreign currencies.
‡ Average for five weeks ended on October 29.
§ Not reflected in data above.

Table II

RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS OCTOBER 1969

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended on Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29	Averages of five weeks ended on Oct. 29
Eight banks in New York City						
Reserve excess or deficiency (—)*	58	— 18	30	— 56	17	6
Less borrowings from Reserve Banks	95	170	211	—	52	106
Less net interbank Federal funds purchases or sales(—)	782	967	1,271	632	419	814
Gross purchases	*1,814*	*1,882*	*2,367*	*1,858*	*1,575*	*1,899*
Gross sales	*1,031*	*915*	*1,096*	*1,226*	*1,153*	*1,084*
Equals net basic reserve surplus or deficit (—)	— 819	—1,155	—1,452	— 688	— 454	— 914
Net loans to Government securities dealers	502	344	400	519	499	453
Net carry-over, excess or deficit (—)†	27	40	15	44	— 16	22
Thirty-eight banks outside New York City						
Reserve excess or deficiency (—)*	39	— 11	— 27	30	— 53	— 4
Less borrowings from Reserve Banks	531	113	397	275	322	328
Less net interbank Federal funds purchases or sales(—)	1,306	2,245	2,570	2,834	2,167	2,224
Gross purchases	*3,579*	*4,380*	*4,705*	*4,490*	*4,101*	*4,251*
Gross sales	*2,271*	*2,135*	*2,135*	*1,656*	*1,934*	*2,026*
Equals net basic reserve surplus or deficit (—)	—1,798	—2,369	—2,994	—3,079	—2,542	—2,556
Net loans to Government securities dealers	127	87	45	283	235	155
Net carry-over, excess or deficit (—)†	33	42	21	24	16	27

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.
† Not reflected in data above.

Table III

AVERAGE ISSUING RATES* AT REGULAR TREASURY BILL AUCTIONS

In percent

Maturities	Weekly auction dates—October 1969: Oct. 6	Oct. 10	Oct. 20	Oct. 27
Three-month	7.046	7.042	6.975	7.030
Six-month	7.289	7.327	7.265	7.263

Maturities	Monthly auction dates—August-October 1969: Aug. 26	Sept. 23	Oct. 28
Nine-month	7.387	7.357	7.244
One-year	7.340	7.350	7.127

* 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.

unilateral cease-fire in Vietnam prompted some reassessment of the military outlook, and the flow of bullish reports on the state of the economy quickly eroded earlier optimism about an easing of inflationary pressures. Investment demand for bills did moderate the scale of subsequent yield advances in the longer sector, however. At the regular monthly auction on October 28 the new nine- and twelve-month bills sold at average rates of 7.244 and 7.127 percent, respectively, the lowest levels for both maturities in five months. Six-month and one-year bills yielded 7.30 percent and 7.03 percent, respectively, at the end of October, 3 and 39 basis points below levels of a month earlier.

Prices on Treasury coupon issues advanced steadily for three weeks, but thereafter market optimism began to evaporate and a sharp reversal took place, offsetting more than half of the earlier declines in yields. The initial upsurge in prices of recently issued Treasury notes was particularly marked. The three notes issued in the September refunding, which at their issue date carried record-setting yields, had moved to discounts ranging from 6/32 to 18/32 point in "when-issued" trading at the end of September.[1] These losses were quickly erased in early October, however, and the bid price on the 7½ percent issue maturing in 1976 moved to a premium as high as 4 points before the market decline set in late in the month. The widely followed 4¼ percent bond of 1987-92 surged almost 6 points in price over the first three weeks, with a corresponding fall in yield of 59 basis points, but it too fell back sharply in late-month trading.

OTHER SECURITIES MARKETS

Prices and yields on corporate and agency securities underwent wide swings in October. Rates on both new and seasoned taxable issues dropped dramatically until the last ten days of the month, when heightened expectations of a substantial reduction in the United States involvement in Vietnam and optimism over progress in reducing domestic inflation contributed to sentiment that interest-rate peaks had been reached. The inflows of long-term funds began to dry up toward the end of the month, however, and the optimistic atmosphere quickly evaporated as the indicators of economic activity took on renewed strength and peace negotiations remained shrouded with uncertainty.

The sharp new-issue yield declines carried through the first three weeks of October, and lows were registered around October 21, when a $100 million offering of 25-year bonds by Southern California Edison was oversubscribed at an 8⅛ percent yield. This level was about 23 basis points below the record 8.35 percent yield on Aa-rated issues, set October 1. On the next day Mountain States Telephone and Telegraph, a Bell System unit, offered $100 million of 40-year debentures to yield 8 percent to investors—fully 25 basis points lower than another Bell unit offering at the end of September. The issue was fairly well received by investors but did not sell out immediately.

The abruptness of the yield declines and the paucity of evidence supporting predictions of economic slowing made the lower yield levels unsustainable. Price restrictions on the unsold Mountain States Telephone debentures were released October 28, and quotations subsequently fell as much as 2½ points. At that stage the issue yielded 8.21 percent, 21 basis points above the original offering and only 4 basis points below the September record. Investor response to new offerings marketed at rising yields during the last week of the month was mixed.

Federal agency flotations again exerted strong demand pressures on the capital markets in October. Rates on issues maturing in one year and over generally declined with other market rates during the first three weeks, but then rebounded sharply. On October 2, a $600 million financing by the Federal National Mortgage Association commanded record-high rates of 8¾ percent and 8.70 percent, respectively, for 16- and 29-month notes. The excellent response to these attractive rates marked a turning point in sentiment, and in secondary market trading the notes were quoted to yield 7.65 percent and 7.50 percent at low points during the month; however, each rose around 35 basis points over the last ten days. At the end of the month, FNMA marketed two more issues totaling $600 million—a $400 million offering of 18-month debentures carried a yield of 8.20 percent and $200 million of 37-month debentures yielded 8 percent to investors.

Price advances in the tax-exempt sector were considerably less pronounced, in large measure because of concern over the status of tax legislation under consideration by the Congress. This uncertainty was eased on October 9, when the Senate Finance Committee rejected the provisions of a House bill which imposed levies on currently tax-exempt securities. In addition, commercial banks, a major source of funds, continued to face reserve strin-

[1] On October 10 the Treasury announced a revision of subscription results for this refunding. The total amount reported as exchanged was reduced $352 million to $7,012 million. This raised the rate of attrition on the publicly held portion of the maturing issues to 24.3 percent from the 19.7 percent initially reported.

gency, while a huge backlog of demands for funds still overhung the market. Interest-rate ceilings have been responsible for a large volume of postponed flotations, and there is evidence that some issuers are amending ceiling statutes to facilitate financings.

On October 7, local public housing authorities sold over 90 percent of an offering of $374 million five-month Federally guaranteed notes. The average rate approximated 5.86 percent, around 7 basis points below that in September when less than half an offering of $316 million was sold. The market outlook brightened subsequently on news of the Senate Finance Committee action on tax legislation. A few days later, various urban renewal agencies, under the auspices of the Department of Housing and Urban Development, sold a total of $250 million of project notes at an average yield of 5.59 percent, over 30 basis points below the cost of a mid-September offering.

Investors began to resist the heavy volume of tax-exempt offerings after midmonth. The limited absorptive capacity of the market was reflected in a sharp upswing in dealer holdings. During the first half of October the Blue List of dealer-advertised inventories ranged between $300 million and $350 million—not far above the year's low. By the end of the third week, however, holdings had jumped to about $540 million, and in the final week they briefly reached $625 million—the year's highest level. In this atmosphere, yields began to rise again. At the close of October, *The Weekly Bond Buyer's* index of twenty municipal bond yields stood at 6.13 percent, only 6 basis points lower than at the beginning of the month.

THE VELOCITY OF MONEY

A new book entitled *The Velocity of Money* by George Garvy and Martin R. Blyn, described in the September *Monthly Review,* has now been published by the Federal Reserve Bank of New York. The volume is a completely revised and expanded edition of *Deposit Velocity and Its Significance,* issued a decade ago, and embodies some of the research in monetary economics being conducted at the Bank.

Copies are available from the Public Information Department at a full charge of $1.50 and an educational charge of 75 cents. Single copies will be sent free to teachers, commercial bankers, and libraries (public, school, and other nonprofit institutions) in the United States and to domestic and foreign government officials, central bankers, and newsmen. Classroom or training copies will be available to these groups (including school bookstores) at the educational charge. Free and educational-charge copies will be sent only to school, business, or government addresses.

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, 33 Liberty Street, New York, N.Y. 10045. Copies of charge publications are available at half price to educational institutions, unless otherwise noted.

1. CENTRAL BANK COOPERATION: 1924-31 (1967) by Stephen V. O. Clarke. 234 pages. Discusses the efforts of American, British, French, and German central bankers to reestablish and maintain international financial stability between 1924 and 1931. ($1 per copy)

2. ESSAYS IN MONEY AND CREDIT (1964) 76 pages. Contains articles on select subjects in banking and the money market. (40 cents per copy)

3. KEEPING OUR MONEY HEALTHY (1966) 16 pages. An illustrated primer on how the Federal Reserve works to promote price stability, full employment, and economic growth. Designed mainly for secondary schools, but useful as an elementary introduction to the Federal Reserve. (First 100 copies free; 7 cents for each additional copy*)

4. MONEY AND ECONOMIC BALANCE (1968) 27 pages. A teacher's supplement to *Keeping Our Money Healthy*. Written for secondary schoolteachers and students of economics and banking. (First 100 copies free; 8 cents for each additional copy*)

5. MONEY, BANKING, AND CREDIT IN EASTERN EUROPE (1966) by George Garvy. 167 pages. Reviews recent changes in the monetary systems of the seven communist countries in Eastern Europe and the steps taken toward greater reliance on financial incentives. (60 cents per copy)

6. MONEY: MASTER OR SERVANT? (1966) by Thomas O. Waage. 48 pages. Explains the role of money and the Federal Reserve in the economy. Intended for students of economics and banking. (First 100 copies free; 13 cents for each additional copy*)

7. OPEN MARKET OPERATIONS (1969) by Paul Meek. 48 pages. A basic explanation of how the Federal Reserve uses purchases and sales of Government securities to influence the cost and availability of money and credit. Recent monetary actions are discussed. Intended for college students. (First 100 copies free; 10 cents for each additional copy*)

8. THE NEW YORK FOREIGN EXCHANGE MARKET (1965) by Alan R. Holmes and Francis H. Schott. 64 pages. Describes the organization and instruments of the foreign exchange market, the techniques of exchange trading, and the relationship between spot and forward rates. (50 cents per copy)

9. THE STORY OF CHECKS (1966) 20 pages. An illustrated description of the origin and development of checks and the growth and automation of check collection. Primarily for secondary schools but useful as a primer on check collection. (First 100 copies free; 4 cents for each additional copy*)

10. ESSAYS IN DOMESTIC AND INTERNATIONAL FINANCE (1969) 86 pages. A collection of nine articles dealing with a few important past episodes in United States central banking, several facets of the relationship between financial variables and business activity, and various aspects of domestic and international financial markets. Intended for advanced students of economics and finance. (70 cents per copy)

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* Unlimited number of copies available to educational institutions without charge.