

# FEDERAL RESERVE BANK OF NEW YORK



## MONTHLY REVIEW

MAY 1966

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Volume 48

No. 5

## The Business Situation

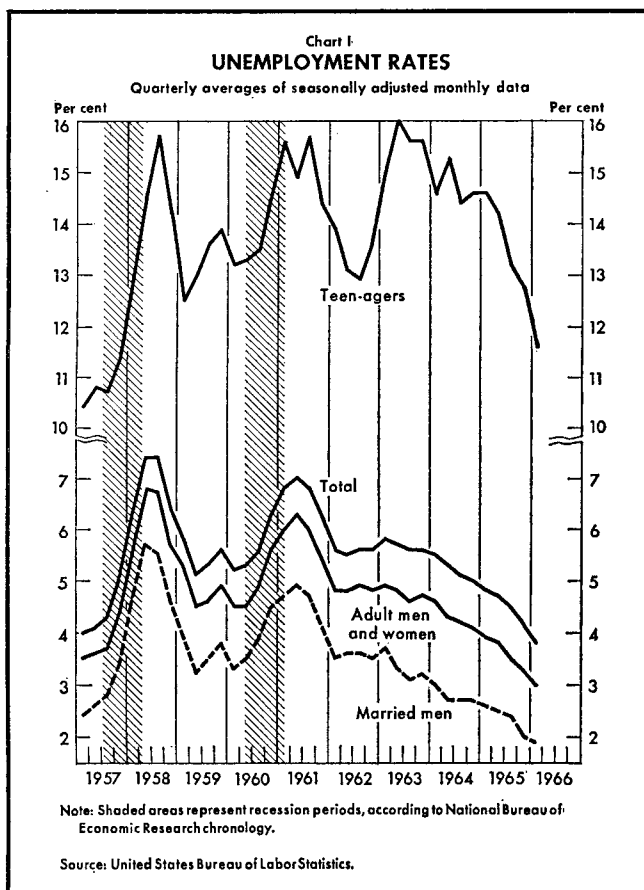
The economy continues to push ahead into new high ground with undiminished vigor. While the physical volume of goods and services produced and consumed has expanded—and will no doubt continue to expand—this expansion has been accompanied increasingly by price advances, as pressures on the economy's resources have mounted. Thus the exceptionally large dollar increase during the first quarter in gross national product (GNP) reflected not only the continued vigor of growth in real output but also a rather substantial rise in the prices of the goods and services produced.

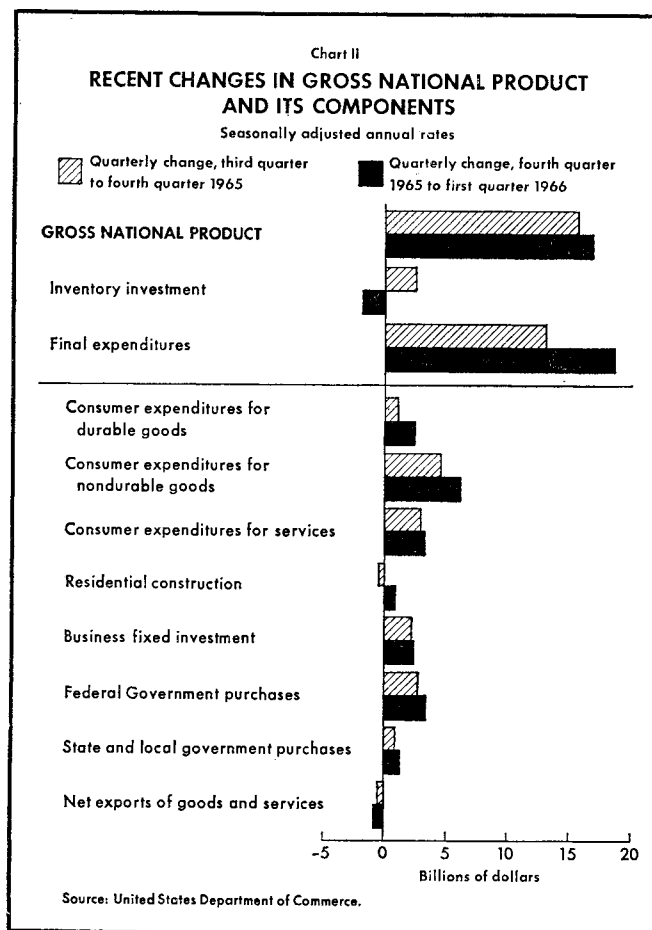
Prices normally come under increasing pressure in an economy where mounting demands are pressing against a productive apparatus in which little slack remains. The over-all unemployment rate is down to the lowest level in many years, and even the particularly troublesome teenage rate has been sharply reduced (see Chart I). Moreover, rates of industrial capacity utilization have edged higher and higher and, against this background, prices of a broad range of goods have risen. The wholesale industrial price index increased at an annual rate of 3 per cent during the first three months of the year, compared with a rise of not quite 1½ per cent during 1965, and it appears that such prices continued to move up in April. The over-all wholesale price index, however, was unchanged in March and perhaps also in April as a result of declines in agricultural prices. At the consumer level, March witnessed another appreciable rise in the over-all price index, reflecting increases for a number of nonfood commodities as well as for foods and services.

Under present conditions, restraint on aggregate demand to keep it in balance with supply possibilities is clearly desirable. With respect to capital spending, there appear to be several factors at work tending to influence businessmen to postpone some of the outlays originally planned for this year. Among these factors, of course, is the President's direct request that businessmen try to cut back on spending wherever feasible. Moreover 1966 capital outlays may be constrained to some degree by the reduced availability and higher cost of credit and, on the supply side, by actual and prospective shortages of capital goods and skilled labor. Nevertheless, while any decisions to postpone some of this year's planned spending will surely be helpful, it remains to be seen how quantitatively important such postponements will prove to be in aggregate.

### GROSS NATIONAL PRODUCT IN THE FIRST QUARTER

The Commerce Department's preliminary estimates put GNP at a seasonally adjusted annual rate of \$714.1 billion in the first quarter, up by \$16.9 billion from the preceding three-month period (see Chart II). This large





advance represented an annual growth rate of 10 per cent, close to the highest rate of gain experienced during any quarter of the current business expansion. In real terms, the nation's aggregate output of goods and services grew at an annual rate of slightly more than 6 per cent in the first quarter, somewhat better even than last year's strong rate of expansion. The average price of output rose at an annual rate of around 3½ per cent, however, the sharpest increase in more than eight years and significantly ahead of last year's advance of about 2 per cent. A large first-quarter rise in food prices was an important factor contributing to this step-up in the over-all rate of price increase.

Most of the major components of aggregate demand contributed to the first-quarter GNP increase. Net exports, however, posted their third consecutive quarterly decline, as spending on imported goods and services increased more than did exports of goods and services produced in the domestic economy. The downtrend in net exports is

disappointing in view of the important part played by our trade balance in the effort to achieve equilibrium in the over-all balance of payments. Nevertheless, a fall in net exports is by no means unusual in a setting of high and rising levels of production, resource utilization, and income. In addition, a rising domestic price level of course tends to stimulate imports and dampen exports.

The estimated rate of inventory accumulation also slowed down a bit in the first quarter, following a sizable fourth-quarter advance that had pushed the annual rate of accumulation up to an exceptionally high \$10.1 billion. While the \$8.3 billion first-quarter rate was quite large relative to the experience of recent years, it was associated with an exceptionally strong expansion of final demand. Viewed in this context, the accumulation rate does not appear to have been excessive. Nevertheless, a desire to build protection against possible future shortages or price increases may be having an influence on business decisions regarding inventories.

Increased spending for goods and services by all levels of government contributed substantially to over-all demand expansion in the first quarter. State and local government outlays rose by \$1.3 billion, right in line with the average gain recorded last year. Federal purchases, however, registered the largest quarterly advance since the Korean war, and this jump followed a significant rise in the fourth quarter of 1965. The recent speedup in Federal spending reflected the expansion of the armed forces and of military procurement, as Federal nondefense purchases continued to rise at about last year's average rate. Although uncertainty over the future course of events in Vietnam makes forecasting difficult, current estimates nevertheless imply that the push given by defense spending to the expansion of aggregate demand will become more modest in the latter part of 1966.

Consumer spending showed an exceptionally large increase in the first quarter even though the growth of disposable income was slowed by the rise in social security taxes effective January 1. Thus there was a considerable decline in the proportion of disposable income saved, reflecting the fact that it usually takes a while for consumers to adjust their spending habits to changes in disposable income caused by tax changes (including social security deductions). The dip in the saving ratio stemming from the rise in such withholdings may therefore prove to be short-lived. Sharply higher food prices were one factor contributing to the strong rise in consumption spending, and the growth in outlays for nondurables was well ahead of the average pace recorded last year. Spending for durable goods also showed a substantial increase in the first quarter, attributable in good part to very strong

sales of new domestically built cars. Sales for the quarter as a whole were at a seasonally adjusted annual rate of 9¼ million units, equal to the high set in last year's first quarter—when the industry was making up sales lost during strikes late in 1964—and substantially above the fourth quarter's 8⅔ million units. Following the strong first-quarter showing, however, sales dropped sharply in April to a seasonally adjusted annual rate below 8 million units.

Spending on residential construction increased in the first quarter by \$0.9 billion (annual rate), and thus recouped the declines of the two preceding quarters. The rate of spending nevertheless remained somewhat below the peak attained two years ago. The upturn in the first quarter reflected improvement late last year in the rate of new housing starts, as well as some further rise in construction costs. The starts rate, however, is highly volatile, fluctuating sharply from month to month. Thus, despite the March recovery of starts from the sharply reduced February level, there has apparently been no real breakout from the sideways movement that has characterized this sector over the past two years.

#### **CAPITAL INVESTMENT AND INDUSTRIAL PRODUCTION**

The rate of growth in spending for business fixed investment continued to exceed the rate of increase in over-all GNP in the first quarter. As a result, the ratio of such investment spending to total GNP edged up further to reach 10.6 per cent, equal to the highest rates recorded during the investment boom of 1956-57. In dollar terms, business fixed investment spending grew at an annual rate of \$2.4 billion in the first quarter, about equal to last year's average quarterly increase. The latest survey of business plans, moreover, clearly supports earlier indications that the remainder of this year will see further strong advances in outlays for new plant and equipment. According to this survey, taken by McGraw-Hill in March, planned 1966 outlays add up to a 19 per cent rise over 1965—an even larger gain than the 16 per cent reported by a Government survey taken in late January and early February. The McGraw-Hill survey, however, was largely completed prior to the President's appeal to businessmen

to cut back on the pace of spending this year. Statements by a number of large corporations during the past month suggest that, because of the President's request and also because of delivery delays, some reductions may in fact take place.

The McGraw-Hill survey indicates that manufacturers are devoting an increased proportion of their capital spending to the expansion of productive capacity. During the first four years of the current business expansion, manufacturers' capital investment was heavily oriented toward cost reduction, and capacity growth averaged somewhat less than 4 per cent yearly. As utilization rates moved upward, however, there was a marked shift toward spending for expansion. Thus capacity grew by about 7 per cent last year, and this year's planned gain amounts to 8 per cent.

Reflecting the sustained advance of capital spending, output of business equipment has been growing at a rapid rate for some time and has been an important factor in the over-all expansion of industrial production. Business equipment production increased again in March, as did all the other major categories of industrial output. The Federal Reserve Board's seasonally adjusted production index rose by a substantial 1.5 percentage points to reach 152.9 per cent of the 1957-59 average. The March showing rounded out a very strong quarter. Indeed, industrial output increased during the first quarter at an annual rate of more than 11 per cent, one of the highest growth rates recorded for any quarter of the current business expansion.

Scattered data suggest that the over-all pace of output growth may have slowed a bit in April. A strike at one company cut steel output somewhat, though total ingot production (seasonally adjusted) was up for the fifth consecutive month. Auto assembly operations early in the month were hampered by a railroad strike, and the resulting production losses were a factor in the decline in the assembly rate—to about 9.1 million units, in annual terms, compared with 9.4 million in March. Moreover, April output in the mining sector was significantly dampened by the widespread strike of coal miners. On the other hand, new orders for durable goods moved sharply higher in March and the backlog of unfilled orders registered a very substantial further increase.

## Banking and Monetary Developments in the First Quarter of 1966

The banking system came under increased pressure during the first quarter. Demand for bank loans continued very strong, while the reserves needed to support further deposit and credit expansion by the banks were not so readily available as in earlier months. Thus bank reserve positions tightened somewhat.

Banks responded to these pressures in several ways. In some cases customers did not get the loans they requested or received smaller amounts than they had sought, as a number of banks adopted somewhat more selective lending policies. Then, in early March, major banks around the country raised the interest rate charged prime business borrowers from 5 per cent to 5½ per cent, a move which discouraged some potential loan applicants. Despite these moves, the volume of loans actually extended rose substantially during the quarter, and banks found it necessary to liquidate sizable blocks of Government securities in order to finance them. As loans were added and investments liquidated, bank loan-deposit ratios rose further. By the end of March, the aggregate ratio for the banking system as a whole stood above 64 per cent, 1 percentage point above the level prevailing three months earlier.

In seeking funds needed to permit the expansion of loan portfolios, many banks continued to bid aggressively in the market for time deposits. By the end of the quarter several banks were posting the maximum permissible rate of 5½ per cent on negotiable time certificates of deposit (C/D's) maturing in nine months or more, and rates paid on shorter term certificates were not far below the ceiling. While the actual flow of new funds into C/D's was rather small during the first two months of the year, it began to pick up during March. For the quarter as a whole, however, total time deposits at all commercial banks increased at a much slower rate than in preceding months. Private demand deposits, on the other hand, increased substantially over the period, contributing to a growth in the money supply that was only slightly less rapid than the fast pace set in 1965.

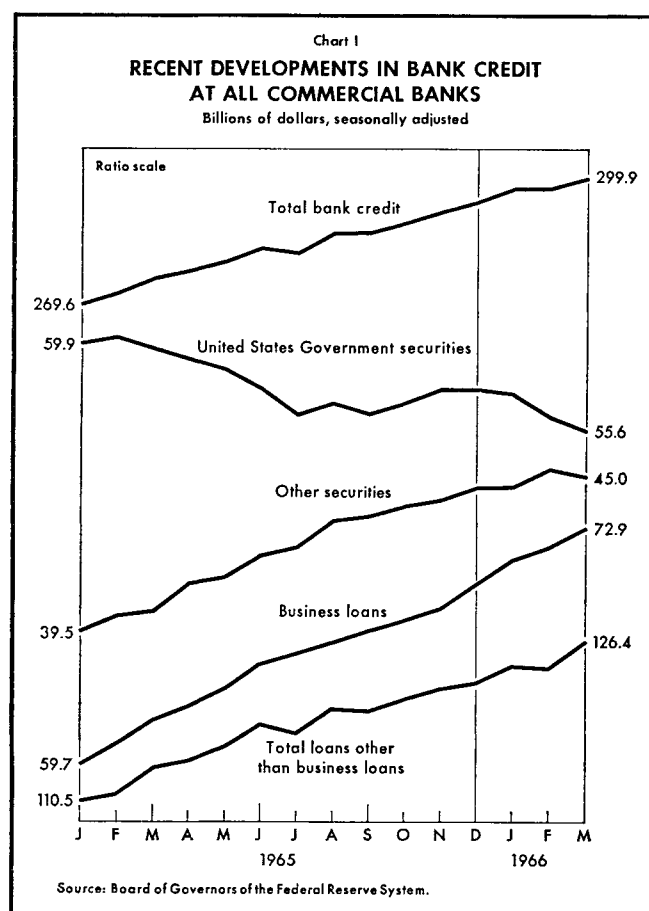
The first-quarter growth rate in total liquid assets held by the nonbank public was in line with that of the preceding quarter. Within this total, however, there appeared

to be a substantially diminished flow of liquid savings, not only to commercial bank interest-bearing accounts, but to mutual savings banks and, to a somewhat lesser extent, to savings and loan associations as well. In contrast, the nonbank public's holdings of United States Government securities maturing within one year showed a sizable increase in the first quarter of this year.

### BANK CREDIT

Total loans and investments at all commercial banks rose at an 8.0 per cent seasonally adjusted annual rate in the first quarter of this year, a bit below the 10.9 per cent pace in the preceding quarter. Indeed, the first-quarter growth rate in total bank credit was more in line with the 8.4 per cent annual average recorded in the 1961-64 period than with the somewhat more rapid 10.0 per cent pace that was experienced over the last year as a whole. Banks reduced their holdings of United States Government securities by a substantial \$2.0 billion (seasonally adjusted) over the first quarter (see Chart I) and, by the end of March, bank holdings of these instruments stood at their lowest level since March 1960. The decline in holdings of United States Government obligations swamped a \$0.4 billion first-quarter increase in holdings of other securities, the smallest quarterly rise in the current expansion. In March, bank holdings of these securities actually declined by \$300 million on a seasonally adjusted basis, the first appreciable decline in this series since 1960.

The strong 15.6 per cent annual rate of increase during the first quarter in total loans at commercial banks was paced by a sharp increase in business loans. While the expansion in loans to business borrowers was considerably below the extraordinary first-quarter advance of last year, it was about in line with the growth rate for 1965 as a whole. Underlying the business loan strength have been tighter corporate liquidity positions and a high rate of capital spending and inventory accumulation. Stepped-up corporate tax payments, expectations of continued high rates of investment expenditure, and projections of a slower growth rate in profits this year relative to last year all



### BANK DEPOSITS, RESERVES, AND TOTAL LIQUID ASSETS

The daily average money supply grew at a 4.3 per cent seasonally adjusted annual rate from December 1965 to March 1966, considerably below the 7.5 per cent pace in the final quarter of last year but not greatly different from the 4.8 per cent growth rate over 1965 as a whole. Month-to-month movements in the money supply reflected in part the frequently observed inverse relationship between short-run changes in its demand deposit component and short-run changes in United States Government deposits. Thus, in February, private demand deposits declined by some \$0.6 billion on a daily average seasonally adjusted basis, while Government deposits, measured on this same basis, rose by roughly the same amount. Despite midmonth tax payments, a reverse flow from Government deposits to private demand deposits occurred over the month of March as a whole, with private demand deposits growing by \$1.1 billion and Government deposits falling again by an approximately offsetting amount.

Commercial bank time deposits (seasonally adjusted) rose at a 7.1 per cent annual rate over the first quarter, markedly less than the rapid 16.1 per cent pace for last year as a whole (see Chart II). Largely because of the sluggish advance in these deposits, the money supply and time deposits combined grew at an annual rate of only 5.6 per cent during the first quarter, as against a 9.8 per cent rise in 1965. Data for weekly reporting member banks suggest that the primary factor in the reduced first-quarter growth in time deposits was the diminished public interest in passbook savings accounts. Funds in these accounts at weekly reporting banks actually declined by some \$251 million over the quarter, compared with a \$1.6 billion rise over the comparable period last year. Moreover, there was some evidence of a diminished flow of new funds into C/D's during the quarter. Despite the sharply higher rates paid on these instruments, C/D's at all weekly reporting banks expanded by only about \$700 million from the beginning of this year to the week just preceding the mid-March dividend and tax dates, as against a \$1.6 billion gain in the comparable period of 1965. Weekly reporting banks—and especially the New York City reporting banks—were, however, considerably more successful than many had expected in attracting additional C/D's during the last two statement weeks in March, with the net gain amounting to \$807 million.

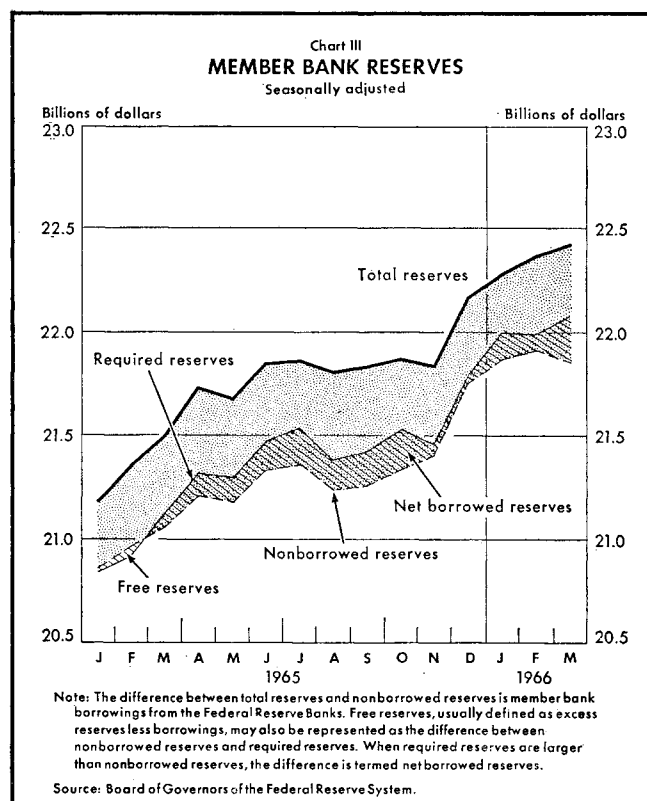
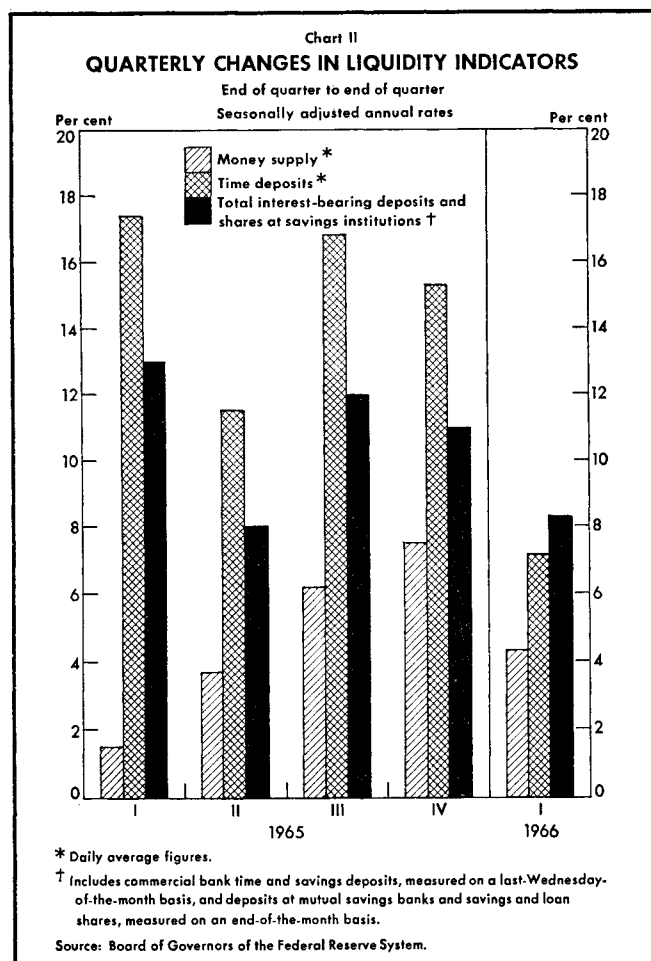
Despite the reduced over-all flow of funds into commercial bank interest-bearing accounts—and into other deposit-type institutions as well—there appears to be some evidence that savings certificates issued by commercial

point to continued strength in business loan demand. On the other hand, despite net increases in most open market rates during the quarter, the relative costliness to business borrowers of bank financing had risen by the end of the period. The main factor in this development was the increase in the prime rate from 5 per cent to 5½ per cent on March 10.

The sharp advance of loans during the first quarter was accompanied by continued pressure on bank liquidity positions, as evidenced by a further sharp advance in loan-deposit ratios. During the January-March period, the loan-deposit ratio for all commercial banks climbed a full percentage point to 64.1 per cent. Even more striking was the rise of 2 percentage points in the loan-deposit ratio at weekly reporting banks over the quarter to 69.8 per cent by the end of March. Similarly, the loan-deposit ratio at New York City reporting banks had advanced to 72.4 per cent by the end of the quarter, up markedly from 69.9 per cent at the end of December.

banks, generally in relatively small denominations, have been growing at a stepped-up pace. This development reflects an increase in the number of banks offering such certificates, some advances in the rates paid on them, and more extensive advertising by issuing banks. Probably a good part of this money represents funds that would otherwise have been lodged in other savings-type accounts, whether outside the commercial banking system or in pass-book savings accounts at commercial banks, including passbook accounts of the issuing banks themselves.

In order to help meet the reserve needs occasioned by the over-all expansion in their demand and time deposit liabilities, banks ran down their excess reserves from an average of \$358 million in January to a \$303 million average in March. At the same time, their borrowings from the Federal Reserve Banks rose from an average level of \$402 million in January to \$551 million in March. On a seasonally adjusted basis, member bank nonborrowed re-



serves expanded at a relatively slow 1.5 per cent annual rate in the first quarter (see Chart III). Over 1965 as a whole, the rate of growth had been 4.2 per cent.

The nonbank public's liquid assets<sup>1</sup> expanded at a seasonally adjusted annual rate of 8.5 per cent in the first quarter, closely in line with the rise in the fourth quarter of last year. As already suggested, however, the growth rate in the time deposit and share components of total liquid assets—commercial bank time and savings deposits, deposits at mutual savings banks, and savings and loan shares—dropped markedly below that for last year as a whole. Savings flows to all three types of institutions may have been adversely affected by the rising attractiveness

<sup>1</sup> Total liquid assets 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; also, deposits at mutual savings banks, savings and loan shares, postal savings deposits, United States Government savings bonds, and the public's holdings of United States Government securities maturing within one year—all measured on an end-of-the-month basis.

of yields on open market instruments, such as state and municipal bonds, and by the fact that individuals apparently saved a considerably smaller proportion of their disposable income in the first quarter than in the preceding quarter. Reflecting in part the heavy bank liquidation of Governments, the nonbank public's holdings of such securities maturing within one year rose by a substantial \$3.3 billion in the first quarter following a modest decline in the

preceding quarter. The ratio of total liquid assets held by the nonbank public to gross national product fell by 0.4 percentage point in the first quarter to 80.9 per cent. Contrary to the experience of earlier business expansions, this ratio rose through much of the current upswing. Since early 1964, however, its movement has been somewhat irregular, and the current position of the ratio is about equal to the level prevailing in the third quarter of 1963.

## **The Money and Bond Markets in April**

The money market became firmer in April, and interest rates on many short- and long-term instruments moved irregularly upward. Bank reserve positions were under pressure during the month, as a continuing strong demand for credit pressed against a somewhat lower average level of nationwide net reserve availability. Reserve needs of the money center banks in particular expanded sharply during the first three weeks of April, which included the midmonth Federal income tax date. As a result, Federal funds were widely sought at rates generally above the discount rate and member bank borrowings from the Federal Reserve increased. For the first time, a significant amount of trading in Federal funds took place at  $4\frac{7}{8}$  per cent,  $\frac{3}{8}$  of a per cent above the discount rate. Toward the end of April, reserve distribution shifted in favor of the money center banks and market conditions became a little less taut.

Treasury bill rates, which had already begun to back away from their March lows in the final week of that month, continued to adjust upward on balance during April. A fairly good demand for bills persisted during the month, but dealers were willing sellers through most of the period as they hesitated to allow positions to build up in the face of high financing costs.

In the bond markets, prices retreated in April from the higher levels to which they had climbed in March. Market participants reacted to the continued heavy flow of financ-

ing in the capital markets, including the market for Government agency issues, as well as to uncertainties over the possibility of a tax increase and the future course of interest rates. Trading activity in Treasury notes and bonds was quite light on most days of the month. By the end of the period, the upward drift in yields had erased a good part of the March decline. The Treasury's announcement in late April of the terms of its May refunding was in line with expectations and thus had little effect on overall market sentiment, although investor response to the offering was quite restrained.

### **THE MONEY MARKET AND BANK RESERVES**

A noticeably firmer tone emerged in the money market during April. While the level of nationwide net borrowed reserves fluctuated somewhat on a week-to-week basis, the average for the month as a whole—\$281 million (see Table I)—was higher than the \$209 million (revised) average in March. Member bank borrowings from the Federal Reserve also expanded during April—rising by \$93 million on average—as banks with reserve deficits turned increasingly to the “discount window” to fill residual reserve needs which had gone unsatisfied in the Federal funds market.

Against the background of a contraction in nationwide reserve availability, there was a pronounced tightening in

**Table I**  
**FACTORS TENDING TO INCREASE OR DECREASE**  
**MEMBER BANK RESERVES, APRIL 1966**

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

Factors	Changes in daily averages— week ended				Net changes
	April 6	April 13	April 20	April 27	
<b>"Market" factors</b>					
Member bank required reserves*.....	— 137	— 17	— 191	— 5	— 350
Operating transactions (subtotal) .....	— 332	+ 170	+ 651	— 157	+ 332
Federal Reserve float .....	— 104	+ 232	+ 307	— 188	+ 247
Treasury operations† .....	+ 257	+ 194	— 132	— 191	+ 128
Gold and foreign account .....	— 37	+ 15	+ 11	+ 13	+ 2
Currency outside banks* .....	— 441	— 312	+ 367	+ 211	— 175
Other Federal Reserve accounts (net)‡ .....	— 8	+ 41	+ 99	— 4	+ 128
Total "market" factors .....	— 469	+ 153	+ 460	— 162	— 18
<b>Direct Federal Reserve credit transactions</b>					
Open market instruments					
Outright holdings:					
Government securities .....	+ 274	+ 8	— 486	+ 145	— 59
Bankers' acceptances .....	— 1	+ 1	—	—	—
Repurchase agreements:					
Government securities .....	+ 145	— 111	— 34	—	—
Bankers' acceptances .....	— 21	— 4	— 6	+ 43	+ 12
Member bank borrowings .....	+ 115	— 20	+ 82	— 43	+ 134
Other loans, discounts, and advances...	—	—	+ 1	+ 3	+ 4
Total .....	+ 513	— 126	— 445	+ 149	+ 91
Excess reserves* .....	+ 44	+ 27	+ 15	— 13	+ 73

	Daily average levels			
	April 6	April 13	April 20	April 27
<b>Member bank:</b>				
Total reserves, including vault cash*...	22,358	22,402	22,608	22,600
Required reserves*	22,025	22,042	22,233	22,238
Excess reserves*	333	360	375	362
Borrowings	623	603	685	642
Free reserves*	- 290	- 243	- 310	- 280
Nonborrowed reserves*	21,735	21,799	21,923	21,958

	Changes in Wednesday levels			
	April 6	April 13	April 20	April 27
<b>System Account holdings of Government securities maturing in:</b>				
Less than one year	+ 655	- 124	- 1,084	+ 746
More than one year	-	-	-	+ 24
Total	+ 655	- 124	- 1,084	+ 770

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 April 27.

**Table II**  
**RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS**  
**APRIL 1966**

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended				Average of four weeks ended April 27*
	April 6	April 13	April 20	April 27*	
Eight banks in New York City					
Reserve excess or deficiency(—)†.....	15	37	8	75	34
Less borrowings from Reserve Banks..	54	28	157	113	88
Less net interbank Federal funds purchases or sales(—) .....	107	863	822	334	532
<i>Gross purchases</i> .....	964	1,377	1,310	981	1,158
<i>Gross sales</i> .....	856	514	488	647	626
Equals net basic reserve surplus or deficit(—) .....	— 146	— 854	— 970	— 372	— 586
Net loans to Government securities dealers .....	658	1,067	1,002	840	892

**Thirty-eight banks outside New York City**

Reserve excess or deficiency(—)†	16	46	21	8	23
Less borrowings from Reserve Banks..	203	164	160	59	147
Less net interbank Federal funds purchases or sales(—)	445	338	406	239	357
Gross purchases	1,357	1,390	1,359	1,289	1,349
Gross sales	912	1,052	954	1,050	992
Equals net basic reserve surplus or deficit(—)	- 633	- 456	- 544	- 290	- 481
Net loans to Government securities dealers	268	353	489	472	396

Note: Because of rounding, figures do not necessarily add to totals.

\* Estimated reserve figures have not been adjusted for so-called "as of" debits and credits. These items are taken into account in final data.

† 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—April 1966			
	April 4	April 11	April 18	April 25
Three-month	4.531	4.618	4.664	4.630
Six-month	4.719	4.763	4.754	4.730
	Monthly auction dates—February-April 1966			
	February 23	March 24	April 26	
One-year	4.945	4.739	4.773	

\* 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.

the reserve positions of banks in the central money market during the first three weeks of April (see Table II). City banks experienced a substantial increase in their total loans and investments during this period. In part, this reflected an increase in bank holdings of securities and a sharp rise in securities loans, as dealers—including dealer banks—expanded their inventories. In addition, the deposits initially created at the money center banks as the counterpart of loans made for the settlement of early-month business needs subsequently became widely dispersed throughout the banking system.

In order to cover their mounting reserve deficiencies, the money market banks bid aggressively for Federal funds. Reflecting both the strong demand and reduced supply, the bulk of transactions in this market was completed at a  $4\frac{3}{4}$  per cent rate during the month,  $\frac{1}{8}$  of a per cent above the rate which had predominated in March. Early in the month and for a few days following the midmonth tax date, a substantial volume of funds was transferred at  $4\frac{7}{8}$  per cent, marking the first period in which Federal funds had traded at a  $\frac{3}{8}$  of a per cent “premium” over the Federal Reserve discount rate.

Money market pressures became particularly strong shortly after midmonth. The April 15 tax date itself passed smoothly as banks in the central money market benefited from an inflow of corporate deposits accumulated to cover tax checks written on that day. Following the tax date, however, reserve needs began to intensify in the money center banks. The Treasury initially used part of the tax checks it received drawn on the commercial banks to build up its deposits at the Federal Reserve Banks since these balances had fallen to abnormally low levels. As a result, Treasury redeposits of tax receipts in commercial bank Tax and Loan Accounts lagged behind the pace expected in the market. Meanwhile, bank loans continued to remain at a high level, particularly loans to nonbank financial institutions and to securities dealers needing alternative sources of financing to replace corporate repurchase agreements that had matured. With banks unable to cover all their needs in the Federal funds market, borrowings from the Reserve Banks on the final day of the April 20 statement week swelled to \$1,587 million.

In the final statement period of the month, the tautness of the money market relaxed somewhat. The money market banks, managing their reserves very cautiously in the wake of the extreme pressures which had existed at the end of the preceding week, borrowed heavily early in the period both in the Federal funds market and from the Federal Reserve. Following the April 23-24 weekend, the excess reserves accumulated by the city banks in this way, together with a supply of excess reserves from “country”

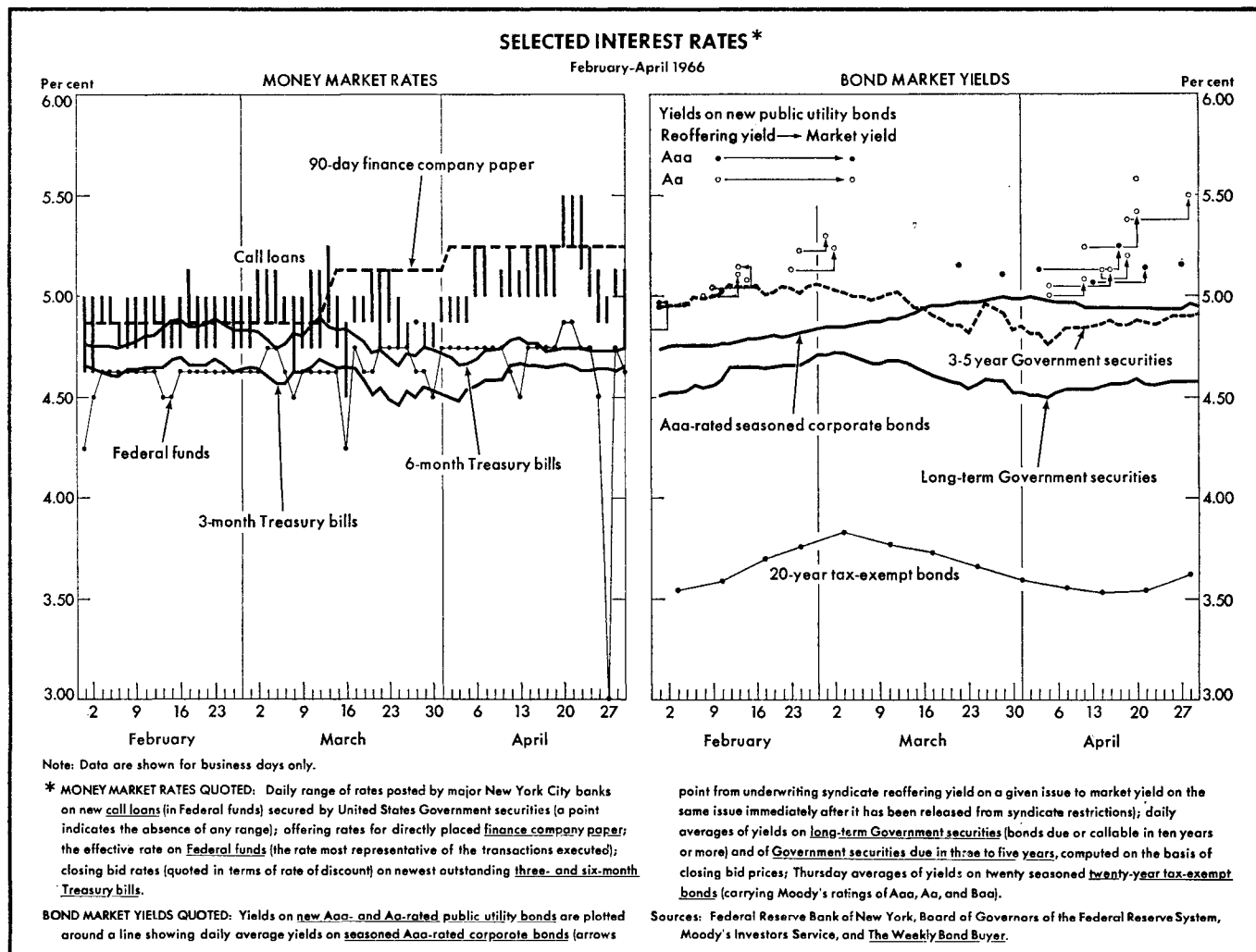
banks, piled up in the money market. As a result, the effective rate on Federal funds declined from  $4\frac{7}{8}$  per cent at the beginning of the statement period to 3 per cent at the close when funds were offered at rates as low as  $\frac{1}{4}$  per cent.

Although the money market banks experienced substantial reserve pressures during much of the month, they were quite successful in replacing the large volume of time certificates of deposit reaching maturity at rates that were little changed from March. Indeed, the volume of such certificates outstanding at the weekly reporting member banks actually climbed in April. There were reports that a considerably broader list of customers was entering the C/D market than in earlier months, with public funds in particular playing a growing role.

#### THE GOVERNMENT SECURITIES MARKET

Following the strong March recovery in the bond markets during which prices of Treasury coupon issues had advanced sharply, prices of intermediate- and long-term coupon issues fell back irregularly in April. (The right-hand panel of the chart on page 112 illustrates the rise in yields which accompanied this decline in prices.) Activity was generally quite light and was dominated by professional participants. Although a cautious atmosphere developed at a number of points during the period, price changes on most days were relatively modest and the market showed signs of resistance to any pronounced downward price movement.

In the early days of the month, Government bond traders were encouraged by the fairly good tone then prevailing in the corporate sector, as well as by comments from the Secretary of the Treasury that any potentially unhealthy aspects of bank credit growth might better be remedied by judicious bank lending policies than by further increases in interest rates. Subsequently, a note of hesitancy appeared in the coupon sector when participants increasingly focused on the heavy calendar of Government agency offerings, the softening tone in the corporate sector, and the uncertain political situation in Vietnam. In addition, the market was affected by the announcement on April 12 that the Federal Housing Administration was increasing from  $5\frac{1}{2}$  per cent to  $5\frac{3}{4}$  per cent the maximum interest rate permitted on mortgages it insures. (The Veterans Administration also made the same rate change on mortgages it guarantees.) Against this background, professional offerings of coupon issues were augmented by limited investment selling, including bank offerings, and prices of notes and bonds generally edged lower from April 6 through midmonth.



Over the following few days, reports of a large rise in gross national product during the first quarter of 1966 apparently led some professional traders to feel that the chances for a Federal tax increase to combat inflationary pressures might be strengthening. Investor interest in coupon issues remained light, however, and prices continued to drift irregularly lower. In the final statement period of the month, prices fluctuated narrowly and activity was quite light. Considerable uncertainty developed over the prospects for a tax increase, and participants awaited news of the terms of the Treasury's May re-funding.

After the close of business on April 27, the Treasury announced that it would offer holders of \$9.3 billion of notes and bonds maturing on May 15 the right to ex-

change them for new eighteen-month 4 $\frac{7}{8}$  per cent notes dated May 15, 1966 and maturing on November 15, 1967. The new notes were priced at 99.85 to yield about 4.98 per cent. Subscription books were open from May 2 through May 4, with payments and deliveries scheduled for May 16. Market participants viewed the exchange as routine. With initial interest in the offering restrained, trading in the refunding issues was quite moderate on the final two business days of the month. During the same period, prices of outstanding issues edged lower.

In the market for Treasury bills, the basically firm undertone which had been evident in March generally carried over into the first part of April when a fairly strong demand persisted. Rates on the very short-dated bills did move up in the opening days of the month, however, as

dealers anticipated a heavy expansion in the available market supply of bills following the March 31 quarterly commercial bank statement date and the April 1 Cook County, Illinois, personal property tax date. However, offerings expanded less than expected and were readily absorbed. At the same time, a good demand for longer bill maturities emerged from a broad spectrum of investors, and rates on most of these issues edged lower through April 5 (see the left-hand panel of the chart).

A more cautious atmosphere developed in the bill sector during the following week. Increased dealer offerings were prompted by the emerging higher level of inventory financing costs and by expectations that market pressures would heighten over the April 15 corporate tax date. In this setting, bill rates moved higher from April 6 through April 13. Subsequently, the rather moderate bill sales from corporations raising funds for their midmonth tax payments and from other sources were absorbed without strain, and dealer offerings tapered off. A fairly strong demand for bills reemerged after midmonth, including large purchases by state and local government funds. At the same time, traders began to anticipate the appearance of some reinvestment demand for bills from sellers of "rights" to the Treasury's May refunding. Against this background, bill rates edged irregularly lower from April 14 through April 28. Bill rates rose again at the close of the month, however, when reinvestment demand connected with the refunding proved disappointing and dealer offerings expanded. Over the month as a whole, bill rates were generally 4 to 25 basis points higher, with the largest increases reported in the shortest maturities.

A substantial volume of new securities was sold in April by agencies of the United States Government, including the Federal Intermediate Credit Bank, the Federal Home Loan Banks, and the Federal Land Banks. Agency offerings totaled approximately \$1.9 billion, of which a substantial \$660 million represented new money. Yields on the agency issues were generally attractive, compared with rates on competing market instruments. However, in anticipation of a heavy future calendar of such issues, investors tended to proceed with caution before committing their funds. While the offerings eventually found buyers, dealer inventories of agency issues bulged quite substantially at times.

#### OTHER SECURITIES MARKETS

In the market for corporate bonds, prices were generally steady to slightly higher during the first statement week in April. Dealer inventories remained at relatively low levels during this period and, as a result, underwriter bidding for new corporate offerings was quite aggressive. At the lower reoffering yields, however, investor demand became selective. Subsequently, additions to the calendar of scheduled offerings were made and the volume of current corporate bond flotations expanded. Against this background, the new offerings encountered considerable investor resistance. Syndicate price restrictions were removed fairly quickly on most of the recent corporate issues, after which yields were adjusted higher by as much as 10 to 15 basis points before attracting some investor demand. (The right-hand panel of the chart illustrates this rise in yields.)

In the tax-exempt sector, prices held generally steady through midmonth. New issues were accorded mixed investor receptions. Later in the period, however, the volume of new offerings and the calendar of scheduled tax-exempt flotations expanded, and investors became more reluctant to commit their funds at the prevailing price levels. As a result, dealers in tax-exempt bonds made little headway in reducing their unsold balances of recent issues—even after making price concessions. By the end of April, the Blue List of dealers' advertised inventories of tax-exempt issues had risen by \$190 million to \$523 million. The largest new tax-exempt flotation of the month, a huge \$242 million New York City offering of various-purpose bonds, reached the market on April 28. Reoffered to yield from 3.60 per cent in 1967 to 4.16 per cent in 1996, the issue was accorded a good investor reception.

Over the month as a whole, the average yield on Moody's seasoned Aaa-rated corporate bonds declined by 4 basis points to 4.95 per cent, while *The Weekly Bond Buyer's* series for twenty seasoned tax-exempt issues (carrying ratings ranging from Aaa to Baa) rose by 3 basis points to 3.62 per cent (see the right-hand panel of the chart). These indexes are, however, based on only a limited number of issues and do not necessarily reflect market movements fully.

## Second District "Country" Member Banks and the Federal Funds Market\*

The national market for commercial bank balances at the Federal Reserve Banks—better known as “the Federal funds market”—has grown steadily in the past decade.<sup>1</sup> Available data suggest that the typical daily volume of sales in the market has more than tripled since late 1956, to perhaps as much as \$3 billion in early 1966. Until the last two or three years, the bulk of market activity was accounted for by relatively few large banks. Since then, however, an increasing number of smaller banks appear to have entered the market. Inasmuch as these institutions hold the greater part of the banking system's excess reserves, their role has been most often as sellers, although to some extent they have also acted as purchasers. An over-all indication of the broadening participation in the Federal funds market by smaller banks—at least on the selling side—is suggested by the increase in the net sale of funds to the forty-six large banks included in the Federal Reserve Board's Federal funds series by the rest of the commercial banking system. On a daily average basis, these sales rose from about \$250 million in late 1959 to some \$500 million in 1962 and to

over \$1 billion in early 1966.<sup>2</sup> In addition, specific evidence of wider “country” bank participation in the Federal funds market can be found in studies and reports by several Federal Reserve Banks.<sup>3</sup>

A survey of country banks in the Second Federal Reserve District taken recently by this Bank indicates that the nationwide trend toward more widespread country bank participation has also been evident among banks in this District. This article summarizes the main findings of the survey.

### INCREASED ENTRY OF COUNTRY BANKS INTO THE FEDERAL FUNDS MARKET

In November 1965, the Federal Reserve Bank of New York sent questionnaires to each of the nearly 400 country member banks in the Second Federal Reserve District requesting information on the extent of their participation in the Federal funds market, the trading channels used, the size of the trading unit, and the effects of participation on these banks' reserve adjustment practices. Responses were received from about 98 per cent of the District's country banks. In addition, interviews were held with officers responsible for managing the reserve positions in twenty respondent banks, selected at random.

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\* William G. Colby, Jr., Economist, Statistics Department, and Robert B. Platt, Economist, Bank Examinations Department, had primary responsibility for the preparation of this article.

<sup>1</sup> A distinguishing feature of Federal funds—and one which has largely accounted for their increasing use as a medium for settling financial transactions—is their immediate availability. That is to say, in contrast to clearing house funds which are credited to member banks' accounts at a Reserve Bank only after one business day, banks acquiring Federal funds from other banks receive an immediate credit. Transactions in the Federal funds market in effect consist of the borrowing or lending of these balances, for one business day, at a specified rate of interest. In market terminology, however, such transactions are generally referred to as “purchases” or “sales” of Federal funds. For detailed accounts of the structure and workings of the Federal funds market, see *The Federal Funds Market*, Board of Governors of the Federal Reserve System (May 1959); Dorothy M. Nichols, *Trading in Federal Funds*, Board of Governors of the Federal Reserve System (September 1965); and Parker B. Willis, *The Federal Funds Market*, Federal Reserve Bank of Boston (October 1964).

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<sup>2</sup> Net sales as used here are calculated as the differences between gross purchases and gross sales reported by the forty-six banks. The resulting amount represents funds that the reporting banks on balance obtained from the nonreporting banks. Data on these transactions are published regularly in the *Federal Reserve Bulletin*. For a detailed discussion of the series, see “New Series on Federal Funds”, *Federal Reserve Bulletin* (August 1964).

<sup>3</sup> For example, see Jack C. Rothwell, “Federal Funds and the Profits Squeeze—A New Awareness at Country Banks”, *Business Review*, Federal Reserve Bank of Philadelphia (March 1965), pp. 3-11, and Dorothy M. Nichols, “Marketing Money: How ‘Smaller’ Banks Buy and Sell Federal Funds”, *Business Conditions*, Federal Reserve Bank of Chicago (August 1965), pp. 8-12.

The survey clearly points to a substantial amount of participation in the Federal funds market by Second District country member banks, with nearly half of these banks reporting at least occasional trading in Federal funds as of late 1965 (see Table I).

As might be expected, the proportion of participating banks was much higher in the larger deposit size-groups. All responding banks in the \$100 million and over deposit category participated in the market, as did four fifths of banks in the \$25 million to \$100 million category. Nevertheless, over 30 per cent of the respondent banks with deposits under \$25 million reported some trading activity. Moreover—and perhaps most significantly—the entry of smaller banks into the market appears to have begun fairly recently and to be spreading rapidly (see Table II). While only three of the respondent banks which currently have less than \$25 million in total deposits were participating in the market in 1960, the number reached seventy-nine by 1965, with the greatest part of the increase occurring in the last two years. All the participating banks with less than \$5 million in deposits first traded Federal funds during 1965, and nearly all the institutions in the \$5 million to \$10 million deposit size-group entered the market in either 1964 or 1965. In contrast, three quarters of the participating banks presently in the over \$100 million deposit group had participated in the market prior to 1960.

Second District country member banks as a group entered the Federal funds market more often as sellers than as buyers—a characteristic that is in accord with the fact that country banks are known to hold relatively high levels of excess reserves. Indeed, most of the participating banks in this District with less than \$10 million in total deposits entered the market only as sellers (see Table III). The number of participating banks in the intermediate-size range, \$10 million to \$25 million in deposits, was divided fairly evenly between banks that just sold funds and banks that acted both as buyers and sellers, while most banks with deposits of \$25 million or more traded at various times on both sides of the market. Even among the banks that both sold and purchased funds, however, the frequency of transactions on the selling side generally was substantially greater than on the purchasing side. On average, all participating banks sold funds nine days a month during 1965, and purchased funds only three days per month.

The banks were asked to indicate in which months of the year their most frequent participation in the market occurred. The replies tended to divide about equally among the twelve months. A few banks reported shifts from periods of daily funds sales to periods of continuous purchases, and vice versa.

**Table I**  
**DISTRIBUTION OF RESPONDENT BANKS BY SIZE AND PARTICIPATION IN THE FEDERAL FUNDS MARKET, 1965**

Deposit size	Respondent banks		Banks participating in the market	
Millions of dollars	Number	Percentage of total	Number	Percentage of respondents
Under 5 .....	84	22	14	17
5 to under 10 .....	78	20	19	24
10 to under 25 .....	99	26	46	46
25 to under 100 .....	74	19	59	80
100 and over .....	51	13	51	100
Total .....	386	100	189	49

**Table II**  
**NUMBER OF BANKS PARTICIPATING IN THE FEDERAL FUNDS MARKET\***

Deposit size	Years						
Millions of dollars	Prior to 1960	1960	1961	1962	1963	1964	1965
Under 5 .....	—	—	—	—	—	—	14
5 to under 10 .....	—	—	—	—	1	7	19
10 to under 25 .....	2	3	7	10	19	35	46
25 to under 100 .....	18	22	30	38	43	50	59
100 and over .....	39	43	44	48	50	50	51
Total .....	59	68	81	96	113	142	189

\* Banks are included in the above table in the year of their initial entry into the market and for all subsequent years, whether or not they have participated in each of those years. Almost all banks, however, participated in every year following their initial entry.

**Table III**  
**DISTRIBUTION OF PARTICIPATING BANKS BY SIDE OF MARKET, 1965**

Deposit size	Sellers only		Buyers only		Both buyers and sellers	
Millions of dollars	Number	Per cent	Number	Per cent	Number	Per cent
Under 5 .....	9	64	2	14	3	21
5 to under 10 .....	15	79	1	5	3	16
10 to under 25 .....	22	48	4	9	20	43
25 to under 100 .....	14	24	3	5	42	71
100 and over .....	2	4	—	—	49	96
Total .....	62	33	10	5	117	62

Note: Because of rounding, percentages may not add across to 100 per cent.

### THE ROLE OF CORRESPONDENT RELATIONSHIPS

The forces underlying the increased participation by smaller banks in the Federal funds market have been present for some time. Perhaps most significant among these has been the generally rising trend of short-term interest rates over much of the postwar period. This development—combined with increasing banking costs—has prompted banks to keep nonearning excess reserves at a minimum, while at the same time inducing many of the larger city banks to increase borrowing in the funds market to facilitate the maintenance of positions in relatively high-yielding assets.

Until recently, however, these influences had only a limited impact on the smaller country banks' activity in the market. In many instances, insufficient knowledge of the opportunities presented by the Federal funds market inhibited their participation. Moreover, the magnitude of the usual unit of transaction—\$1 million—largely precluded entrance into the market by the smaller banks. This is a larger amount than most of these banks would have available for sale in the market or, on the other hand, would require for temporary reserve adjustment. Some trading at times took place in lesser amounts but, until quite recently, the large money center banks and brokers in Federal funds that form the nucleus of the Federal funds market were not particularly anxious to deal in such amounts, and indeed seldom bothered with transactions of less than \$500,000.<sup>4</sup>

In the more recent past, these impediments to country bank participation in the Federal funds market have been reduced by the efforts of the larger city banks to tap the excess reserves of these smaller institutions. With this end in view, the city banks—operating through their correspondent relationships—have spread information about the Federal funds market and enhanced the attractiveness of participation by providing the smaller banks with a convenient and relatively certain outlet or source for the sale and purchase of funds. Moreover, in order to accommodate their correspondents, they have been willing to trade funds in smaller units than in earlier years.

The part played by the larger banks in introducing their correspondents to the market emerged clearly in the interviews with the country bankers. According to these bankers, once a country bank began to trade in the market,

individual funds transactions were almost invariably initiated by that bank; nevertheless, the first entry in the market was often the result of advice and encouragement on the part of a city correspondent.

### TRADING CHANNELS AND UNIT SIZE OF TRANSACTIONS

The continuing role of the correspondent relationship was reflected both in the channels of trading used by Second District country banks and in the unit size of trading. The survey revealed that most of Second District country bank transactions in the Federal funds market—both on the sale and the purchase side—were conducted with their city correspondents (see Table IV). Interviewed bankers based their preference for trading with correspondents partly on the rapport existing between the country bank and its correspondent, resulting from years of satisfactory relations, as well as on the familiarity of the city bank with the smaller institution's financial resources and needs. The convenience to country banks, particularly the smallest institutions, of trading with correspondents appeared to be significantly enhanced by the willingness of the larger city banks to accommodate them on either the selling or buying side of the market as required, and without regard to the current reserve needs of the larger institutions themselves.

This desire on the part of the city correspondent banks to accommodate the trading needs of the country banks has also been reflected in the significant number of transactions that now take place in units involving less than

Table IV  
DISTRIBUTION OF PARTICIPATING BANKS  
BY FEDERAL FUNDS TRADING CHANNELS, 1965

Deposit size	Number of banks	Trading channels*		
		Correspondents	Brokers	Others
Millions of dollars		Per cent		
Under 5 .....	14	86	—	14
5 to under 10 .....	19	95	5	—
10 to under 25 .....	46	100	2	2
25 to under 100 .....	59	97	8	2
100 and over .....	51	92	35	10
All participating banks ...	189	95	13	5

<sup>4</sup> See Howard D. Crosse, *Management Policies for Commercial Banks* (Englewood Cliffs: Prentice Hall Inc., 1962), p. 128.

\* Since some respondents used more than one type of intermediary, the totals across may exceed 100 per cent.

\$1 million (see Table V). Federal funds brokers, it may be noted, still prefer to deal in units of \$1 million or more.

Most transactions in the funds market nevertheless do involve units of \$200,000 or more. Some of the smaller banks are often able to sell such relatively large units at one time only by accumulating excess reserves up to the closing days of their biweekly reserve averaging period, and then drawing down the reserve balances, sometimes below their reserve requirements, with the resulting modest deficiency offsetting the previously accumulated excess. While this practice permits the profitable employment of potentially idle resources, it is subject to some constraint. Notably, a member bank is not permitted to overdraw its reserve balances at its Federal Reserve Bank, and should not deliberately incur large daily deficits.

#### EFFECTS ON RESERVE ADJUSTMENT PROCEDURES

Nearly all the surveyed banks participating in the market reported that their trading activity in Federal funds has been accompanied by a reduction in their average holdings of excess reserves—although the bankers that were interviewed generally could not estimate the magnitude of the decline traceable to participation in the market. One hundred and sixteen banks (over 60 per cent of the total participating) specified that a reduction in excess reserves has been the single most important effect of their activity in the Federal funds market on their reserve management practices (see Table VI). A majority of banks also indicated that trading in funds has reduced

**Table VI**  
**EFFECTS OF FEDERAL FUNDS ACTIVITY ON  
RESERVE ADJUSTMENT PRACTICES**

Type of effect	Number of participating banks according to their ranking of effects*				
	First	Second	Third	Fourth	Fifth
Reduction in excess reserves.....	116	42	10	2	0
Reduction in the use of Treasury bills and other short-term instruments .....	33	85	26	8	0
Reduction in borrowings from the Federal Reserve .....	28	27	38	8	0
Reduction in borrowings from other banks (other than Federal funds transactions) .....	1	6	19	16	0
Other .....	11	5	6	3	1

\* Columns and rows may not add to 189, the total number of participating banks, since many banks ranked fewer than five effects.

their reliance on purchases or sales of Treasury bills and other money market instruments as a means of reserve adjustment. Seventeen per cent of the respondent banks singled out this development as the most important result of their participation.<sup>5</sup>

In elaborating on the changes in reserve adjustment practices resulting from their Federal funds activity, most of the country bankers interviewed felt that purchases and sales of Treasury bills and similar instruments were inappropriate for putting idle resources to work for short periods—such as within the two-week settlement period—or for making up temporary reserve deficiencies. The reluctance to purchase or sell bills for short-term reserve adjustments was based primarily on the inconvenience to country banks of trading these instruments. Some concern was also expressed, however, over transfer costs and possible losses resulting from declines in market prices. According to several bankers, the reluctance to keep liquid reserves in the form of Treasury bills had previously led them to maintain excess reserves at a higher level than they have found desirable since they began to use the Federal funds market as a convenient and flexible outlet

**Table V**  
**SIZE OF FEDERAL FUNDS TRANSACTIONS\***

Deposit size	Sales		Purchases	
	Median	Range	Median	Range
Millions of dollars	Thousands of dollars			
Under 5 .....	225	50- 400	225	150- 750
5 to under 10 .....	300	50- 1,100	675	350- 1,000
10 to under 25 .....	600	60- 4,000	500	150- 1,000
25 to under 100 .....	1,000	300- 5,000	1,000	400- 3,000
100 and over .....	3,000	500-20,000	3,000	300-15,000
All participating banks .....	1,000	50-20,000	1,250	150-15,000

\* The respondent banks reported their average-transactions size during 1965. This table presents the medians and the ranges of these reported averages.

<sup>5</sup> Among other effects of Federal funds activity noted by respondent banks were reduced borrowings from the Federal Reserve and borrowings from banks other than through the Federal funds market. These results, however, were generally considered by the banks to be of substantially less importance than the reduction in excess reserves or the use of Treasury bills.

for idle funds. Similarly, banks that did employ Treasury bills and other short-term instruments as secondary reserves have tended to substitute Federal funds sales for such short-term investments since their entry into this market.

The country banks thus clearly prefer Federal funds sales to holdings of Treasury bills as a short-term investment. This is particularly true for the smaller banks, which often indicated during the interviews that "moderate" differentials in interest rates in favor of Treasury bills would not induce them to substitute such instruments for Federal funds sales. Larger country banks also were reluctant to substitute bills for funds, although they expressed a greater sensitivity to rate differentials in choosing among short-term investment outlets.

#### CONCLUDING COMMENTS

The Federal funds market has filled an important gap in the array of money market instruments available for the investment of idle reserve balances. Its development reflects the increasing attention being given throughout the economy to the efficient utilization of financial resources—even for very short periods of time—resulting in good part from the relatively large loss of interest earnings involved in holding idle balances. For country banks in particular, access to the Federal funds market has enabled these banks to put otherwise idle funds to profitable use. It has also brought the country banks into closer touch with the centers of financial activity, thereby promoting a more integrated financial system.