FEDERAL RESERVE BANK OF NEW YORK

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Contents

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The Business Situation

The most recent data on the economy point to a continued moderation in the pace of overall activity. However, the unusually severe weather conditions in many parts of the country from late January through much of March significantly affected production and sales. Consequently, although the February declines in such key measures as industrial production, retail sales, and manufacturers' shipments unquestionably indicate some easing in the economy, these developments nonetheless may provide highly inaccurate indications of the momentum of the economy under normal circumstances. At the same time, a positive factor in the economic outlook is the prospective action by Congress to restore two tax incentives to investment—the 7 per cent tax credit and the use of certain accelerated depreciation allowances—which were suspended last fall. Indications are that the restoration, if approved, might give an appreciable boost to plant and equipment spending this year. Moreover, the availability of accelerated depreciation allowances also has a significant bearing on apartment construction, and the restoration of this tax benefit could thus be expected to result in a further brightening of the prospects for expanded residential building activity.

The considerable moderation of demand pressures during recent months has been reflected in a substantial improvement of the price picture. From October to February the consumer price index rose at an annual rate of only 0.8 per cent, a very modest increase by comparison with the rise at a 3.8 per cent rate during the first ten months of 1966. At the wholesale level as well, price behavior has moderated in recent months. The wholesale index declined by 0.2 percentage point in February, and preliminary estimates indicate that it held steady in March at 106.0 per cent. At that level, the index was nearly a full percentage point below the peak reached late last summer. As in the case of consumer prices, the recent easing of the wholesale index had been preceded by a very sharp rise—at an annual rate of 3.9 per cent during the first eight months of 1966. Declining agricultural commodity prices have been the main factor in the downtrend of the overall wholesale index since the fall; while the industrial component has continued to rise, its advance has been tempered by an easing of prices for nonferrous metals and other raw materials. On the other hand, average labor costs per manhour and per unit of output in manufacturing have continued to move up despite a widespread reduction in the use of high-cost overtime hours.

OUTPUT, EMPLOYMENT, AND CONSUMER DEMAND

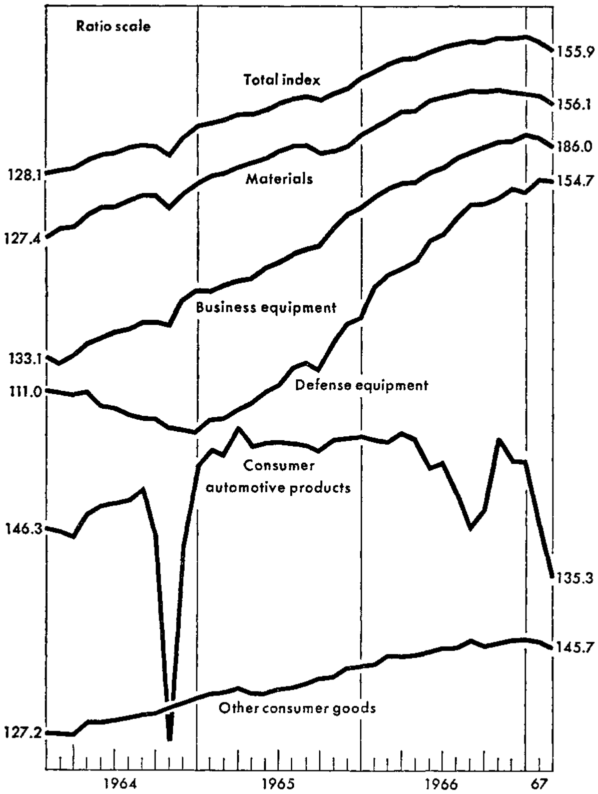
Industrial output dropped off in February for the second consecutive month. The Federal Reserve Board's industrial production index fell by 2.1 percentage points (1.3 per cent) to 155.9 per cent of the 1957-59 average, with declines spread widely through industries producing both materials and final products (see Chart I). The reduction of automobile output was particularly sharp, as the rate of new car assemblies fell by about 15 per cent for the second consecutive month. The steepness of the February decline reflected not only some planned cutbacks by auto producers, in the face of a continuing lack of buoyancy in new car sales, but also the impact of work stoppages and severe snowstorms. The exceptionally sharp February decline dropped the seasonally adjusted annual rate of auto assemblies to a level only slightly above 6 million units, the lowest in some years (apart from the strike period in late 1964). Output recovered substantially in March, however, and producers' schedules point to a further increase in April to a rate of more than 7½ million units.

Unusually severe weather conditions in February played a role in the declines registered in other industrial production categories as well. Output of consumer durables other than autos declined further, while production of nondurable goods for consumer markets showed little change. Activity in the steel industry, in contrast to the trend of recent months, was about unchanged from January to February, though production of most other materials moved lower. Since early last fall, steel production had been declining steadily in response both to a weakening of sales in such important steel-using industries as autos and home appli-

Chart I

INDUSTRIAL PRODUCTION

Seasonally adjusted; 1957-59=100



Note: Indexes for defense equipment and nonautomotive consumer goods were calculated at the Federal Reserve Bank of New York from data published by the Board of Governors of the Federal Reserve System.

Source: Board of Governors of the Federal Reserve System.

ances and to a trend toward greater economizing on inventories by steel users generally. The consensus of industry opinion appears to be that, while there is little likelihood of a significant production upturn over the near term, neither is there a strong prospect of appreciable further declines. In March, however, steel production was apparently reduced once again. Output of equipment, for both the business and defense markets, continued in February to show relatively greater strength than that exhibited by the other major components of industrial production.

The most recent reports regarding orders received by durables manufacturers suggest a continuation over the near term of the current period of sluggishness in the pace of manufacturing activity. The flow of new orders increased slightly in February, following a sharp January decrease, but the volume of unfilled orders on producers' books declined further. Within the durables sector, a substantial recovery of new orders from the reduced January levels was reported by aircraft producers and by the primary and fabricated metals industries, but these gains were largely offset by sharp drops in orders for machinery and motor vehicles. The decline in the latter industry reflected mainly the decline in shipments of motor vehicles, which are treated as essentially equal to new orders. The huge buildup of unfilled orders for durables was, of course, one of the most striking evidences of the excessive pressures on the economy's capacity during 1966. During the course of last year, order backlogs grew by nearly $14 billion, a rise of about 22 per cent, with virtually all the advance occurring in the first nine months. The moderate decline of backlogs in January and February, totaling about $1½ billion, reflects the easing in demand conditions that began to develop in the latter months of last year. Since durables producers' shipments have also moved lower in recent months, the unfilled orders on their books at the end of February continued to represent more than 3¼ months of sales at the current rate—a ratio that has shown virtually no change since reaching that relatively high level early last fall.

New construction activity continued to expand modestly in February. Outlays on private residential construction, which had declined through most of 1966 to a very low level in December, rose in February for the second month in a row. Other private construction outlays were about unchanged, while governmental construction spending advanced moderately. The development of easier credit conditions in recent months has contributed to an improvement of prospects for construction activity, all segments of which were affected in some degree by the reduced availability and rising cost of credit during 1966. With respect to the home-building sector, which was of course particularly hard pressed last year, developments in recent months have led observers increasingly to conclude that 1967 will see a substantial recovery in activity as the year progresses. The expected restoration by Congress of the accelerated depreciation allowances suspended last fall should have some favorable effect on apartment house construction. As mortgage interest rates have eased, and funds have become more easily obtainable, both the number of new housing units started and the number of new homes sold have shown an upturn. To be sure, the rate of new housing starts declined in February after three successive advances. To some extent, this reflected unusually poor weather conditions; however, such a swing, coming in the wake of a sharp January rise, is in any event not unusual in so highly erratic a monthly series.

The employment picture in February was somewhat mixed. The unemployment rate in the civilian labor force held at the low 3.7 per cent recorded in December and January. The employment situation of teen-agers weakened a bit but that of adults showed still further improvement. Indeed, the unemployment rate for married men—who are generally considered to be the "backbone" of the labor force—dropped to 1.6 per cent, the lowest figure in the thirteen years during which that rate has been calculated.

The moderation in the pace of manufacturing activity was, however, reflected in the February employment data. Manufacturers slightly reduced the number of production workers on their payrolls, while at the same time the average number of hours put in weekly by these workers dropped quite sharply. Declines in the workweek were widespread throughout the manufacturing sector. Though in part they reflected producers' efforts to adjust to easier demand conditions, unusually severe weather in some areas also played a role. Outside manufacturing, the number of workers on nonagricultural payrolls generally increased, with particularly strong gains in government, the service industries, and construction. In the latter industry, employment has been expanding steadily since last fall and had by February returned to the level prevailing early in 1966.

As a result of the drop in the number of man-hours worked in manufacturing, the aggregate pay of manufacturing workers declined somewhat in February. This put an appreciable damper on the growth of overall personal income. Employee income in other sectors of the private economy continued to expand, however, as did government wages and salaries—particularly at the state and local levels. Nevertheless, even though February income was buoyed by the accelerated payment of veterans' insurance dividends, the month's rise in total personal income was the smallest in nearly a year and only half as large as in January.

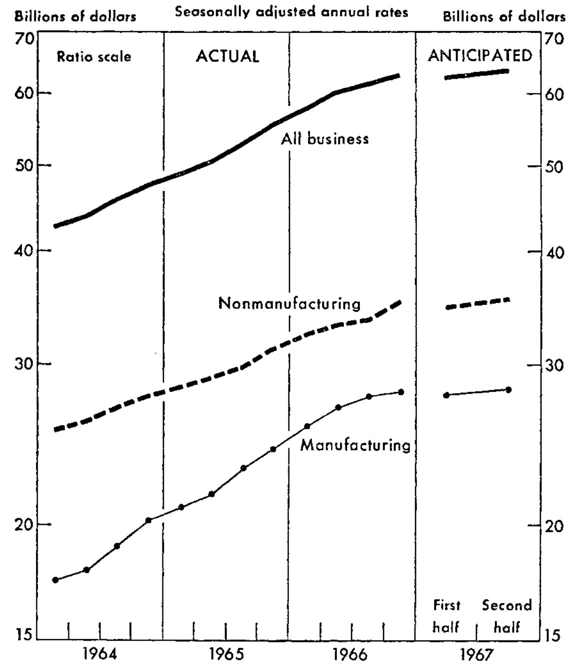
Preliminary figures on retail trade indicate that sales volume declined in February, following a fairly strong rise in January. Taken together, the first two months of 1967 saw no basic departure from the generally sluggish performance that has characterized retail sales for some time. The February decrease was concentrated entirely in durable goods, with sales declines spread generally through the durables sector. The further drop in new car sales in February was one factor in the weakening of dollar sales volume at retail outlets. At a seasonally adjusted annual rate of 7.0 million units, auto sales were off almost 10 per cent from the January pace. Though there was evidence in March of the normal spring pickup in car buying, this trend was dampened by unfavorable weather conditions so that seasonally adjusted sales volume registered only a slight gain over the low February level. Reflecting the sluggishness of retail sales, consumers have been saving an unusually high proportion of their incomes during the past half year. Recent surveys, however, have revealed some improvement in consumer sentiment, which may portend a gradual strengthening of consumer demand.

BUSINESS INVESTMENT

The Commerce Department and Securities and Exchange Commission, in their February survey of capital spending plans, gathered information on anticipated outlays over the full course of 1967. At the time this survey was taken, which was before the President asked Congress to reinstate the investment tax credit and accelerated depreciation allowances, businessmen anticipated that capital spending would expand this year by a modest 4 per cent, or $2.4 billion, reaching a total of $63.0 billion (see Chart II). A rise of this magnitude would be very much milder than those of the past several years, when annual gains in a 15 to 17 per cent range were recorded. Moreover, the February survey indicated a decline in the seasonally ad-

Chart II

ACTUAL AND ANTICIPATED PLANT AND EQUIPMENT SPENDING



Note: Expenditures figures for the first and second halves of 1967 are from the February Commerce-SEC survey.

Sources: United States Department of Commerce; Securities and Exchange Commission.

justed spending rate during the first half of 1967, followed by a renewed advance after midyear. Most major industry groups covered by the survey anticipated greater spending in 1967 than in 1966, though the expected advances were generally more modest than those of recent years.

The findings of the February Commerce-SEC survey were somewhat weaker than those of a special survey taken by McGraw-Hill in the opening weeks of the year that had pointed to a rise in capital spending this year of nearly 6½ per cent. In good measure, the divergence between the two sets of survey findings probably reflects a relative under-representation of small businesses in the sample of firms used by McGraw-Hill. It is generally believed that the suspension of tax incentives to investment, effective last fall and originally intended to run through the end of 1967, had a greater impact on the spending plans of smaller firms. Moreover, the latest Commerce-SEC findings showed a downgrading of planned first-half spending from that reported by the previous Commerce-SEC survey taken last November. To some degree, this downgrading may have reflected a tendency by businessmen to curtail near-term investment plans because of a growing conviction that the suspended tax benefits would be restored at an early date. When the President last fall signed the suspension legislation, he stated that he would promptly recommend an early restoration if circumstances rendered such action appropriate. The chances for an early restoration had appeared to be increasing through the winter, amid growing evidence of an easing in the pressures that had so severely strained the economy's productive resources during most of 1966.

Thus, an important consideration in any assessment of the Commerce-SEC February survey results is the fact that the survey was conducted prior to the President's request for a restoration of the tax benefits. If Congress acts to reinstate the benefits retroactive to March 9, as now contemplated, the outlook for 1967 indicated by the February survey may be subject to substantial upward revision. In December 1966, a special Commerce-SEC survey had found businesses anticipating that, as a result of the temporary suspension of the investment tax benefits, plant and equipment spending in 1967 would be more than $2 billion below the level that would otherwise have been reached. The sharpest downward adjustment was anticipated by the railroads—and indeed the February Commerce-SEC survey found that, among the few industries planning spending cuts in 1967, by far the largest reduction was anticipated by the railroads.

When releasing the results of the special December survey, Government officials cautioned that the figures gave only a very rough indication of the anticipated impact of the tax benefits suspension. Moreover, those figures were based on businessmen's 1967 spending plans as of last December. Nevertheless, the findings of that survey do suggest that early restoration of the tax benefits may provide measurable stimulus to capital spending this year. Further indications in this direction were provided by a poll taken by the National Industrial Conference Board soon after the President's request for restoration of the benefits. The NICB found that close to 20 per cent of the nation's largest manufacturing firms would raise 1967 investment outlays if the tax provisions were reinstated.

Business inventories are currently at a high level relative to sales and, not surprisingly, a Commerce Department survey taken this past February found that manufacturers were then expecting to cut back in the first and second quarters on the size of their inventory increases. Available data indicate that manufacturers have in fact slowed their rate of inventory accumulation. On the basis of preliminary figures, the addition to total manufacturing stocks in February was at less than half the high January pace. Durables producers cut back the rate of accumulation for the third consecutive month, while in nondurables manufacturing there was virtually no net addition to inventories in February following a large January gain. It is generally expected that reduced inventory accumulation in the months ahead will continue to exert a restraining influence on overall economic activity. The extent and duration of the prospective inventory correction are difficult to assess at this time, but the apparent orderly nature of the February downturn in manufacturers' inventory accumulation was an encouraging development.

The Money and Bond Markets in March

The money market turned distinctly more comfortable in March, as increased reserve availability and expectations of further monetary ease generated a widespread decline in short-term interest rates. The money and capital markets, in fact, handled with facility the special demands of the corporate dividend and tax payment dates as well as a record volume of new long-term issues.

Federal funds traded mainly in the vicinity of the discount rate at 4½ to 4¾ per cent during March, compared with the 5 to 5¼ per cent range that prevailed over much of February. Rates on most Treasury bills declined by 41 to 56 basis points over the month. Rates on commercial and finance company paper, bankers' acceptances, and negotiable certificates of deposit (C/D's) also dropped over the month. Moreover, the move to a 5½ per cent bank lending rate on prime business loans became general near the end of the month.

Nationwide net reserve availability increased considerably during March, as System open market operations enabled member banks to reduce their borrowings at the "discount window" and at the same time to expand loans and investments. Even so, the money market tone did not always correspond to the higher levels of net reserve availability. In the post-tax-date week, "country" banks did not fully employ in the Federal funds market the reserves accruing to them from reserve shifts and from the second-stage cut in reserve requirements against savings deposits and certain time deposits. Consequently, bidding by the major money center banks kept the Federal funds rate above the discount rate for a time, and borrowings from the Reserve Banks rose in that week. Even this suggestion of firmness, however, had faded by the end of the month.

The long-term capital markets absorbed about $2.8 billion of new corporate and municipal public offerings in March without particular difficulty, contrary to earlier misgivings. A series of developments, beginning with the reserve requirement reduction announced on the final day of February, strengthened expectations that credit conditions would continue to ease. The broad decline in domestic interest rates and in the bank rates of several European countries contributed to expectations of a reduction in the Federal Reserve discount rate in the near future. Treasury note and bond prices recovered sharply in the course of the month. At the close, underwriters approached a heavy calendar of current and prospective issues with confidence, in marked contrast to the caution that had developed for a time in February.

BANK RESERVES AND THE MONEY MARKET

Money market conditions became more comfortable during March, as System open market operations provided reserves in abundance to the banking system. Member bank free reserves averaged $166 million during March (see Table I), up from a $37 million average for the preceding month. Most trading in Federal funds was at 4½ to 4¾ per cent, as noted, and average member bank borrowings from the Reserve Banks dropped sharply to $196 million in March from $366 million in February.

In the comfortable money market atmosphere, the major banks experienced no difficulty in replacing their large March maturities of C/D's. Indeed, offering rates posted by the major New York City banks fell back to a range of 4⅝ to 4⅞ per cent on three- to six-month maturities from 5 to 5⅛ per cent at the beginning of the month. Rates available from other major banks tended to decline somewhat more slowly. Over the four weeks ended on March 22, C/D's outstanding rose $212 million at the major New York City banks and $560 million at all weekly reporting banks. The gain at all weekly reporting banks was $695 million in the preceding four weeks.

Other short-term interest rates also declined significantly during the month. Rates on three- and six-month Treasury bills fell by 53 and 48 basis points, respectively, to 4.01 per cent and 4.06 per cent by the month's end. Offering rates on directly placed finance company paper maturing in ninety days declined ¼ of a percentage point to 4⅞ per cent, and the rate on four- to six-month commercial paper dropped by ⅜ of a percentage point to 5 per cent. In five separate steps over the month, dealers in bankers' acceptances reduced rates by a total of ⅝ of a percentage point to 4½ per cent bid on maturities of three months or less and a range of 4½ to 4⅝ per cent bid on longer maturities.

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, MARCH 1967

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

Factors	Changes in daily averages—week ended					Net changes
	March 1	March 8	March 15	March 22	March 29	
"Market" factors						
Member bank required reserves*	— 25	+ 430	— 65	— 225	+ 193	+ 308
Operating transactions (subtotal)	+ 36	— 565	+ 173	+ 121	— 203	— 438
Federal Reserve float	— 179	— 123	— 88	+ 393	— 281	— 278
Treasury operations†	+ 119	+ 124	+ 211	— 349	— 71	+ 34
Gold and foreign account	— 35	— 4	— 5	— 1	—	— 45
Currency outside banks*	+ 169	— 466	+ 30	— 12	+ 155	— 124
Other Federal Reserve accounts (net)‡	— 37	— 96	+ 27	+ 88	— 5	— 23
Total "market" factors	+ 11	— 135	+ 108	— 104	— 10	— 130
Direct Federal Reserve credit transactions						
Open market instruments						
Outright holdings:						
Government securities	+ 98	+ 334	— 148	+ 250	+ 151	+ 685
Bankers' acceptances	—	— 6	— 2	+ 1	— 4	— 11
Special certificates	—	—	+ 64	— 64	—	—
Repurchase agreements:						
Government securities	— 240	+ 34	+ 100	— 28	— 204	— 338
Bankers' acceptances	+ 11	— 1	— 74	—	+ 39	— 25
Federal agency obligations	— 8	— 5	— 3	— 4	— 5	— 25
Member bank borrowings	— 310	+ 35	— 29	+ 129	— 167	— 342
Other loans, discounts, and advances	—	—	—	—	+ 3	+ 3
Total	— 449	+ 391	— 92	+ 283	— 186	— 53
Excess reserves*	— 438	+ 256	+ 16	+ 179	— 196	— 183

	Daily average levels					
Member bank:						
Total reserves, including vault cash*	23,381	23,207	23,288	23,692	23,303	23,374§
Required reserves*	23,266	22,836	22,901	23,126	22,933	23,012§
Excess reserves*	115	371	387	566	370	362§
Borrowings	167	202	173	302	135	196§
Free reserves*	— 52	+ 169	+ 214	+ 264	+ 235	+ 166§
Nonborrowed reserves*	23,214	23,005	23,115	23,390	23,168	23,178§

	Changes in Wednesday levels					
System Account holdings of Government securities maturing in:						
Less than one year	— 681	+1,266	— 665	+ 258	— 402	— 224
More than one year	—	+ 50	—	—	+ 51	+ 101
Total	— 681	+1,316	— 665	+ 258	— 351	— 123

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 five weeks ended March 29, 1967.

Table II

RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS MARCH 1967

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended					Average of five weeks ended March 29
	March 1	March 8	March 15	March 22	March 29*	
Eight banks in New York City						
Reserve excess or deficiency(—)†	26	— 9	22	20	58	24
Less borrowings from Reserve Banks	—	13	61	192	—	53
Less net interbank Federal funds purchases or sales(—)	538	797	1,254	943	1,125	931
Gross purchases	*1,155*	*1,294*	*1,740*	*1,410*	*1,599*	*1,440*
Gross sales	*618*	*498*	*486*	*467*	*474*	*509*
Equals net basic reserve surplus or deficit(—)	— 511	— 819	—1,293	—1,116	—1,067	— 961
Net loans to Government securities dealers	687	783	879	796	837	796
Thirty-eight banks outside New York City						
Reserve excess or deficiency(—)†	32	20	23	23	24	24
Less borrowings from Reserve Banks	5	68	12	27	89	40
Less net interbank Federal funds purchases or sales(—)	1,412	1,119	1,047	1,523	1,360	1,292
Gross purchases	*2,113*	*1,744*	*1,939*	*2,273*	*2,108*	*2,035*
Gross sales	*700*	*626*	*892*	*750*	*748*	*743*
Equals net basic reserve surplus or deficit(—)	—1,386	—1,167	—1,036	—1,527	—1,425	—1,308
Net loans to Government securities dealers	698	644	643	992	927	781

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—March 1967			
	March 6	March 13	March 20	March 27
Three-month	4.344	4.308	4.102	4.150
Six-month	4.340	4.265	4.005	4.073

Maturities	Monthly auction dates—January-March 1967		
	January 24	February 21	March 28
Nine-month	4.656	4.718	4.078
One-year	4.576	4.696	4.074

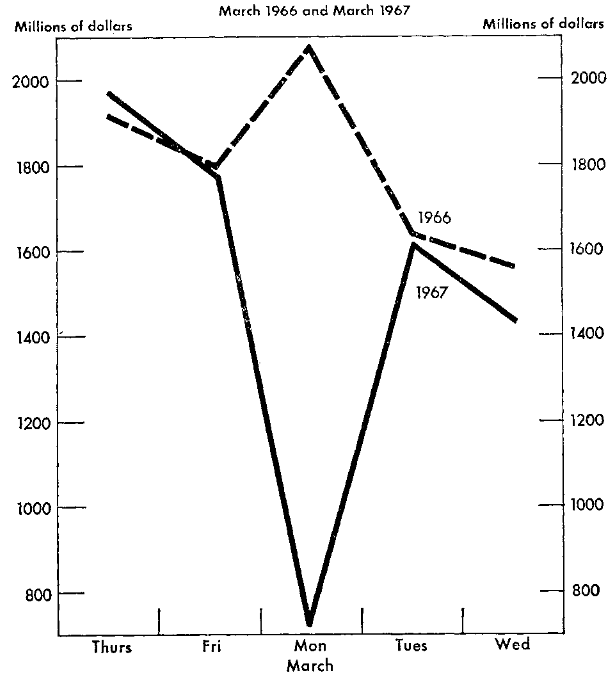
* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

In the midst of this general decline in money market rates, a major New York City bank announced on Wednesday, March 22, that it was lowering its lending rate on prime business loans from 5¾ per cent to 5½ per cent—a rate posted by another major bank since late January. Over the next few days, the rate reduction spread to most other banks in the country.

Several factors affecting reserve positions during the month were of particular interest. Required reserves rather consistently averaged higher than expected as deposit growth picked up in the comfortable money market environment. That perennially volatile element—float—also caused some problems, in large part because of the new patterns introduced when all Reserve Banks (effective after February 17) discontinued counting Saturday as a business day in crediting cash items in the process of collection.[1] As a result of this modification, the average Monday level of float in March declined by $1.4 billion from that in the same month a year ago (see Chart I).

An incomplete adjustment to this new float pattern may have been partly responsible for a relatively low level of excess reserve balances at country banks early in March. It had been expected that excess reserves might tend to pile up in country banks in the March 8 statement week, during which the first step in the earlier announced reduction in required reserves was put into effect.[2] In fact, during that week country bank excess reserves averaged only $342 million, a rather low amount for the first week in their settlement period. Subsequently, in the statement week ended on March 22, when the second and final step in the reduction in required reserves occurred, country bank excess reserves rose to an average of $485 million. However, a sizable shift in reserves away from the major money market banks may have contributed to this buildup.

Chart I
FEDERAL RESERVE FLOAT
March 1966 and March 1967



Note: Figures plotted are average levels for each day, based on four observations covering the periods from March 5 to April 1, 1966 and from March 6 to March 31, 1967.

Source: Board of Governors of the Federal Reserve System.

Pressures on the banking system were at their peak for March around midmonth. On top of the usual dividend- and tax-related loan demands, there were special pressures associated with the March 13 payment for the $2.7 billion of June tax anticipation bills that had been auctioned on March 7. Over the week ended on March 15, loans at weekly reporting banks (other than interbank loans) rose $3.5 billion, and holdings of United States Government securities rose $2.0 billion, wholly reflecting an increase in Treasury bills. The major New York City banks came under particular pressure, and their basic reserve deficit averaged $1.2 billion in the two weeks surrounding the tax date. The financing needs of Government securities dealers were an important source of pressure, and the New York City banks maintained dealer loan rates in a 5 to 5½ per cent range during most of the month. Dealer financing was also heavy at out-of-town banks after midmonth.

THE GOVERNMENT SECURITIES MARKET

The tone in the market for Treasury notes and bonds turned distinctly buoyant in March, in the wake of the

[1] Formerly, some Reserve Banks had considered Saturday a business day for the purpose of determining when checks presented to them for collection were eligible for crediting to member bank reserve accounts. Thus, a portion of checks that previously would have been credited to member bank reserve accounts on Monday now are not credited until Tuesday. In addition, for some portion of the checks, payments are received by the Reserve Banks from the drawee member banks on Monday, and reserve credit is made to the payee banks on Tuesday.

[2] Reserve requirements were reduced from 4 per cent to 3 per cent on all member banks' savings deposits and Christmas and vacation club accounts and on the first $5 million of time deposits at each member bank. The reduction was in two stages, with half made effective in the statement week beginning March 2 and the remainder made effective two weeks later. Required reserves declined by an estimated $850 million as a result of the reduction.

announcement on the final day of February of the reduction in reserve requirements against member bank savings deposits and certain time deposits. Market optimism was sustained throughout the month by a succession of developments which were interpreted as enhancing the prospects for continued easing in credit conditions. Reports of further weakness in some economic indicators served to bolster this feeling.

The President's call for a restoration of the 7 per cent investment tax credit to become effective retroactively on March 9 prompted some initial caution, but on balance the measure appeared to have a positive impact on market psychology. Market participants generally came around to the view that the proposal signaled official recognition of additional softening in the economy, and interpreted the generally comfortable money market atmosphere as indicating that the Federal Reserve was actively seeking to combat any tendencies toward recession. Indeed, the steep decline in short-term interest rates led many to conclude that a reduction in the Federal Reserve discount rate was a near-term possibility. Expectations of such a move were heightened by ½ percentage point reductions in the Dutch and British bank rates on March 14 and March 16, respectively, and later in the period by the widely publicized cut from 5¾ per cent to 5½ per cent in the prime lending rate.

The rise in prices of Treasury coupon obligations was interrupted on several occasions during the month, but the succession of developments mentioned above served to rekindle professional expectations of lower interest rates ahead. Government securities dealers and large trading banks were particularly active during the month as the reservations they had felt in February faded into the background. At the same time, there was also outright investment demand by commercial banks seeking to expand their depleted holdings of Treasury coupon issues. However, some institutional selling of intermediate- and longer term Treasury issues developed against purchases of corporate bonds and the participation certificates of the Federal National Mortgage Association offered late in the month. Over the month as a whole, prices of Treasury notes and bonds rose by $^{10}/_{32}$ to $1^{28}/_{32}$ points, with the gains most pronounced in the intermediate maturity sector. The price gains on longer term obligations were somewhat smaller because of the supply coming into that sector of the market from investors.

Rates moved sharply lower in the market for Treasury bills during March. Good corporate and commercial bank demand, particularly for tax anticipation bills, was augmented by state and municipal purchases and System buying. Comfortable money market conditions and a growing feeling that the discount rate might be reduced in the near future contributed to market strength. Banks held on to a considerable proportion of the $2.7 billion June tax anticipation bills which they purchased in the March auction at an average issuing rate of 4.295 per cent. There was also bank buying of other bills in advance of the end-of-quarter statement publishing date, as well as a sizable accumulation of bills by Chicago banks prior to the April 1 Cook County tax date. Bill demand continued remarkably good around the March 15 tax date, slackened for a time later, and closed strong.

Acting on their expectations of lower rates ahead, dealers in March sought to maintain their Treasury bill positions in the face of demand. Bidding was aggressive in both the regular weekly auctions on March 13 and on March 20, and rates fell sharply. Some congestion developed temporarily after the latter auction as dealers, who were having to pay around 5 per cent for financing a sizable part of their positions, began to feel that the rate decline had perhaps gone too far. Rates accordingly backed up somewhat, but bidding was again strong in the auction of nine-month and one-year bills on March 28. The average issuing rates on these two issues were set at 4.078 per cent and 4.074 per cent, respectively, down 64 and 62 basis points from the average issuing rates of a month earlier. Good demand reappeared in the last few days of March, and rates on Treasury bills of under-one-year maturity closed at their lows for the month. (For information on average issuing rates, see Table III on page 68.)

In the market for Government agency obligations, prices moved higher over the month as investors took heart from the optimistic climate in other sectors of the capital markets. Over the month as a whole, new public offerings by agencies totaled approximately $1.4 billion. Attention centered on the Federal National Mortgage Association's offering of $900 million of participation certificates on Wednesday, March 22. The offering consisted of $450 million of two-year notes at 4¾ per cent, $250 million of a five-year issue at 5 per cent, and $200 million of a twenty-year issue at 5.10 per cent, all priced at par. Treasury trust accounts were allotted $50 million of each issue. The public awards of each issue were well received. Other new agency offerings during the month were also accorded good receptions at declining rates.

OTHER SECURITIES MARKETS

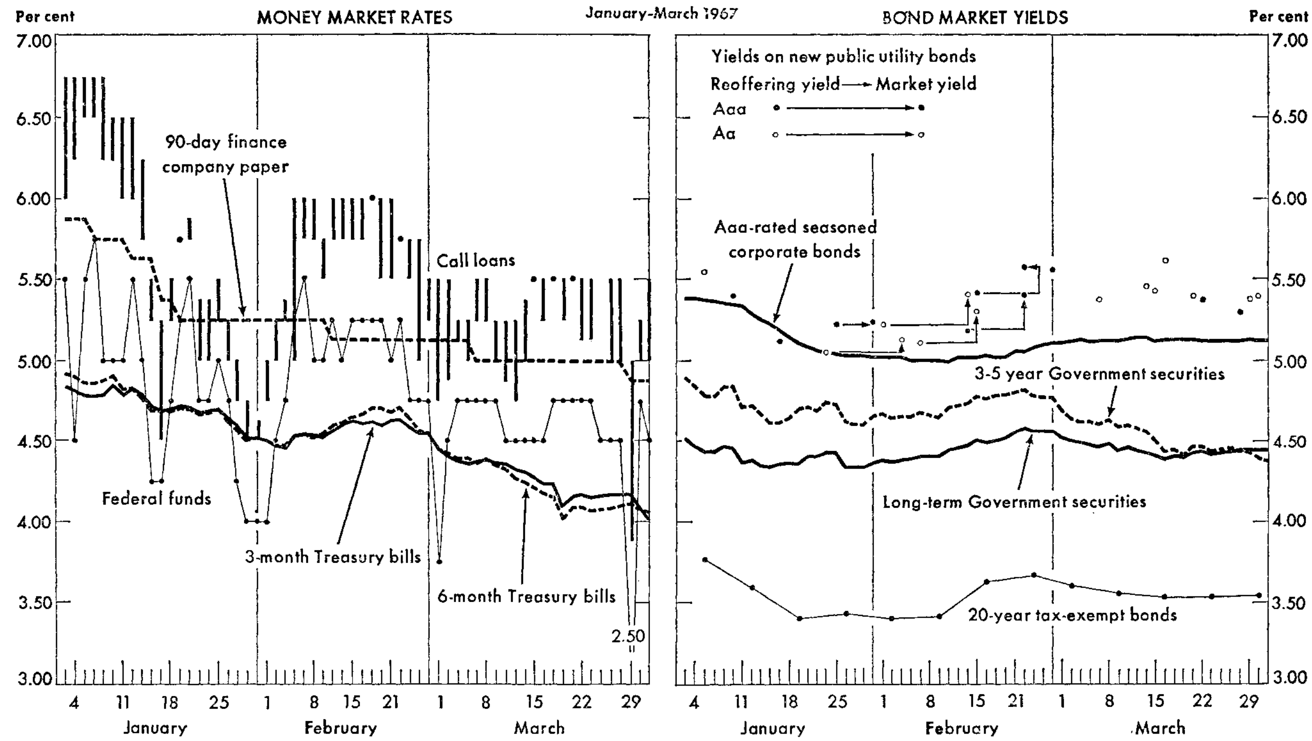
The corporate and tax-exempt bond markets absorbed a record volume of new issues during March, and the bulk of these were placed with investors. Along with the other capital market sectors, participants in these markets were buoyed by the weakness in some economic indicators and the possibility of a further easing of credit conditions. Underwriters were undaunted by selective initial investor interest in new offerings during the month, allowing inventories to rise in the favorable market climate. Distribution of slower moving issues was aided near the end of the month when the 5½ per cent prime rate became general throughout the country.

In the corporate sector, a record $1.6 billion of publicly offered new issues was offered at yields that tended to edge lower over the month. A $150 million offering of (Aaa-rated) industrial debentures, which were awarded on March 7, met with an enthusiastic reception at a reoffering yield of 5.32 per cent. (By way of comparison, a similarly rated large oil company bond issue, also with ten-year call protection, was offered at 6 per cent at the peak in interest rates in the late summer of 1966.) Other high-grade industrial issues with ten-year special call protection, on which terms were negotiated with the underwriters, also met with strong investor response and were distributed quickly. The large volume of utility issues sold at competitive bidding during the month moved somewhat more slowly, however, though distribution accelerated when the British bank rate was lowered and again when the prime lending rate was cut. For example, an $80 million offering of 5½ per cent (Aa-rated) mortgage bonds, awarded on March 14, encountered investor resistance initially at a reoffering yield of 5.45 per cent (compared with a reoffering yield of 5.75 per cent on a similar flotation by the same utility in early November 1966). Subsequently, however,

Chart II

SELECTED INTEREST RATES*

January-March 1967



Note: Data are shown for business days only.

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

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

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

the issue sold out and was trading to yield 5.41 per cent at the month's end.

New offerings of municipal issues during March totaled $1.2 billion. Bank demand for tax-exempt securities was stimulated somewhat by the reduction in reserve requirements against savings deposits, but banks tended to avoid the longer maturities. Underwriters, apparently expecting a continuation of active demand, bid aggressively for the new issues. As the month progressed, investor resistance developed to the lower yield levels, and longer maturities in particular began to build up on dealers' shelves. The Blue List of advertised offerings of tax-exempt issues rose from $568 million on March 1 to $783 million on March 31. However, prices tended to hold steady in the expectation that a cut in the Federal Reserve discount rate might soon take place.

Over the month of March as a whole, the average yield on Moody's seasoned Aaa-rated corporate bonds was almost unchanged at 5.12 per cent. *The Weekly Bond Buyer's* series for twenty seasoned tax-exempt issues, carrying rates ranging from Aaa to Baa, fell by 12 basis points to 3.54 per cent (see the right-hand panel of Chart II). These indexes are, however, based on only a limited number of seasoned issues and do not necessarily reflect market movements fully, particularly in the case of new and recent issues.

Farm Credit at Second District Commercial Banks*

The Federal Reserve System since 1946 has conducted, at ten-year intervals, a nationwide survey of commercial bank farm lending for the purpose of gathering information on the types and terms of farm credit and the characteristics of borrowers and lending banks.[1] Such data have become important as a means of keeping abreast of the developments in the farm loan market that have accompanied the many changes in the character of the agricultural economy during the postwar years. The latest survey in the series was conducted as of mid-1966, and this article summarizes the results for the Second Federal Reserve District.[2]

*Robert B. Platt, Economist, Statistics Department, had primary responsibility for the preparation of this article.

[1] The 1966 Agricultural Loan Survey provided for a randomly selected sample, which covered about 12 per cent of the commercial banks in the country and about 11 per cent of total farm loan volume. The sample results were expanded to provide estimates of total bank farm debt and related measures. Nationwide results of this survey will be published in the *Federal Reserve Bulletin* by the Board of Governors of the Federal Reserve System.

[2] The Second Federal Reserve District comprises New York State, the twelve northern counties of New Jersey, and Fairfield County in Connecticut.

DEVELOPMENTS IN THE FARM ECONOMY AND IN FARM CREDIT

The demand for funds by the nation's farm economy has been steadily increasing in the postwar years. Total outstanding farm debt, for example, has grown by more than five times since the end of World War II, reaching a level of over $40 billion at the beginning of 1966. This development has partly reflected the growing use of capital in farm production which, in turn, has often required recourse to outside sources of funds. The increased use of capital shows up clearly in the indexes of farm inputs. These indicate that from 1945 to 1964 the amount of labor used in farm production actually declined by 55 per cent, while the use of fertilizers and mechanical power and machinery rose by an impressive 244 per cent and 87 per cent, respectively.

The increasing capital investment in farms has also encouraged growth in the scale of operations in order to spread fixed costs over a larger volume of output. Thus, while total farm acreage in the country has changed little since 1935, the number of farms has declined from a peak of 6.8 million in that year to about 4.4 million in 1956 and to an estimated 3.5 million in 1966.

These developments in the national farm economy have been paralleled by trends in the Second Federal Reserve District. The number of farms in the District have been de-

Table I

SECOND DISTRICT FARM BORROWERS AND BANK LOANS

June 1956 and June 1966

Net worth	Number of farm borrowers		Number of farm bank loans		Outstanding farm bank loans (in thousands of dollars)	
	1956	1966	1956	1966	1956	1966
Under $3,000	3,390	507	4,548	654	2,121	1,218
$3,000 to 9,999	20,638	4,823	28,421	6,859	25,041	9,208
$10,000 to 24,999	25,000	12,140	38,389	19,742	55,999	43,617
$25,000 to 99,999	10,973	18,857	18,039	31,714	50,212	130,588
$100,000 and over	991	2,655	1,863	5,422	12,569	54,678
Net worth not known	8,972	10,143	9,779	12,783	7,375	37,064
Total	69,964	49,125	101,039	77,174	153,317	276,373

clining steadily since the mid-1930's, but the remaining units have grown in size and productivity as their owners and operators have increasingly relied on capital inputs. As a consequence, important changes have taken place in District farm credit. In the ten years after the 1956 Federal Reserve farm loan survey, for example, total outstanding farm loans of District commercial banks rose more than 80 per cent, while the number of individual farm borrowers at banks dropped nearly 30 per cent, and the total number of notes outstanding fell by about 24 per cent. With more debt spread over fewer borrowers, the average bank debt per borrower increased from $2,200 in 1956 to about $5,600 in 1966.

While farm borrowing at banks has increased rapidly, and incomplete statistics indicate perhaps an even faster rate of expansion in nonbank credit, the strength of farm finances in the Second District appears to have been well maintained. This shows up in the increased net worth of farm borrowers between the two survey dates. In 1966, the "typical" or most frequent farm borrower in the District had a net worth of between $25,000 and $100,000. In contrast, farm borrowers at the time of the previous survey in 1956 most frequently had a net worth of between $10,000 and $25,000 (see Table I).

Despite the large rise since 1956, farm loans at Second District banks have neither been growing so fast as bank farm loans in other sections of the country nor so rapidly as the other types of credit extended by District banks. Outstanding District bank farm loans grew at an average annual rate of about 6 per cent during the ten years ended in mid-1966, while for the nation as a whole they rose at an average rate of 9 per cent a year. Over the same period, nonfarm loans at District banks increased by almost 9 per cent annually. On the other hand, partial evidence indicates that credit to District farmers from nonbank sources grew at a slightly faster pace than did bank credit during the ten years 1956-66. Although their share of total Second District farm credit may have declined a bit, commercial banks have continued to be the principal source of farm credit in the area. As of mid-1966, District commercial banks supplied about 29 per cent of the average total debt of the District's farm borrowers, almost identical with the commercial bank share of farm credit in the nation as a whole.

BORROWER CHARACTERISTICS

The changed nature of farming operations in the past ten years has been reflected in changes in the characteristics of the farming population generally and of farm borrowers in particular. Farm borrowers now average a little older than before, are more likely also to hold a nonfarm job, stand a little better chance of being a corporation, and are more likely to own rather than rent their farms.

Of the farm businessmen who had loans outstanding at District commercial banks in mid-1966, 57 per cent were forty-five years of age or older, up from 52 per cent ten years earlier. Apparently, the greater investment now required for entry into farming, as well as other factors, has discouraged younger people from pursuing careers in agriculture. Also, the increasing capital requirements in agriculture may account for the growth of the corporate form of business organization in farming. Corporations, while still representing only ½ per cent of all farm borrowers in the District, have increased in number by about four times since 1956. Corporations accounted for 6 per cent of total outstanding farm loans at District banks in the most recent survey, up from only 0.2 per cent ten years earlier.

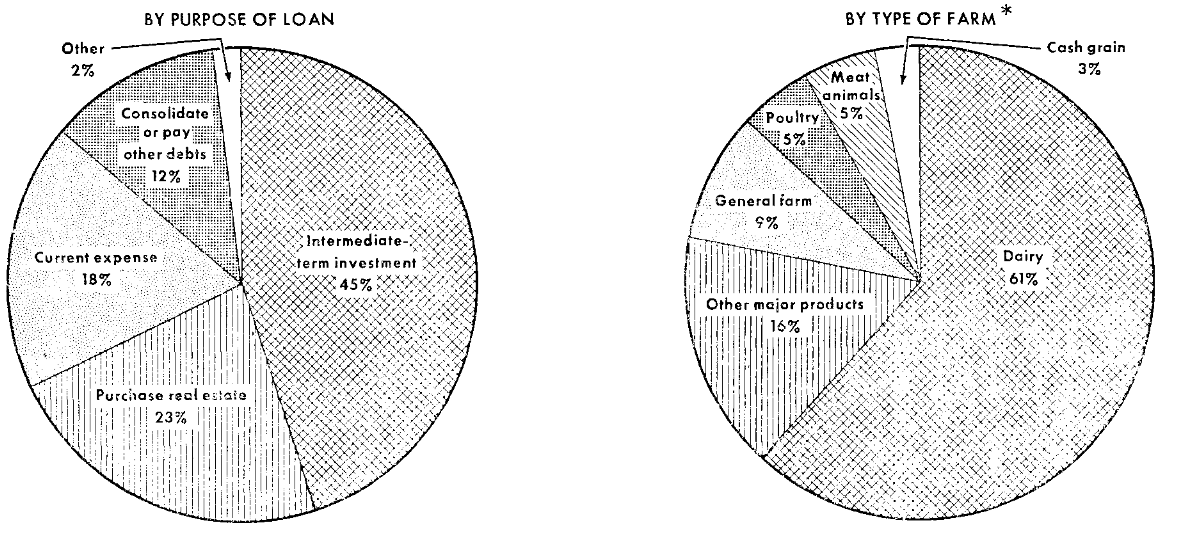
The proportion of total farm borrowers at District banks operating their farms on a part-time basis increased to 20 per cent in 1966 from 12 per cent ten years earlier. This could, in part, reflect the increasingly uneconomical nature of small-scale farming which, in turn, has made it necessary for many farmers to supplement their incomes with nonfarm employment. The difficulties of small-scale farming may also underlie the drop at District banks in the proportion of tenant farmers among total farm borrowers. Tenant farm operators accounted for only 5 per cent of total borrowers and 1 per cent of total outstanding farm loans in mid-1966, down from 7 per cent of borrowers and 4 per cent of loans in 1956. Moreover, tenant operations in the Second District are much less important than in the nation as a whole, where they account for 19 per cent of all farm borrowers.

LOAN CHARACTERISTICS

TYPE OF FARM AND PURPOSE OF LOAN. New York farmers accounted for about 92 per cent of total outstanding farm loans at all Second District commercial banks as of June 1966, and this fact, of course, had considerable bearing on the distribution of loans by type of farm. Credits extended to dairy farms, which constitute about 47 per cent of all New York State farms, were 61 per cent of total outstanding bank farm loans as of June 1966 (see chart), about the same proportion as in the 1956 survey. Borrowing by owners and operators of farms that produce a variety of vegetable or fruit crops, while still second in overall District farming activity, declined in importance. These borrowers accounted for 9 per cent of total outstanding farm loans at District banks as of June 1966, down from 18 per cent reported ten years earlier. Farmers raising meat animals, on the other hand, increased their share of the loan volume to 5 per cent of the total in 1966, up from a negligible 0.7 per cent in 1956.

Despite these shifts in the types of farm borrowers between the two survey dates, the stated purposes for which the loan proceeds were used remained largely unchanged. For example, the proportion of outstanding District bank loans for intermediate-term investments—primarily the purchase of farm equipment and livestock—held fairly constant at about 45 per cent (see chart). In the Second District, such loans represented the highest proportion of total farm loan volume, ranking ahead of loans for the purchase of real estate and for current expenses. In the country as a whole, however, current expense loans ranked first in volume by loan purpose as of mid-1966. The relatively smaller importance of current expense loans in the District reflects the predominance of types of farming activity, such as dairy farming, which do not require lengthy periods of produc-

DOLLAR AMOUNT OF FARM LOANS OUTSTANDING ON JUNE 30, 1966 AT SECOND DISTRICT COMMERCIAL BANKS



* Total does not add to 100 per cent because of rounding.

Table II

SECOND DISTRICT FARM LOANS BY SIZE OF BANK

June 1966

Total deposits (in millions of dollars)	Number of banks	Total outstanding farm loans (in thousands of dollars)	Average original amount of note (in dollars)	Net loans and discounts as percentage of total deposits	Loans to farmers* as percentage of gross loans and discounts	Percentage of outstanding farm loans acquired from merchants and dealers
Under 5	78	10,096	2,355	60.6	15.8	3.7
5 to under 10	100	42,375	3,655	64.7	8.1	6.5
10 to under 25	119	50,855	3,934	60.5	3.8	10.3
25 to under 100	103	55,316	3,430	63.9	1.4	21.9
100 and over	75	117,731	6,914	79.5	0.2	3.3
Total	475	276,373	4,431	77.5	0.5	8.8

* Excluding loans to Second District farmers by the Commodity Credit Corporation.

tion and hence provide the farmers with a steady inflow of funds from the sale of their products.

MATURITY AND SECURITY. Term loans (original maturities of over one year) made up a substantially higher proportion of District bank farm loan volume than was the case at the time of the last farm credit survey. As of June 1966, roughly 50 per cent of outstanding farm loans at Second District banks had maturities in excess of one year, up 6 percentage points from the 1956 survey. Nationally, however, term loans were far less significant, accounting for only about 27 per cent of bank farm loans outstanding in mid-1966. This difference is not surprising in view of the greater nationwide importance of loans for current expense purposes, which generally are short term.

Inasmuch as the increased importance of term loans to farmers in the past ten years was not associated with any significant shifts in stated purposes for borrowing, the lengthening maturities of farm debt may have reflected greater willingness of District bankers to extend longer term credits to farmers. Such a development might be expected, moreover, in view of the rapid growth in time and savings deposits at Second District banks since the last farm credit survey. The relatively high cost and greater stability of these deposits have encouraged bankers to search for higher yields such as those obtainable on farm term loans. Thus, as of June 1966, farm loans with maturities of over one year earned an average interest rate of 7.2 per cent, compared with 6.3 per cent on shorter term farm credits.

The growing proportion of farm debt with maturities of over one year, together with the rise in the average size of farm loans, has been accompanied by some increase in the proportion of outstanding loan volume secured by some form of collateral. Even though secured notes at Second District banks were about two thirds of the total number of notes in both 1956 and 1966, the proportion of secured dollar volume increased to 83 per cent in 1966 from 75 per cent ten years earlier. Loans secured by chattel mortgages and by mortgages on farm real estate were about of equal importance in the current survey. Combined, they accounted for approximately 81 per cent of secured dollar volume. Not surprisingly, security was related to purpose of loan. The increased importance of chattel and real estate mortgages as collateral for District farm loans reflects the large amount of loans for intermediate-term investments and for the purchase of real property.

BANK CHARACTERISTICS

As might be expected, results of the latest farm loan survey indicate that the smaller commercial banks, which are located for the most part in rural areas, put a greater share of their loan resources into farm loans than do the larger banks in the District. As of June 1966, farm loans constituted about 16 per cent of total loans of those banks with less than \$5 million of total deposits, but accounted for only 0.2 per cent of all loans of those banks with deposits of \$100 million or more (see Table II). Nevertheless, the larger District banks with deposits of at least \$100 million together accounted for about 43 per cent of total outstanding farm credit. To a considerable extent, this reflects the fact that these larger banks as a group command far greater total financial resources than do the smaller banks, and keep a greater percentage of these resources in loans.

Bank size is also an important factor in explaining the proportion of total farm loans made directly to farm customers rather than through the purchase of farm paper from merchants or dealers. For Second District banks, about 9 per cent of total outstanding farm loans represented purchased notes, a notable drop from the 15 per cent reported ten years earlier. The volume of purchased loans increased as a percentage of total farm loans for banks up to $100 million in total deposits but dropped sharply at the larger banks.

The 1966 farm loan survey, on the other hand, generally found no significant relationship between the size of the borrower and the size of the lending bank except for loans to farmers with a net worth of at least $100,000, which were made proportionately more often by District banks with total deposits of $100 million or more. Credits extended to larger borrowers are often too great in amount for many of the smaller banks in the District to handle, either because of legal lending limits or because of the bank's own desire to maintain a well-balanced portfolio of loans. For the larger banks, loans to farmers with a net worth of $100,000 or more accounted on the average for 33 per cent of their total outstanding farm loans, compared with 16 per cent for all other District banks combined.

AVAILABILITY AND COST OF FARM CREDIT

AVAILABILITY OF CREDIT. The year 1966 was one of tight conditions in the loan market generally. But judging from the results of the survey, there still appears to have been an ample supply of bank credit for farmers at Second District commercial banks. Less than 2 per cent of banks surveyed in the District reported greater difficulty in meeting the credit needs of their regular farm customers during the year ended in June 1966 than during previous years. The banks experiencing difficulty in meeting farm credit demand, moreover, were some of the most heavily "loaned-up" banks in the District. All but one had a loan deposit ratio of 70 per cent or more.

Apparently, a factor at times significantly affecting the availability of farm credit at individual small banks in the Second Federal Reserve District is the legal limit on size of any one loan.[3] Thirty-two banks were reportedly unable to grant some farm loans during the year ended in June 1966, because the request exceeded the legal limits for loans to any one borrower. For thirty of these banks, the loans not granted for this reason equaled or exceeded 10 per cent of their outstanding amount of farm loans.

In some cases, District banks experiencing difficulty in filling the applications for large farm loans were able to arrange for part of the loans to be supplied by nonbank credit sources such as insurance companies or Federally owned or supervised credit agencies. However, the most common method used by District banks to accommodate a loan request they themselves were unable to satisfy in full was through "participating" part of the loan to a correspondent bank. Twenty-five banks in the District—5 per cent of the total—used this technique during the year ended in June 1966.

INTEREST RATES. As of June 1966, the average effective interest rate on Second District farm loans was 6.7 per cent, exactly the same as the national average. Farm loans repayable in instalments earned an average of 11 per cent for District banks, compared with about 6 per cent on all other types of farm credit. Also, rates paid on farm loans in the Second District varied greatly with the net worth of the borrower. Farmers with a net worth of less than $3,000 paid an average effective interest rate of 8 per cent in 1966 on their outstanding loans from banks, as against 6 per cent paid by farmers with a net worth of $100,000 or more (see Table III). However, this relationship between size of borrower and interest rate paid largely results from the fact that loan size also varies sharply with the net worth of borrowers. When the data were classified by both size of loan and net worth, thus permitting the effect of loan size on interest rates to be separated out, the relationship between loan rates and

Table III

AVERAGE EFFECTIVE INTEREST RATES ON SECOND DISTRICT FARM LOANS

June 1966

Size of original note	Net worth of farm borrowers					
	Under $3,000	$3,000-9,999	$10,000-24,999	$25,000-99,999	$100,000 and over	Total
	In per cent					
Under $1,000	8.6	8.9	7.5	7.7	6.7	8.0
$1,000 to 1,999	9.6	9.4	8.2	7.7	6.1	8.2
$2,000 to 4,999	9.2	7.8	8.2	7.1	6.1	7.5
$5,000 to 9,999	—	6.4	6.8	7.0	6.1	6.9
$10,000 to 24,999	6.2	6.1	6.3	6.3	6.2	6.3
$25,000 and over	6.2	—	6.2	6.5	6.0	6.1
Total	8.0	7.7	7.2	6.7	6.0	6.7

[3] District banks are generally limited in the size of loans they may make to a single borrower. These limitations vary by type of collateral, if any, used as security. Also there are minor differences in regulations depending on whether the bank is chartered under Federal or state laws.

borrower size remained but was diminished. The remaining importance of borrower size as it affects the cost of farm credit probably reflects the greater creditworthiness of borrowers with a larger net worth. The lower rates on larger loans, on the other hand, are consistent with the fact that costs incurred by banks in granting and administering loans tend to decrease per dollar of loan as the principal amount increases.

The interest cost of farm credit at District banks also varied in 1966 according to the distance from the lending bank office to the borrower. This relationship of distance of borrower to cost of credit was most obvious when distance was measured in terms of multiples of the radius in miles within which a bank obtains 75 per cent of its direct farm loan volume. The average interest rate on loans within one such radius from the lending bank office was 6.7 per cent, but for loans made at greater distances from the bank office the average interest rate was 7.3 per cent.[4] Here too, however, the size of the borrower may be a factor in explaining the changes in the cost that occur with borrower distance since the average net worth of the borrower diminished somewhat with distance from lending bank office. Nonetheless, bankers are more familiar with business conditions and individual circumstances in areas near to their operations, and this, coupled with the community orientation of banks, would be expected to produce lower rates for local borrowers.

The size of the lending bank, on the other hand, apparently bore little relationship in 1966 to the cost of farm credit. Also, there was no significant difference between the average interest rate on secured and nonsecured farm loans. Within the category of secured farm loans, however, there were differences depending on the nature of the collateral. Loans guaranteed or insured by the Federal Government, for example, carried an average interest rate of 5.1 per cent, compared with 7.5 per cent on chattel mortgage loans and 6.8 per cent on all secured loans combined. In addition, there was a differential in the interest charges on secured real estate credit and other farm loans. This differential, however, was substantially reduced from the one reported in the 1956 farm credit survey. As of June 1966, the average interest rate on loans secured by farm real estate was 6.3 per cent and that on other farm credit was 6.9 per cent. The 0.6 percentage point differential between these two average rates was less than half as large as the spread between the corresponding rate averages of 5.1 per cent and 6.6 per cent in 1956.

[4] On average, banks made 75 per cent of their loans to farmers within a radius of nine miles from the bank office.

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. THE STORY OF CHECKS (1966). A 20-page booklet that describes the origin and development of checks, the growth and automation of check-clearing operations, and the checkless society envisioned for the future. No charge in limited quantities.

2. CENTRAL BANK COOPERATION: 1924-31 (1967) by Stephen V. O. Clarke. A 234-page book that deals with efforts by American, British, French, and German central bankers to reestablish and maintain financial stability in 1924-31 and the frustration of those efforts during the financial crisis at the end of that period. $2.00 per copy.

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

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

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

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

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

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

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