economic review

MAY 1967

IN THIS ISSUE

FEDERAL RESERVE BANK OF CLEVELAND

MONETARY POLICY IN A CHANGING WORLD

by
W. Braddock Hickman, President
Federal Reserve Bank of Cleveland

Talk delivered by President Hickman as part of the series "Distinguished Lectures on Banking and Monetary Policy" at The Ohio State University, Columbus, Ohio, May 3, 1967. The views expressed are Mr. Hickman's and do not necessarily reflect those of the Federal Reserve System.

MONETARY POLICY AND UNCERTAINTY

I am delighted to be with you today, and honored to participate in the series of "Distinguished Lectures on Banking and Monetary Policy." My topic today is "Monetary Policy in a Changing World." More precisely, it should be called "Monetary and Fiscal Policy in a Changing World," since the one cannot be discussed without the other; but I will try to emphasize monetary policy and thus conform more closely to the title of the lectures. I shall touch briefly and informally on the elementary textbook theory of fiscal and monetary policy and indicate some of the problems that arise when we attempt to apply pure theory in a world of uncertainty and change. I shall then review the record of recent years and point out some of the errors that I think have actually been made in this area. And finally, I shall identify what seem to be the principal sources and causes of the errors.

Let us start with the conventional wisdom as it is described in the elementary textbooks. There is today almost complete agreement that monetary policy and fiscal policy share the same general objectives: to help the economy achieve economic growth without inflation and with reasonable equilibrium in the international balance of payments. The textbooks tell us further, that an appropriate mix of monetary and fiscal policy is needed to achieve these objectives. On some occasions, it may be desirable to have a little more fiscal policy and a little less monetary policy, and on some occasions, the reverse. But the point is that the state of the economy is assumed to be known with almost complete certainty, so that there is virtually no uncertainty about the appropriate economic policy mix.

A number of problems arise when we attempt to apply textbook theory in practice,

due largely to the difficulty of predicting economic events. The economy — instead of moving along a steady path at a constant rate of growth — moves at a constantly changing rate, which is difficult to forecast accurately. This is not really surprising since the principal parameters of the economic system are not really stable, economic relationships are not fully understood, and unexpected developments affect the system at various times and in various ways. As a general matter, rates of growth of population change over time; technologically determined production functions change with innovations; and consumers' attitudes and tastes shift erratically. Most importantly of all, Federal spending and taxing are determined in part by social, political, and international considerations and only in part by what would be good economics.

The basic problem of an appropriately coordinated monetary and fiscal policy is to determine the course of the economy over a finite period ahead. If the period is as long as a year and a half (as in the President's annual budget, for example), this is an extremely difficult job when you consider the kinds of exogenous factors at work. To illustrate: the step-up of our defense effort in Vietnam had major influences on domestic economic activity in the second half of 1965 and in all of 1966 (influences that were largely missed in the standard forecasts made at the beginning of both years). What is in store for 1967? Frankly, I do not know. But I do know that with the future magnitude and duration of our military effort unspecified, there is a wide margin for error in any forecast of economic activity in the period ahead. Another illustration of an exogenous — and unpredictable — influence on the economy is the fact that we are faced this year with many major labor negotiations and the possibility of work stoppages. These, too, have serious unknown implications for the pace and direction of economic activity in 1967. Another complex of factors — partly exogenous and partly endogenous—has to do with consumer spending plans. Given the uncertainties of Vietnam and possible labor stoppages, as well as the current lower level of the structure of interest rates and the uncertain course of disposable personal income, it is difficult to predict how consumers will behave in the months ahead. Any or all of these factors could easily and appreciably change the *future* course of the economy in 1967, as well as the appropriate mix of monetary and fiscal policy *today*.

This type of uncertainty is indeed unfortunate, although uncertainty is a basic fact of life. Policy makers must assume, on the basis of the best evidence available, that the economy will behave in a certain fashion over a finite period, and formulate an appropriate policy mix for that finite period. If economic conditions alter unexpectedly during the period of the forecast, what was once judged to be appropriate policy will become inappropriate. The inflexibility and rigidity of the policy mix — particularly the fiscal aspects of that policy — create the crux of the difficulty. While monetary policy can adapt quickly, fiscal policy cannot. The inflexibility and rigidity of fiscal policy were clearly demonstrated during the second half of 1965 and the first half of 1966, when fiscal policy was too expansionary while the economy was over-

heating, and during late 1966, when fiscal policy was inadequately expansionary while the economy was cooling off. The basic problem of fiscal policy is the inflexibility of the Federal budget once formulated, and the slowness with which it can be reformulated under our existing institutional arrangements.

Monetary policy also has its problems, but they are not the same problems as those of fiscal policy. Both types of policy rest on fallible forecasts, but, fortunately, monetary policy is not rigid and inflexible. To the contrary, it is extremely responsive and accommodative. Given the right information, monetary policy can be adjusted quickly to changing economic circumstances, as attested by the shift that occurred last November. Although policy makers look ahead as far as the horizon permits, policy can be reformulated at intervals as short as the periods between meetings of the Federal Open Market Committee. This flexibility is much greater than that of fiscal policy, where the operational lag may be as much as a year and a half, from January through the end of the next fiscal year, which is the current planning period for the Federal budget.

The relative flexibility of the Federal Reserve System partly reflects the fact that it is not committed to a published forecast, and partly the fact that it is an independent agency within, but not of, the Government. Within the System, a small group of people (FOMC) — with diverse backgrounds and interests — meets frequently to discuss economic developments and must make a policy decision at each meeting. Nevertheless, despite timeliness and flexibility of monetary policy, many basic questions regarding its effects on the economy are still unresolved. The lead-lag relationships of changes in bank reserves, the money stock, bank credit, and interest rates are not fully understood. For example, tight money in 1966, has had, and will continue to have, uneven effects on various sectors of the economy in 1967 and perhaps beyond, and the amount and timing of these effects are unresolved. The uncertainty associated with variable time lags and impacts are problems that are, of course, not unique to monetary policy. Fiscal policy also has distributed effects on various sectors of the economy, and the magnitudes of these effects are not known. For example, the elimination of the 7 percent investment tax credit in October 1966 (just at the wrong time, as it turned out) has had, and will continue to have, pronounced effects on the amount and timing of plant and equipment expenditures in 1967, the extent of which can only be approximated. In addition, I do not know what the effects of the restoration of the investment tax credit will be in 1967 — or in 1968, or beyond.

Only one thing, based on invariant historical experience, is really clear. If the economy overheats later this year, the overheating will be blamed on monetary policy, no matter what fiscal policy may be or may have been. It will be said that we overreacted to recessionary fears in late 1966 and early 1967. On the other hand, if the economy were to sag further, we will be blamed for excessively tight money in 1966 or the fact that we underreacted in 1967, independently of the nature of fiscal policy. The rule is: heads, monetary policy loses; tails, fiscal policy wins. Hopefully, in the remainder of my talk

I will be able to rise above the perpetual squabble about the respective roles of monetary and fiscal policy, and shed some light on the practical difficulties of the Federal Reserve System as it attempts to conduct monetary policy on the basis of the information available. Let us therefore turn to a review of economic developments since the last recession, and the role of public policy in that period.

ECONOMIC DEVELOPMENTS SINCE 1961

In the long business expansion since early 1961, the economy has been characterized by three distinct periods of economic growth, with a different mix of monetary and fiscal policy in each period. Between the cyclical trough in February 1961 and mid-1965, the economy advanced at a remarkably well-balanced and noninflationary pace. Real GNP rose at a high average rate of about 5.5 percent, and the GNP deflator rose at a relatively low average annual rate of about 1.4 percent a year. In an effort to close the gap between the economy's potential and actual output, both monetary and fiscal policy were expansionary throughout the period. Around the time of the reduction in personal and corporate income taxes in February 1964, real economic growth accelerated but without a noticeable acceleration in prices. The Federal Reserve System maintained an accommodative monetary policy, which provided the money and credit needed to support enlarged spending by businesses, consumers, and government.

During each of the next two periods, the mix of monetary and fiscal policy was less appropriate. From mid-1965 until mid-1966, the economy was characterized by excessive aggregate demand relative to the nation's capacity to produce. The results were imbalances and distortions in various sectors of the economy, and a general inflationary overheating. In mid-1965, accelerated defense spending for Vietnam was superimposed on rapidly rising business expenditures for fixed plant and equipment. Inventory spending also expanded rapidly, both for defense purposes and other uses. (Parenthetically, as I will discuss later, our information on defense spending and inventory investment was highly inadequate at that time.) Operating rates in many lines began to exceed desired levels, and labor shortages appeared. After years of virtual stability, unit labor costs began to rise rapidly, profit margins fell, and inflationary pressures accelerated. Between the second quarter of 1965 and the third quarter of 1966, real GNP rose at a satisfactory 5.5 percent annual rate, but the GNP price deflator increased at a 2.9 percent annual rate, about twice the increase of the earlier period.

The surge in economic activity generated enormous demands for funds, which could not be satisfied without an excessive expansion of credit. As inflationary pressures increased, the Federal Reserve System became less accommodative, the growth of bank credit slackened, and the entire constellation of interest rates began to move up. The increase in the discount rate from 4 percent to 4½ percent in December 1965, although at first highly unpopular, gained grudging support from informed quarters when it became apparent that the Administration was not going to ask for an appropriate contracyclical

increase in income taxes. The logic supporting earlier fiscal measures to invigorate a lagging economy now argued for the reverse fiscal policy, but this was not to be the case. Despite token fiscal measures, such as the partial restoration of previously reduced excise taxes and accelerated income tax withholdings, the major burden of restraint fell on monetary policy.

This, as it turned out, had many unfortunate consequences. For example, as monetary policy became progressively tighter, and interest rates soared to the highest levels in 40 years, savings that normally flow through nonbank deposit-type institutions were diverted directly into higher yielding money market investments. Since deposit-type institutions normally supply the bulk of funds for residential construction, the mortgage market was seriously squeezed. The result was a sharp decline in housing starts and in residential construction.

The third period began in the fall of 1966 when it became apparent to the Federal Reserve that the overheated economy was beginning to cool off. While prices were still rising, the pace of the private sector slowed, and industrial production began to level. Moreover, just as economic activity began to moderate in October 1966, fiscal policy took a restrictive step with the suspension of the 7 percent tax credit on business investment and accelerated depreciation allowances. The burden once again was on monetary policy, which turned progressively easier beginning in November. After a short period of hesitation, bank reserves began to grow rapidly, bank credit expanded sharply, the money supply increased, and interest rates declined.

Fiscal policy began to play an appropriate contracyclical role early in 1967. The Administration released funds that had been withheld from the highway program, made more mortgage funds available through FNMA, speeded up veterans' dividend payments, and in March called for immediate reinstatement of the 7 percent investment tax credit. The existence of moderating tendencies in the economy was reconfirmed by the Federal Reserve System in March when reserve requirements on certain time deposits were reduced, and again in April, when the discount rate was cut from 4½ percent to 4 percent. From the third quarter of 1966 to the first quarter of 1967, real GNP rose at a somewhat more subdued rate of 2.3 percent but the price deflator continued to rise at a high annual rate of 2.8 percent, although other major price indexes showed moderating tendencies.

Despite the recently improved mix of monetary and fiscal policy, the nation's real economic growth will be small in 1967, judged by recent standards. Business investment in new plant and equipment is edging down, inventory accumulation has been reduced, and until recently, consumer spending has been sluggish. The basic question of the moment, from the point of view of monetary policy, is whether our stance is about right, or whether we should ease further or tighten. Whatever policy is adopted, our basic goal remains the same as it has always been — to achieve balanced noninflationary economic growth.

LESSONS OF RECENT EXPERIENCE

In my brief review of economic developments since the last recession, I delineated a long period from 1961 to mid-1965 when the economy enjoyed steady growth and stable prices, and two short periods, mid-1965 to mid-1966, when growth was satisfactory but prices spurted, and mid-1966 to the present, when growth slackened while prices continued to rise. All of us can take pride in the record as a whole, but it could have been better, given better information, deeper insights, and more appropriate mixes of monetary and fiscal policy. Let us see what constructive steps should be taken to improve public policy in the future.

First, it is imperative that we find some way of reducing the inflexibility and resulting untimeliness of fiscal policy. Part of the trouble lies in the budget making process itself. Federal budgets are based on specific, one-shot forecasts of what the economy will be like over the next 18 months; against this background, receipts are estimated, tax policy planned, and spending projected. If the forecast is wrong, as it almost always is for any 18-month period, estimates of income will be wrong, and spending plans and tax policy will be inappropriate for economic stabilization and growth. The difficulty is that Federal programs for spending and taxing take many months to place in train, gain momentum in the process, and cannot easily be reversed, once started.

One practical solution would be to provide for the regular publication of revised quarterly budgets, similar to those the Bureau of the Budget will provide this year to the Joint Economic Committee. Another constructive step would be to develop better understanding and agreement as to which budget concept is most appropriate for policy planning purposes. The present system of multiple budgets is confusing to the layman, and lends itself to manipulation to show a surplus—or a small deficit — in whatever budget happens to be in favor at the moment. As a former Chairman of the Council of Economic Advisers recently pointed out, we are operating in a kind of "fiscal fog" that could be highly dangerous. Fortunately, the President plans soon to establish a bipartisan group to study budget processes, with a view towards reform and improvement. I personally think also that some way must be found to provide for speedier adjustments in the tax system to changing economic conditions. Perhaps an independent agency might be given the power to adjust taxes upward or downward as needed within a small percentage range, subject to review and revision by Congress or the Executive. Admittedly, the practical political difficulties of any such plan are enormous, but the potential economic benefits are even greater.

Second, monetary policy also is in need of some improvement, particularly in the area of measuring time lags and impact. Frankly, I think monetary policy has been quite good since early 1960. There now seems to be general approval among economists of the timeliness and direction, if not the magnitudes, of recent monetary policy changes, although there is considerably less agreement, as I have indicated, on whether we tend to overstay our position. Also, many criticize us for not designating one particular economic time series as *the* major monetary

variable. Should it be Professor Brunner's "credit base," Professor Friedman's "broad" money supply, or the Federal Reserve's own brain child, "the bank credit proxy"?

Frankly, I do not know the answer, and doubt that anyone else does. In practice, the Federal Open Market Committee looks at all kinds of variables and tries to account for significant variations in rates of change among them. Econometric models have a way of indicating that one or another of a set of variables is the most important variable to be considered, but the selected variable has a disconcerting way of changing, depending upon the model and time period considered. In part, this probably reflects inherent statistical problems associated with economic model building, for example, the high degree of intercorrelation between the dependent variables in the model, serial correlation, incorrect assumptions about the distribution of error terms, and so forth. In part, I suspect that it also reflects the fact that economic relationships are too complex and interrelated to be represented by any single time series, or any single set of variables. In any event, the Federal Reserve System is keenly aware of the gaps in its knowledge and is sincerely trying to fill them.

As a third step in improving public policy in general, we desperately need to improve our information system, by obtaining more accurate and timely statistics, by improving coverage, and by filling some of the gaps in our knowledge. Consider, for example, business inventory investment, which plays a major role in explaining cyclical swings in economic activity generated in the private sector. Publication of monthly statistics on combined manufacturing and trade inventories now lags the event by about two months. This means that today we know something about what happened to inventories in February, but subsequent developments remain shrouded in mystery. This is not only bad by itself, but the early releases on inventories are subject to substantial revision, due chiefly to difficulties in obtaining reliable information on manufacturing and retail stocks. The same difficulties carry over into the GNP statistics. To illustrate, in January and early February, the Federal Open Market Committee operated on the assumption that business inventories had increased by $14.4 billion in the fourth quarter of 1966, only to learn at the end of February that inventory investment had been $2 billion higher, implying a much more severe inventory adjustment later on.

In addition to accuracy and timeliness, we need to improve the coverage of our statistics. Consider, for example, the important influence of changes in liquid asset holdings of businesses and consumers on savings flows, the money stock, and sources of commercial bank funds. We rely here on quarterly FTC-SEC estimates of "cash," "U. S. Government securities," and "other" liquid assets, rather than on more precise and meaningful categories (now almost totally unavailable to us) of such items as corporate holdings of Eurodollars, time certificates of deposit, foreign Treasury bills, and so forth, all of great concern to the monetary authorities.

A third major information problem involves the gaps in our knowledge. A major information gap relates to defense spending. As mentioned earlier, the huge and largely unex-

pected surge in defense spending that began in late 1965 generated far-reaching reactions in the economy, the effects of which are still with us. Undoubtedly, if monetary and fiscal policy makers had been fully aware of developments then, steps would have been taken earlier to restrain them, and less restraint would have been needed later on. The fact is, however, that key variables relating to defense spending are almost impossible to predict, and impossible to obtain even within the various agencies of the Government itself. Unfortunately, these unexpected escalations and de-escalations in defense spending can do serious harm to the domestic economy, unless offset by appropriate public policy. At least, important policy making groups such as the Council of Economic Advisers and the Federal Open Market Committee should be informed, to the extent possible, of major shifts in defense spending, even if such information must be withheld from the public on grounds of national security. If this type of information is not available, then steps should be taken to develop it by the appropriate agencies.

In general, I suspect that the root of the difficulty in obtaining adequate and timely information goes back to our old bugaboo, the fiscal processes of the Government itself. Unless and until high-level public officials recognize the dangers involved, no department of the Government will receive adequate appropriations for such mundane things as data collection or data processing, which are so necessary for efficient policy making. It is inconceivable that the greatest nation in the world, with a Gross National Product of over $750 billion, and with Federal Government outlays of over $150 billion a year, spends only $125 million on its Federal statistical programs. Surely, we need to improve the quality and timeliness of our economic information, even if it means spending more money.

These then, in broad brush, are the elements needed for a better mix of monetary and fiscal policy in the future: first, a more flexible fiscal policy, particularly a more flexible tax policy; second, an improved theoretical basis for monetary policy; and third, better data for the policy maker in such important areas as liquid assets, business inventories, and defense spending. We, of course, also need to improve our economic forecasts. This is something to which we can all contribute — in the universities, in Government, and in business.

CAPITAL SPENDING PLANS IN CLEVELAND AND NORTHEASTERN OHIO

Manufacturing firms in the four-county Cleveland metropolitan area expect total spending for new plant and equipment in 1967 to be 27 percent larger than in 1966, with a slight reduction in the rate of capital spending indicated for 1968. These plans were revealed in a survey of capital spending in northeastern Ohio taken in March 1967.

This year's survey of capital spending differs from earlier surveys by the Federal Reserve Bank of Cleveland. In an attempt to reduce duplication and, at the same time, to improve the usefulness of the results, this Bank's semiannual survey of the Cleveland area was combined with the annual survey of the eight-county northeastern Ohio area previously conducted by the Cleveland Chamber of Commerce and the Greater Cleveland Growth Board. Greater geographic coverage was accompanied by a large increase in the number of participating firms; all manufacturing establishments in the eight-county area, regardless of size, were invited to cooperate in the survey. While this resulted in a lower response rate, the expanded survey greatly increased the number of responses and improved the representativeness of the sample.[1]

CLEVELAND AREA

The expected 27-percent increase in this year's capital spending by Cleveland manufacturers (see Table I) considerably exceeds national expectations for 1967, as revealed by the most recent nationwide surveys. At the same time the 27-percent increase represents only about half as large a rise as had been anticipated at the time of the previous survey by this Bank in the fall of 1966. The downward revision in spending plans for 1967 undoubtedly reflects changes in the evaluation of the near-term economic outlook between the two survey dates.

The general pattern of increased spending in 1967 and reduced spending in 1968 in the

[1] Questionnaires mailed to prospective participants above a certain size were similar to those used by this Bank in previous surveys. A much abbreviated form, however, was sent to the large number of smaller firms newly included in the survey. As a result, only the percentages of year-to-year changes in spending and the proportions of total spending for structures and for machinery, respectively, are based on all returns. All other findings reflect only that portion of the respondents completing the full-size questionnaire.

TABLE I

Capital Spending by Manufacturing Firms Cleveland Metropolitan Area (Spring 1967 Survey)

Year-to-Year Percent Changes

	1966 (actual) to 1967 (planned)	1967 (planned) to 1968 (planned)
Durable goods	+ 31%	— 4%
Stone, clay, and glass	+ 33	— 34
Primary metals	+ 65	+ 2
Fabricated metals	+ 15	+ 11
Machinery	— 2	— 6
Electrical equipment	+ 17	— 26
Transportation equipment	+ 23	— 9
Instruments	— 16	+128
Other durables*	+ 50	— 21
Nondurable goods	+ 9	— 6
Food	— 13	— 11
Apparel	+ 27	— 88
Paper and paper products	+400	— 64
Printing and publishing	+ 12	+ 2
Chemicals	— 30	+ 59
Rubber and plastics	+ 73	— 14
Other nondurables†	— 27	+ 29
TOTAL	+ 27%	— 4%

* Includes ordnance, lumber, furniture, miscellaneous manufacturing.

† Includes textiles, petroleum products, leather.

Source: Federal Reserve Bank of Cleveland

Cleveland area holds true for the durable and nondurable goods sectors, as well as for about half the individual industries shown in Table I. A few industries expect spending to rise in both 1967 and 1968. The group includes the primary metals, fabricated metals, and printing and publishing industries that previously reported reduced spending in 1966 as compared with 1965. Other industries expect to reduce spending in 1967 and again in 1968; they include the machinery and the food industries where spending in 1966 was high compared with 1965. The chemical industry, which expects reduced spending in 1967 from a high 1966 level, anticipates a sizable increase in 1968.

The impact of expected industry changes in capital spending on total capital investment in the Cleveland area is, of course, proportionate to the amount of spending by the industries involved. As an example, the expected 30-percent reduction in this year's spending by the chemical industry represents many more dollars than the 33-percent increase in the stone, clay, and glass industry.

Generally, total capital spending in the Cleveland area is determined largely by the durable goods sector, as shown by the nearly identical percent changes for all manufacturing industries (27 percent) and for the durable goods component (31 percent) in Table I. The latter component accounts for over 80 percent of expected total spending in 1967, with almost one-half coming from the primary metals industry alone and the other half from transportation equipment, machinery, electrical equipment, and fabricated metals, in that order. In contrast, the relatively small nondurable goods sector, where the chemical industry outranks all others in size of this year's expected spending, exerts relatively less influence on the area's total spending.

About one out of every five dollars of new capital investment by all manufacturing industries in the area will be for new structures in 1967 (see Table II). As usual, individual industries vary widely as to the proportions of spending for structures as against machinery.

The proportion of spending earmarked for expansion of facilities — about 60 percent, as shown in Table II — is lower than the 67 percent indicated in last October's survey.

This probably reflects somewhat less pressure on capacity now than last fall, when almost half of the replies showed "less than adequate" capacity, in contrast to only 30 percent in the latest survey. That a very high proportion of replies were marked "less than adequate" in the printing and publishing industry, suggests capacity shortages in some areas.

TABLE II
Capital Spending by Manufacturing Firms
Cleveland Metropolitan Area
(Spring 1967 Survey)
Percent Distribution of Total Spending by Type*
(Between Structures and Equipment and Between Expansion and Replacement)

	Structures†			Expansion‡		
	1966	1967	1968	1966	1967	1968
Durable goods	25%	19%	23%	61%	63%	58%
Stone, clay, and glass	22	13	19	43	59	63
Primary metals	16	12	32	73	80	83
Fabricated metals	29	24	32	56	38	44
Machinery	32	26	16	57	46	37
Electrical equipment	48	38	35	60	72	68
Transportation equipment	19	12	6	53	47	45
Instruments	9	7	5	77	74	72
Other durables§	18	33	6	79	77	88
Nondurable goods	30	32	30	59	65	67
Food	44	30	26	–0–	–0–	–0–
Apparel	74	67	14	72	92	–0–
Paper and paper products	41	60	18	n.a.	n.a.	n.a.
Printing and publishing	25	22	25	55	70	58
Chemicals	26	22	51	63	62	83
Rubber and plastics	28	8	4	77	91	94
Other nondurables#	9	14	12	45	2	36
TOTAL	26%	21%	24%	61%	63%	60%

* Based only upon returns in which these breakdowns were supplied.

† Spending for equipment equals 100 percent less the percentage shown for structures.

‡ Spending for replacement equals 100 percent less the percentage shown for expansion.

§ Includes ordnance, lumber, furniture, miscellaneous manufacturing.

Includes textiles, petroleum products, leather.

n.a. Not available.

Source: Federal Reserve Bank of Cleveland

Approximately 90 percent of the dollar amounts to be spent for new plant and equipment in 1967 and 1968 will be financed internally, a slightly larger percent than indicated in the previous survey. However, the proportion of firms expecting to finance this year's spending entirely from internal sources — 80 percent of those replying — is slightly smaller than shown for either 1966 or 1968.

NORTHEASTERN OHIO AREA

Total capital spending in the northeastern Ohio area is largely determined by the industrial patterns of the two metropolitan areas — Cleveland and Akron—included in the eight-county group, which contribute 70 percent and 20 percent, respectively, of northeastern Ohio's manufacturing employment. The Cleveland area, which accounts for about three-fourths of new capital investment expected by reporting manufacturers, clearly dominates the spending pattern for the entire eight counties. This is particularly evident in the durable goods industries, which are heavily concentrated in the Cleveland area. A comparison of the data in Tables I and III shows that percent changes in spending plans for the durable goods group as a whole are virtually the same for the entire northeastern Ohio area and for the Cleveland portion. Among component industries, year-to-year changes in spending are of similar size in some instances and move in the same

TABLE III

Capital Spending by Manufacturing Firms and Utilities
Northeastern Ohio (Eight Counties)
(Spring 1967 Survey)
Year-to-Year Percent Changes

	1966 (actual) to 1967 (planned)	1967 (planned) to 1968 (planned)
Durable goods	+ 31%	— 5%
Stone, clay, and glass	+ 31	— 20
Primary metals	+ 71	+ 3
Fabricated metals	+ 11	+ 3
Machinery	— 4	— 6
Electrical equipment	+ 17	— 25
Transportation equipment	+ 29	— 15
Instruments	— 17	+ 35
Other durables*	+ 26	— 19
Nondurable goods	— 10	+ 6
Food	— 41	— 15
Apparel	+ 22	— 87
Paper and paper products	+255	— 60
Printing and publishing	— 2	+ 8
Chemicals	— 21	+ 35
Rubber and plastics	— 16	+ 6
Other nondurables†	— 27	+ 27
TOTAL MANUFACTURING	+ 17%	— 2%
UTILITIES	+ 12%	+ 27%

* Includes ordnance, lumber, furniture, miscellaneous manufacturing.
† Includes textiles, petroleum products, leather.
Source: Federal Reserve Bank of Cleveland

direction in all instances, as between Cleveland and the entire area.

Spending plans for the eight counties in the nondurable goods sector, however, bear the stamp of the Akron area, where 40 percent of northeastern Ohio's employment in nondurable goods manufacturing is located. One-half of all capital spending by those industries in the combined eight counties is reported from the Akron area, in contrast to only 15 percent of total spending in all manufacturing industries.

Manufacturers in the Akron area expect, on average, to spend 15 percent less for new plant and equipment in 1967 than last year and to raise the level of spending by 2 percent in 1968. The reported totals are heavily influenced by spending plans of the rubber industry, which include a 22-percent reduction in spending in 1967 and a 10-percent gain in 1968. The chemical industry, ranking second in the Akron area in the amount of spending planned for 1967, shows increases in 1967 and 1968 of 18 percent and 7 percent, respectively. Together, the rubber and chemical industries account for over 70 percent of all new plant and equipment spending reported by Akron area manufacturers. In contrast, the durable goods sector, where reduced spending is expected in both 1967 and 1968, contributes less than one-fourth of total spending in the area.

For the entire northeastern Ohio area, changes in spending by the largely Akron-based nondurable goods industries and by the Cleveland-dominated durable goods industries are partly offsetting. As a result, total spending by all manufacturing firms in the eight counties is expected to rise in 1967 by 17 percent and in 1968 to decline by 2 percent (see Table III).

Public utilities in the entire northeastern Ohio area plan to increase their capital spending by 12 percent in 1967 and by a further 27 percent in 1968, as shown in Table III.

AGRICULTURAL LOANS AT COMMERCIAL BANKS IN THE FOURTH DISTRICT

A number of interesting facts regarding the use of bank credit by farm operators in the Fourth District emerge from the nationwide agricultural loan survey conducted by the Federal Reserve System as of June 30, 1966.[1] Where appropriate, these facts are compared with the results of the previous agricultural loan survey conducted in 1956.[2]

At midyear 1966, about 60 percent of all farm operators in the District were using bank credit, a much larger proportion than ten years earlier when only about 40 percent were in debt to District banks. Interestingly, the number of borrowers in 1966 — 111,462 — was actually 17,500 less than ten years earlier due chiefly to a decline in the number of farms. In addition to a larger proportion of farmers using bank credit, the amount of debt per borrower was larger in 1966 than in 1956.

Total agricultural loans at District banks as of June 30, 1966, amounted to $484 million, or 71 percent more than ten years earlier. The $484 million of agricultural loans included 163,599 loans averaging $2,956 each. Many borrowers had more than one bank loan, and the average amount outstanding per borrower was $4,399. The average size of loan was about twice the magnitude of ten years earlier.

The growth of agricultural loans at District banks occurred largely from the resources of the individual banks. The 1966 survey indicated that during the 12 months ended June

[1] The data discussed in this article are derived from a stratified random sample of 110 Fourth District insured commercial banks, which was part of a nationwide survey on bank financing of agriculture. Each bank reported detailed information on a sample of farm loans in addition to several other items of information. The sample banks were stratified by size, as measured by dollar volume of farm loans outstanding. Each of the respondent banks reported on all farm borrowers with $100,000 or more of debt outstanding and on from 20 to 50 additional farm borrowers within a designated alphabetical segment. The data were expanded to represent the total of all farm loans reported by all District banks on the Report of Condition as of the same date.

Results of the nationwide survey on bank financing of agriculture will be presented in the *Federal Reserve Bulletin*.

[2] See "Bank Loans to Agriculture," *Monthly Business Review*, Federal Reserve Bank of Cleveland, December, 1956.

30, 1966, there were only 72 loans, totaling $2.7 million, that banks in the District were unable to accommodate because the size of individual loans exceeded the bank's legal lending limit to one borrower. Unaccommodated loans during the 12-month period amounted to 0.04 percent and 0.56 percent, respectively, of the number and dollar volume of agricultural loans outstanding as of midyear 1966. The unaccommodated loans were probably handled to some extent by participation loans. The survey indicated that, as of June 30, 1966, there were 28 participation loans (totaling $2.5 million) originated by reporting banks and 20 participation loans (totaling $431,000) originated by correspondent banks.

The growth in agricultural loans at District banks between 1956 and 1966 was accompanied by a more than two-fold increase in agricultural loans outstanding by other institutional lenders.[3] In contrast, the dollar volume of loans by individuals for agricultural purposes registered a moderate decline during the same period.

OUTSTANDING BANK DEBT OF BORROWER

The amount of debt per borrower at Fourth District banks rose substantially between 1956 and 1966. As shown in Table I, the largest volume of debt was in the category where outstanding debt ranged from $10,000 to $24,999; ten years earlier, the largest volume of debt was in the $2,000 to $4,999 category (not shown in table). In 1966 the group with the largest number of borrowers (30,054) was in the $2,000 to $4,999 range; ten years earlier, the group with the largest number was in the under $500 category (not shown in table). As also shown in Table I, as the dollar amount of debt per borrower increased, the number of notes per borrower also increased. Thus, while the number of borrowers and the number of loans were reasonably close in the smaller debt categories, borrowers in the larger debt groupings held an increasingly larger number of notes.

As would be expected, the average effective interest rate on agricultural loans declined as the amount of bank debt per borrower rose. In the smallest debt category (under $500), the average effective interest rate was 7.6 percent; in the largest debt category ($100,000 and over), the average rate was 5.4 percent. For all categories, the average effective interest rate as of June 30, 1966, was 6.4 percent, which compared with 5.7 percent ten years earlier.

MAJOR PURPOSE OF LOAN

As of June 30, 1966, the volume of loans to purchase farm real estate was considerably larger than for any other major purpose, accounting for 41.5 percent of all agricultural loans, and was somewhat higher than a decade earlier. Bank loans for intermediate term investments, such as purchases of farm machinery, autos and other consumer durables, improvement of land and buildings, and other livestock, ranked next. Taken together, these loans accounted for 29.8 percent of total loans, or slightly less than in the earlier period.

[3] Corollary studies of the experience of other institutional lenders to farm operators, including the several agencies of the Farm Credit Administration and life insurance companies, are in progress; findings are to be reported by the Economic Research Service of the Department of Agriculture.

TABLE I
Fourth District Agricultural Loans
Total Debt Per Borrower
June 30, 1966

	Number of Borrowers	Number of Loans	Outstanding (thousands of dollars)	Average Effective Interest Rate
Under $500	19,776	21,352	$ 5,199	7.6%
$500—$999	14,421	16,892	9,822	7.0
$1,000—$1,999	18,380	23,118	25,162	7.0
$2,000—$4,999	30,054	45,458	95,892	6.5
$5,000—$9,999	16,543	29,651	114,324	6.4
$10,000—$24,999	10,164	22,448	153,586	6.2
$25,000—$49,999	1,814	3,919	59,315	6.1
$50,000—$99,999	293	670	17,385	6.1
$100,000 and over	18	92	2,975	5.4
Total	111,462	163,599	$483,662	6.4%

Source: Board of Governors of the Federal Reserve System

The proportion of bank credit employed in financing current operating expenses was greater in mid-1966 than ten years earlier. Loans to consolidate and repay debts, as well as loans for miscellaneous purposes, represented a smaller proportion of the total (in numbers and outstandings) in 1966 than in 1956.

As Table II shows, the average size of loans to purchase farm real estate was larger than for any other purpose, and loans to purchase autos and consumer durables were the smallest.

The average effective interest rate ranged from 6.1 percent on loans to purchase feeder livestock and real estate to 8.8 percent on loans for autos and consumer durables. The effective rate on loans to finance current expenses was 6.3 percent, and intermediate investments, 7.1 percent.

LOANS BY NET WORTH OF BORROWER

The largest proportion (number and amount) of agricultural loans at District banks was to borrowers with a net worth of $25,000 to $99,999 (Table III). Loans in that category accounted for 45 percent of the total volume, and about one-third of all borrowers. The next largest category was the group with a net worth of $10,000 to $24,999, followed by the group with a net worth of under $10,000. The smallest group included borrowers with a net worth of over $100,000. The two largest groups, when combined, accounted for 55 percent of the loan volume and 36 percent of the borrowers.

The average amount outstanding per borrower varied in direct relation to net worth. Borrowers with a net worth of over $100,000 had the largest average amount of bank debt and those with a net worth of less than $10,000, the smallest.

LOANS BY AGE OF BORROWER

Borrowers 45 years and over had the largest amount of bank debt, as shown in Table III, accounting for 54 percent of the volume

TABLE II

Major Purpose of Fourth District Agricultural Loans

June 30, 1966 and June 30, 1956

	Number of Loans June 30, 1966	Percent Distribution June 30, 1966	Percent Distribution June 30, 1956	Outstanding (thousands of dollars) June 30, 1966	Percent Distribution June 30, 1966	Percent Distribution June 30, 1956	Average Original Size June 30, 1966	Average Effective Interest Rate June 30, 1966
Feeder livestock	8,591	5.2%	3.8%	$ 26,721	5.5%	4.2%	$3,110	6.1%
Current operating and family living expenses	51,975	31.8	29.5	64,517	13.4	10.3	1,241	6.4
All current expenses	60,566	37.0	33.3	91,238	18.9	14.5	1,506	6.3
Other livestock	7,934	4.9	5.2	21,351	4.4	5.6	2,691	6.2
Machinery	30,981	18.9	19.8	65,528	13.6	13.6	2,115	6.9
Autos and consumer durables	11,942	7.3	7.4	13,242	2.7	3.6	1,109	8.8
Improvement of land and buildings	10,264	6.3	6.7	44,073	9.1	8.7	4,294	6.3
All intermediate investments	61,121	37.4	39.1	144,194	29.8	31.5	2,359	7.1
Purchase farm real estate	28,108	17.2	15.1	200,561	41.5	38.3	7,135	6.1
Consolidate and pay debts	5,775	3.5	5.9	25,692	5.3	8.1	4,449	6.3
Other	8,028	4.9	6.6	21,976	4.5	7.6	2,746	6.6
Total	163,599	100.0%	100.0%	$483,662	100.0%	100.0%	$2,956	6.4%

Sources: Board of Governors of the Federal Reserve System and Federal Reserve Bank of Cleveland

TABLE III
Fourth District Agricultural Loans
Characteristics of Borrowers
June 30, 1966

	Number of Borrowers	Percent Distribution	Outstanding (thousands of dollars)	Percent Distribution	Average Outstanding Per Borrower
Net Worth of Borrower					
Under $10,000	26,359	23.6%	$ 53,345	11.0%	$ 2,024
$10,000—$24,999	33,219	29.8	127,252	26.3	3,831
$25,000—$99,999	36,188	32.4	216,250	44.7	5,976
$100,000 and over	3,734	3.5	48,210	10.0	12,911
Not reported	11,963	10.7	38,604	8.0	3,227
Total	111,462	100.0%	$483,662	100.0%	$ 4,339
Age of Borrower					
Under 35 years	14,967	14.1%	$ 68,313	14.9%	$ 4,564
35-44 years	29,299	27.6	143,497	31.3	4,898
45 years and over	61,715	58.2	246,171	53.8	3,989
Total	105,981	100.0%	$457,981	100.0%	$ 4,321
Type of Enterprise					
Proprietorship	105,981	95.1%	$457,981	94.7%	$4,321
Corporation	271	0.2	6,102	1.3	22,553
Partnership	125	0.1	3,373	0.7	26,963
Not reported	5,085	4.6	16,206	3.3	3,187
Total	111,462	100.0%	$483,662	100.0%	$ 4,339

Source: Board of Governors of the Federal Reserve System

and 58 percent of the borrowers. The group from 35 to 44 years of age accounted for 31 percent of the dollar volume and 28 percent of the loans. Taken together, the two age groups (35 to 44 and 45 and over) accounted for over four-fifths of both the loan volume and number of borrowers. Borrowers under 35 constituted the smallest group using bank credit, with 15 percent of the loan volume and 14 percent of the borrowers. Borrowers 45 years of age and over had a smaller average amount of bank debt than those in either the under 35 or 35 to 44 groups, presumably because more of the former were at a stage where they were not aggressively seeking funds to expand their operations.

Individual proprietors accounted for the largest proportion of bank loans, 94.7 percent. Loans to corporate farms amounted to only 1 percent of the total, but the average amount per borrower — $22,553 — was considerably larger than for individual proprietorships. Partnerships accounted for an even smaller proportion, but the average amount per borrower was larger than for any other group.

MATURITY OF LOANS

Average loan maturity was somewhat longer in mid-1966 than a decade earlier, reflecting the fact that farm real estate loans accounted for a larger proportion of the total. The shift in maturity structure resulted from increases in the number and dollar amount of loans with a maturity of eight months or more,

TABLE IV

Maturity and Security of Fourth District Agricultural Loans

June 30, 1966 and June 30, 1956

	Number of Loans June 30, 1966	Percent Distribution		Outstanding (thousands of dollars) June 30, 1966	Percent Distribution		Average Original Size June 30, 1966	Average Effective Interest Rate June 30, 1966
		June 30, 1966	June 30, 1956		June 30, 1966	June 30, 1956		
Maturity								
Demand	23,685	14.5%	11%	$ 67,016	13.8%	15%	$ 3,681	6.0%
1-4 months	13,916	8.5	49	16,269	3.4	28	1,218	6.1
5-7 months	39,055	23.9		74,818	15.5		1,986	6.1
8-10 months	6,739	4.1	14	10,079	2.1	11	1,552	6.1
11-13 months	28,172	17.2		75,895	15.7		2,986	6.2
14-29 months	14,406	8.8		23,858	4.9		2,215	8.0
3 years	12,045	7.4		31,206	6.5		3,648	7.7
4-5 years	5,768	3.5	29	26,328	5.4	45	6,121	7.1
6-10 years	10,576	6.5		65,954	13.6		8,809	6.3
11 years or more	9,239	5.6		92,240	19.1		12,708	6.1
Total	163,599	100.0%	100%	$483,662	100.0%	100%	$ 3,655	6.4%
Security								
Unsecured	74,135	45.3%	40%	$120,088	24.8%	25%	$ 1,620	
Secured								
Endorsed	9,312	5.7	16	13,390	2.8	7	1,483	
Chattel mortgage, etc.	38,412	23.5	20	80,782	16.7	14	2,103	
Real estate mortgage	39,946	24.4	21	262,283	54.2	51	6,566	
All other	1,795	1.1	3	7,120	1.5	3	3,967	
Total	163,599	100.0%	100%	$483,662	100.0%	100%	$ 2,956	

Sources: Board of Governors of the Federal Reserve System and Federal Reserve Bank of Cleveland

and reductions in those with a maturity of seven months or less, as shown in Table IV. The number of demand loans was relatively greater in 1966 but the dollar volume was moderately less. Except for demand loans and loans with maturities of 10 months or less, the effective interest rate was lowest for the loans of longest maturity (11 years or more). The predominance of secured real estate loans in the latter category probably accounted for this pattern. The 8.0 percent effective interest rate for loans with a maturity of 14 to 29 months and the 7.7 percent rate on 3-year loans probably can be attributed to the relatively high proportion of auto and consumer durable loans that fall within those maturity categories.

SECURITY OF LOANS

The use of real estate and chattel mortgages as security gained in relative importance between 1956 and 1966. This was evidenced by increased proportions (both number and dollar volume) of loans secured by these two types of security (see Table IV). In contrast, there was a decline in the number and dollar volume of endorsed loans and loans with other types of security. Unsecured loans represented about the same proportion of total dollar volume in mid-1966 as ten years earlier.

Real estate mortgages were the most common type of security reported in the survey, accounting for 54 percent of the total dollar volume of loans outstanding in 1966, a moderately larger proportion than in 1956. Next in relative importance was the chattel mortgage (including the closely associated security agreement and financial statement, chattel deed of trust, or conditional sales contract). This security accounted for 17 percent of the dollar volume of loans outstanding and nearly one-fourth of the total number of loans. Among secured loans, endorsed loans were the smallest in average size and real estate, the largest. Unsecured loans were only slightly larger than endorsed loans.

AMOUNT OF ORIGINAL NOTE

As shown in Table V, more than 90 percent of the loans were for an original amount of less than $10,000. Of the less than 10 percent of the loans that were in excess of $10,000, the bulk fell between $10,000 and $25,000. In terms of dollar volume, about 85 percent of the loans were for an original amount of less than $25,000. In keeping with the usual relationship between interest rates and size of loan, the average effective rate of interest declined as the original amount of the note increased.

METHOD OF REPAYMENT AND INTEREST CHARGE

About 54 percent of the dollar volume and 35 percent of the number of loans provided for repayment in instalments, as indicated in Table V. The interest charge on most of these loans was on the outstanding balance, with the average effective rate of 6.1 percent only slightly higher than on single payment loans.

Single payment loans accounted for nearly two-thirds of the number of loans, but represented only 46 percent of the volume; reflecting the fact that the average original size of single payment loans was about one-third the size of instalment loans. Single payment

TABLE V

Characteristics of Fourth District Agricultural Loans

June 30, 1966

	Number of Loans	Percent Distribution	Outstanding (thousands of dollars)	Percent Distribution	Average Original Size	Average Effective Interest Rate
Size of Loan						
Under $250	14,938	9.1%	$ 2,056	0.4%	$ 145	6.4%
$250—$499	15,347	9.4	4,875	1.0	346	6.9
$500—$999	25,635	15.7	15,028	3.1	671	6.9
$1,000—$1,999	30,664	18.7	35,318	7.3	1,340	6.8
$2,000—$4,999	40,778	24.9	100,419	20.8	3,053	6.6
$5,000—$9,999	20,879	12.8	109,277	22.6	6,583	6.3
$10,000—$24,999	12,761	7.8	143,456	29.7	14,139	6.2
$25,000—$49,999	2,314	1.4	58,354	12.1	31,705	6.1
$50,000—$99,999	266	0.2	13,810	2.8	57,166	6.1
$100,000 and over	6	*	1,069	0.2	205,917	5.2
Total	163,599	100.0%	$483,662	100.0%	$ 3,655	6.4%
Method of Repayment and Interest Charge						
Single payment	105,492	64.5%	$223,030	46.1%	$ 2,356	6.0%
Instalment	58,108	35.5	260,632	53.9	6,014	7.9
Outstanding balance	40,202	24.6	234,915	48.6	7,755	6.1
Add on	15,560	9.5	19,346	4.0	1,876	11.6
Discount	2,346	1.4	6,371	1.3	3,622	13.9
Total	163,599	100.0%	$483,622	100.0%	$ 3,655	6.4%
Effective Interest Rate						
4.0%—4.9%	401	0.2%	$ 4,232	0.9%	$15,282	4.6%
5.0%—5.9%	5,445	3.3	41,020	8.5	10,606	5.5
6.0%—6.9%	128,734	78.7	403,348	83.4	3,776	6.1
7.0%—7.9%	10,022	6.1	9,189	1.9	1,031	7.1
8.0%—8.9%	2,074	1.3	1,695	0.3	1,023	8.3
9.0%—9.9%	1,693	1.0	2,739	0.6	2,781	9.5
10.0%—10.9%	1,090	0.7	1,652	0.3	2,351	10.7
11.0%—11.9%	8,226	5.0	12,075	2.5	2,161	11.5
12.0%—12.9%	1,854	1.1	2,421	0.5	1,722	12.6
13.0%—14.9%	2,494	1.5	2,231	0.5	1,354	13.7
15.0% and over	1,566	1.0	3,059	0.6	2,542	18.4
Total	163,599	100.0%	$483,662	100.0%	$ 3,655	6.4%
Origin of Purchased Loans						
Merchant or dealer	10,140	6.2%	11,043	2.3%	$ 1,405	8.9%
Other†	79	*	243	*	3,864	12.8
Not purchased	153,381	93.8	472,376	97.7	3,804	6.3
Total	163,599	100.0%	$483,662	100.0%	$ 3,655	6.4%
Repayment Status						
Not overdue	161,292	98.6%	$478,133	98.9%	$ 3,654	6.4%
Note is overdue	2,307	1.4	5,529	1.1	3,765	6.1
Number of days overdue:						
4-32 days	621	0.4	1,226	0.2	2,373	6.7
33-92 days	417	0.2	1,767	0.4	5,128	6.2
93 or more days	1,269	0.8	2,536	0.5	3,998	5.7
Total	163,559	100.0%	$483,662	100.0%	$ 3,655	6.4%
Renewal Status						
Note renewed	51,272	31.3%	$141,525	29.3%	$ 3,148	6.3%
Planned	40,473	24.7	113,067	23.4	3,187	6.1
Unplanned	10,799	6.6	28,458	5.9	3,001	7.0
Due to low income	5,314	3.2	13,336	2.8	2,740	6.6
Other causes	5,485	3.4	15,122	3.1	3,254	7.3
Note not renewed	112,142	68.6	341,990	70.7	3,892	6.4
Not reported	185	0.1	147	*	845	6.0
Total	163,599	100.0%	$483,662	100.0%	$ 3,655	6.4%

*Less than 0.05%.

†Includes a small number of loans purchased from insurance companies.

Source: Board of Governors of the Federal Reserve System

loans had lower average effective interest rates than instalment loans. The average effective interest rate on instalment loans of 7.9 percent reflects the influence of "add on" and "discount" rates, which were applicable to about 5 percent of the dollar volume of loans, and were used mostly on loans that were much smaller in average size than instalment loans, on which interest was charged on the outstanding balance.

EFFECTIVE INTEREST RATE

The effective interest rate for all agricultural loans at District banks as of June 30, 1966, averaged 6.4 percent in contrast to a corresponding rate of 6.7 percent in the nation. As indicated in Table V, a large proportion of the loans (93 percent of dollar volume and 82 percent of the number) had an average effective rate of 6.1 percent or less. The higher average rate for all loans was accounted for by high rates on a relatively small proportion of loans, ranging up to 15 percent and higher for the 1 percent of the loans with the highest rates. Only about 7 percent of the dollar volume carried effective rates averaging above 6.1 percent.

ORIGIN OF PURCHASED NOTES

Virtually all of the purchased notes held by District banks in mid-1966 were from merchants and dealers selling equipment and supplies to farmers, with nearly 90 percent for intermediate term investments. The notes purchased from merchants and dealers, as shown in Table V, represented 2.3 percent of the dollar volume of all farm loans and were much smaller in original size than notes that were not purchased. The other notes purchased, some of which were from insurance companies, averaged slightly larger than those not purchased. The average effective interest rate of purchased notes — 8.9 percent — was more than one-third higher than that on notes not purchased.

REPAYMENT STATUS

The relatively high level of farm income during 1966 apparently contributed to a comparatively low percentage of overdue loans as of mid-1966. As shown in Table V, only 1.1 percent of the dollar volume and 1.4 percent of the number were reported overdue at the time of the loan survey. These were much smaller proportions than in 1956, when the amount of loans overdue was 5.1 percent of outstandings and 2.8 percent of the number. As in 1956, most overdue notes had been overdue for 33 days or more at the time of the survey.

The original size of overdue notes averaged somewhat larger than notes not overdue, suggesting that there were a significant number of secured real estate loans among overdue notes. Such loans are usually somewhat larger than other loans and probably account for the slightly lower average effective interest rate indicated for overdue loans.

RENEWAL STATUS

Renewal of loans does not necessarily imply that the borrower has found it impossible to meet original terms. In fact, renewal may be part of a plan to extend repayment over a period of time beyond that for which the note is originally drawn, and involves a renewal understanding between borrower and lender at the time the loan is granted. About

four out of five of the 51,272 renewed loans at District banks in mid-1966 were planned renewals, as indicated in Table V. Loans that were renewed on a planned basis represented about 23 percent of the dollar volume and 25 percent of the number of all loans. The average size of these loans was somewhat larger than loans renewed on an unplanned basis, and average effective interest rate lower.

Unplanned renewals represented about 6 percent of the dollar volume. The original size of these loans was somewhat less than planned renewals and the average effective interest rate was higher. Nearly half of the unplanned renewals were due to low income of the borrower.

About 70 percent of the loans outstanding as of June 30, 1966, had not been renewed, a figure not much different from ten years earlier, when about two-thirds were reported as not renewed. The original amount of the loans was larger than for any other group in this classification, but the average effective interest rate was the same as for all loans.

Fourth Federal Reserve District