

FEDERAL RESERVE BANK OF MINNEAPOLIS

SERIAL NO. 23

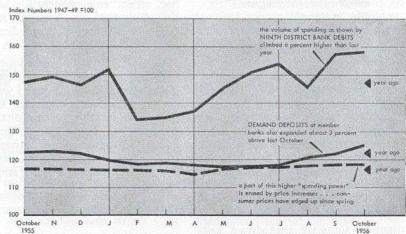
NOVEMBER 30, 1956

VOL. 12

Current conditions . . .

High incomes to spur Christmas spending





THE DISTRICT ECONOMY has been steadily gaining momentum thus far in 1956 and current information points to a strong finish during the final weeks of the year. A strong finish appears assured in view of the favorable output from district farms and industry, record employment, and the prevailing strong demand situation.

Retailers are confident that the best Christmas spending season on record is just ahead. High employment at the best earnings rates in history lends validity to such sales expectations. Even farm machinery manufacturers have recently recalled some workers, which shows that some improvement in future demand for this equipment is expected. Furthermore, bank deposits have exhibited a stronger-than-usual seasonal upturn since mid-year. Larger bank deposits and the current high earnings will give impetus to the demand for goods and services produced in the district.

Interviews with businessmen in the Twin Cities area give further evidence that the current business out-

look is favorable. For example, some architects report large numbers of commercial and industrial projects in the planning stage. Many contractors report that nonresidential building is holding up well and there is optimism for the immediate future. Residential construction, however, has been relatively weak in recent months but contractors tend to be optimistic for the near future. On the basis of the answers to our survey, builders are preparing tracts in the Twin Cities area this fall for about 20 percent more single-family houses than were being developed in the fall of 1955.

It is expected that highway construction and educational building programs will be expanded. Inventories in most lines are not considered excessive, but copper and lumber are among the exceptions. Some materials, such as structural steel and other metals used in building, are reported to be in short supply. Farm marketings, particularly of livestock and livestock products, will be at or near record levels during the winter marketing period.

Wholesale prices of all commodities (national average) remained about the same during October but indications are that advances in some commodities have occurred during November, partly as a result of the Middle East crisis. Prices of industrial com-

modities are approximately 2 percent higher than in July and about 7 percent higher since mid-1955. The consumer price index advanced to a new high in October. At a record 117.7 percent it is 2.4 percent above a year earlier. Farm products have declined slightly in

price over the past several weeks but most of this decline represents seasonal factors. The mid-October level of farm prices was 5 percent below this year's high in mid-June, but farm prices were still 2 percent above a year ago.

Following are summaries that highlight the current economic scene in the Ninth district:

Employment begins the normal seasonal decline

DISTRICT NONFARM employment in October began the fall decline. However, excellent weather conditions retarded the shutting down of some outdoor projects. Moreover, the strong demand for fabricated products, in part, offset the seasonal decline in manufacturing employment. As a result, the decline in the number of workers employed from September to October was smaller than usual.

In Minnesota nonfarm employment in October was down only 0.4 percent from September. Although employment in manufacturing was down from September, it was up almost 3 percent from a year ago, and in durables it was up almost 5 percent. Iron ore mining firms operated at or near capacity to move a maximum tonnage of ore to the lower ports before the Lake Superior shipping season closes. More workers were employed in mining than in September. The number employed in October was almost 10 percent above a year ago. On the other hand, cutbacks were made in the construction field. In both September and October, employment was below a year ago.

In Montana nonfarm employment from September to October declined by 1.2 percent, which is a normal seasonal decrease. In both manufacturing and mining more workers were employed in October than in the preceding month. (In copper mining, the Anaconda Copper Company returned from a six to a five-day week, which did

not affect employment.) Due to the closing of the vacation industry, employment in trade declined by 3 percent from September.

In South Dakota employment in October remained high in most regions of the state. A record volume of construction continued under favorable weather conditions. Although no employment reports have been released for other district states, other sources suggest a continuation of a high level of employment.

Farm real estate rise

FARM REAL ESTATE values in the Ninth district continued to rise during the four-month period ending July 1, 1956—a 2 percent rise was indicated for Montana and North Dakota, a 1 percent rise in Minnesota, and no change in South Dakota or Wisconsin. This compares with a 1 percent average increase in land values for the nation as a whole during the same period.

Compared with July 1955, land values on July 1 were estimated up 4 percent in Montana and Minnesota, and up 1 percent in the Dakotas.

Thus, despite lack of strength in farm prices and income (although farm prices have been stronger this year than for some time), farm operators — who continue to be the main buyers of farm land—consider the relatively small amount of farm land offered for sale a good investment. Purchase of land for the purpose of enlarging present farm units continues to be a factor supporting land values.

Borrowing decreases in November

The Decline in borrowing from the Federal Reserve indicates that the reserve positions of reporting city banks in the Ninth district improved significantly between October 1-15 and November 1-15. Average daily borrowings by these banks declined by 71 percent from the earlier period to the most recent one. The average number of banks engaging in borrowing declined by 51 percent. (The larger decline in the former is due to the virtual absence of borrowing during the November 1-15 period by the large Twin City banks.)

Corresponding changes took place in the transactions of the reporting city banks in the federal funds market. (This market involves the purchase and sale of excess reserves by member banks, usually on a one-day basis.) It is estimated that federal funds borrowed by Ninth district city banks declined by 64 percent between October 1-15 and November 1-15, while loans to banks outside the district increased by 65 percent. This shift from a position of net debtors to one of net creditors signifies the easing of reserve positions of member banks in this area.

What factors were responsible for the changes discussed above? Additional reserves were obviously not secured through the liquidation of earning assets since average loans and investments increased during the period. However, inflows of deposits did supply significant amounts of added reserves. Demand deposits increased by 2.8 percent while time deposits increased by

Current conditions

0.7 percent. This inflow of funds was essentially seasonal in nature and contributed approximately \$44 million to deposit accounts of the reporting city banks in the district.

Department store sales up after short slump

NINTH DISTRICT department store sales in October were down 10 percent from the 1955 volume. In the first nine months of the year the increase in sales over a year ago was 7 percent. The exceptionally mild weather until the first snow hit the area apparently postponed some of the usual buying of fall and winter apparel.

Sales in the four large district cities for the week ending November 17 again were up 6 percent from a year ago. Heavy buying of apparel, as well as shopping for Christmas, boosted sales, according to preliminary information. With employment at a record high, average hourly pay up, and the work week holding close to 41½ hours, merchants anticipate a good Christmas season.

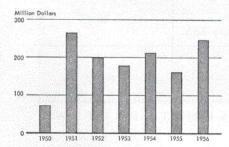
October banking developments

DURING OCTOBER, district member banks enjoyed the largest monthly deposit increase of the year thus far. Deposits usually flow out of the district in the first half of the year while an inflow occurs during the last half of the year. Thus, the October increase was seasonal in character. But the seasonal upsurge so far this year has been somewhat larger than the average of other recent years. This is shown by the chart, which depicts the deposit increase at district member banks from July to October inclusive during the years since 1950.

While it is true that district member bank deposits now exceed the year-ago figure, it is also true that deposits of district member banks have not risen as fast as member bank deposits in the rest of the nation. At the end of September member bank deposits for the nation were up 2.5 percent

DEPOSIT INCREASES AT DISTRICT MEMBER BANKS

From July to October Inclusive



from a year earlier while the district gain was less than 1 percent.

The October deposit gain of \$109 million (more than twice the \$48 million gain a year ago) was accompanied by an increase of loans and investments and cash assets at the banks and by a decrease in borrowings by the banks. A cash inflow, of course, reduces the need to borrow.

Loans at country member banks in the district rose by \$17 million in October, the same increase as was reported in October last year. City bank loans rose \$5 million during October in contrast to a decline of \$3 million a year earlier.

Farm loan rise continues

FARM LOANS at member banks in the Ninth district continued to rise during the past year, according to late-September Call Reports from member banks in the Ninth district. Non-real-estate farm loans were higher by 5 percent on October 1 than loans at these same banks a year ago. Since banks provide more than three-fourths of such loans extended by major lending institutions, this represents a significant indication of the trends of this type of credit during the past year.

Loans secured by farm real estate — of which banks lend a much smaller amount in relation to other lending institutions—rose by 7 percent over the previous year's figure. There was indication also that real estate loans had been augmented to some extent by refinancing of short-term non-real-estate debts into long-term credit secured by farm real estate.

Bank-held farm loans guaranteed by the Commodity Credit Corporation (price support loans) were down 47 percent compared with the previous year. Although such loans do not represent a direct commitment against income in the sense that other farm loans do, they nevertheless represent credit advanced to farmers by banking institutions.

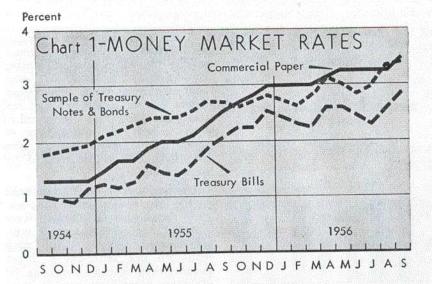
Durum progress

N INTH DISTRICT durum production, escaping the ravages of stem rust and other hazards, exceeded 39 million bushels in 1956, a 19-million-bushel and 95-percent increase over the previous year. All four district states participated in the increase. Montana became a strong second in durum output by producing an estimated 16 million bushels of durum in 1956 (compared with a 5.7 million bushels in 1955).

North Dakota, still the leading durum state, produced 20.8 million bushels in 1956, 13.2 million bushels in 1955.

The distribution of some rust resistant varieties for general planting was partly responsible for the improved production, which for the first time in several years approached an 'average' output for the nation's durum area. But desirable growing conditions which discouraged rust development were probably the most important factor in boosting production.

Varieties of rust resistant durum are expected to be generally available for 1957. END



Monetary policy and interest rates

B ORROWERS REPORT that credit has become relatively scarce and that lenders are now getting higher interest rates than at any time in more than two decades. Some people have asked why interest rates went up and why credit was allowed to become scarce. The following article attempts to shed light on these questions.

In a banking system in which the law requires banks to keep reserves amounting to some fraction of their deposit liabilities, the lending power (total loans and investments) of banks can be limited in either of two ways. The amount of reserves in possession of the banks may be changed, or the fraction of deposits which reserves must be (reserve requirements) may be changed.

In the United States the Federal Reserve System is the agency charged with the responsibility for regulating the lending power of commercial banks. Inseparable from this is the burden of regulating the size of the nation's money supply since the demand deposits of banks constitute the principal part of our money supply and since the amount

of these deposits changes with the amount of bank credit (see chart 4).

The Federal Reserve has at its disposal the power and the authority to change both the amount of reserves in existence and the level of reserve requirements. Changes in the amount of reserves are accomplished primarily with 'open market operations,' a term which refers to the purchase or sale of securities by Federal Reserve banks. Open market operations are conducted on a day-today basis while changes in reserve requirements are employed much less frequently. The last such change occurred in the summer of 1954.

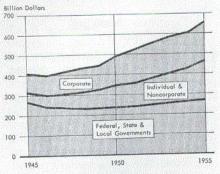
The amount of reserves in possession of the banks can be increased by the banks themselves when they borrow from the Federal Reserve. The rate of interest charged on such loans to banks is known as the discount rate. The Federal Reserve may discourage banks from borrowing reserves by charging a high discount rate; a low rate, of course, would have an opposite effect. However, a change in the discount rate, by itself, has no effect on bank lending power.

Monetary policy limits bank lending power

The monetary authorities (Federal Reserve) are constantly confronted with the necessity for appraising the adequacy or inadequacy of the nation's supply of bank credit and/or money since it is they who impose limits on these magnitudes. (The word 'limits' was chosen rather than 'controls' because it has happened on occasion that banks were provided with additional lending power but failed to expand their loans. Such a situation is reflected by an increase in the level of excess reserves.)

It is natural to inquire about what the monetary authorities look at in deciding if the lending power of banks should be increased or decreased. The Federal Reserve seeks to promote the economic prosperity of our nation. One condition of prosperity is a high level of consumption which in turn requires a high level of employment. For this reason the Federal Reserve seeks, among other things, to use its powers in a way which will mini-

CHART 2—NET PUBLIC AND PRIVATE DEBT



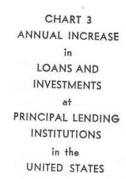
The net debt concept for each of the four sectors can be summarized as follows: Federal Government net debt is that owed to all other sectors of the economy except the Federal Government proper and its corporations and agencies; State and local government net debt is that owed to all other economic entities except state and local governments; corporate net debt is that owed to all other entities (including corporations) except to corporate members of an affiliated system; and private noncorporate net (or gross) debt is that summation of all forms of legal indebtedness except that among individuals and unincorporated nonfinancial business firms.

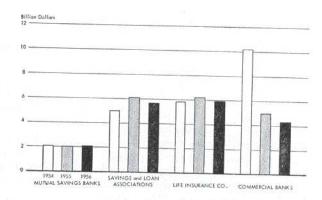
mize the danger of serious unemployment.

It has been a matter of common observation, particularly in recent years, that satisfactory levels of employment have been associated with a growing level of total spending in the economy. Logically, the reason for this is that when spending goes up, business sales go up and employers are more likely to hire additional workers. It has also been observed that, with some exceptions, the level of spending is associated with the supply of money and credit; they rise and fall together as a rule.

But money, like other objects of desire, loses value (purchasing power) if its supply is allowed to grow too rapidly. Just as efforts to stabilize the value of farm products include production control, so 'production' of money must be limited if its value is to be preserved. Justice to those who use money as a standard of deferred payment (debtors and creditors) requires that the value of money not be allowed to change rapidly. Of course, a change in the general level of prices is equivalent to a change, in the opposite direction, in the value of money.

Thus it is seen that too little money and credit may precipitate a decline in output and employment while too much money and credit may precipitate inflation. Our economic welfare requires that neither condition be permitted. This is the task of *Monetary Policy*,





the policy which decides what the lending power of commercial banks will be.

Supply and demand for credit set interest rates

Just as control of bank lending power cannot be divorced from control of the money supply, it also cannot be divorced from influencing the level of interest rates. This is true because interest rates are determined by the supply of and demand for credit (loans) and commercial banks constitute one of the most important components of the total supply of credit. A change in the lending power of commercial banks is equivalent to a change in the total supply of credit and as such cannot help but affect the price of credit (interest rates) in the same way that a change in the

supply of potatoes affects their price. Herein lies the connection between monetary policy and interest rates.

Similarly, just as any consumer of potatoes is a part of the demand side of the market for potatoes, any borrower is a part of the demand side of the market for credit. The amount of credit granted (debt issued) in recent years has increased rapidly; this fact is depicted on chart 2 which identifies borrowers as public, private, corporate and non-corporate. The holders of this large debt are the lenders in our society, the supply side of the market for credit.

Credit originates with many lenders

The lenders include banks, insurance companies, trust and pension funds, savings and loan associations, credit unions, individuals others. But there is an important and basic distinction between commercial banks and the other lenders who constitute the supply of credit. The credit which originates with all the lenders save commercial banks is limited by the amount of its income our society chooses to save. The supply of credit which originates with the banking system is limited by monetary policy. Also, changes in the amount of commercial bank credit are accompanied by changes in our money supply, while this is not true of credit originating with other lenders.

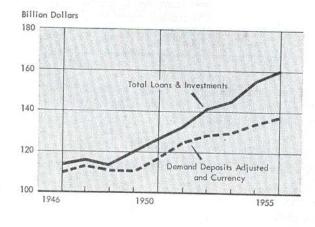


CHART 4
LOANS AND
INVESTMENTS
of
BANKS
and
MONEY SUPPLY
1946-1955

Savings and bank credit expansion

Chart 3 illustrates vividly the special impact of monetary policy on commercial banks. While the rate of increase in credit extended by other lending institutions has not changed much from year to year, the rate of credit expansion at commercial banks has displayed great variation. It dropped from \$10 billion per year in 1954 (when reserve requirements were last reduced) to \$5 billion per year in 1955, for example. This period witnessed a shift in monetary policy, from 'active ease' to 'restraint.' After 1955, the rate of bank credit growth fell further.

Accordingly, it can be seen that the supply of credit and thus the price of credit (level of interest rates) can be influenced by monetary policy through the determination of bank lending power. When one considers that commercial banks hold a larger part of the debt in our economy than any other type of lending institution it is easy to appreciate the quantitative importance of banks as suppliers of credit.

The amount of loans and investments held by commercial banks, life insurance companies, savings and loan associations and mutual savings banks at the end of 1955 amounted to \$161 billion, \$83 billion, \$34 billion and \$30 billion respectively.

Interest rates have been rising; this is another way of saying that prices paid for debt instruments have declined. Thus, if Uncle Sam's promise to pay \$1000 in a year would fetch \$970 a month ago but would sell for only \$960 today, we say that the rate of interest charged on a one-year loan to the government has increased from 3+% (30/970) to 4+% (40/960) in the past month. In the language of economists, interest rates vary inversely with debt prices.

One loan
is a substitute
for another

In economics we learn that substitutes tend to vary together in price. Thus, for example, if peaches fall in price some people will substitute peaches for pears in their diet and this will decrease the demand for pears and tend to lower the price of pears along with the price of peaches. In the same way, the prices of all the various debts (loans) tend to rise and fall together. Lenders may be regarded as buyers of debt and - like other buyers-they like to pay the least possible price for the things they buy. This is another way of saying that lenders like to get the highest possible rate of interest on the loans they make. That's how a free market works. Therefore, since loans of various kinds are substitutes for one another in the portfolios of lenders, the interest rates charged on all loans tend to rise and fall together. This is illustrated by chart 1 which depicts the course of interest rates on loans and securities of various kinds during recent years.

If the interest rate yielded by a particular type of loan is for some reason not free to change, then it is obvious that the type of loan in question will be granted less frequently when the yield on other loans is going up. If the price of peaches remains unchanged when other fruit falls in price, sales of peaches will decline.

For example, the rate of interest charged on a government-insured or guaranteed home loan is not free to change and since interest rates on other loans have been rising, we have witnessed a decline recently in the number of GI and FHA loans granted.

Low interest rates are sometimes incompatible with sound money

It goes without saying that borrowers like to get loans at low interest rates; when interest rates go up they feel less well off than before. In consequence, the recent elevation of interest rates has prompted many requests for "an easier monetary policy." Also, sellers of commodities that are usually purchased with borrowed funds (autos and houses, for example) have been disturbed by the possibility that a scarcity of credit may be harmful to sales.

But if monetary policy were to permit an increase in the lending power of commercial banks so that interest rates would fall and credit become more plentiful, our money supply would be enlarged. This at a time when the rising employment statistics and the rising price indexes suggest that our money supply is already very adequate would defeat the purpose of monetary policy.

It is clear that if the purchasing power of our money is to be preserved at a time like the present when unemployment is as low a fraction of the labor force as at any time in the last three years and prices for almost everything are going up, monetary policy must not relax its limitations on credit and money creation at the banks.

END

Recent publications available free upon request from the Research Department, Federal Reserve Bank of Minneapolis, Minneapolis 2, Minnesota, include:

Pulp and Paper in the Upper Lakes Region

Supplement to the July 1956 Monthly Review

Housing and Mortgage Markets

Supplement to the Sept. 1956 Monthly Review

Part IV*: interest rates on business loans of Ninth district banks

VERY COMPLETE picture of the interest rate structure on business loans has been provided by the business loan survey of October 5, 1955. The various average rates of interest which are given below were derived from the effective annual rates of interest on unpaid loan balances as reported by bankers. These rates of interest were weighted according to estimated original amounts of loans.

Changing degrees of ease or tightness in credit conditions do not affect all interest rates proportionately, so that the structure of rates on the survey date cannot be expected to remain completely unchanged over time. Nevertheless many of the relationships and rate differentials found in the survey data have a reasonableness which suggests that they are fairly stable.

Average interest rates on all business loans—The estimated average rate of interest on all business loans at Ninth district member banks on the survey date was 4.7 percent. The comparable national rate for business loans of all member banks was 4.2 percent, one-half a percentage point below that of the Ninth district.

Relation of interest rate to loan maturities — The average interest rate on Ninth district loans made for periods up to a year was 4.5 percent, while that for loans with maturity periods over a year was 4.9 percent. A wider range of rates appeared within the long-term category, where averages around 6 percent for loans running from one

AVERAGE INTEREST RATES ON BUSINESS LOANS BY SIZE OF BORROWER

Member Banks in the Ninth District October 5, 1955

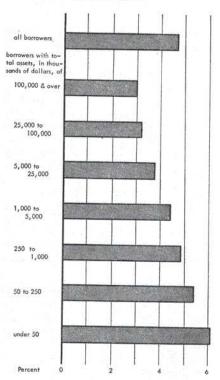


TABLE I

Average Interest Rates and Average Size of Business Loans by Loan

Maturity, Member Banks in the Ninth District, October 5, 1955

Loan maturity	Average interest rate	Average size of loan	
All maturities	4.7%	\$13,300	
Short-term (I year or less), total	4.5	14,100	
Demand	4.5	29,300	
I month or less	5.4	5,100	
1-3 months	4.5	11,100	
3-6 months	4.3	15,600	
6-9 months	4.4	17,500	
9 months - I year	5.1	6,000	
Long-term (over I year), total	4.9	11,700	
I-2 years	6.2	5,000	
2-3 years	6.0	7,400	
3-4 years	5.5	15,000	
4-5 years	4.8	16,700	
5-10 years	4.3	20,100	
Over 10 years	3.7	21,500	

TABLE 2

Average Interest Rates and Average Size of Business Loans by Business of Borrower, Member Banks in the Ninth District, October 5, 1955

Business of borrower	Average interest rate	Average size of loan
All businesses	4.7%	\$13,300
Manufacturing and mining, total	4.6	
Food, liquor, and tobacco Textiles, apparel, and leather Metals and metal products Petroleum, coal, chemicals and rubber Other	4.0 4.7 5.0 4.7 4.8	28,800 21,900 26,800 35,900 14,200
Trade, total	4.9	9,400
Wholesale Retail	4.7 5.0	24,800 7,000
Other, total	4.5	13,800
Commodity dealers Sales finance companies Transportation, communication, and other	3.7 3.9	94,100 111,400
public utilities Construction Real estate Service firms Other nonfinancial	3.8 5.5 4.5 5.4 5.3	35,400 12,600 21,300 5,200 5,200

^{*}This is the fourth (and final) of a series of brief reports based on the findings of the 1955 business loan survey. A full report and analysis of the survey results, Bank Financing of Business Enterprises in the Ninth District, is planned for publication in the near future.

to three years stand in contrast to an average of only 3.7 percent for loans with maturity periods in excess of 10 years. Within the shortterm category there was much less spread of average rates. Rates by maturity period are shown in table 1.

Because lower average interest rates appear to be closely associated with larger loans, and higher rates with smaller loans, the table also shows the average size of business loan made for each maturity period. The major exception to the inverse relationship between interest rate and average size of loan was demand loans. These were markedly higher in average amount than loans of other maturity classifications, but their average rate of interest was just a little less than that for business loans as a whole. The highest interest rate, and lowest size of loan averages coincided for the maturity period of one to two

Relation of interest rate to business of borrower - As shown in table 2, average interest rates paid by various kinds of Ninth district businesses in 1955 ranged from a low of 3.7 percent on loans to commodity dealers up to a high of 5.5 percent paid by construction firms. Average rates of 5 percent or more were also paid by service firms, retail traders, and producers of metals and metal products. Average rates under 4 percent were paid not only by commodity dealers but also by public utilities and sales finance companies. Differences between rates paid by various kinds of businesses often trace to differences in the average size of loan,

TABLE 3

Average Interest Rates and Average Size of Business Loans by Size of Borrower,

Member Banks in the Ninth District, October 5, 1955

Size of borrower (total assets, in thousands of dollars)	Average interest rate	Average size of loans
All borrowers	4.7%	\$13,300
Under 50	6.1	2,600
50-250	5.4	8,600
250-1,000	4.9	37,400
1.000-5.000	4.4	120,800
5,000-25,000	3.8	446,800
25,000-100,000	3.2	291,700
100,000 and over	3.0	374,100

also indicated by table 2. With the exception of the metals group, the kinds of businesses paying noticeably high average interest rates are those to which the average size of loan is relatively small, while the kinds of businesses paying noticeably low average interest rates are those to which the average loan is relatively large. This would be expected, since the costs to banks of credit investigation and loan administration are greater per dollar of a small loan than of a large loan.

Comparative data for the nation as a whole indicate that the higher average interest rate structure in the Ninth district applies to nearly all kinds of businesses. The only exceptions to this were commodity dealers and real estate firms, whose average rates were the same in this district as in the nation as a whole.

Relation of interest rate to size of borrower — Average interest rates on loans of Ninth district member banks in 1955 were twice as high for the smallest borrowers as for the largest borrowers. As shown in

the chart, the average rate was 6.1 percent on loans to firms with assets under \$50,000. But as size of borrower increased the rate declined, to only 3.0 percent for borrowers having assets of \$100 million and over. A large share of these differences is attributable to differences in size of loan. Larger firms borrow in larger amounts and thus benefit from the economies which large loans afford to bankers. But table 3 shows that as size of borrower increased above \$25 million, average interest rates continued to decline even though average sizes of loans became less. This indicates that the low rates charged to the very largest firms were not wholly due to their borrowings of large amounts.

Relation of interest rate to size of bank-The average rate of interest varied inversely with the size of bank, from a high of 5.9 percent on business loans of banks with deposits under \$2 million down to a low of 4.2 percent for banks with deposits of \$250 million and more. However, as indicated in table 4, these variations are due chiefly to the fact that large borrowers more often borrow from large banks and small borrowers from small banks. The average rate charged borrowers having assets under \$50,000 was a nearly uniform 6 percent at all sizes of banks. Indeed, it was slightly higher at the largest banks than at others. With larger borrowers the average rate of interest fell at banks of all sizes, and was approximately 3 percent for the largest borrowers at all sizes of banks. END

TABLE 4

Average Interest Rates by Size of Bank for Selected Size Groups of Business Borrowers,

Member Banks in the Ninth District, October 5, 1955

Size of bank (total deposits,	Size of borrower {total assets in thousands of dolla			dollars)
in millions of dollars)	All	Under 50	1,000-5,000	100,000 and over
All banks	4.7%	6.1%	4.4%	3.0%_
Under 2	5.9	6.1	4.0	
2-10	5.6	6.1	3.7	3.0
10-50	5.2	6.1	4.6	2.8
50-250	4.6	6.0	4.2	3.1
250 and over	4.2	6.4	4.4	3.0