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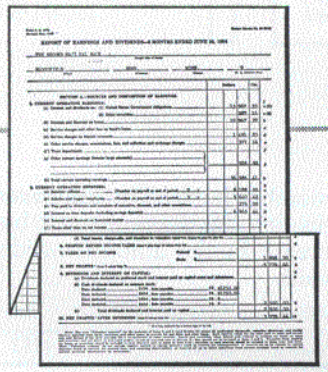
FEDERAL RESERVE BANK OF MINNEAPOLIS

MONTHLY *Review*

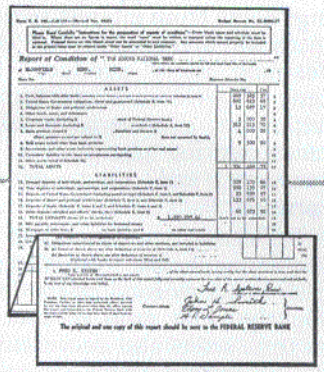
VOL. 12 APRIL 30, 1955 SERIAL NO. 4

This year again, figures from call reports and earnings statements of each of 470 member banks in the Ninth district have been processed into . . .

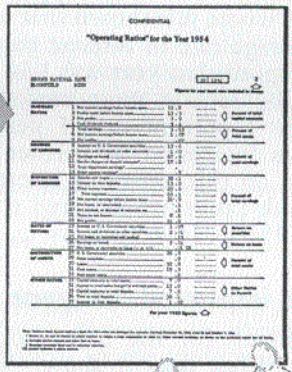
►EARNINGS AND DIVIDENDS REPORT



►CALL REPORT OF CONDITION



►OPERATING RATIOS REPORT



Operating ratios are very useful to bank management. Thirty-seven separate ratios are included in the confidential report sent yearly to each member bank. District-wide averages made available with the report enable bank officers and directors to contrast their own bank's experience with that of other banks of similar size.

OPERATING RATIOS

1954 REPORTS REVEAL PROFITABILITY UP

THE "Operating Ratios" study conducted each year by the Federal Reserve Bank provides bankers with a yardstick which can be used to compare operations of an individual bank with operations of other banks. Results of the study are expressed in the form of ratios between various items appearing on the bank's balance sheets and income statements.

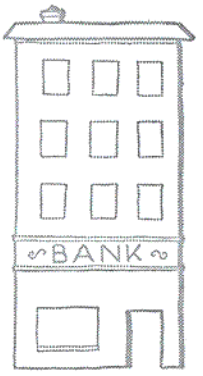
Thus, gross earnings is expressed as a percentage of total assets, rather than as a dollar amount.

For each bank in the study, thirty-seven ratios are computed. Each member bank receives a copy of its ratios in a confidential report which also contains averages of the ratios for other banks.

By comparing ratios, a banker may spot differences between his own performance and typical "other-bank" experience. These differences, by the way, make a convenient starting point for a critical look at a bank's operating practices.

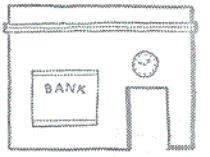
To make comparisons more meaningful, six sets of ratios are published. Five of these sets are

►RATIOS make it possible to directly compare the dollars-and-cents operating results of otherwise diversely-sized banks. For example:



The larger bank may hold much greater amounts of loans and other assets...

than the smaller bank...



based on groupings of banks according to size, ranging from a group of banks with deposits of less than $2 million to a group with deposits of $25 million and up. The sixth set of ratios combines all banks. With such a breakdown, an individual bank may compare its own position with the average for banks of approximately its same size.

Because a bank's balance sheet changes from day to day, asset and liability amounts as of a particular date may not be representative of a bank's condition throughout the year. For this reason, balance sheet amounts used in the study are averages of three different dates. In the 1954 study, these dates were: December 31, 1953, and June 30 and October 7, 1954.

The average ratios published in the study are called, in the language of the statistician, "unweighted" averages. This means simply that each bank has an equal influence on the final average regardless of its size.

One more word about averages—the ratios which appear in the study do not represent ideal relationships or goals. They are simply the result of arithmetic applied to the financial statements of diverse banks. Caution must be exercised when interpreting the ratios — otherwise they can be misleading.

An illustration of this appears on page 4, where it is shown that while the average rate of interest paid on time deposits last year was 1.34 percent, the rate at most banks was actually 1 percent or 1.5 percent. Readers interested in further discussion on this aspect of interpreting bank ratios are referred to the April, 1954, *Monthly Review*.

Profits improved last year

So much for the nature of the study. What does it show? What are the important changes revealed in the operating experience of banks?

For one thing, profitability of the typical banking business improved last year. Here are three ratios that demonstrate this:

	1953	1954
Profits to total assets	.65%	.72%
Profits to capital accounts	9.7 %	10.5 %
Profits to total earnings	19.9 %	21.2 %

Whether expressed as a percentage of total assets, of capital accounts, or of gross earnings, profits went up at the average district member bank. The improvement in profits was accompanied by an increase in the amount of dividends paid.

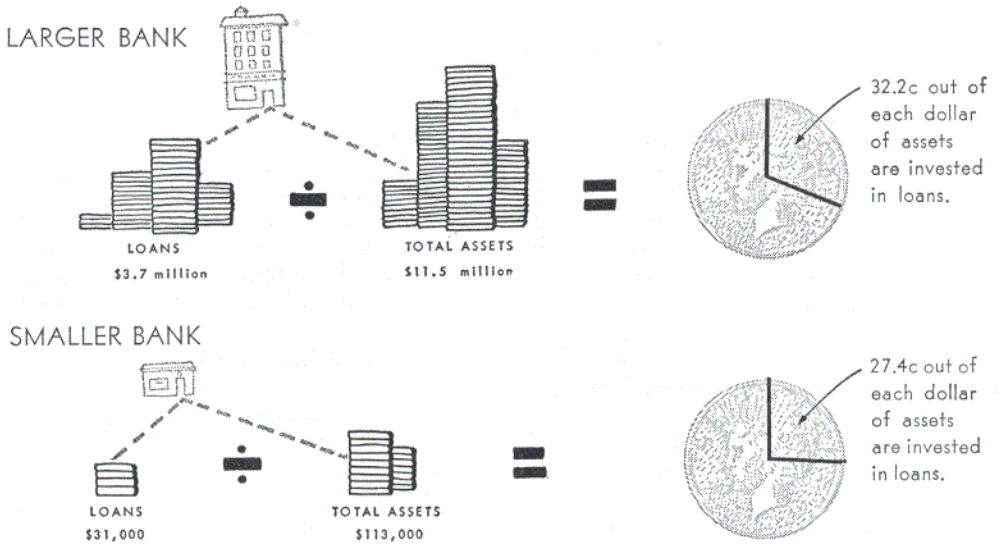
	1953	1954
Dividends to capital accounts	3.4%	3.7%

Most of the typical bank's earnings come from interest received on loans and investments. In 1954 these "earning assets" produced 85 percent of gross earnings. Other, less important, sources of earnings include service charges on deposit accounts and trust department earnings.

Reflecting a reduction of reserve requirements last year, the ratio of cash assets to total assets decreased slightly. The ratio of investments to total assets also decreased slightly. Offsetting these reduced proportions was an increase in the ratio of loans to total assets.

These changes served to increase the ratio of gross earnings to total assets, since they represent (a) a shift to a higher proportion of "earning assets" (in contrast to cash which earns no interest), and (b) a substitution of higher yielding assets (loans) for lower yielding assets (securities).

but ratios (loans to total assets for example) make direct comparison possible...



►In this manner, RATIOS can help to show up important differences in operating practices.

Here are the average rates of return on earning assets at district member banks:

	1953	1954
Return on loans	5.74%	**5.70%**
Return on U. S. Gov't securities	2.09%	**2.15%**
Return on other securities	2.28%	**2.32%**

U. S. Treasury securities constitute five-sixths of the average bank's investment portfolio.

To some extent, no doubt, the falling average rate of return on loans reflects the fact that many banks are adding to their holdings of G.I. and F.H.A. mortgage loans which generally yield less than other loans. Despite the minor drop in the average rate of return on loans, these earning assets still yield so much more than investments that the substitution of one for the other among bank assets produces important changes in bank earnings.

While changes from one year to the next in the proportions of different types of assets held are usually quite small, a persistent change in one direction over a number of years can produce important changes in the condition of banks. This has been the case since 1946.

Changes since 1946

For example, in each year since 1946 the proportion of assets held in the form of loans has increased, and the proportion held as securities has decreased at the average Ninth district member bank.

	1946	1954
Loans to total assets	12.7%	**32.9%**
Investments to total assets	62.7%	**45.7%**

It should be noted that a proportion-wise decrease in investments may occur at the same time dollar amounts are increasing.

The changing allocation of assets described above, together with a generally rising rate of return on both loans and investments, represents the principal force which has operated in the postwar years to raise the gross return on total assets at district member banks. This gross return grew *in every year* since 1946 from 2.2 percent at that time to 3.41 percent in 1954. In 1953 it was 3.31 percent.

Since the expenses of operating a bank are not reflected in the ratio of gross earnings to total assets, one must look elsewhere for information concerning the profitability of bank operations. Besides ordinary operating expense, charges for such things as taxes and bad debts must also be considered.

Bankers hardly need to be told that expenses have been rising in recent years. But they'll be encouraged to know that net current earnings (earnings after current expense, that is) represented 1.16 percent of total assets in 1954 compared to 1.15 percent in 1953, and .8 percent in 1946.

The proportion of earnings absorbed by expense increased slightly between 1953 and 1954 (from 65.4 percent to 65.9 percent). It has moved up slightly in each year since 1951, when it was 63.7 percent. A rising average rate of interest paid by district member banks on time deposits is largely responsible for this movement.

Since 1951 average interest expense on time deposits has increased from 11 percent of gross earnings to 13.8 percent last year.

From 1946 to 1951 inclusive the average rate of interest paid by district member banks on time deposits was stable at 1 percent. The increase since then has been in keeping with the trend of other interest rates generally. At the same time that bankers have experienced an

improvement in yields on earning assets they have been raising the return to their time deposit customers.

An inspection of the chart reveals that considerable disparity exists among the banks with respect to interest on time deposits. The district average rate of 1.34 percent for 1954 is not a "typical" figure; rates of 1 percent and 1.5 percent are more common.

It is not surprising to find that wages and salaries absorb a larger part of gross earnings than any other item of expense; in 1954, 31.1 percent of total earnings went for this purpose. While this ratio has not changed much since 1951, it is up considerably from the 28.4 percent of 1946.

	1953	1954
Payrolls to gross earnings	31.0%	31.1%
Interest on time deposits to gross earnings	13.1%	13.8%

Current expenses other than wages, salaries and interest on time deposits absorbed 21 percent of gross earnings last year in contrast to 22.5 percent in 1946.

The ratio of net profits to total assets, a key ratio to the stockholders, reflects not only the level of earnings and expense, but also the amount of income taxes and other charges, such as those for bad debts. In 1954 income taxes absorbed 11 percent of total earnings, while other charges amounted to 1.9 percent.

From a postwar low of 6.8 percent in 1948 the proportion of earnings going for income taxes moved up each year to a high of 11.3 percent in 1952. There was no change in 1953. In 1954 the ratio dropped to 11 percent. This particular ratio, of course, besides reflecting changes in the earnings position of the banks also reflects changes in the tax laws.

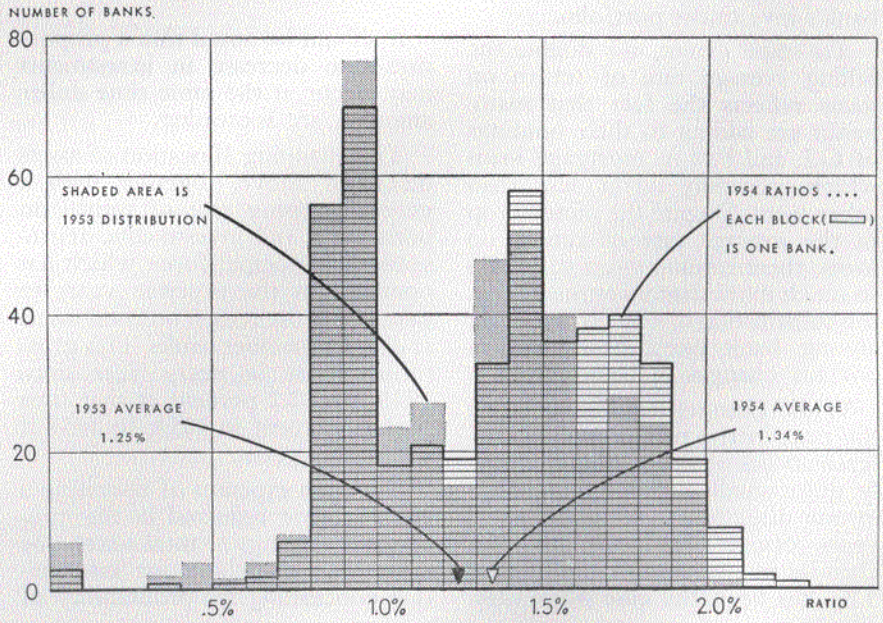
The proportion of earnings left for "profits after taxes" moved up between 1953 and 1954 from 19.9 percent to 21.2 percent, while the ratio of taxes to earnings moved down from 11.3 percent to 11.0 percent.

Out of the larger profits thus made available for retained earnings and for distribution to stockholders, dividends were increased from the 1953 level as mentioned earlier.

Since 1946 the average district member bank has paid out less than a third of its net profits to stockholders in dividends. This conservative dividend policy has permitted a more rapid growth of bank capital accounts than bank deposits.

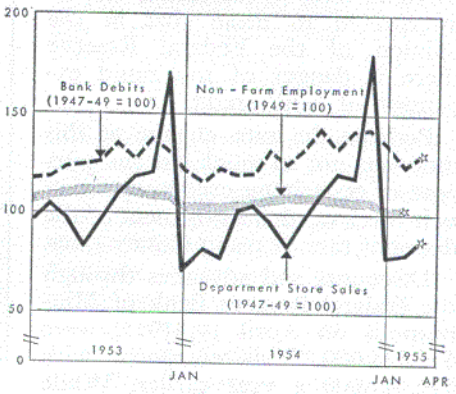
	1946	1954
Capital to total deposits	5.5%	7.7%

Before World War II, capital to deposit ratios of 10 percent were common. The rapid deposit growth during and after the war, however, brought capital ratios down despite additions to capital by the banks. The recent increase in this ratio at district banks is an encouraging sign that bankers are making progress in their efforts to restore the old relationship between capital and deposits. END



THE RATIO, INTEREST TO TIME DEPOSITS plotted here, indicates that a number of banks shifted to higher rates of interest payment on time deposits during 1954.

Ninth district employment, bank debits, and department store sales plotted as index numbers, 1953-5.



Gathering momentum reflected in many phases of district's economy

THE UPWARD shift in the discount rate from 1½ to 1¾ per cent in mid-April is a reflection of the rapidly changing economic scene.

The rate change was necessitated by an upward trend in interest rates generally, resulting from the fact that business activity has increased and the demand for credit has expanded.

A rise in market rates of interest, if continued for a period of time, has generally been followed by an increase in the discount rate. Too, a rate change upwards is usually regarded as a signal that some phases of business expansion may be proceeding at too fast a pace.

Just about a year ago the Federal Reserve was lowering the discount rate, first in February and again in April, in order to help stimulate a lagging economy. Business contraction was a disturbing reality in the first part of 1954.

By late 1954, however, the economy had begun to emerge from its contraction, thanks in part to action taken by the monetary authorities in the last half of 1953 and early 1954 to create larger excess reserves (and hence easier credit conditions) by means of open market operations and lowering of reserve requirements (June 1954).

At the end of 1955's first quarter, almost all business indexes, except farm prices and income, are near if not at record levels. For example, Ninth district bank debits in March were 143 (1947-49=100) compared with 135 a year earlier and 133 two years ago.

Department store sales, lumber sales, and carloadings in March all averaged above year-ago levels. Agriculture, almost alone, remains a discordant note in the Ninth district economy at the beginning of spring. Farm product prices, particularly the grains, are yet in a definite downward trend.

At the moment, however, early spring farm work is off to an excellent start, spring seeding is well underway, soil moisture appears to be ample, there are more livestock on feed and on farms than a year earlier and livestock in general have come through the winter in better-than-average condition.

► Construction contracts set new record

With warm, dry weather prevailing near the end of March and in the first part of April in most areas of the district, the construction industry began work on the largest number of projects on record.

The valuation of building permits issued in this district during March was the largest ever recorded. The amount was 37 percent higher than the totals for either March of 1954 or 1953, and the totals in those years set former records.

As reported by the F. W. Dodge Corporation, the contracts awarded for residential building in this district during March totaled over 50 percent higher than the amount awarded in March 1954.

All other types of construction awards were up by 90 percent. In nonresidential building, the March contract awards for both commercial and manufacturing were double the amount of awards a year ago, and the awards for educational building, which were already high last year, showed an increase of 75 percent.

► Discount rate increased

Effective April 15, the Federal Reserve Bank of Minneapolis raised the rate on its discounts and advances for member banks from 1½ percent to 1¾ percent under Section 13 and 13a of the Federal Reserve Act. This was accompanied by an increase in the bank's rate from 2 percent to 2¼ percent on advances to member banks under Section 10(b) of the Federal Reserve Act.

A change in the discount rate is important for two reasons: (1) when the rate is raised, as it was April 15, it represents an increase in costs to member banks who wish accommodation at the Federal Reserve Bank. It, therefore, serves as a

brake on borrowing from the Federal Reserve Bank. (2) It tends to serve as one criterion of monetary policy.

An advance in the rate is usually interpreted to mean that in the opinion of the Federal Reserve there is danger of too rapid expansion of bank credit.

Perhaps the rate change at this time was not so much for the purpose of restraining credit expansion as it was a needed adjustment of the discount rate to rising money rates.

Discounts and advances through the Federal Reserve Bank of Minneapolis on April 19, 1955, were $59,575,000. This compares with $10,045,000 a year earlier. While borrowings fluctuate greatly from day to day and week to week, discounts and advances since the first of the year have been substantially above year-ago levels.

► *Retail sales have been rising*

Rising retail sales in March reflected a more-than-seasonal increase in personal incomes. The recovery in business has extended to most towns and cities in the district even though it has not touched farmers significantly. Steadily rising factory payrolls boosted incomes in industrial centers. In some areas, an early start on construction activity and favorable weather for farm work started—earlier than usual—the seasonal rise in employment.

District department store sales for March were 10 percent above those for March 1954. Sales in all states were up, except in the wheat-raising areas of North Dakota.

In the latter part of March, there was some increased buying for Easter, which came one week earlier than last year. In the four-week period ended April 16, weekly sales in the four large cities (Minneapolis, St. Paul, Duluth and Superior) were 4 percent above those for the corresponding weeks of last year. This comparison includes most of the Easter shopping for both 1954 and 1955.

New passenger car sales held up well during the winter months. In the first two months of 1955, registrations in all states of the district except in North Dakota were from one-fourth to one-third higher than a year ago. In North Dakota, registrations were down slightly.

It is evident now that high sales during the winter did not saturate the market. With the return of mild weather, sales have reflected the usual seasonal increase. In the Twin Cities area, registrations in March, as in February, were one-third higher than a year ago. Registration during the first half of April remained at this same high level.

► *Wheat vote in July*

Wheat producers will again vote in a national referendum (must be held by July 25) to determine whether they will continue to operate under wheat marketing quotas during the 1956 crop season.

This year, spring wheat plantings (other than durum) in the Ninth district are expected to be down 9 percent from 1954, almost entirely due to the restrictions in wheat acreage.

The extent of the 1956 restriction is almost certain to be the same as the 55 million acres allotted for this year. But if farmers should disapprove marketing quotas in the referendum, the support level would drop to 50 percent of parity under the present law. Those who do not abide by their acreage allotments (still assigned) would have no support at all.

If producers approve marketing quotas for 1956, according to the present law, the support level could drop as low as 75 percent of parity, since there is a large supply of surplus wheat on hand.

► *More cattle on feed*

The nation's farmers had 12 percent more cattle in their feedlots on April 1 compared with a year ago, according to the U. S. Department of Agriculture estimate. And in the Ninth district: Minnesota farmers had 3 percent more cattle in feedlots, South Dakota had 16 percent more cattle on feed and Wisconsin numbers were up 12 percent. In the nine corn belt states, numbers on feed were 8 percent larger than a year ago.

These trends in cattle feeding indicate that marketings of cattle for slaughter will probably be higher than a year ago. The January 1 number on feed was 8 percent above 1954, although fed cattle marketings during January-March, 1955, were a little below the same 1954 period.

Of the number currently on feed, about an equal number are expected to be marketed during the months of April, May, and June respectively.

California had the largest increase in number on feed—54 percent above a year ago, reflecting the marked trend toward larger cattle feeding on the West Coast in recent years. END

HIGHLIGHTS FROM NATIONAL CONDITIONS . . . . .

Economic expansion continued in March. Industrial production rose further to near-record levels, and construction activity was maintained in record volume. Employment and income advanced further, and unemployment declined seasonally. Retail sales increased moderately and were up sharply from a year earlier; auto sales were at a new high. Average wholesale commodity prices advanced somewhat from mid-March to mid-April. Demand for bank credit continued strong.

Adapted from the National Summary of Business Conditions prepared by Board of Governors of the Federal Reserve System, April 14, 1955.

greater use sparks interest in . . .

Loans to Finance Fertilizer Needs

THE STEADY rise in fertilizer use on Ninth district farms indicates that farmers have found fertilizer applications profitable.

As a result, more and more banks are being asked to make loans in order to finance the purchase and application of fertilizers. The increased demand has given rise to numerous questions about fertilizer financing. A brief review of some of the principles involved may be helpful to those concerned with fertilizer use, particularly in appraising credit to finance fertilizer applications.

Under most conditions a sound investment

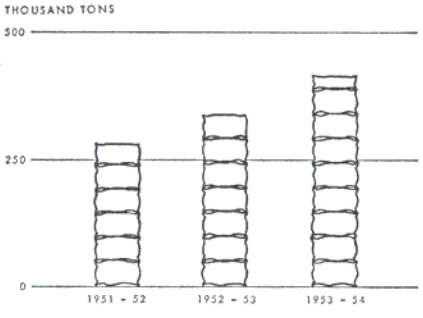
Both research and practical farm experience indicate that investments in fertilizer can be expected to pay a high return on most farms. The added crop production more than pays for the added cost involved. Proper use of fertilizers not only helps to increase the maximum yield obtained from crop production, but it can contribute in another important way —by making crop production and income more certain under adverse conditions.

Recent experimental work and experience under farm conditions indicates that proper fertilization can hasten the maturity of some crops, can help crops withstand drought more effectively, and can raise significantly the protein content of both grain and forage crops under some conditions.

Nor are all of the benefits of fertilizer use expressed in higher yields and production above the ground. More extensive root development on fertilized soils adds organic matter to the soil and improves soil structure. This reduces erosion, helps absorb and holds moisture, and tends to improve subsequent crop yields.

In this respect, proper fertilizer use tends to help protect and insure the line of credit that a farm customer has borrowed. A number of banks have indicated that they look upon their fertilizer lending in just this way—as an assurance that their customers will have adequate crop yields, high-producing forages and pastures, and adequate feed supplies to keep their farming operations going on a full-scale, profitable basis.

USE OF FERTILIZER IN THE NINTH DISTRICT



Source: National Fertilizer Association.

Lending no different

Strictly from the lending standpoint, however, there seems to be little difference between loans for normal fertilizer use and other short-term loans to meet current production expenses. The experience of lenders suggests no special security, terms, or risks involved for fertilizer loans. Many banks include funds for this purpose as part of a regular loan for crop expenses.

As farm practices go, however, fertilizer usage is relatively complex. Its soundness from a loan viewpoint may depend considerably on the lender's understanding of soil and management factors as they relate to fertilizer use.

Soil analysis first step

The essential first step in profitable fertilizer application is to make a thorough analysis of the soil itself —including nutrient content and availability, presence of organic matter, soil structure and tilth, soil type, previous soil management and cropping practices, moisture and drainage conditions, and other special local conditions. Sound fertilizer applications can only be based on adequate knowledge of soil condition and need. Farmers in every state can get a complete laboratory analysis of their soil for a nominal fee from their state testing laboratory. (Some banks require a copy of this analysis when making loans for fertilizer.)

Application important

Profitable fertilizer use requires first that the recommended proportions and amounts be applied. But it is just as important that they be applied in the manner that will contribute most to plant growth. Research has shown that poor methods of application may lose much of the response that a given application would otherwise be expected to produce. Timing is also important.

Have a program

Fertilizers cannot take the place of desirable cropping practices; they must be applied as part of an overall crop and soil management program.

Soil structure, or tilth, can be equally as important as chemical content of the soil. Structure often determines to a large extent the availability of plant nutrients that are present, the availability of moisture, and the ability of the soil to absorb moisture and to retain it during dry periods. Although fertilizer can promote the addition of organic matter through greater plant growth, good structure is maintained primarily by a good crop rotation program which includes both grasses and legumes in the rotation. Legumes add nitrogen in the soil; grasses, with their fibrous

roots, help achieve the desired soil structure. Both contribute organic matter.

Such practices as planting crop varieties that are tested and recommended for an area, weed control, and other important management practices are all an essential part of sound fertilizer use. These practices should not be overlooked in evaluating the probable contribution that fertilizers can make to a farming operation. Failure to follow them may limit the results from fertilizer use.

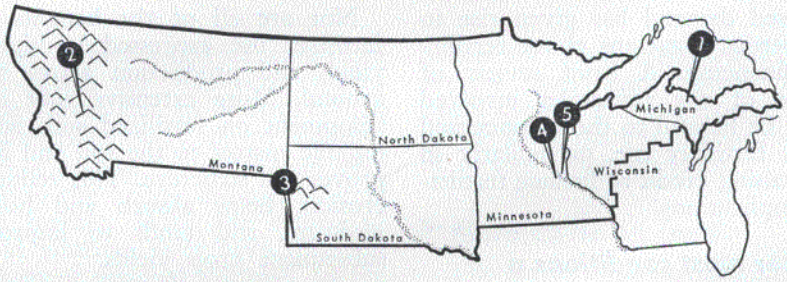
Get technical advice

Because of the complex relationships involved, a technical knowledge of crops and soils is important in appraising fertilizer practices on a given farm. The help of trained specialists in soils and agronomy is an important practical assurance that money spent (or borrowed) to buy fertilizer will produce a profitable return.

Where fertilizer use is in line with recommendations and approved soil management, lending for fertilizer is probably at least as sound as lending for other production expenses on farms. END

ECONOMIC *Briefs*

SIGNIFICANT HAPPENINGS IN THE NINTH DISTRICT



1-To process Michigan low grade ore

Jones & Laughlin Steel Corporation revealed progress in developing methods to process Michigan's low-grade iron ores (30% iron) in a laboratory-scale pilot plant at Negaunee, Michigan. The raw material is Upper Michigan's equivalent of taconite—but is non-magnetic. The company's process treats the material so that the iron oxides it contains are converted to a magnetic form—then follows a process similar to that used on Minnesota's taconite. End product is high-grade ore concentrate (63% iron). Long range plans are to expand the process until operations on a commercial scale are reached.

2-Large food center at Butte

A $4-million food distribution center will be constructed next year at Butte, Montana, for Safeway Stores, Inc. Included will be a warehouse, shipping, and truck-repair facilities. The center will employ about 100 persons, in addition to the company's trucking department. It will serve the three districts headquartered in Butte, Billings and Great Falls. It will also serve stores to be constructed in western North Dakota until other facilities are developed in that state.

3-Black Hills to get Uranium mill

The AEC has given approval for construction of a uranium mill in the Black Hills area to be financed and operated by Mines Development, Inc., of Golden, Colorado. The company announced the plant would probably be located at or near Edgemont, South Dakota, where the AEC operates an ore buying station. It would be the tenth mill of its kind in the U. S. and likely cost about $2.5 million.

4-Mpls. granted slum clearance aid

Early in April, the Federal Government authorized a $6.6 million grant and loan to the city of Minneapolis for redevelopment of the 180-acre Glenwood area in north Minneapolis. Four million dollars of this will be an outright grant. Preliminary work will begin this summer on the five-year project. Plans for the rebuilt area include multiple housing units, two shopping centers, fire station, church sites, playground and 50 acres of industrial sites.

5-Big expansion for St. Paul plant

Construction of a $2-million electronics plant and laboratory was proposed by Engineering Research Associates of St. Paul in a rezoning petition filed with the St. Paul City Council. The firm is a division of Remington Rand, Inc., producers of electronic "brains" or computers. The proposed building, with 200,000 square feet of space, would be constructed on a 17-acre tract across the Mississippi River from Fort Snelling. The project would expand the firm's St. Paul working force from 1,400 to 5,000 persons (annual payroll $22 million) and consolidate 2 of the company's 3 units now operating in that city.