CROP and BUSINESS CONDITIONS
NINTH FEDERAL RESERVE DISTRICT

REPORT OF
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TO THE
FEDERAL RESERVE BOARD
WASHINGTON, D. C.

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September 28, 1923

MINNEAPOLIS, MINN.

EDITORIAL NOTICE—This report is prepared monthly in the office of the Federal Reserve Agent for the purpose of furnishing the Federal Reserve Board with complete, accurate, and impartial information concerning business conditions in the Northwest. It is also printed for public use and will be mailed free of charge to anyone making request for it.

GRAPHIC SUMMARY OF RURAL BUSINESS CONDITIONS IN THE NORTHWEST.

For convenience in comparing current and past conditions two important indices of rural business conditions in this district have been combined in one chart.

LUMBER SALES: One valuable index of the farmer's economic position, purchasing power, and confidence in the future is the sales of lumber at retail yards in this district, outside of the larger cities. Usually these sales represent purchases in excess of the farmer's needs for food, clothing and other immediate necessities. However, it should be borne in mind, that at times the purchase of lumber to make repairs is almost as urgent a necessity as food and clothing, especially following protracted periods of abstinence from buying. The sales in board feet of 719 yards, which we estimate to be at least one-fourth of all the country yards in this district, have been included in preparing this curve. None of these yards are located in Minneapolis, St. Paul or Duluth. An adjustment has been made to eliminate seasonal influences by a method substantially the same as that described on page seven of our March 28 report.

RATIO OF LOANS TO DEPOSITS: The best available index of short-time credit or banking conditions in the country districts is the percentage relation between total loans and total deposits of all sorts of country banks. When the ratio of loans to deposits is high, banks are in an extended condition, and when this ratio is low, their potential lending power is great. In this curve the figures of state and national banks in Minnesota, North Dakota, South Dakota and Montana are included, with the exception of national banks in the Twin Cities which are large reserve holding banks, and hence are not subject to the same influences as affect the banks in rural communities. The curve, therefore, reflects the condition of country banks in this district, except that a small fraction of the total figures used here represents Twin City state banks and trust companies, and also banks in northern Minnesota and some parts of Montana which are non-agricultural in character. The figures are taken as of the various bank call dates during the past four and one-half years and there are also included figures as of June 30 from 1915 to 1918 inclusive. Owing to the fact that bank reports of condition are not available on uniform dates, no adjustment for seasonal change has been attempted.
CROP AND BUSINESS CONDITIONS

DISTRICT SUMMARY FOR THE MONTH

Crop returns for this district are becoming more definite each day. Latest information at our command confirms early reports of an increase in the corn crop without material damage from early frost, and a decrease in the spring wheat crop. Farmers who varied their production this year by planting flax are now reaping a merited reward with good yields and fair prices. Terminal prices for wheat, corn and flax are greater than a year ago.

Business activity during August as reflected by individual debits was practically the same as in the preceding month, whereas there is usually an increase at this season of the year. However, the total is slightly better than a year ago. In most lines of business the volume of activity followed seasonal trends except that retail trade appeared to be much better in the cities and poorer in the country districts. Mining output for both iron and copper were above a year ago. Marketing of corn and rye was below a year ago but this was partly offset by abnormally high receipts of flax, oats, and barley. The fact that receipts of cattle and calves have fallen below those of a year ago suggests the possibility that beef herds are being built up because of plentiful forage and confidence in the stability of beef prices.

The outlook for new business may to some extent be estimated by a consideration of projected building activity as shown by building permits and by stocks of merchandise on hand. The valuation of permits recorded by this office for August reached the highest total since our reporting began nearly five years ago. Both the number and valuation of permits exceeds that of a year ago. Stocks in the hands of lumber retailers, however, have reached the highest totals for this year relative to seasonal trends, while the stocks of lumber manufacturers are about the same as a year ago. Merchandise stocks of city retailers are greater than a year ago.

Financial conditions indicate customary developments for this time of the year. The loans of 28 banks located in the larger cities increased nearly 7 millions during the six weeks ending with the middle of September, bringing them to the point of borrowing from this Federal Reserve Bank during September. Crop moving demands increased Federal Reserve note issues 2½ millions during the first half of September. Banks located outside the larger cities indicate in recent called reports a less strained condition than a year ago, although somewhat more extended than during the spring, as is to be expected. The general demand for accommodation for agricultural purposes has made interest rates firmer, demands from commercial sources having remained about the same.

TOPICAL REVIEWS

Crop Conditions: Late field crops in the four complete states in this district have been aided by favorable weather up to September 15. Temperatures were below normal during the last half of August and the frost of August 22 damaged corn in northeastern South Dakota, but killing frosts were not reported from the other states until the second week in September. The harvest of corn for grain was general in North Dakota by September 15 with a large percentage of the grain fully matured. Corn was a little late in Montana on September 1, but the condition was generally considered satisfactory, as the bulk of the crop will be put in silos or hogged off. The frost damage in Minnesota was insignificant, but the August 22 frost in South Dakota injured corn on low land.

Threshing returns on small grains throughout the district indicate that with the exception of a few areas and with the exception of the flax crop, yields are only fair. Wheat in North Dakota, the greater part of South Dakota, and in a large part, in eastern Montana, is a disappointment, having been severely injured by both heat and black rust. The rust damage this year spread to many areas in Montana that have formerly been free from this disease. The period of abnormal heat late in the growing season has caused much shrunken grain and has reduced the general average of weight, but the gluten content will probably be greater than last year. Small grains, particularly wheat, show a very spotted condition, due in part to the causes referred to, and in part to poor methods of cultivation, which are to a considerable extent the product of the effort of many individuals to farm too much land. Throughout the district durum is yielding better, both as to quality and quantity, than Marquis, on account of being rust resistant.

The oat crop is quite satisfactory throughout the entire district, the bulk of the reports received stating that the kernels are well filled out, giving good weight per bushel, and the grain is of excellent quality.

The barley crop in South Dakota was not satisfactory, much of the grain being light and "pegy." In the most important barley producing sections of Montana the grain is filled well and the yield satisfactory.

Flax is a good crop in all four states. Late fields suffered damage from the heat and drought, particularly in eastern Montana. The early plantings in North Dakota have been harvested and outside of some weedy fields, the yields are good. The quality is excellent in South Dakota and the yields good, although some late fields were damaged by frost. Flax was a little weedy in some sections of Minnesota, but losses from weeds in the early fields were probably offset by the crop escaping frost damage.

Commercial digging of potatoes was not general on September 15, but was under way in North Dakota and reports indicate that it will soon commence in other sections. The quality of the crop is good in Montana, but only fair in the other three states. The set is light, however, even in Montana.
Shock threshing was well along in all four states in September 15, with some stack threshing done.

Sugar beets in Minnesota and Montana are an excellent crop, both in quality and yields. A significant fact, indicative of the partially developed agricultural resources of the district, is that beans grown on a commercial scale in part of the Yellowstone Valley in Montana, will produce a return of one million dollars to the growers this year.

Growers apparently are planning to hold their crops to a greater extent than last year. Flax being marketed extensively, but Minnesota and North Dakota farmers particularly are holding the.

The late rains interfered considerably with farming operations but left the ground in good shape for wing and fall seeding, which the farmers are doing as rapidly as possible. This is in contrast with the last year when the ground was hard and many fields were plowed and seeded so that it did not germinate before the freeze-up. From present indications, it appears that North Dakota farmers will plant a smaller acreage of rye this fall than last year, but continued favorable weather conditions may change their plans.

The late rains interfered considerably with farming operations as well, but the ground was in good shape for wing and fall seeding, which the farmers are doing as rapidly as possible. This is in contrast with the last year when the ground was hard and many fields were plowed and seeded so that it did not germinate before the freeze-up. From present indications, it appears that North Dakota farmers will plant a smaller acreage of rye this fall than last year, but continued favorable weather conditions may change their plans.

Grain stocks in terminal elevators at Minneapolis and Duluth-Superior were slightly less at the end of August than at the end of July, owing mainly to a decline of nearly one-fifth in stocks of wheat. In fact, stocks of the other grains, with the exception of corn, which was insignificant in amount, showed increases ranging from 6 per cent for rye to 85 per cent for barley. As compared with stocks last year, the total was about the same, but stocks of wheat were nearly five times as large, rye more than five times as large, flax seven times as large and barley up one-fourth, while stocks of corn and oats were very much smaller.

Livestock receipts at South St. Paul were about one-fifth smaller in August than in July, which is more than the usual seasonal decline at this time of year. This is due to unseasonably large declines in receipts of hogs and calves and smaller than seasonal increases in receipts of cattle and sheep. Receipts of hogs were more than one-fifth lower in August than in July and receipts of calves were down about one-sixth. Receipts of cattle were about 6 per cent larger in August than in July and receipts of sheep were nearly two-thirds larger. Hogs and calves continued to run in amounts larger than the ten year average and sheep receipts continued to be smaller than this average, while receipts of cattle, which had been slightly above the ten year average for several
months, were lower in August. As compared with last year, August hog receipts were 9 per cent larger, receipts of calves were 5 per cent smaller, receipts of cattle were down one-third and receipts of sheep were down nearly one-half.

Feeder shipments increased nearly one-fourth between July and August. There was an increase of one-third in feeder cattle shipments and a slight increase in feeder calf shipments. Shipments of feeder sheep were about four and one-half times as large in August as in July, but shipments of feeder hogs were down one-half. Shipments of all classes of feeders were much lower in August than a year ago, especially in the case of sheep, where the shipments were only about one-fourth as large. For all feeders combined, the movement in August this year was less than one-half as large as the movement a year ago.

Farm product prices at northwestern terminal markets appear to have shown a slight upward trend between July and August. At this time of year there is always a readjustment of prices incident to the fitting of new supplies to demand, both of which can be estimated with reasonable accuracy in the late summer. It is, therefore, interesting to compare in some detail the August prices with prices in July and in August a year ago.

Cash grain prices at Minneapolis showed about as many ups as downs between July and August. Wheat and rye both showed moderate increases from July, which was the low point of the year for both grains. Of the feed grains, corn prices increased, but barley and oats declined. Flax declined precipitately, owing to the early arrival of new crop supplies and the larger crop in prospect. As compared with August a year ago, all of the grain prices were higher, except rye, with the best recoveries appearing in the feed grains.

Livestock median prices at South St. Paul exhibited an equal number of advances and declines between July and August. Butcher cows and steers and lambs declined moderately, and there were small increases in the price of feeder steers, veal calves and hogs. As compared with August last year, butcher steers and calves were higher and hogs and lambs lower, while butcher cows and feeder steers sold at the same price.

Wholesale produce prices, other than potatoes, at Minneapolis showed seasonal advances between July and August and were higher than a year ago, especially in the case of butter and potatoes.

A table of the prices discussed above follows:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Aug., 1923</th>
<th>July, 1923</th>
<th>Aug., 1922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat, No. 1 Dark</td>
<td>$1.23</td>
<td>$1.17½</td>
<td>$1.19½</td>
</tr>
<tr>
<td>Corn, No. 3 Yellow</td>
<td>.83¾</td>
<td>.81</td>
<td>.57½</td>
</tr>
<tr>
<td>Oats, No. 3 White</td>
<td>.35</td>
<td>.36½</td>
<td>.29½</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Aug., 1923</th>
<th>July, 1923</th>
<th>Aug., 1922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butcher Cows and Heifers</td>
<td>$4.50</td>
<td>$5.00</td>
<td>$4.50</td>
</tr>
<tr>
<td>Butcher Steers</td>
<td>7.85</td>
<td>8.50</td>
<td>6.35</td>
</tr>
<tr>
<td>Stocker &amp; Feeder Steers</td>
<td>5.20</td>
<td>5.25</td>
<td>5.50</td>
</tr>
<tr>
<td>Veal Calves</td>
<td>9.50</td>
<td>9.00</td>
<td>9.25</td>
</tr>
<tr>
<td>Hogs</td>
<td>7.25</td>
<td>6.75</td>
<td>8.00</td>
</tr>
<tr>
<td>Lambs</td>
<td>11.25</td>
<td>12.25</td>
<td>11.75</td>
</tr>
</tbody>
</table>

Retail trade during August was marked by a full recovery in department store sales in northwestern cities after the July slump and a growing depression in rural lumber sales. Department store sales in August were nearly one-fourth larger than July sales, which is much more than the usual seasonal increase. This increase made August sales the largest of the year, if a correction is made to eliminate seasonal differences. At the same time, although stocks of merchandise increased four per cent during August, the increase was less than the normal seasonal amount and making an adjustment for seasonal changes, stocks were at the lowest point of the year. Retail lumber sales were five per cent smaller in August than in July, although normally there is an increase and the August sales were the lowest, relative to the normal for the month, of any month during the last four years, with the exception of February and March, 1922. Stocks of lumber in retailers' hands declined somewhat less than the normal amount during August, so that these stocks at the end of August were at the highest level of the year, relative to the trend. Department store sales and stocks were slightly larger in August than a year ago, but retail lumber stocks were somewhat lower and lumber sales were down one-fourth.

Wholesale trade showed seasonal changes between July and August. Sales of dry goods and shoes increased more than two-thirds between the two months. There was a moderate increase in grocery sales and a very slight increase in hardware sales, but sales of farm implements declined one-third. It is more significant to compare August sales with sales a year ago. Sales of shoes and groceries, measured in dollars, were somewhat larger than last year and sales of dry goods and hardware were slightly smaller, but farm implements sales were one-fourth below sales in August a year ago.
Gal receipts at Duluth-Superior harbor were increased relatively and were about as large as a year ago, after many smaller stocks. Orders placed during usual small seasonal increases in cut, stocks, shipments and a decline in cake shipments, although normalcy there is only a very slight seasonality. A marked increase in shipments, amounting to seasonal increases over July.

As compared with last year, the number was up 6 per cent and the value up 25 per cent. The August increase in value of permits increased the size of the average permit materially.

Manufacturing in this district showed some increase in activity, largely seasonal, between July and August. The flour trade showed a fair volume, both production and shipments and there were the usual seasonal increases over July. Linseed products showed a marked increase in shipments, amounting to two-thirds for linseed oil and one-fifth for oil, although normally there is only a very slight ease in oil shipments and a decline in cake shipments. Lumber operations were characterized by usual small seasonal increases in cut, stocks, shipments and new orders. As compared with last year, production and shipments were slightly lower. Shipments of linseed products were more than as large. The cut of lumber was one-tenth in August than during the same month last and shipments were one-seventh less, so that the increase relatively and were about as large as the end of August as a year ago, after many shipments of smaller stocks. Orders placed during last August were one-third lower than in August last.

Mining activity in this district was about as great as August as during July. There was a small increase in iron ore shipments from upper lake ports, according to reports from M. A. Hanna and Co., but per iron ore showed a small increase. The output of both iron and copper ore was more than as large in August than in August a year ago.

Coal receipts at Duluth-Superior harbor were larger in August than in August, but very much larger in August a year ago. Soft coal receipts were on one-eighth and hard coal receipts were about third lower. From the opening of navigation to August 31, 6,924,111 tons of soft coal and 904,518 of hard coal have been received at the Duluth-Superior harbor. This is nearly one-half more and about the same amount of hard coal as was received in the same period in five years before 1922, and the totals are very larger than the 1922 receipts to August 31.

Lumbering reports from northwestern cities show seasonal expansion during August. In the balance sheets of twenty-eight selected member banks in the large cities of the district, loans increased one and one-third million dollars and there was a decline of two-thirds of a million in demand deposits.

However, time deposits increased one and two-thirds millions during the month and security holdings were reduced one and one-half millions and these banks were able to reduce their borrowings with this bank more than three-fourths of a million dollars.

During the two weeks ending September 12, these same banks experienced a further expansion in loans of five and one-half millions, accompanied by an increase of more than eight millions in demand deposits and a decline of two and two thirds millions in time deposits. At the same time they were compelled to increase their borrowings from this bank by more than two millions and their security holdings remained unchanged.

Savings deposits at Minneapolis, St. Paul and Duluth were as large on the first of September as on the first of August and were 12 per cent larger than a year ago. There was a slight decline in the average savings deposit balance during August, owing to an increase in the number of deposits.

Commercial paper outstanding in this district declined 8 per cent during August, a common occurrence at this time of year. The volume outstanding continued to be larger than the volume a year ago, but smaller than in 1920 or 1921.

Prevailing interest rates showed a slight increase during the month ending September 15, according to quotations by three Minneapolis banks. There were increases of one-half per cent in rates on inter-bank loans and on loans secured by government collateral and an increase of one-fourth per cent on cattle loans, while rates on banker's acceptances, endorsed and unendorsed, declined one-half and one-fourth per cent, respectively.

This Federal Reserve Bank experienced a withdrawal of member bank deposits of approximately one million dollars during the month of August, while loans to member banks remained unchanged. At the same time Federal Reserve notes in circulation declined more than three-fourths of a million and security holdings were increased one and one-half millions, so that cash reserves declined two and three-fourths millions during the month.

During the two weeks ending September 12, there was an increase of nearly one million dollars in loans to member banks, accompanied by an increase of about the same amount in member bank deposits. Federal Reserve notes in circulation commenced their autumn increase with a rise of nearly two and one-half millions, reserves increased one million dollars and there was a considerable increase in float.
Rural bank credit conditions on June 30, 1923, showed a marked improvement over conditions a year ago, but seasonal expansion as compared with April 3. Maps are presented on this page and the one succeeding which show the condition by counties for three years, and the movement between call dates for the district is shown in the curve on page 1. The recovery from last year is, of course, partly due to the elimination of banks in extended condition, but more largely to the gradual business recovery in the rural sections of the district.

The measure of credit conditions which was used was the ratio of loans to deposits, the value of which as an index was described in our letter of June 27, 1921, as follows:

"The credit situation, past, present and prospective, can always be determined by the ratio of loans to deposits. When the ratio of loans to deposits rises, either deposits are being withdrawn more rapidly than loans are being collected or loans are being expanded more rapidly than deposits are growing. In either case, the credit situation would not be so favorable with regard to the outlook for more liberal lending or much lower interest rates. On the contrary, when the ratio of loans to deposits declines, it is apparent that deposits are rising, filling up bank reserves, or that collections of loans are being made; either of which will strengthen the bank position and indicate the probability of a more lenient lending policy or reduced interest rates."

The ratio of loans to deposits declined from 93.0 per cent to 85.7 per cent during the year for all banks, both state and national, in the Ninth Federal Reserve District, outside of the cities of Minneapolis, St. Paul and Duluth. Every state showed an improvement, the largest occurring in Montana. On June 30, 1923, banks in the state of North Dakota showed the most unfavorable condition, and Michigan banks the most favorable. A comparative table of the ratios on the two dates follows:

<table>
<thead>
<tr>
<th>State</th>
<th>Ratio June 30, 1923</th>
<th>Ratio June 30, 1922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montana</td>
<td>82.3%</td>
<td>95.8%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>98.7</td>
<td>108.5</td>
</tr>
<tr>
<td>South Dakota</td>
<td>90.3</td>
<td>95.7</td>
</tr>
<tr>
<td>Minnesota</td>
<td>84.6</td>
<td>89.8</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>81.2</td>
<td>88.0</td>
</tr>
<tr>
<td>Michigan</td>
<td>61.9</td>
<td>69.8</td>
</tr>
<tr>
<td>District</td>
<td>85.7</td>
<td>93.0</td>
</tr>
</tbody>
</table>
Bank Credit Conditions on June 30, 1921, 1922, and 1923 by Counties, Indicated by the Ratio of Customers' Loans to Total Deposits in Commercial Banks Outside of the Larger Cities. (Showing the Best Condition by the Darkest Shade.)
Summary of National Business Conditions

(Compiled Sept. 25 by Federal Reserve Board)

The volume of merchandise distributed during August, as indicated by railway traffic and wholesale and retail trade, was large. Production of certain basic commodities and industrial employment showed further slight decreases.

PRODUCTION: The Federal Reserve Board's index of production in basic industries declined 2 per cent during August, and was at the lowest point for the year. The August output, however, was 27 per cent larger than a year ago and production in every month this year has been at a higher level than in any month of the previous five years. The lower production index in August reflected reduced output, after a correction for the usual seasonal trend, of pig iron, woolen goods, flour and cement. Cotton consumption, sugar meltings, lumber cut and bituminous coal production increased. The number and value of new building projects, as measured by permits granted in 168 leading cities, increased during August, but actual contract awards were smaller than in July.

Employment at industrial establishments throughout the United States was slightly smaller in August, while average weekly earnings advanced about 1 per cent. Increases in wages amounting to 10 per cent were granted to anthracite coal miners, and the readjustment of wages and hours in the steel industry continued, but wage advances during August were fewer than in any month since last winter.

The principal changes in crop estimates shown by the September 1 forecast of the Department of Agriculture were a larger reduction in the expected cotton crop, slight decreases in the probable yield of wheat, barley and oats, and increases of yields of corn, tobacco and potatoes.

TRADE: Railroad freight shipments were larger in August than in any previous month on record. This was due to seasonal increases in shipments of coal, miscellaneous merchandise, and agricultural products. Wholesale trade, according to the index of the Federal Reserve Board, increased 12 per cent in August, which is more than the usual seasonal increase, and sales were the largest of any month in three years. Sales of clothing, dry goods and shoes showed substantial gains as compared with July and were larger than a year ago. Retail trade also increased in August and sales in all reporting lines were larger than in August, 1922. Department store sales in all sections of the country averaged 12 per cent above last year's level.

PRICES: The general level of wholesale prices, according to the index of the Bureau of Labor Statistics, remained relatively constant in August, the change for the month being a reduction of less than one-fifth of one per cent, compared with declines of about 2 per cent in each of the three preceding months. Prices of building materials, house furnishings and fuel were materially reduced, while prices of farm products and foods increased. Prices of certain raw materials, particularly cotton and silk, advanced substantially during September, while prices of petroleum and copper declined.

BANK CREDIT: After a decline during July and the first part of August, the volume of bank credit in use showed a seasonal increase during the last week of August and the first two weeks of September. Total loans and demand deposits of member banks in principal cities increased during recent weeks, reversing the trend of the preceding two months. Loans chiefly for commercial and agricultural purposes increased by $122,000,000 and reached a high point for the year. Investment holdings of these banks, on the contrary, continued to decline and on September 1 were lower than at any time since the middle of October of last year.

Between August 22 and September 19 the amount of accommodation extended to member banks by Federal reserve banks in industrial districts declined, while in agricultural districts the seasonal demand for credit and currency resulted in a considerable growth of reserve bank credit in use.

The demand for currency arising out of crop moving and fall trade has been reflected in an increase of $82,000,000 in money in circulation between August 1 and September 1. Of this amount about $44,000,000 represents an increase in Federal reserve note circulation.

Money rates were firmer during the first two weeks of September, but eased somewhat after the 15th, partly because government disbursements were temporarily in excess of tax collections.

The treasury issued on September 15 $200,000,000 of six months certificates bearing 4¼ per cent interest, compared with 4 per cent borne by six months certificates issued in June.