MONTHLY REVIEW

of Ninth District Agricultural and Business Conditions

FEDERAL RESERVE BANK OF MINNEAPOLIS

Vol. 9 OCTOBER 31, 1947 Serial No. 70

Economy Expands Despite Population Drop

District Markets Keep Pace with Those in Other Areas; Increases in Farm and Industrial Output Exceed U. S. Average

ALTHOUGH there has been a population decline in the Ninth district, production has nevertheless expanded sharply, and markets, which usually depend primarily on the number of people served, have grown as a result of the rise in the per capita income.

The labor force in this district has been reduced materially through the population movement to other regions. Net migration out of this district, however, ceased in the latter part of 1946. Since July 1, 1946, the population increase has equalled the national average.

The output of agricultural products has increased faster than in the entire nation as the result of more effective utilization of farm labor, greater mechanization, and favorable weather. A greater industrial output has resulted from a larger employment and an enlarged plant capacity.

Markets in this district have kept pace with those in numerous other regions in the nation.

POPULATION REDISTRIBUTION GREATEST IN HISTORY

A review of recent population statistics reveals that since 1940 the nation has witnessed the greatest population redistribution in its history among the 48 states. This movement has resulted in a greater population concentration in the Pacific coast states and in some Rocky Mountain states, in a few states bordering the Great Lakes, and in a number of states on the Atlantic seaboard. In brief, the movement has been from the mid-continent and southern states to the two sea coasts and to the Great Lakes.

The greatest migration has been west to the Pacific coast, as may be observed in the accompanying chart.[1] In the three Pacific coast states of California, Oregon, and Washington, the population from April 1, 1940, (the last census) to July 1, 1945, only one and one-half months prior to VJ-day, increased by 24½ percent.

The extent of the migration is only partially revealed by the population increase, for the personnel in the armed forces stationed overseas was excluded from the 1945 population estimate. The largest population migration experienced by any state since 1940 was California, with a net migration of 1,639,824 between April 1, 1940, and July 1, 1945.

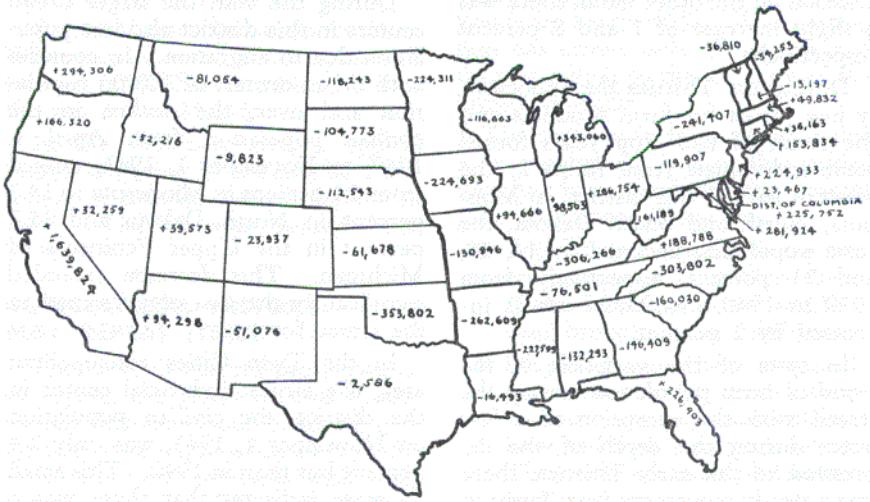
Of the states bordering the Great Lakes, Illinois, Indiana, Michigan, and Ohio had an influx of population during the war years. Michigan and Ohio received by far the largest number of immigrants. However, due to the large personnel in the armed forces stationed overseas the total population in these states, with the exception of Michigan, was less on July 1, 1945, than on April 1, 1940.

Of the states along the Atlantic seaboard, Florida has had a steady influx of immigrants. Even excluding those in military service on July 1, 1945, the population was 9 percent larger than at the turn of the decade.

Population in substantial numbers also moved into the seaboard states extending from Virginia north to Massachusetts. The greatest concentration of population was centered in the District of Columbia and in the two immediately surrounding states.

Southern states were the greatest losers of population in terms of absolute numbers. States in the western

CIVILIAN POPULATION CHANGES, UNITED STATES, APRIL 1, 1940, TO JULY 1, 1945



Source: "Population—Special Report" U. S. Department of Commerce Series P-46, No. 3.

[1] The statistics on population are taken from U. S. Census reports.

half of the Ninth District suffered the greatest percentage decline in total population as a result of the migration. At the end of hostilities, the population in Montana and North Dakota was 19 percent smaller than in 1940. In South Dakota it had declined 18 percent. Oklahoma was the only other state in the nation that had an almost comparable population decrease—17 percent.

MIGRATION PART OF LONG-TIME MOVEMENT TO CITIES

As may be readily observed from the accompanying chart, the population migrated from states predominantly agricultural to states primarily industrial where the bulk of the war materials were manufactured.

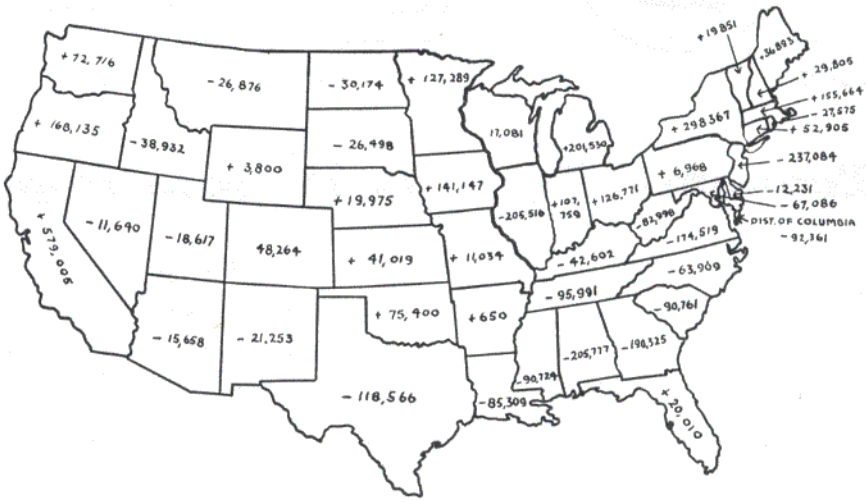
From 1940 to 1945 the population on farms declined rapidly. According to estimates made by the U. S. Bureau of Agricultural Economics, the farm population in the United States declined 17 percent in the five-year period. In the West North Central region, of which the Ninth District, with the exception of Montana, is a part, the farm population declined by 15 percent.

The migration from agricultural to industrial regions, in a large measure, is an acceleration of a long-time trend. During the Twenties and Thirties, the farm population in the United States remained at an almost constant figure. In the Ninth District there was some variation in the trend of farm population among the states. The Montana farm population in 1930 was 10 percent less than in 1920; in Minnesota it was only 1 percent less. In North and South Dakota, on the other hand, there was a slight increase of 1 and 8 percent respectively.

During the Thirties the abnormally low prices for farm products and the series of bad crop years forced some individuals from farms in the western part of this district. In Montana, North and South Dakota, the farm population declined by 14, 18, and 21 percent respectively from 1930 to 1940. In Minnesota it increased by 2 percent.

In spite of the variation in the trend of farm population among the states, with the exception of a few years during the depth of the depression of the early Thirties, there was a steady movement from farms in all of the states.

CIVILIAN POPULATION CHANGES, UNITED STATES, JULY 1, 1945, TO JULY 1, 1946



Source: Computed from U. S. Department of Commerce Reports P-46, No. 3 and P-25, No. 2.

From the small towns serving primarily agriculture, there also has been a general exodus to the larger centers. In the nation this trend was quite pronounced in the Twenties but was reversed during the Thirties. In all of the states in this district during the Twenties, the population in these centers either declined or increased significantly less than in the larger centers.

In the Thirties the growth of the smaller towns was more significant but decidedly less than in the larger centers in Montana, South and North Dakota. In general, the population movement has been from farms and small towns to the larger urban centers.

During the war, the larger urban centers in this district also lost population due to migration. In counties with urban centers of 10,000 population and over, the decline in the civilian population from April 1, 1940, to November 1, 1943, ranged from 6.1 percent in Minnesota to 14.3 percent in North Dakota and 15.2 percent in the Upper Peninsula of Michigan. This decrease exceeded significantly the loss of personnel to the armed forces.

In the Twin Cities metropolitan area, the largest industrial center in the district, the civilian population on November 1, 1943, was only 2.4 percent less than in 1940. This small decrease indicates that there was a steady net influx of population to this center during the war years. The latest population estimates for this metropolitan area on April 1, 1947, revealed an increase of approximately 10 percent over 1940.

When employment opportunities in the larger centers of this district are comparable to those found in centers of other regions, population migrates to these centers instead of out of the district.

MIGRATION CONTINUED AFTER VJ-DAY

Since the population movement among the states following VJ-day in many instances has continued in the same direction as during the war, this is more evidence that the movement during the war years was an acceleration of a long-time trend. Population in substantial numbers has continued to migrate to the industrial centers. (See chart.)

The population movement out of Montana, North and South Dakota has continued in significant numbers. From July 1, 1945, to July 1, 1946, a total of 83,547 left these states in excess of the number that returned.

In Minnesota the trend was reversed following VJ-day. Whereas a net of 224,311 emigrated out of the state between April 1, 1940, and July 1, 1945, a net of 127,289 returned to the state in the following year. Thus, within one year after VJ-day, Minnesota recovered over one-half

Continued on Page 505

AGRICULTURE

Agriculture's Financial Health Unparalleled

Favorable Long-Time Farm Outlook Is Indicated by Farm Programs, Population Growth, Foreign Trade, Fewer Farmers

NOT only financially but from the standpoint of physical assets, agriculture is in a strong position, and indications are that this situation will continue for some time.

Farm real estate values have nearly doubled from pre-war. Livestock, crops, and other physical asset values have more than doubled. Financial assets have increased from around $5 billion in 1940 to about $22 billion in 1947. Liquid assets of farmers at the start of 1947, measured in terms of 1940 purchasing power, were nearly three times pre-war.

Furthermore, it seems reasonable to assume that agriculture's over-all financial position will improve still further during the remainder of 1947. Land values have slowly but steadily advanced. Prices of livestock and crops were at all-time highs in mid-September. Prices received by farmers advanced 43 points for the period ending last September 15, while the prices paid index scored a 37-point advance from the 1910-14 base.

Cash farm income in the first half of 1947 was 43% above the first half of 1946 in the Ninth Federal Reserve District, and up 35% for the country as a whole. It would appear, therefore, that farmers, in 1947, will again be able to add substantially to financial reserves.

FARMER'S DEBT TREND REVERSED DURING 1947

About the only disturbing feature in the farmer's current financial situation was the slight increase (3%) during 1946 in farm mortgage indebtedness. This was the first time since 1928 that the downward trend in farm mortgage indebtedness has been reversed. Farm mortgage debt, however, is now less than half that of the 1923 peak. About a 30% decline occurred in farm real estate indebetedness from 1940 to 1947.

The increase during 1946 in non-real estate debt was substantial, nearly 17%, although the amount outstanding at present is less than half what it was at the peak following World War I. If this trend continues for several years as it did following World War I, however, it may have serious consequences in the event of a severe farm depression. It was the excessive short-term debts in the early 1920's which were refunded, in part, in long-term farm debts. The debt side of agriculture will bear careful watching in the period immediately ahead.

AGRICULTURE'S NET INCOME TREBLE PRE-WAR

The average farmer in 1946 received a net income more than three times pre-war amounts. Net agricultural income in 1946 was estimated at nearly $19 billion. Roughly, there are about 6 million farms, including large, medium, and small units (a 3-acre tract that yields a $250 return is considered a farm). Therefore, the average net income per farm would be in excess of $3,000. Net income during 1947 may average even higher.

The U.S.D.A. recently made a study of farm operator's net income by different types of farm enterprises. A typical farmer in the winter wheat belt, with wheat as a major farm enterprise, received a net operator's income of $12,493 in 1946, according to this study. The pre-war average, 1937-41, was $1,210.

A typical dairy farmer in southern Wisconsin received a net operator's income of $5,066 in 1946. Before the war it was $1,316.

In the corn-belt area, a typical farmer engaging in the hog-beef fattening enterprise netted $8,906 in 1946. The pre-war average was $1,837.

AGRICULTURAL HISTORY MAY REPEAT ITSELF

The farmer's current prosperity is, of course, the result of two fundamental factors; record breaking production, plus unprecedented high demand for farm products with costs tending to lag substantially behind prices received. We may be just completing a period of years which may not again soon be repeated. Normally, large production is associated with substantially lower prices. Particularly is this true in the western submarginal or semi-arid areas, where a large crop more often than not produced surpluses and relatively low farm prices.

It is not unusual, as everyone knows, for prices of farm products to become inflated during a war period. It happened during and for a short period after the War of 1812, the Civil War, World War I, and again this time.

It should be remembered, however, that history shows farm price inflation is sooner or later followed by a painful and oftentimes a long deflationary period. Perhaps this may not occur this time to the same degree as in the past postwar periods, but, in any event, it is wisdom to be cautious and alert to changes which may affect bank lending experiences.

MANY FACTORS RESPONSIBLE FOR FARM PRICE INCREASE

Many persons wonder how farm prices could almost treble since 1940 while at the same time food production is up nearly 40%. The population has grown only about 8% and there is a limit to the capacity of the human stomach.

The trebling in farm prices is due to a number of factors that added together have produced the present price situation. These are:

- Population in the U. S. has increased about 11 million since 1940. Little additional land has been brought under cultivation.
- People's incomes have increased approximately 2½ times. Low income groups, particularly, have had their incomes boosted. They now eat more and better food.
- Approximately 60 million peo-

ple are working at paying jobs. Before the war, only 45 million were employed. Factory payrolls are treble pre-war.

- Many of the great food surpluses that existed before the war have been used. Wheat carryover on July 1, 1942, was in excess of 600 million bushels. On July 1, 1947, the carryover was only 100 million bushels, one of the smallest on record.
- During the war, huge lend-lease shipments of food were made. Right after the war, UNRRA took millions of tons of U. S. food stocks. Currently, it is foreign relief.
- Agricultural exports are 5 times pre-war.
- Imports of food are substantially below pre-war.
- World food production is below average, at the same time world population is up. Europe's population is said to have increased 10 million since pre-war.

EXTENT OF FOOD RELIEF MAJOR FACTOR IN OUTLOOK

Agricultural exports during the war averaged around $2 billion annually. In 1946, exports were valued at $3½ billion. This year they may total approximately $4 billion. This will be the highest on record except in 1919, when agricultural exports exceeded $4 billion.

Measured in physical units, nearly 3.6 million long tons of food were exported for the 1935-39 average, about 18½ million long tons were exported from July 1946 through June 1947.

It seems obvious that the outlook for agricultural prices and incomes is dependent to a considerable degree on the volume of future exports. It is difficult to evaluate what the level of exports may be. In the short-run, much will depend on appropriations Congress is willing to make for this purpose; in the longer-run, the export outlook depends on the nature of commercial policy that develops in western Europe and on U. S. tariff policies.

Under the Marshall plan, as now suggested, $1½ billion worth of food products would be exported in 1948 and over $1¼ billion worth in each of the succeeding 4 years. This would be in addition to the amounts purchased by foreign countries with other loans and resources. Such a plan, if adopted, would provide substantial support to domestic farm prices.

As long as these heavy exports continue, it is difficult to see how a serious farm recession might occur.

WHEAT, THE MOST IMPORTANT FOOD EXPORT

Approximately 400 million bushels of wheat have been exported in each of the last two years. This was about one-third of the annual wheat production. Before the war, wheat exports averaged less than 50 million bushels annually.

State Department officials have asked that 500 million bushels of wheat be sent overseas this year. U.S.D.A. officials feel that only 400 million bushels can be spared without disrupting livestock production practices and skyrocketing grain prices. The administration is attempting to secure the extra 100 million bushels of grain by a voluntary food and feed saving program.

In any event, U. S. wheat carryover, next July, may be one of the smallest on record. Right now, ominous reports are coming in from the winter wheat area that soil moisture conditions are the poorest in years. Much of the wheat has been dusted in this fall.

An average wheat crop in this country is around 850 to 900 million bushels. In the drouth years of the 1930's, less than 600 million bushels were produced annually. This year the wheat crop was an all-time high, 1.4 billion bushels. In spite of this large crop, cash wheat prices recently passed the $3.00 mark.

The shortest corn crop since 1936, however, offsets to a great extent the advantages of a record wheat crop and has tended to put pressure on wheat supplies.

DAIRY OUTLOOK ALSO AFFECTED BY EXPORTS

Since 1942, approximately 5 billion pounds of milk equivalent has been exported annually. This year the amount exported may be somewhat less.

Exports have been particularly heavy in the concentrated dairy products. It is reported that, during 1946, approximately 31% of evaporated milk, 32% of dry skim milk, 70% of dry whole milk, and 27% of cheddar cheese were exported.

Before the war, the U. S. was a net importer of 50 to 60 million pounds of foreign cheese. Such imports are now a negligible amount.

What will happen to prices of the greatly expanded dried milk industry if the export market should return to pre-war levels? A shift in production to butter and other dairy products would probably be necessary unless the government stepped in to purchase surpluses.

Basically, however, the dairy industry appears to be in a sound position. Milk cow numbers are at prewar levels and relatively low on a per capita basis. Population has increased by 11 million since 1940 and people apparently are more diet and nutrition conscious than ever before. They eat more dairy products as a result of nutrition education and because they have more money in their pockets.

PEOPLE EAT MORE MEAT WHEN INCOMES ARE HIGH

Livestock numbers on farms have been declining the last few years. A further reduction is in prospect as higher feed prices cause feed ratios to become more unfavorable.

Both hog and sheep numbers last January 1 were below a recent 10-year average. Cattle numbers were up about 13%. On a per capita basis, however, livestock numbers are not excessive.

For the last few years, livestock slaughter has been unusually large, reflecting the large numbers of livestock built up during the early war years and, more recently, a certain amount of livestock liquidation.

Consumers demand more meat when they have the income with which to buy. They are willing to

Continued on Page 508

Livestock Numbers on Farms January 1

(In Million Head)

	1940	Wartime Peak	1947
Cattle	67	85	81
Hogs	61	84	56
Sheep	52	56	38

BUSINESS

September Saw Material Business Expansion

WITH practically all economic resources of the Ninth District currently employed in the production and distribution of goods and services, the economy is operating very close to full capacity.

A large volume of raw materials and finished products moved through the trade channels during the first three-quarters of this year. The total of all types of railroad carloadings exceeded significantly the number for the same period of last year. The monthly increase ranged from 4 to 45 percent (because of work stoppages in 1946).

The larger shipments of raw products included grain, lumber, coal, coke, and ore. Livestock shipments, on the contrary, were less in each month as compared with a year ago. Shipments of finished merchandise also have been at a high level.

The largest gains were registered in April and May, when the volume of less-than-carload lots exceeded those of last year by as much as 39 and 49 percent respectively; such striking figures, however, reflect the low level a year ago because of work stoppages rather than any bona fide spurt. In only one month, September, did the volume fall below the figure for a year ago.

EMPLOYMENT CONTINUES TO EXPAND

Employment in recent months has risen to such a high level that unemployment has been reduced to a peace-time minimum. In Minnesota, where a large share of the industrial activity of this district is centered, wage and salaried workers in industrial establishments in July and August exceeded 200,000. This compares with 223,500 in February 1945, the peak month during the war, and with 110,000 on April 1, 1940, when the census was taken.

Although employment figures for recent months are not available for the other states of this district, figures for the first half of the year indicate a similar upward trend.

According to recent reports released by the Minnesota Division of Employment and Security, a further expansion in employment is anticipated during October. Employment in Minneapolis is expected to exceed the September total by 2,700 and in St. Paul by 1,860. Since the number unemployed is at a very low figure, employers may experience considerable difficulty in securing the needed labor.

SEPTEMBER BANK DEBITS AT NEW PEAK

The expansion in the volume of business transacted, as well as the general rise in prices, is reflected in the amount of bank debits reported by banks in 93 cities of this district. For September, debits were at an all-time peak. The index adjusted for the usual seasonal variation was 232 percent above the 1935-39 average. This was 25 points above the former peak reached in March of this year.

The seasonally adjusted index limited to the farming centers of this district has risen to an even higher level. During the first quarter of this year, the index averaged 281 percent above the 1935-39 average. After a material decline during the summer months the index for September again reached a peak of 273 percent above the former average. This is indicative of the large volume of business transacted in these centers.

SEPTEMBER DEPARTMENT STORE SALES REACH NEW PEAK

Department store sales in this district likewise have risen to a new peak. The preliminary index for September adjusted for the usual seasonal variation was 187 percent above the 1935-39 average. The previous high point occurred in March, when the adjusted index was 179 percent above the former average. A comparable expansion in sales has taken place between stores reporting from large and small trading centers.

GRAIN and lumber lead rise in shipments of raw products.

Factory workers in Minnesota exceed 200,000 mark.

Marked increase occurs in September bank debits.

Department store sales also register pronounced rise to record level during September.

An examination of department store sales by departments indicates that the sales of major household appliances, toys, games, sporting goods, cameras, and luggage continue to show increases decidedly above the average for the entire store.

RETAIL STOCKS LOW IN COMPARISON WITH SALES

Department store stocks are at a relatively low level. At the end of August the adjusted index was 141 percent above the 1935-39 average. A steady decline in stocks has taken place since the end of April, when the

Concluded on Page 509

Northwest Business Indexes

(Adjusted for Seasonal Variations—1935-39=100)

	Sept. 1947	Aug. 1947	Sept. 1946	Sept. 1945
Bank Debits—93 Cities	332	288	261	221
Bank Debits—Farming Centers	373	351	296	225
Ninth District Dept. Store Sales	287 p	271	265	191
City Department Store Sales	287	268	282	196
Country Department Store Sales	287 p	274	248	185
Ninth District Department Store Stocks	244 p	241	227	163
City Department Store Stocks	218	209	230	157
Country Department Store Stocks	265 p	266	225	169
Country Lumber Sales	155 p	137	115	135
Miscellaneous Carloadings	97	125	112	110
Total Carloadings (excl. Misc.)	103	128	123	129
Farm Prices (Minn. unadj.)	305	296	222	170

p—Preliminary.

ECONOMY EXPANDS DESPITE POPULATION DROP

Continued from Page 501

of the number that left the state during the war years.

Wisconsin, too, has regained some of its migrants. Of a net emigration of 117,000 out of the state during the five-year period from 1940, a net of 17,000 returned within one year after VJ-day. Although recent population data by counties is not available, it is evident that there has been a movement back to a few northwest counties which have opportunities for industrial employment.

Following VJ-day, population continued to move into Michigan in substantial numbers. For one year from July 1, 1945, the net immigration aggregated 201,530. However, the Upper Peninsula, which is a part of this district, was a deficit area during the war. Thus far, no movement back to this area has appeared.

MIGRATION FROM DISTRICT CEASED IN LATE 1946

Although migration figures since July 1, 1946, are not available, population estimates indicate that the net migration out of this district practically ceased during the past year. The civilian population increase between July 1, 1946, and July 1, 1947, in all of the states in this district except Wisconsin equalled the national average of 3 percent. The increase in Wisconsin was 4 percent.

As a result of the population migration among the states, the civilian population in this district was less on July 1, 1947, than on April 1, 1940, whereas the civilian population in the nation increased 8.5 percent. In North and South Dakota, and Montana, it declined as much as 14.0, 12.8, and 12.0 percent respectively. In Minnesota and Wisconsin there has been some increase, concentrated almost entirely in the last year—3.7 and 4.6 percent respectively. In Michigan the civilian population increased by 18.8 percent.

GRAIN AND LIVESTOCK PRODUCTION TOP 1940

Agricultural production in this district rose significantly during the war in spite of a sharp decline in farm labor. Grain production in the four states wholly within this district reached a peak in 1945 when the aggregate number of bushels exceeded the total in 1940 by 45 percent.[2] Even this year, when weather has not been as favorable as in past years, it is estimated that the total grain production will be one-fourth larger than in 1940.

The greatest expansion in grain production has occurred in the western states of the district. Adequate rainfall and greater mechanization has greatly increased the number of bushels raised per farm worker. In South Dakota, grain production in 1945 was more than double the 1940 figure. In Montana and in North Dakota, the war-time peak was roughly three-fourths larger than the prewar total. This increase far exceeded the rise in the total grain production of the nation.

Livestock production also rose sharply during the war in spite of the contraction in farm labor. In the four states wholly within this district, the head of livestock on farms on January 1, 1944, reached a peak of 51 percent above the number on farms on January 1, 1940. Since that time the number has declined, but at the first of this year it was still 22 percent larger than prior to the war. This, like the production of grain, greatly exceeds the rise in the livestock production in the nation.

Among these states, the largest expansion in livestock production occurred in Minnesota and in South Dakota, where the number of head is still approximately one-third and one-fourth larger respectively than in 1940.

During the depression of the Thirties, farms were a haven for the unemployed urban workers. Even by 1940, a large amount of labor was still used inefficiently on farms, otherwise the large expansion in agricultural products would have been impossible with the sharp decline in farm labor. The output per farm worker has been estimated approximately 40 percent larger now than in 1939.[3]

[2] The statistics on crops and livestock were taken from U. S. Department of Agriculture reports on "Crop Production" and "Livestock on Farms."

[3] G. T. Barton, "Farm Wage Rate and Labor Efficiency," The Agricultural Situation, January, 1947, p. 8.

[4] Data in employment were taken from the State Division of Employment and Security.

[5] The electrical power requirements of industrial concerns were taken from the Federal Power Commission's report, "Industrial Electric Power," 1939-1946, Table J, p. XIII.

EMPLOYMENT AND ELECTRIC POWER USE REFLECT LARGER INDUSTRIAL OUTPUT

Although this is predominantly an agricultural region, manufacturing in the postwar era has grown faster than in the nation as a whole. Since the end of hostilities there has been an intensive search for additional factory space or suitable industrial sites in most cities and larger towns of the district.

Employment in industrial concerns of the four states wholly within this district during the first half of this year was half again as large as on April 1, 1940, when the census was taken.[4] Most of this expansion was concentrated in Minnesota, where such employment increased 78 percent. In North Dakota, employment in industrial concerns increased 50 percent, and in Montana and in South Dakota by 32 percent and 37 percent respectively. The expansion in Michigan and Wisconsin, which are more industrialized, was 48 percent and 50 percent respectively.

During the war, as in peace time, this region was chiefly a food processing region. Consequently, manufacturing employment did not decline from a war-time peak as in other areas. Only in Minnesota, where most of the war materials in this district were manufactured, and Superior, Wisconsin, which along with Duluth was a shipyard center, did some decline in industrial employment occur following VJ-day.

Since electric power is used extensively in all branches of industrial production, the consumption of electrical energy comprises a useful measure of regional industrial trends over relatively short periods of time. The chief weakness lies in the undue weight that is given to areas of highly mechanized industry.

Electric power required by industrial concerns in this district has risen rapidly since 1940 but, nevertheless, much less than in other areas.[5] The explanation may be found in the type of products manufactured in this region. Most of the processing, for example food products, requires a relatively small amount of electrical energy. Furthermore, since the end of hostilities, copper smelters, who are heavy users of power, have operated much below the pre-war output.

Concluded on Page 507

BANKING

Deposits, Loans Expand at Record Rate

A MARKED increase in both loans and deposits characterized Ninth District banking developments during September.

Loans at Ninth District member banks rose $35 million, or 5 percent, to a new high of $732 million by the end of September. Thus has been continued the rapid bank loan expansion which began in the middle of 1946.

As a matter of fact, the rate of increase recently has experienced some acceleration. During the last 12 months member bank loans in this district increased at an average rate of between 3 and 4 percent per month, somewhat less than the 5 percent for September.

Most of the loan expansion in September was accounted for by city member banks. The 20 weekly reporting member banks, which account for just over half of all member bank loans outstanding in this district, represented 93 percent of the September loan expansion.

If data for these larger member banks are any indication, most of the expansion is to be explained by the increase in commercial, industrial, and agricultural loans. Real estate loans increased nominally, and loans on securities and miscellaneous loans (largely to consumers) remained unchanged.

Assets and Liabilities of All Ninth District Member Banks*
(In Million Dollars)

	August 27, 1947	September 24, 1947	Change
Assets			
Loans and Discounts	$ 697	$ 732	+ 35
U. S. Government Obligations	1,760	1,810	+ 50
Other Securities	161	169	+ 8
Cash and Due from Banks	853	937	+ 84
Other Assets	28	23	— 5
Total Assets	$3,499	$3,671	+172
Liabilities and Capital			
Due to Banks	$ 365	$ 437	+ 72
Other Demand Deposits	2,013	2,096	+ 83
Total Demand Deposits	$2,378	$2,533	+155
Time Deposits	912	918	+ 6
Total Deposits	$3,290	$3,451	+161
Borrowings	0	10	+ 10
Other Liabilities	17	16	— 1
Capital Funds	192	194	+ 2
Total Liabilities and Capital	$3,499	$3,671	+172

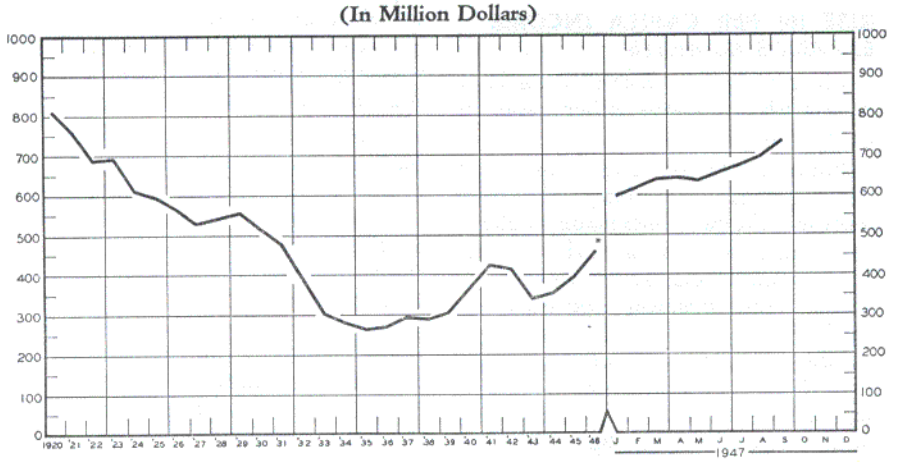
*This table is in part estimated. Data on loans and discounts, U. S. government obligations, and other securities are obtained by reports directly from the member banks. Balances with domestic banks, cash items, and data on deposits are largely taken from the semi-monthly report which member banks make to the Federal Reserve Bank for the purpose of computing reserves. Reserve balances and data on borrowings from the Federal Reserve banks are taken directly from the books of the Federal Reserve bank. Data on other borrowings are estimated. Capital funds, other assets, and other liabilities are extrapolated from call report data.

MEMBER bank loans rise $35 million during September to $732 million total.

September deposit expansion of $161 million sets 1947 record.

Country banks in Dakotas and Montana enjoy largest relative deposit spurts.

LOANS OF ALL NINTH DISTRICT MEMBER BANKS, 1920-1947
(In Million Dollars)



* Monthly data for 1947.

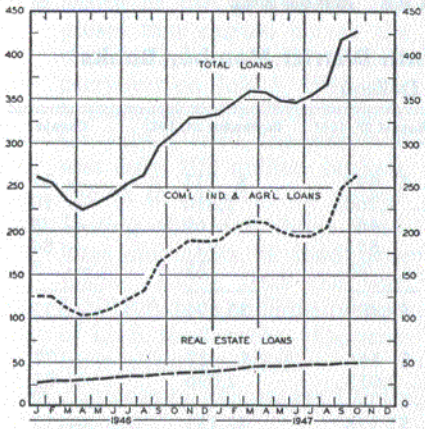
By October 15, the last date for which data for the weekly reporting banks are available, loans had expanded another $14 million. There is, in other words, no indication that the rapid expansion in the demand for bank credit is spending itself.

The further swelling of member bank deposits constitutes the second major banking development of the month. This, of course, is to be explained largely by the seasonal flow of funds into the area as a result of marketing small grain, given perhaps added impetus this year by the record wheat crop. Member bank deposits for the Ninth District rose during September by $161 million. This is by all odds the largest monthly deposit expansion of the year, and raised total deposits for these banks to $3,451 million on September 24.

Country member bank deposits during the last half of September averaged $76 million above the previous month. The largest gains were registered by country banks in North Dakota and Montana, each accounting for $20 million of the increase. An $18 million deposit increase for

LOANS OF 9TH DISTRICT WEEKLY REPORTING MEMBER BANKS, 1946-1947

(In Million Dollars)



Assets and Liabilities of Twenty Reporting Banks

(In Million Dollars)

	Aug. 27, 1947	Sept. 24, 1947	Oct. 15, 1947	Change Aug. 27-Sept. 24
Assets				
Comm., Ind. & Ag. Loans	$ 214	$ 246	$ 263	+ 32
Real Estate Loans	49	50	50	+ 1
Loans on Securities	23	23	23	.....
Other Loans	93	93	91	.....
Total Loans	$ 379	$ 412	$ 427	+ 33
Total U. S. Gov't Securities	692	718	727	+ 26
Other Investments	60	62	66	+ 2
Cash and Due from Banks	428	472	524	+ 44
Miscellaneous Assets	16	13	14	— 3
Total Assets	$1,575	$1,677	$1,758	+102
Liabilities				
Demand Deposits, Ind., Part., Corp.	$ 740	$ 768	$ 818	+ 28
Demand Deposits, U. S. Gov't	15	17	28	+ 2
Due to Other Banks	325	389	406	+ 64
Other Deposits	386	384	386	— 2
Total Deposits	$1,466	$1,558	$1,638	+ 92
Borrowings	0	10	13	+ 10
Miscellaneous Liabilities	13	13	10	.....
Capital Funds	96	96	97	.....
Total Liabilities and Capital	$1,575	$1,677	$1,758	+102
Excess Reserves	7	9	3	+ 2

South Dakota country member banks accounted for most of the remainder of the district's deposit expansion.

With the rapid expansion in bank loans, and the resulting increase in deposits subject to reserves, a few member banks were forced to borrow from the Federal Reserve Bank to maintain the required volume of reserves. Member bank borrowings rose $10 million during September, and increased some further early in October. END

ECONOMY EXPANDS DESPITE POPULATION DROP

Concluded from Page 505

In South Dakota the consumption of electrical power by industrial concerns during the war actually declined due to the closing down of the gold mines. In 1944 only about half as much industrial power was used as in 1940. Not until 1946 did the industrial concerns in that state again require as much electrical power as in the pre-war year.

In Montana the industrial power consumption in 1946 was estimated at only 12 percent above the 1940 figure, which was due to an output of copper less than half of the 1940 amount.

In the other states of the district the industrial power consumption rose during the war and in the postwar period has remained well above the pre-war level. In North Dakota the power required in 1946 was estimated close to 90 percent above the pre-war consumption, and in Minnesota, where most of the manufacturing in this district is concentrated, the power requirements in 1946 were estimated 50 percent above those in 1940. This increase compares with the expansion in the nation of 69 percent.

From this analysis it is evident that production in this district since 1940 has expanded at a rate roughly comparable to that in the nation as a whole in spite of the migration of labor from farms and small towns to other regions.

RISE IN PER CAPITA INCOME EXPANDS MARKETS

Markets in this district have kept pace with numerous other areas in the nation.

Bank debits are one measure of general business activity, for they represent the payments made by check principally for goods and services. The amount of checks drawn by individuals and business concerns on banks located in numerous centers of this district has increased more than those drawn on banks located in representative centers over the nation. The increase, however, has fallen far short of that reported by banks in representative centers along the west coast.

Department store sales in this district during the war and postwar period rose rapidly, but they have not quite kept pace with the national average. In 1946 the sales had risen 17 points less from the 1935-39 average than those in the entire nation.

Since the summer of 1946, sales in this region have risen faster than in other areas, which has brought the expansion in sales closer to the national level. During the first nine months of this year, the district index was approximately 10 points below the national index.

The expansion in the volume of business transacted in this district is due to the rise in per capita income, which in large measure has offset the declining population in some states and the almost static population in others. Since 1940 the rise in per capita income in the four states wholly within this district has exceeded the national average, and North and South Dakota have led the entire nation.

—Oscar F. Litterer

AGRICULTURE

Continued from Page 503

pay current record high prices and still take 15% more meat per capita compared with pre-war. Meat consumption this year may reach a peak of 158 pounds per capita. Before the war, 1939-41, the average was 138.

As livestock liquidation progresses, a point will sooner or later be reached when the supply of meat may become less. Only 148 pounds per capita may be available next year, according to the American Meat Institute estimates.

The level of meat prices in the future will be largely a reflection of domestic consumer purchasing power and the level of livestock numbers.

Hog production in the year ahead is expected to be low in relation to the demand. In July and August this year, packers at 7 markets bought 23% more sows than they did last year. This may reduce the fall pig crop to some extent in relation to goals and earlier expectations. It appears likely also that the 1948 spring pig crop may be smaller than was the spring crop this year.

Of lesser importance in this livestock and meat picture, has been the reduction in fresh meat imports from Canada and canned meats from Argentina. The foot and mouth disease in Mexico has also eliminated the imports of around one-half million head of cattle.

In addition, meat exports last year amounted to about 1.5 billion pounds, out of total meat production of around 23 billion pounds.

Average Prices Received by Farmers, Ninth District[1]

Commodity and Unit	September 15, 1937-1941 Avg.	September 15, 1946	September 15 1947	Parity Prices [2] United States Sept. 15, 1947
Crops				
Wheat, bushel	$0.72	$ 1.77	$ 2.48	$ 2.10
Corn, bushel	.57	1.65	2.35	1.52
Oats, bushel	.25	.66	1.04	.946
Potatoes, bushel	.47	1.09	1.45	1.77
Livestock and Livestock Products				
Hogs, 100 lbs.	8.53	15.77	27.22	17.20
Beef Cattle, 100 lbs.	7.73	14.93	20.72	12.80
Veal Calves, 100 lbs.	9.22	14.83	22.72	16.00
Lambs, 100 lbs.	8.15	15.21	20.72	13.90
Wool, lb.	.27	.43	.43	.434
Milk, wholesale, 100 lbs.	1.60	3.81	3.67	3.90
Butterfat, lb.	.30	.79	.88	.619
Chickens, live, lb.	.133	.259	.236	.27
Eggs, dozen	.198	.372	.453	.541

[1] Data compiled from "Agricultural Prices," United States Department of Agriculture.

[2] The term parity as applied to the price of an agricultural commodity is that price which will give to the commodity a purchasing power equivalent to the average purchasing power of the commodity in the base period, 1910-1914.

INCREASED AGRICULTURAL PRODUCTION SIGNIFICANT IN LONGER-TERM PICTURE

Revolutionary changes have occurred in agricultural production techniques in recent years. This may have a significant bearing on the future farm situation. If the agricultural factory continues to turn out 25 to 35% more products compared to pre-war, as many think probable, what may be the effect on prices? The impact of this phenomenal increase in farm output has not yet been tested due to abnormal war demands that still persist.

That changes have taken place in farming methods, few will question. Farm mechanization has doubled in only a few years and the backlog of orders for new and improved farm machinery is hardly measurable. The use of fertilizers and lime has more than doubled. Many superior crop varieties have been produced by crop scientists and the farmers have been quick to adopt them. Hybrid corn is only one example.

Indications are that improved breeding practices are on the way in livestock production. With the decline in the horse population, millions of acres that formerly grew feed have been released for food production.

In view of agriculture's increased production potential, will markets be found in two, three, or five years ahead to take all the farmer produces at favorable prices? Will farm prices decline substantially below "parity" as they did in the inter-war period? Will new demands be made for government assistance by rejuvenated old programs or new ones?* These, of course, are complex questions and the answers are yet to be found.

There is a tendency among many observers to discuss agriculture's future in terms of pre-war experiences. There will, of course, be problems and perhaps actual distress in particular commodities, if and when production outruns demand.

A number of developments have occurred in recent years, however, that may offset at least in part the bearish effect of expanded farm production. These developments are listed as follows:

- Farms are growing larger because of farm mechanization. There are at least 2.5 million less people on farms now compared with pre-war. Farm income is, therefore, distributed among fewer recipients.
- Agriculture is in the best financial position in history. Debts have been repaid. Bank deposits and savings are at record levels.
- Many government farm programs are designed to maintain farm prices and incomes. This is in contrast to other postwar periods. Congressional hearings on long-range farm programs are being held currently. From the testimony already presented, there seems to be general agreement that such programs should provide for abundant agricultural production, a revision of the parity formula, and continued price supports at some level.
- The recent upsurge in population growth indicates more food is needed. The supply of land is limited.
- A realistic foreign trade program may be developed which may provide an outlet for agricultural surpluses.
- Changes have occurred in the economic geography of eastern

*The topic was discussed to some extent in the August issue of the Monthly Review of the Federal Reserve Bank of Minneapolis, in a special article entitled "What about Farm Programs?"

Europe. Much of the surplus from Europe's "breadbasket" may now be directed eastward. If so, western Europe may look to the Western Hemisphere to help feed her millions of people.

Of major importance in farm markets, of course, will be the level of our domestic business activity. Although listed last, this factor is the real key to agricultural prosperity in the U. S.

—Franklin L. Parsons

January-August Cash Farm Income[1]

(Thousands of Dollars)

State	1935-39 Average	1946	1947	1947 in Percent of 1946
Minnesota	$ 214,452	$ 621,442	$ 800,894	129%
North Dakota	59,495	258,679	362,887	140
South Dakota	65,715	288,301	402,890	140
Montana	43,032	129,379	165,857	128
Ninth District [2]	433,009	1,450,756	1,913,307	132
United States	4,828,651	13,616,918	17,360,558	127

[1] Data from "The Farm Income Situation," United States Department of Agriculture.
[2] Includes 15 counties in Michigan and 26 counties in Wisconsin.

BUSINESS

Concluded from Page 504

adjusted index stood at 187 percent above the former average.

OUTSTANDING ORDERS DOWN

On the basis of a small sample of department stores in this district, outstanding orders recorded a peak in July. Since that time the volume has fallen off steadily. In relation to the total volume of sales, in August outstanding orders were 4.7 times the amount of monthly sales, whereas in October the ratio had declined to 2.3 times the volume of sales. END.

Index of Department Store Sales by Cities

(Unadjusted 1935-39 = 100)

	Sept. [1]	Percent Change [2] from Year Ago Sept.	Jan.-Sept.
Minneapolis	316	+ 1	+ 5
St. Paul	296	+12	+13
Duluth-Superior		+18	+12
La Crosse	256	+ 7	+14
Mankato	268	—11	+ 4
St. Cloud	369	— 2	— 1

[1] Based on daily average sales.
[2] Based on total dollar volume of sales.

Sales at Ninth District Department Stores[1]

	% Sept. 1947 of Sept. 1946	% Jan.-Sept. 1947 of Jan.-Sept. 1946	Number of Stores [2] Showing Increase	Decrease
Total District	110	110	214	58
Mpls., St. Paul, Dul.-Sup.	106	108	19	4
Country Stores	118	113	195	54
Minnesota	106	108	41	32
Central	98	100	4	5
Northeastern	109	108	4	2
Red River Valley	99	105	1	3
South Central	104	111	10	7
Southeastern	110	113	9	4
Southwestern	110	108	13	11
Montana	131	114	24	5
Mountains	130	115	8	2
Plains	131	113	16	3
North Dakota	127	116	47	2
North Central	122	111	8	0
Northwestern	114	110	6	0
Red River Valley	133	122	18	0
Southeastern	125	111	12	2
Southwestern	127	105	3	0
Red River Valley-Minn. & N. D.	128	120	19	3
South Dakota	121	112	39	7
Southeastern	123	114	10	4
Other Eastern	120	111	22	3
Western	123	110	7	0
Wisconsin and Michigan	114	117	44	8
Northern Wisconsin	121	116	10	2
West Central Wisconsin	114	117	27	4
Upper Peninsula Michigan	111	115	7	2

[1] Percentages are based on dollar volume of sales.
[2] September 1947 compared with September 1946.