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of Ninth District Agricultural and Business Conditions

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SPECIAL ARTICLE

Manufacturing Answer to Full Employment

Expansion in Construction Expected to Offset Decline in Manufacturing; Pre-War Employment Shift Away from Basic Industries May Continue

• Up to the Present Time, Manufacturing Has Absorbed Employees Released by Agriculture

Basic Industries — Farms, Factories, and Mines — Have Been Losing Labor to Distribution and Service Industries

PRECEDING the recent war, unemployment was a serious economic problem. Federal, state, and local governments for nearly a decade pursued a program of relieving distressed unemployment. In 1940, 16 percent of the labor force in the Ninth District was still either unemployed or employed on public emergency work.

Since employment now has reached a record peacetime level, it is an opportune time to observe how labor is employed in the Ninth District economy. Furthermore, with practically full employment, the attention of the public is turning toward the probable duration of this high level of employment in the coming postwar era.

During the past summer months, nearly two million individuals were employed in this district. Of this number, about one and one-third million, or 70 percent, were employed in cities and towns and nearly two-thirds of a million on farms.[1]

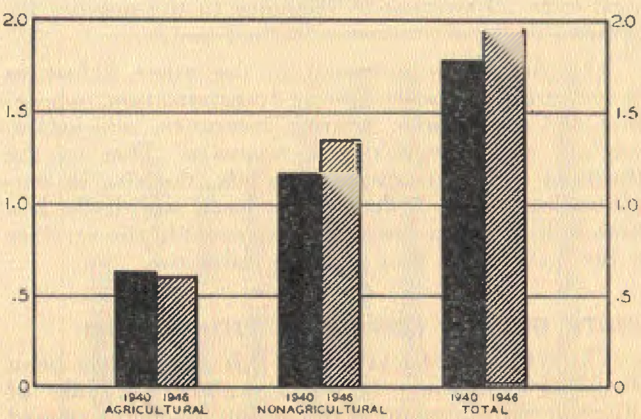
RECENT RISE IN EMPLOYMENT IS CONCENTRATED IN CITIES AND TOWNS

All of the expansion in employment as compared with the pre-war period is concentrated in cities and towns over the district. During the summer, employment in non-agricultural establishments was one-fourth larger than in 1940, and in the more recent months it has continued to expand. Employment on farms, on the contrary, is still well below the pre-war level even though the output of agricultural products has risen markedly. In 1945, agricultural employment was about 6 percent less than in 1940. With the demobilization of the armed forces following VJ-day, employment on farms has again increased. Although data are not available to estimate the recent rise in this type of employment in this district, it is safe to assume that the rise probably has been no greater than in the nation as a whole—which was one percent from July, 1945, to the same month of this year. Consequently, the present employment on farms is still about 5 percent below the pre-war level.

Previous to the war, in 1940, nearly one-half of total employment in the district was associated with the basic producing industries; namely, agriculture, manufacturing, mining, fishing, and forestry. Of the total number employed—1,785,000—35 percent was associated with agriculture, which is the dominant industry in the district. Over 10 percent was employed in manufacturing, and 2 percent in mining. Only two-tenths of one percent was employed in fishing and forestry.

EMPLOYMENT IN THE NINTH DISTRICT, 1940[1] AND 1946[2]

(In Millions)



1. U. S. census.
2. Estimated as indicated in the text.

[1] The estimated total non-agricultural employment is based on the number of employees in non-agricultural establishments as estimated by the U. S. Department of Labor in cooperation with state unemployment divisions. It was assumed that the number of self-employed individuals is now approximately equal to the number in 1940. The average rate of increase in non-agricultural employment in the four states was used to estimate total non-agricultural employment on the Upper Peninsula of Michigan and in the 26 northwest counties of Wisconsin.

The estimate of agricultural employment was based largely on the farm population estimates made by the U. S. Department of Agriculture. The ratio between employment and population in 1940 was used to estimate employment from the 1945 population estimate. The rise of agricultural employment in the states of the Ninth District from July, 1945, to July, 1946, was assumed to be approximately equal to the increase in the nation as estimated by the Bureau of the Census in the "Monthly Report on the Labor Force." The average increase in agricultural employment in the four states was used to estimate the 1946 agricultural employment in the parts of Michigan and of Wisconsin in this district.

As compared with the pre-war period, a smaller proportion of the total number employed in the district is now associated with agriculture, and a larger proportion with manufacturing. There are now roughly 29 percent in agriculture and 11 percent in manufacturing. The proportional changes in the other basic industries have been insignificant.

From a geographic point of view, much of the expansion in employment in the Ninth District has taken place in Minnesota, where most of the manufacturing plants are located. In July of this year, the number of workers in non-agricultural establishments was one-fourth larger than in 1940, and in subsequent months the average has grown to one-third.

In the other states, Montana, North and South Dakota, non-agricultural employment during the war years was significantly below the 1940 average, but in the first seven months of this year the level of this type of employment in these states has exceeded the pre-war level.

MANUFACTURING SHOWS LARGEST INCREASE

Nearly one-half of the expansion in employment in the non-agricultural phase of the economy is concentrated in manufacturing plants. During the past summer, employment was about 60 percent larger than prior to the war, and in the more recent months it has continued to expand rapidly as more raw materials have become available to manufacturers.

Of the total employed in manufacturing in this district, approximately one-third are engaged in the processing of food. Employment in this industry in recent months was close to 50 percent above the pre-war level. In some of the other industries the increase in employment percentage-wise was much greater. In the manufacture of electrical machinery, the number of employees is now about five times the number prior to the war. In the manufacture of other machinery and of iron and steel products, employment has more than doubled. In all of the other manufacturing industries—textiles, apparel, lumber and timber, furniture, paper and allied products, printing and publishing, chemicals, and stone, clay and glass—employment has expanded well over 50 percent in response to the general increased demand for more finished goods.

The rise in employment in the other industries is scattered primarily among transportation, wholesale and retail trade, finance, insurance, real estate, mining, and governmental agencies. Due to the shortage of construction materials, the rise in employment in this industry has been decidedly less than in the former ones. Employment in the services is low relative to that in other industries.

NINTH DISTRICT COMPARED WITH NATION

The rise in employment in this district has been decidedly less than in other regions. In July of this year, employment in the nation reached a record peacetime peak of over 58 million individuals exclusive of those in the armed services. Civilian employment was 22 percent higher than in 1940 as compared with 10 percent in this district.[2]

The pattern of increase in employment among the industries in this district is similar to that found over the nation. All of the expansion in employment in the nation as compared with the pre-war period has taken place in the non-agricultural phase of the economy. Nearly one-half of the added employment is concentrated in manufacturing. The number of employees in July was one-third larger than in 1940.

In government service a percentage increase has taken place in employment comparable to that in manufacturing. In the other industries—transportation and public utilities, wholesale and retail trade, construction, finance, and services—the percentage rise in employment has been decidedly less, and in mining employment was 11 percent less than in 1940.

POSSIBLE SHIFTS IN EMPLOYMENT AS INDUSTRY ADJUSTS TO POSTWAR CONDITIONS

In the present business situation there is evidence of impending changes which may affect the future level of employment. As the economy moves out of the transitional period, the pattern of employment among industries may shift significantly.

Manufacturing plants are now producing for inventory as well as for current consumption. When inventories have reached a satisfactory level, production will be limited to consumer demand or temporarily reduced below the current demand. As the flow of raw materials is better coordinated, the output per worker will again rise in many concerns. Consequently, employment in manufacturing concerns may have reached its peak.

As building materials become more plentiful, the construction industry will bid for more labor. Thus far, the expansion in employment in this industry has been much less than in manufacturing.

When the labor market loosens in the non-agricultural phase of the economy, labor will find employment on farms more attractive. The manpower on farms was greatly depleted during the war. The armed forces drew a substantial portion of the most productive laborers and others found more lucrative positions in war plants. For a temporary period, there may be a net flow of labor back to farms. In the long run, however, it is probable that agriculture will account for a smaller proportion of the employed population than before the war.

Employment in the service industries also may become more attractive as the labor market loosens. The increase in employment as compared with the pre-war period in these industries has been decidedly less than in most others.

(Continued on Page 397)

[2] Since it is assumed that the number of self-employed individuals which declined during the war, is now only about equal to the number in 1940, the estimate of 1946 total employment is, in all probability, a conservative one.

AGRICULTURE

Huge Exports Support Wheat Prices

PROSPECTS are excellent for another record 1947 winter wheat crop.

Farm prices decline after all-time peak in mid-October.

Cash farm income for 1946 may total 20% above 1945 record.

FOR the sixth year in succession a bumper wheat crop was produced this season in the Ninth District. The crop this year was more than double the pre-war five-year average, 1935-39, and only about three percent below last year's record production. (See chart below.)

In spite of record breaking crops, wheat prices have increased steadily since 1940 until currently, about 18 months after VJ-day, prices are nearly two dollars a bushel to the farmers of the district. This compares with $1.46 in 1945 and $.87 in the 1935-39 period.

At first glance it seems rather paradoxical that wheat prices would be so low in the period of small crops and yet so high when production has more than doubled. The answer, of course, is that war changes things and the abnormal demands associated with war continue to be felt in the wheat market even this long after hostilities have ended.

The wheat market during the war years and since has been influenced by two major developments. First, a tremendous expansion in domestic use of wheat as feed for livestock during the war; second, a huge export demand, particularly for relief purposes after the defeat of Germany.

During the four years 1942 to 1945, inclusive, between 300 and 500 million bushels of wheat were used each year for feed purposes—much of it on a subsidized basis in order to stimulate livestock feeding. Before the war, wheat used as livestock feed took only about 122 million bushels annually on the average.

In the early part of the war only a relatively small quantity of wheat was exported, owing largely to U-boat activity, shortage of shipping space, and relatively large world stocks of food.

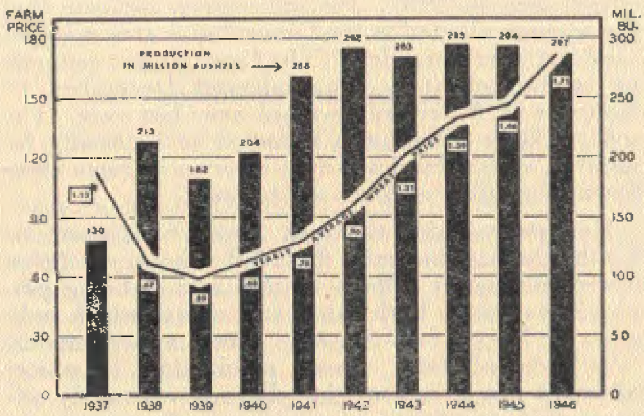
During most of the 1930's and up until 1943, wheat exports averaged less than 50 million bushels annually, but in 1945 nearly 400 million bushels were exported, with the amount exported in 1946 expected to total more than 300 million bushels. Much of this wheat has been handled through lend-lease and UNRRA, and has been used for relief purposes to a large extent.

Another thing that has given rise to the great demand for United States wheat in recent years has been widespread drouth conditions in the other major wheat-producing regions. This world drouth situation was largely broken in 1946, except in Australia, where the crop this year is estimated to be much below pre-war levels. The drouth in other wheat producing countries explains, at least in part, for United States exports in recent years having been the largest of the four major wheat-producing countries, namely: United States, Canada, Argentina, and Australia. Before the war, wheat exports from this country were the smallest of the four.

As worldwide food production gets back to a normal basis, it appears probable that less wheat will be required from the United States. Particularly will this be true if importing countries are required to pay for the wheat with dollar exchange, rather than taking it under other arrangements—much of it on a relief basis. It would seem that if domestic wheat prices are supported at 90 percent of parity until January 1, 1950, as is guaranteed under existing law, domestic wheat prices might be expected to average above the world wheat price, and importing countries would tend to get their supplies elsewhere. For example, England last July contracted with Canada to import 140 million bushels of wheat each year from the 1947 and 1948 harvests at prices approximately 20 percent below the present guaranteed support price of United States wheat.

Earlier this year the wheat export goal for this year's crop was set at about 250 million bushels. In late November the impression became rather general that enough wheat had been purchased to meet the goal, although a good share of it had not yet moved out because of transportation difficulties. As a result, wheat prices broke sharply the last two or three days of November—which reflects how sensitive wheat prices are to Government purchases for export. Subsequently prices strengthened when it became known that the Commodity Credit Cor-

WHEAT PRODUCTION AND PRICES IN THE NINTH DISTRICT[1]



[1] Minnesota, Montana, North and South Dakota.

poration would continue to purchase wheat, as export commitments had not yet been fully fulfilled.

Pressure to send wheat abroad for relief purposes in early 1947 may be expected to continue even though UNRRA as such may be out of the picture. The administration may be expected to cooperate on any program of exports that will tend to maintain wheat prices at parity levels until next July 1. The President is directed by law to support wheat and other "basic" and "Steagall" farm products at parity until July 1, 1947, and exporting wheat to meet relief needs is an excellent way to meet this commitment. After mid-1947 the support price is at 90 percent of parity at least until January 1, 1950.

The basic demand for wheat is still strong. Foreign importers would be glad to purchase more of United States wheat even at current high prices if they could get it. Transportation bottlenecks in the United States are an important factor tending to limit the amount of wheat that can be exported in the next several months.

It seems important, in a proper evaluation of the wheat market, to realize that the abnormal foreign demand is the backbone of present wheat prices.

In considering what the future trend of wheat prices may be, it should be remembered that normal domestic wheat uses amount to only about 750 million bushels annually. If 900 million to 1 billion bushel crops continue to be produced, carry-over surpluses may be expected to develop, with lower prices resulting, unless large exports are continued or stringent production control programs are adopted.

It may be significant to note that new crop 1947 wheat for July delivery in the Chicago futures in mid-December was selling around $1.78, or only slightly above the 1946 loan level. This would indicate the trade generally expects a decline in wheat prices.

Total wheat acreage goals for 1947 are 3 percent above 1946, although the 1947 goal in relation to 1946 varies from state to state. No production wheat control programs or marketing quotas are contemplated for 1947.

Prospects are excellent for another bumper winter wheat crop in 1947. Private reports indicate that the acreage planted in the Great Plains area may exceed last year's high level. The Government estimate on winter wheat acreage released December 19 indicates an 8 percent increase over last year. The soil moisture situation is reported as unusually favorable, with subsoil moisture reserves in some areas extending down as much as six feet.

Reports covering the area from Texas north to South Dakota indicate that fall wheat condition never was better. Much of this area is being pastured heavily by both cattle and sheep, which indicates a heavy fall growth. Since approximately two-thirds of total wheat production is winter wheat, it would appear that, barring extremely adverse crop conditions next spring and summer, another large wheat crop may reasonably be expected in 1947.

Average Prices Received by Farmers[1]

Commodity and Unit	Ninth District: Nov. 15 1937-1941 Avg.	Ninth District: Nov. 15 1945	Ninth District: Nov. 15 1946	Parity Prices[2] United States Nov. 15, 1946
Crops				
Wheat, bushel	$ .70	$ 1.50	$ 1.90	$ 1.87
Corn, bushel	.42	.98	1.08	1.36
Oats, bushel	.26	.63	.70	.846
Potatoes, bushel	.44	.96	1.08	1.57
Livestock and Livestock Products				
Hogs, 100 lbs.	7.15	13.95	22.24	15.40
Beef Cattle, 100 lbs.	7.22	10.27	17.56	11.50
Veal Calves, 100 lbs.	8.69	13.00	16.84	14.30
Lambs, 100 lbs.	7.99	12.57	16.19	12.50
Wool, lb.	.27	.44	.43	.388
Milk, wholesale, 100 lbs.	1.73	2.77	4.67	3.73
Butterfat, lb.	.33	.52	.89	.593
Chickens, live, lb.	.119	.209	.235	.242
Eggs, dozen	.253	.40	.404	.556

[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.

Prices received by farmers were the highest on record in mid-October. Since then, prices of most farm products produced in the Ninth District have declined slightly. It is believed by some competent observers that the price peak is now behind us and that the trend in farm prices will on the average slant downward.

Farm product prices in mid-November were 263 percent of the 1910-14 base and only 10 points below the peak of the previous month. Farm prices have nearly doubled from the time the United States entered the war, and are now about 30 percent higher compared with prices on VJ-day.

Farm prices reached a peak in early 1920 following World War I of 235 percent of the 1910-14 base. In contrast to the present war period, there was no general price control program over farm prices. The two war periods were, of course, not comparable in many respects, one of which was the length of the wars and the degree to which the United States was actively engaged in the struggle.

There was one thing in common, however, between the two war periods and that is the tremendous expansion in exports of foods, particularly for relief purposes following the end of hostilities. It is one of the great unpredictable feats of government that exports have been held to such a high level that domestic food shortages existed in recent months in spite of unprecedented agricultural production.

It should not be forgotten, however, that these large exports of farm products largely have been extended on a relief, lend-lease, or credit basis. The time may be near when relief will be ended, and loans curtailed, and then food exports may drop off sharply. This is what occurred early in 1920.

(Continued on Page 401)

BUSINESS

Record Retail Sales Totals Due to High Prices

DEPARTMENT store stocks rose 8% in dollar volume in November.

Ratio of stocks to sales now approximately that of pre-war.

Conservative trend evidenced by retailers and public because of price situation.

Car sales in district, 42% as many in first six months as in first half of 1941, in third quarter reached 76%.

CHRISTMAS shopping resulted in the usual upsurge in business activity toward the end of the year. Bank debits, an indicator of general business activity, for November stood at 291 percent of the 1935 to 1939 average—an increase of 16 points from October.

Department store sales have reached an all-time record level. For the four weeks ending December 7, sales in the four large cities of the district—Duluth, Minneapolis, St. Paul, and Superior—were 28 percent above those in the corresponding period of 1945. Sales in the other cities and towns of the district have shown a comparable percentage increase over a year ago.

The 14 percent rise in retail prices is the primary factor in the expansion of department store sales, accounting for roughly half the dollar increase in sales in this area during the last year. Since last September the increase in sales volume has not been as large as usually occurs at this time of year.

Department store stocks continued to rise in terms of dollar volume. At the end of November the stocks held by the stores in the four large cities were 3 percent larger than at the end of October after an allowance was made for the usual decline in stocks during the month. The stocks held by the stores in the other cities and towns of the district increased 8 percent during November.

The stocks held by department stores in the smaller cities and towns in recent months have risen faster than those held by the stores in the larger cities.

The ratio of stocks to sales is now approximately equal to the ratio maintained by the stores prior to the war. Stocks, of course, are still out of balance among departments; they are low in many durable goods items and are relatively high in some of the soft goods lines.

As a result of the rise in inventories in relation to sales, retailers have adopted a more conservative policy in their operations. Duplicate and triplicate orders outstanding for scarce items have been reduced or cancelled. In many instances, nearly all of the merchandise on orders outstanding have now been received. Furthermore, some manufacturers have already delivered their January and February orders.

The price situation is also causing retailers to adopt a conservative policy. The prices of numerous items are, undoubtedly, at a peak. With a larger supply of merchandise in the stores, consumers have become more selective in their purchases. Merchandise of inferior quality has moved slowly and, consequently, sales have been initiated at substantial price reductions to move this type of merchandise. If it is necessary to take inventory losses, retailers prefer to take them this year to reduce their net earnings for tax purposes.

Industry in this district was not materially affected by the recent coal strike. No industrial plants were closed and no employees were laid off. The only apparent effect was a 10 percent reduction in electrical energy production as a result of the brown-out.

The coal strike, moreover, according to competent observers, will have no effect on industry in this district in the next few weeks or months immediately ahead. Large stock piles of coal were accumulated in this region during the water transportation season. All manufacturers had large enough supplies of most raw materials, so the slight reduction in the output during the coal work-stoppage was not noticed. If industrial production is retarded during this winter, it will be caused by bottlenecks in raw materials which cannot be immediately attributed to the coal strike.

Consumer credit expanded noticeably during November. In commercial banks of this district, the amount outstanding increased by 8 percent.

This form of credit will continue to expand with the rise in the production and distribution of durable consumer goods. The sale of automobiles, where much consumer credit is used, is mounting steadily. According to passenger car registrations

(Continued on Page 401)

Northwest Business Indexes

Adjusted for Seasonal Variations—1935-1939 = 100

	Nov. 1946	Oct. 1946	Nov. 1945	Nov. 1944
Bank Debits—93 Cities	291	275	229	216
Bank Debits—Farming Centers	314	307	248	218
City Department Store Sales	269	264	215	181
Country Department Store Sales	236	244	191	165
City Department Store Stocks	247	240	153	154
Country Department Store Stocks	267	247	167	185
Country Lumber Sales	......	74	......	......
Miscellaneous Carloadings	145	127	128	144
Total Carloadings (Excl. Misc.)	137	135	110	122
Farm Prices —Minn. (Unadj.)	261	253	172	172

SPECIAL ARTICLE (From Page 393)

As the pattern of employment among industries begins to change, frictional unemployment—that is, the laborers unemployed as they shift from one job to another—will very likely increase. With a backlog of savings, laborers forced to seek employment in different industries will tend to devote some time to the search for the best job offered to them. Consequently, there may be some decline in total employment due to the time used by laborers in shifting to new jobs.

THE output per worker in the basic producing industries has increased significantly over a period of decades. As a result, employment has shifted from the basic industries—namely, agriculture, manufacturing, mining, fishing, and forestry—to some of the other industries which are broadly classified into construction, public utilities, finance, trade, and services. There is every reason to believe that this shift in employment will continue in the post-war years, although the shift is obscured frequently by the expansion and contraction in employment attributed to the general business cycle.

AGRICULTURAL EMPLOYMENT DECLINING

The use of machinery and of other technological developments in agriculture and related industries has continuously reduced the amount of labor needed to do a unit of work on farms over many decades. From 1870 through 1915 the number of individuals gainfully employed in agriculture increased 71 percent while the volume of agricultural products nearly tripled. From 1915 to 1940 the number of individuals gainfully employed in agriculture declined nearly 25 percent while the output of products continued to increase another 30 percent.[3] This trend continued during the recent war.

The steady stream of inventions and production of agricultural implements, the better crop varieties, the improved livestock strains, and superior farm management explain the steady rise in the output of agricultural products while the number of people engaged in agriculture increased slowly and later declined.

As a result of the greater output per worker, there has been a migration from farms whenever the opportunities for employment in other pursuits presented greater rewards. This movement from farms to towns and cities has been quite evident in the Ninth District. During the decade of the Twenties, over 350,000 people, excluding children under 10 years of age, left farms in this region.[4] In that period, agriculture operated under relatively depressed conditions while industry experienced prosperous conditions. Such a situation caused many ambitious people to seek the greater opportunities in the industrial centers. Due to the Great Depression which reduced drastically the opportunities for employment in the industrial centers in the early Thirties, the migration was halted and even reversed for a few years. By the end of the decade the net migration off farms, nevertheless, exceeded the number in the preceding decade by approximately 20,000. In the Dakotas the migration was increased by an amount which more than compensated for the decline in the other states. The severe and continued dust storms literally forced people from farms in those regions.

Although comparable figures on net migration are not available for the period from 1940 through 1945, population figures indicate a pronounced migration from farms in this area during the war. The civilian population in counties with cities of less than 10,000 population decreased 17.1 percent between April 1, 1940 and November 1, 1943; whereas in counties with urban centers of 10,000 and over, the civilian population decreased only 7.8 percent. During these years it was not, of course, the lack of productive employment in rural areas but the opportunities for employment at higher wages in the war production centers that stimulated farm labor to migrate to industrial centers.

As soon as a balance between labor and production on farms is reestablished, farms again may be a significant source of labor supply for other industries.

MANUFACTURING EMPLOYMENT HAS FLUCTUATED WITH BUSINESS CYCLE

Manufacturing plays an ever-increasing role in the economy, but employment has risen decidedly less than total output due to the increased use of machines. Machines have been invented to produce machines and products. Machine tools are constantly designed and redesigned to become more automatic and inclusive in their operations, and their precision has become almost uncanny. The ever-increasing use of these machines has replaced men in factories.

The number of wage earners in United States manufacturing establishments during the four decades of this century, from 1899 to 1939, increased by three-fourths. The output of manufactured products at the end of this period was 3¾ times the volume at the beginning of this period.[5] Since manufacturing ranks among the cyclical industries, the expansion in this industry is limited to the prosperous business periods. A peak in employment was reached during the first World War in 1918, when the number of wage earners was nearly double the number at the turn of the century. Another peak was reached in 1937, when employment was nearly equal to the former peak year. Output per worker during the latter part of the Thirties was approximately double the amount at the turn of the century.

Manufacturing employment in the Ninth Dis-

(Continued on Page 399)

[3] Solomon Fabricant, **Labor Savings in American Industry, Occasional Paper 23**, 1899-1939, National Bureau of Economic Research, Appendix. Table 1.

[4] The approximate net migration of rural-farm population was computed by the U. S. Department of Agriculture. In 1940 Yearbook of Agriculture, **Farmers in A Changing World**, United States Department of Agriculture, pp. 841-844 and subsequent mimeograph releases.

[5] Solomon Fabricant, **op. cit.** Appendix, Table III.

BANKING

Note Redemption Reduces War Loan Balances

THE major banking developments in the district during the past four weeks stem from the redemption for cash on December 15 of $3,261 million in Treasury notes due on that date.

This redemption was responsible for several developments. First, the funds utilized to redeem these securities were obtained by the largest percentage draft on war-loan deposits of the year, reducing by 50 percent the war-loan accounts at the 20 reporting banks.

Second, holdings of U. S. Treasury notes exhibited a $13 million decline since these were the securities up for redemption.

Third, the redemption resulted in some tightening of the reserve position, with the result that holdings of U. S. Treasury bills declined from $14 million to $6 million by mid-December, and borrowings, which were zero in mid-November, had risen to $17 million on December 18.

Most of the other developments were of comparatively nominal significance. Commercial, industrial, and agricultural loans during the month held about even after a persistent and strong upsurge during the preceding few months. Real estate loans expanded slightly. Loans for carrying securities declined another $2 million, but other loans, mostly to consumers, increased by the same amount. The net result of these various changes in the loan portfolio was to leave the total volume of loans outstanding approximately the same on December 18 as a month earlier.

BORROWINGS increase and bill holdings decline as reserve position tightens.

Country bank deposits experience slight expansion.

As indicated above, a substantial proportion of U. S. Treasury bill holdings was liquidated in order to meet the tighter reserve position, and holdings of U. S. Treasury certificates of indebtedness also declined by 10 percent. Deposits other than war-loan accounts went down by $29 million, a decline which, added to the reduction of war-loan accounts, brought the total deposit decline to $69 million for the month. The reserve position, which showed an excess of $2 million on November 20, exhibited a $2 million deficiency by December 18.

Country member banks' deposits continued their steady expansion and averaged $1,203 million during the last two weeks of November, up $18 million over the preceding month. Michigan and Wisconsin banks experienced a slight decline, while country banks in Minnesota and Montana accounted for most of the increase. The deposit increase at country banks in the Dakotas was quite nominal.

The amount of currency in circulation has increased steadily following a slight decrease during the first three months of this year. Since only national totals are compiled, it is impossible to give a figure on the amount outstanding in this district.

On October 31, $28,600 million of U. S. currency was in circulation. At the end of March the amount had decreased to $27,879 million from the former peak of $28,515 million at the end of December 1945. Prior to the war less than $10 billion ($8,732 million at the end of 1940) was in circulation—which indicates how rapidly the amount of currency in circulation rose during the war years.

The reserve position of all Ninth District member banks during the last half of November is shown in the accompanying table.

Assets and Liabilities of Ninth District City Member Banks

(In million dollars)

	11/20/46	12/18/46	Change
Assets			
Commercial, industrial and agricultural loans	$ 188	$ 187	$— 1
Real estate loans	39	40	+ 1
Loans for carrying securities	25	23	— 2
Other loans	78	80	+ 2
Total loans	330	330	
U. S. Treasury bills	14	6	— 8
U. S. Treasury certificates of indebtedness	69	62	— 7
U. S. Treasury notes	113	100	—13
U. S. Treasury bonds	631	629	— 2
Total U. S. Government securities	827	797	—30
Other investments	58	56	— 2
Cash, due from banks, and reserves	425	407	—18
Miscellaneous assets	18	16	— 2
Total assets	1,658	1,606	—52
Liabilities			
Deposits of U. S. Government	80	40	—40
Other deposits	1,473	1,444	—29
Total deposits	1,553	1,484	—69
Borrowings	0	17	+17
Miscellaneous liabilities	13	12	— 1
Capital accounts	92	93	+ 1
Total liabilities and capital	1,658	1,606	—52
Excess Reserves	2	—2	— 4

Daily Average Reserve Position for All Ninth District Member Banks for the 15-Day Period Ending November 30, 1946

	Average Reserves Carried (000)	Average Reserves Required (000)	Average Excess Reserves (000)
Reserve city banks	$185,806	$182,814	$ 2,992
Other city banks	32,149	28,730	3,419
Total city banks	217,955	211,544	6,411
Total country banks	202,022	169,885	32,137
Total Ninth District—1946	419,977	381,429	38,548
Total Ninth District—1945	329,277	291,410	37,867

SPECIAL ARTICLE

(From Page 397)

trict continued to expand during the Twenties. Since manufacturing is a cyclical industry, the trend of employment is not measured accurately by figures on decennial years; nevertheless, it provides a rough indication of the trend. In 1930, 245,000 individuals were associated with such concerns—an increase of nearly 7 percent over 1920. In the Thirties the number employed contracted sharply; the force in 1940 was 24 percent smaller than in 1930.

Among the states in the district the largest gain in manufacturing, on the basis of the number employed, was made in Minnesota in the Twenties. In 1930, nearly 17 percent more individuals were engaged in this industry than in 1920. On the Upper Peninsula of Michigan and in South Dakota, an expansion in the number employed also occurred between the two decennial years. In the other states, a decline occurred during the Twenties as well as during the Thirties.

Since manufacturing is highly sensitive to the general business cycle, the level of employment in this industry in the postwar era in a large measure will depend on prosperous or depressed business conditions. The application of more machinery always results in some labor-saving. Consequently, to maintain or increase employment in manufacturing it is necessary continually to increase the quantity or variety of products.

MINING AND FORESTRY EMPLOYMENT HAS DECLINED SHARPLY

In mining there is an inevitable depletion of resources. However, the depletion has been much less than frequently was predicted. The discovery of new resources offsets the depletion of known resources, and technological developments reduce the cost of mining and make possible the utilization of lower grade ores. According to the relationship between employment and output during the first four decades of this century, the latter forces have outweighed significantly the depletion of resources.

In the United States in 1939, employment in terms of man-days was about equal to those in 1920, while the output of minerals tripled.[6] This large increase in mineral production with an approximately constant labor force is attributed primarily to technological developments and secondarily to the discovery of new resources. The rapid advancement in technology has materially reduced the investment in capital per unit of output. Prior to the recent war, there was no evidence of diminishing returns in the industry.

In the Ninth District the number employed in the mining industry declined sharply in the two decades between the first and second World wars. The 36,000 individuals associated with the industry in 1940 were only slightly more than one-half of the number in the industry in 1920. The contraction occurred in both decades but was somewhat concentrated in the Thirties.

In South Dakota the number employed in mining, contrary to the general trend, expanded sharply. In 1930, it was 38 percent larger than in 1920, and in 1940 it was double the former number. This expansion in number employed is traced to the greater activity in gold mining.

As compared with the decade of the Thirties, a high level of industrial activity in the postwar era will stimulate greater activity in the extraction of minerals which are raw materials for the industrial machines. The extractive industry, however, is highly mechanized, and a substantial increase in the output of minerals will result in the employment of only a small number of additional workers.

Forestry and fishing in the district have become relatively insignificant industries. In 1940, employment in these industries comprised 3,000 workers, which was slightly less than 6 percent of the number employed in 1920.

EXPANSION FOUND IN CONSTRUCTION, DISTRIBUTION, AND SERVICE INDUSTRIES

The remaining industries, which are broadly classified into construction, public utilities, finance, trade, and services, are dependent to a considerable extent upon the basic industries.

Employment expanded decidedly during the Twenties. In 1930 the number of individuals employed in these industries was 15 percent larger than in 1920. Nearly all of the expansion occurred in wholesale and retail trade; in finance, insurance, and real estate; and in personal and professional services. Employment in construction was only slightly larger in 1930 than in 1920, while in public utilities it was slightly smaller.

In the Thirties the trend of employment, as measured by a comparison of the number employed in 1930 and in 1940, was downward in all industries —except in wholesale and retail trade and in finance, insurance, and real estate. The total number employed in these industries in 1940 was approximately equal to the number employed in 1930. As a result of the marked expansion in the Twenties, employment prior to the recent war still was approximately 15 percent larger than in 1920.

During the war, employees left these industries for the more lucrative jobs in the war plants. Consequently, employment was substantially below the 1940 level. Shortly after VJ-day, labor again began to return to these industries. By the summer of this year, employment exceeded the pre-war level by more than 10 percent.

SUMMARY

Employment in the basic producing industries declined in the Ninth District during the two decades between World Wars I and II. In 1940, employment was 17 percent smaller than in 1920. This decline was in large part a cyclical phenomenon for all of the decrease occurred during the period of

(Continued on Page 401)

[6] Solomon Fabricant, op. cit. pp. 7-10 and Appendix, Table II.

National Summary of Business Conditions

COMPILED BY THE BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM, DECEMBER 21, 1946

INDUSTRIAL production and employment in most lines of activity continued to be maintained at record peacetime levels in November. Department store sales in November and the early part of December were larger in dollar amount than the holiday trade last year, reflecting mainly increased prices. Prices of industrial commodities have generally advanced further, while a number of important farm products and foods have declined from previous peaks.

INDUSTRIAL PRODUCTION—Total output of manufactured goods and minerals, as measured by the Board's seasonally adjusted index, was 182 percent of the 1935-39 average in November. This was about the same as in October notwithstanding the sharp drop after November 20 in coal, coke, iron, and steel production as a result of work stoppages in the bituminous coal industry. After the resumption of bituminous coal output on December 9, activity at steel mills, which reached a low of 60 percent of capacity in the first week of the month, rose sharply and in the current week is scheduled at 84 percent.

Output of steel in the month of November was at an average rate of 84 percent of capacity as compared with 89 percent in October. Activity in the non-ferrous metals and machinery industries continued to increase in November and output of most other metal products was maintained at a high level. Lumber production showed less than the usual seasonal decline.

Output of manufactured food products was maintained in November at an exceptionally high level for this season of the year, reflecting chiefly further sharp increases in meat production and larger output of flour and sugar products. Production of cotton and rayon textiles, paperboard, rubber products, and some other non-durable goods showed further small gains in November.

Output of minerals declined 5 percent in November. Bituminous coal production dropped sharply as a result of work stoppages in the latter part of the month, while production of anthracite and crude petroleum was maintained at high levels and output of metals showed less than the usual seasonal decline.

CONSTRUCTION — Estimated expenditures on construction projects in November were maintained close to the peak levels reached in August and September. Contracts awarded for non-residential construction, however, were at the lowest level since the end of the war, according to reports of the F. W. Dodge Corporation; residential building awards were sharply below the peak rate reached in the spring, but were still considerably above last year's level.

DISTRIBUTION—Department store sales in November and the early part of December were about one-fifth larger than during the same period of the holiday shopping season last year. The total value of retail trade outside of department stores increased somewhat further in the fourth quarter, reflecting chiefly higher prices and larger expenditures for foods.

Loadings of railroad revenue freight declined in November due to the sharp drop in bituminous coal shipments at the end of the month. Loadings of manufactured products and most other classes of freight showed substantial gains, after allowance for seasonal changes.

COMMODITY PRICES — Following the initial sharp increases in basic commodities which occurred with the elimination of federal price controls on November 11, price changes have become more selective. Prices of copper, lead, steel scrap, and cotton gray goods for immediate delivery have advanced further, while prices of hides, turpentine, and silk have declined. During the past week there has been a sharp drop in hog prices. Wholesale prices of foods have decreased somewhat further from the sharply advanced levels reached in the middle of October. Prices of industrial products have continued to advance. In retail markets, prices of women's wear and some other items have declined, but in general retail prices have continued to advance.

BANK CREDIT—Commercial, real estate, and consumer loans increased further at banks in leading cities during November and the first half of December. Government security holdings declined considerably, reflecting Treasury cash retirement of notes and certificates. Deposits of businesses and individuals increased somewhat and currency in circulation rose by the usual seasonal amount.

The Treasury retired for cash during November and the first half of December $5.8 billion of Government securities held largely by the banking system. Withdrawals from war loan deposits at commercial banks to redeem securities reduced U. S. Government deposits at banks to a level of about $2 billion in mid-December as compared with $24 billion before the retirement program was begun in March.

SPECIAL ARTICLE

(From Page 399)

depressed business conditions in the Thirties. In 1930, employment was actually 4½ percent larger than in 1920 due to an increase in both agriculture and manufacturing.

With a prosperous postwar era, aggregate employment in the basic producing industries again may exceed substantially the total employed during the Thirties.

From the long run point of view, employment will continue to shift to the distributive and service industries as more labor saving devices are utilized in the basic industries.

—Oscar F. Litterer.

BUSINESS

(From Page 396)

in the four states wholly in this district, 42 percent as many cars were sold during the first six months of this year as in the first half of 1941, while in the third quarter the number sold rose to 71 percent of the number sold in the same period of 1941.

According to the trend of truck registrations, the sale of trucks during the second half of this year exceeds the 1941 sales. During the first half of this year, truck registrations in the four states were only 3 percent less than in the first half of 1941, and during the third quarter they were almost 5 percent above the pre-war year. A large number of loans have been made to G.I.s for the purchase of trucks.

Sales at Department Stores

	Number of Stores Showing Increase	Decrease	% Nov. 1946 of Nov. 1945	% Jan.-Nov. 1946 of Jan.-Nov. 1945
Total District	260	29	125	133
Mpls., St. Paul, Dul.-Sup.	21	2	126	135
Country Stores	239	27	123	130
Minnesota	71	8	122	128
Central	13	0	133	134
Northeastern	6	0	120	132
Red River Valley	4	0	114	129
South Central	15	4	117	122
Southeastern	12	1	124	131
Southwestern	21	3	119	127
Montana	33	4	125	134
Mountains	10	2	124	138
Plains	23	2	126	132
North Dakota	43	7	124	134
North Central	8	3	111	128
Northwestern	4	1	119	133
Red River Valley	16	1	129	139
Southeastern	13	1	125	131
Southwestern	2	1	122	131
Red Riv. Val.-Minn. & N. D.	20	1	127	127
South Dakota	39	5	120	129
Southeastern	13	2	119	130
Other Eastern	21	2	121	128
Western	5	1	127	128
Wisconsin and Michigan	53	3	122	126
Northern Wisconsin	16	0	122	129
West Central Wisconsin	27	3	122	124
Upper Pen. Michigan	10	0	120	130

Department Store Sales

	Percent One Year Ago Nov.	Jan.-Nov.	Percent 1935-39 Average
Minneapolis	123	135	343
St. Paul	134	136	301
Duluth-Superior	122	126	....
La Crosse	122	130	....
Mankato	113	120	....
St. Cloud	133	129	....

AGRICULTURE

(From Page 395)

Farmers are interested in the purchasing power of their dollar as well as the general level of farm prices; in other words, a comparison of prices paid by farmers with prices received. The prices paid index in mid-November was at 224 of the 1910-14 average—up 24 percent from VJ-day in August, 1945.

The theoretical measure of the farmers' well-being is found by comparing the prices received index with the prices paid index. In other words, the prices received index (263 mid-November) divided by the prices paid index (224 in mid-November) gives the so-called parity ratio of 117. If interest and taxes are also included in the prices paid index, the parity ratio at mid-November was 124. The all-time peak was the previous month, when the parity ratio was 132.

Just how favorable this is to farmers is demonstrated by a parity ratio of about 84 in the 1935-39 period and in the lower 60's during the early 1930's.

Cash farm income in Ninth District states continues to forge ahead of last year's record high levels. Data for the first nine months, January through September, show a 16 percent gain over the same period in 1945. Income data for the last three months of the year are not yet available, but considering the sharp increase that has occurred in farm prices after de-control in late September, and the recent large marketings of livestock, it is possible that 1946 district cash farm income may total nearly 20 percent above last year's all-time record.

Crop conditions were particularly favorable in South Dakota this season and this is reflected in a 34 percent increase in farm income over 1945 during the first nine months. In Montana and North Dakota, farm income was 18 and 16 percent above last year. Minnesota farm income was up 9 percent.

January-September Cash Farm Income[1]

(Thousands of Dollars)

State	1935-1939 Average	1945	1946	1946 in Percent of 1945
Minnesota	$ 247,481	$ 613,297	$ 666,181	109%
North Dakota	77,025	297,304	350,168	118
South Dakota	77,530	296,203	397,247	134
Montana	57,857	138,831	160,547	116
Ninth District[2]	516,913	1,489,920	1,729,236	116
United States	5,684,905	14,850,000	15,992,000	108

[1] Data from "The Farm Income Situation," United States Department of Agriculture.

[2] Includes 15 counties in Michigan and 26 counties in Wisconsin.