

MONTHLY REVIEW

of Ninth District Agricultural and Business Conditions
FEDERAL RESERVE BANK OF MINNEAPOLIS

Vol. 9

JANUARY 31, 1948

Serial
 No. 73

1947's Boom Provides 1948's Major Heritage

THE most important legacy which 1948 has inherited from its predecessor is a high and still rising volume of business activity, both nationally and in this area.

Gross national product, the most comprehensive measure of business activity, was \$232 billion in 1947. By the final quarter of 1947, gross national product was running at the annual rate of \$243 billion, a rise of 11 percent during the year.

Gross National Product (In Billion Dollars)

1929	\$104
1933	56
1940	101
1945	213
1946	204
1947	232
(Annual Rates by Quarters)	
1946—First quarter	192
Second quarter	197
Third quarter	208
Fourth quarter	219
1947—First quarter	223
Second quarter	229
Third quarter	232
Fourth quarter	(Est.) 243

Source: U. S. Department of Commerce; published in "The Economic Report of the President" transmitted to Congress January 14, 1948, p. 109.

1947 was therefore accorded the distinction of turning in a dollar volume of business never excelled in our history even at the peak rates of war production. This was a distinction of particularly exceptional merit in view of the unanimity of expectation that 1947 would herald the genesis of our first postwar depression.

BUSINESS INCREASE MOSTLY RISE IN PRICES

One of the least reassuring features of this expansion in the dollar volume of business was that it was accompanied by (and largely explained by) a roughly corresponding rise in prices. Gross national product in 1947 was 14 percent above 1946. The wholesale price index during 1947 rose by 15.5 percent, and during the latter half of 1947 the index

With Productive Capacity Fully Employed, Response to 1947's Expanding Demand Was Price Rise, Negligible Output Increase

was rising at an annual rate of almost 20 percent.

One of the striking features of the price rise in 1947 was that it was general in scope and affected all prices in a surprisingly similar manner. The three broad groups comprising the wholesale price index are: farm products; foods; all other. During the last half of 1947 (June to December) the general over-all wholesale price index rose 10.2 percent; the farm products group rose 10.2 percent; foods, 10.4 percent; and the all other groups averaged 10.1 percent.

It is apparent therefore that, while the relative rise in food prices slightly exceeded the price rise of other

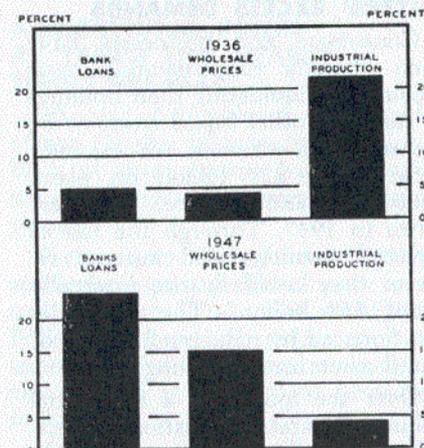
groups, the difference was quite modest, considerably less than has generally been believed. Even during the full year food prices actually increased less rapidly than the general average of all wholesale prices (11.5 percent for food and 15.5 percent for the average of all wholesale prices).

Percentage Change in Wholesale Prices

	Dec. 1946 to Dec. 1947	June 1946 to Dec. 1947	June to Dec. 1947
All commodities	15.5%	44.1%	10.2%
Farm products ..	16.5	39.9	10.2
Foods	11.5	58.3	10.4
All other	16.2	37.0	10.1

Source: Department of Labor; cf. "The Economic Report of the President," transmitted to Congress, January 14, 1948, p. 36 and p. 120.

PERCENTAGE INCREASE IN WHOLESALE PRICES, INDUSTRIAL PRODUCTION, AND BANK LOANS DURING 1936 AND 1947



Source: Wholesale prices, Bureau of Labor Statistics, Industrial production and bank loans, Federal Reserve Bulletin.

Note: Percentage increases from December 1935 to December 1936 and December 1946 to December 1947. Data for 1947 are preliminary.

PRODUCTION WAS AT CAPACITY IN 1947

A comparison of the physical or unit volume of production for 1947 with the previous year is, at first glance, encouraging.

In all phases of the economy the actual physical or unit volume of production in 1947 exceeded the previous year by moderate but comfortable margins with the exception of agriculture (largely to be explained by the unfavorable corn crop). The unit volume of manufacturing in 1947 averaged 10 percent above 1946 and 94 percent above the pre-war base period. Even the physical volume of construction registered a 7 percent gain. The largest spurt in the unit volume of production was turned in by the utilities industries with a 13 percent advance to a volume substantially more than double the pre-war period.

A more careful analysis of the situation reveals, however, some less

comforting observations. For example, the major reason that 1947 manufacturing production averaged 10 percent above 1946 was apparently the series of work stoppages and transitional problems which held the volume of production in 1946 to abnormally low levels.

A fact of fundamental importance is that the rate of industrial production made no appreciable gains after the latter part of 1946. The Federal Reserve industrial production index during the first quarter of 1947 averaged 189 percent of the 1935-39 period; for the final 1947 quarter 190 to 191—a gain of less than one percent.

When the actual decline in agricultural output is added to this, it seems reasonable to suggest that the actual physical or unit output of goods and services made only negligible gains during the year 1947 itself.

The business situation for 1947 can therefore be broadly characterized in this way: Production had levelled off; the pressure of excessive demands was calling forth rising prices and not rising production.

RISING PRICES GENERATE PUBLIC CONCERN

It is not surprising, in the light of these developments, that a problem of considerable public interest by the latter part of 1947 was the upward trend of prices, described above. Many questions were asked. What was causing prices to rise? What action should be taken to halt this rising trend? Is it because there is too much purchasing power? Or do the price increases signify a forthcoming shortage of purchasing power? In the confusion of these questions it is by no means clear that the simple basic causes of price inflation were at all clearly comprehended.

Prices were rising because businesses and consumers were in the aggregate laying out for themselves a volume of expenditures in excess of their current incomes. Yet the dollar value of total production is always exactly equal to total incomes. Therefore, when consumers and businesses are pushing their expenditures beyond their current incomes, the dollar value of the volume of production must rise accordingly.

In a period such as the Thirties when unemployed labor and unused productive resources are at hand, the result of this pushing of expenditures beyond current receipts is apt to be a corresponding increase in production. It is therefore a desirable development.

In a period such as 1947, when no unused productive resources and unemployed labor exist, the result of pushing expenditures beyond incomes is a corresponding rise in prices. Production, already at capacity, has little stretch left. The major impact must come on prices.

It is important that this simple but essential feature of our present economy be clearly understood. There is an inevitable undercurrent of suspicion that prices are rising because of the rapacity and anti-social conniving of some (other) elements in the economy. While this may have been true in some instances, the basic cause of our difficulties is simply that month after month at the then current prices we were trying to buy and consume more than we could produce.

In fact one of the not uninteresting features of our postwar economy is that in the case of some industries, traditionally thought to have some degree of monopolistic control over their prices, customers would apparently have been willing to pay higher prices than those actually charged—such as steel and automobiles. That is the significance of their so-called gray markets.

PRICE PRESSURES STEM FROM BUYERS' EXCESS DEMANDS

Consumers and businesses have been liberally supplementing their incomes by liquidating their holdings of cash and other liquid assets or by borrowing. Businesses, for example, spent about \$25 billion on plant, equipment, and additions to inventories in 1947. Through the use of retained earnings and current reserves they could finance internally about \$18 billion. The remainder was financed by reducing holdings of liquid assets or borrowing.

Over the long run, a substantial volume of capital formation is desirable. Increasing the amount of capital invested in industry per worker employed has been traditionally the single most important method of increasing standards of living. In 1947,

however, it meant that businesses were creating an upward pressure on prices by "deficit spending" to the extent of \$7 billion.¹ This meant a demand substantially in excess of then current rates of production destined to come into the market to bid for scarce goods whose supply could not readily be increased.

Consumers were also adding their bit to upward pressures on the price level by attempting to make good the arrears of the war years. According to a survey of consumer finances, published in mid-1947, 42 percent of all consumer units in 1946 drew down their bank balances or cashed in government bonds. These "deficit spending" consumer units thus acquired about \$10 billion of purchasing power in this manner and spent about 60 percent of it for automobiles, other durable goods, houses, and other investments.*

While data for 1947 are not yet available, it is not without significance that in the survey for 1946 an even larger number of consumers expected in 1947 to draw down liquid asset holdings than had expected to do so in 1946. It seems reasonable to conclude therefore that the consumer reduction in liquid asset holdings in 1947 provided additional purchasing power beyond incomes of roughly the same as 1946 (about \$10 billion). In addition a \$3 billion expansion of consumer credit provided consumers with that much more supplementary purchasing power.

Now, this consumer eagerness to expand the rate of spending would be eminently desirable if our problem were deficient demand or purchasing power—a period, for example, such as much of the pre-war decade. Then, otherwise unemployed productive resources would have been put to work as a result of this eagerness to expand spending. But, when we are already producing to the limit, the only conceivable response to an increase in demand is a rise in prices.

There can be no question, also, but

Continued on Page 532

1/ These are preliminary estimates from "The Economic Report of the President," transmitted to the Congress, January 14, 1948.

* "Survey of Consumer Finances: Expenditures for Durable Goods and Investments," Federal Reserve Bulletin, June 1947, p. 654. While 42 percent of all "spending units" reduced their liquid asset holdings, only 27 percent were negative savers—other current savings more than offset reduced liquid asset holdings for many consumer spending units. (Cf. Federal Reserve Bulletin, August, 1947, p. 953.)

AGRICULTURE

1947 Saw Record \$3½ Billion Farm Income

UNPRECEDENTED agricultural prosperity in the Ninth Federal Reserve district has brought a high degree of financial health to the total economy of the region. This is because agriculture accounts for a major share of the Upper Midwest total income as compared with only a minor share for the country as a whole.

During 1947, farmers in the Ninth district have received approximately \$3½ billion from marketings of crops, livestock, and livestock products. Not only does this high income ring the cash register for the farmer but also for those who market, process and distribute agricultural products to consumers. It is this handling and processing of food and fiber that forms a basis for much of the industry of the region.

When district crops are good and farmers have high net incomes, which has been the situation in recent years, almost everybody—and especially the smaller urban communities—feels the glow of prosperity. Merchants have a ready market for their products since farmers have an almost unlimited demand for various gadgets and equipment to make farm work easier and more efficient. Processors of farm products are busy. Various service industries are expanded to meet both rural and urban needs. Employment is high, bank debits increase, and the income payments to all individuals increase.

This is exactly what has happened during 1947, when total income payments to all individuals in the Ninth district states showed an increase of 14 percent above that of 1946.

CASH FARM INCOME 54% OF TOTAL INCOME PAYMENTS

The relative importance of agriculture to the district economy is forcefully indicated by a comparison of cash farm income and total income payments in the Ninth district and for the country as a whole. Actually, such a comparison overstates the importance of agriculture in our economy, since only net farm income (not the gross cash receipts) enters into income payments. Information on 1947 net farm income

for this area is, however, not yet available.

For the four full states in the Ninth district, 1947 cash farm income was equal to 54 percent of estimated total income payments. For the United States as a whole, cash farm income was equal to only 15 percent of total income payments to individuals. This comparison shows in a spectacular way agriculture's dominant position in the Ninth district economy.

Even in the district, however, there is considerable variation from state to state in the share of income that goes directly to farmers. This is illustrated in the table covering 1947 data.

Net Income Payments to Individuals and Cash Farm Income in 1947
(In Millions)

	Estimated net income payments to individuals	Cash farm income	Cash farm income as % of income payments
Minnesota	\$ 3,446	\$ 1,331	38%
Montana	764	382	50
North Dakota ..	748	720	96
South Dakota ..	782	675	86
United States ..	190,000	30,000	15

Note: Cash farm income is not strictly comparable to net income payments, since production expenses are not taken into account in farmers cash income from marketings. State data on net income to farmers, which is comparable to total income payments, will not be available until about mid-1948.

AGRICULTURAL PRICES AT YEAR'S END NEARLY TREBLE PRE-WAR

The size of farm income is a result of two factors: price and production. Both of these factors have demonstrated phenomenal growth in recent years.

Farm prices were held relatively stable during the period of price control from late 1942 until mid-1946. Following decontrol, prices spurted almost a third higher and at present are perched at the highest pinnacle in history.

A year ago practically everyone was of the opinion that a mild recession in agricultural prices was in store, at least by late 1947. Actually, prices advanced about as much as

CASH farm income in 1947 was 54% of district net income payments, where U. S. average is only 15%.

Crop production was down slightly but above pre-war.

Declining livestock numbers indicate less marketings in 1948.

Bank loans to farm real estate up 28%, July 1, 1946, to July 1, 1947.

Land values show sharpest increase in wheat areas.

it was thought they would decline. In retrospect, it is easy to spot the principal factors which reversed the expected trend. One was the short corn crop in the U. S., another was the large exports due to drouth and resultant terrific food shortages in Europe.

Observers are more cautious now in their prognostications, but there seems to be general feeling that farm prices will show little if any weakness during the first half of the year. What happens in late 1948 will reflect largely domestic and world crop conditions and U. S. financing of the so-called Marshall Plan.

Prices received by farmers in December 1947 were nearly treble pre-war. For many important individual crops produced in the Ninth district such as wheat, corn, oats, soybeans, and flaxseed, prices were nearly quadruple pre-war. (See table on prices received by farmers.)

Prices paid by farmers for production and living costs have not quite doubled from pre-war. As a result the parity ratio (prices received divided by prices paid) has been extremely favorable all through 1947. On December 15, this ratio was 123 compared with 84 for the 1935-39 average.

CROP PRODUCTION SLUMPS SLIGHTLY IN 1947, BUT WAS MUCH LARGER THAN PRE-WAR

Production of most important farm products in the district has greatly expanded from pre-war. Wheat production in 1947 was second only to that of 1944 and more than double

pre-war.

Corn production was down almost a fourth from the large crop of 1946, but still 40 percent above the 1935-39 average.

Flax acreage was greatly expanded in 1947 over 1946 — especially in North Dakota. Yields were good and district production totaled $33\frac{1}{3}$ million bushels. More than 85 percent of the flax produced in the U. S. last year was from Ninth district states. Thirty-three million bushels of flax at nearly \$6 a bushel brought tidy incomes to flax producers last year.

Oats production was 11 percent below last year, but substantially above pre-war.

Soybean acreage and production has been expanded many times pre-war.

Rye acreage and production were nearly double the low 1946 levels, but were only about half pre-war averages.

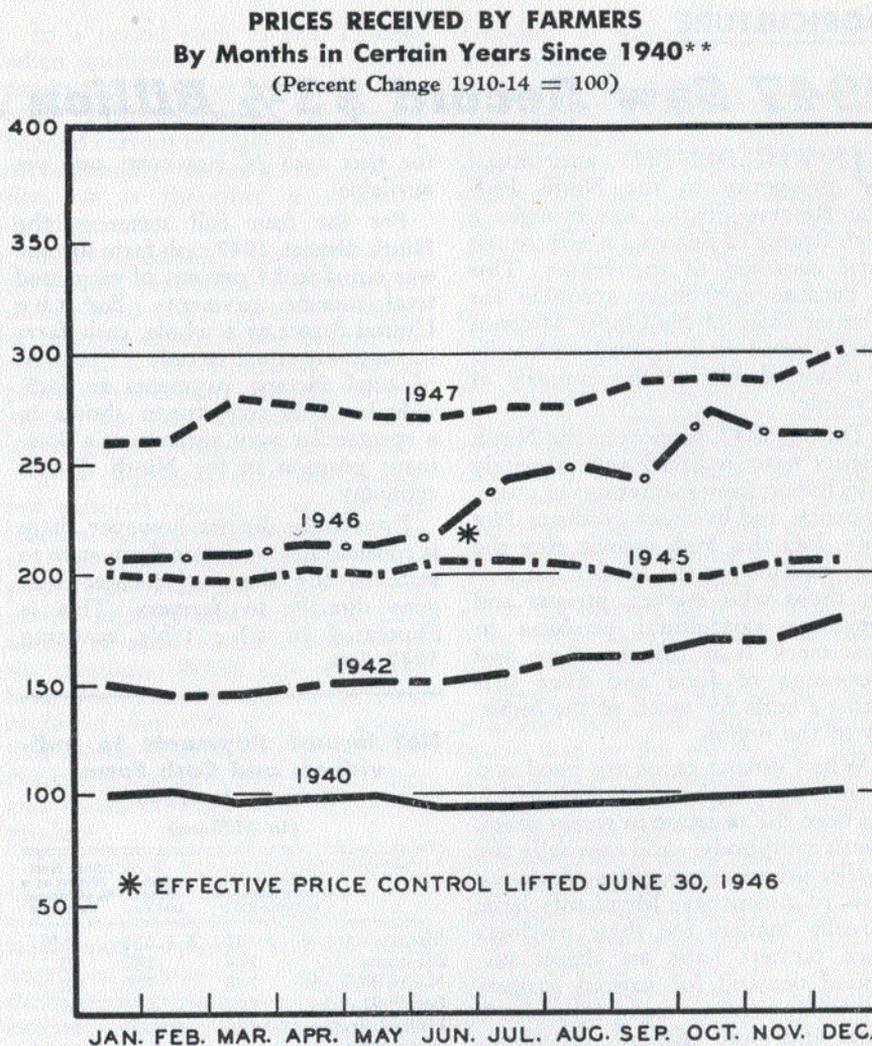
LIVESTOCK NUMBERS DOWN

Livestock numbers on farms in the Ninth district have declined from wartime peaks. Judging from slaughter data, the decline in cattle and hog numbers during 1947 may have been substantial. This decline is due partly to unfavorable feeding ratios and partly because of exceptionally high livestock prices.

Cattle numbers in the Dakotas, Minnesota, and Montana a year ago totaled about 9.5 million head. At the peak, in 1944, there were approximately 9.8 million head. This compares with only 7.1 million head for the 1935-39 average. The decline in cattle numbers for the U. S. as a whole has been much more general than has been true in the ninth district.

Hog numbers in the district have declined more than any other class of livestock from their wartime peak. Hog numbers a year ago were little different from what they were in 1940. Although data are not yet available for 1947, further reduction in numbers appears probable. The number of sows expected to farrow next spring may be 8 to 9 percent less than last spring, which means a further reduction in pork for 1948.

Sheep numbers are down drastically from the war peak and below the 1935-39 average.



**Source: U. S. D. A.—“Agricultural Situation.”

Chicken numbers have been reduced, but a year ago were half again as high as they were in the pre-war 5-year average. Turkey numbers a year ago were down 30 percent from the previous year and 43 percent below the pre-war 5-year average. Further decline in both chicken and turkey numbers has occurred during 1947, according to reports.

Reduction in livestock and poultry and turkey numbers is principally a result of declining feed supplies and unfavorable feed-price relationships.

Continuation of unfavorable feeding ratios beyond mid-1948 would eventually be reflected in relatively low per capita meat supplies. It is the current unfavorable feeding ratios and the prospect of a reduction of 8 percent or so in per capita meat supplies which lead many observers

to predict continued high livestock prices during 1948.

1947 FARM INCOME 29% OVER 1946 — NEARLY FIVE TIMES PRE-WAR

District cash farm income continued to push up during 1947. The total may approximate \$3½ billion. The 1935-39 average was less than \$750 million. Looking at the figures another way, the average cash income per farm was \$1,638 for the pre-war average. In 1947, it was \$8,123.

Net income data are not yet available for 1947, but since parity ratios in 1947 were much more favorable compared with pre-war, it would appear farmers' current net income position was even more favorable than is their cash income position.

Continued on Page 530

BANKING

Member Bank Loans Expand 27% in 1947

THE 1947 balance sheets of the Ninth district member banks reflected the substantial business and agricultural boom and the uncertainty incident to the inevitably less automatic availability of funds which accompanies exceptionally high levels of business activity.

The boom itself is reflected in the continued substantial expansion of bank loans and the roughly corresponding rise in deposits after an allowance is made for certain offsetting factors.

Deposits of all member banks in the district increased to a new record volume by the end of 1947 of \$3,552 million, an increase of \$235 million during the year or a 7.1 percent expansion. Demand deposits of individuals and businesses, which rose 10 percent in 1947, accounted for \$173 million of this expansion, or substantially over half the total increase.

Deposits of states and political subdivisions displayed the largest relative gain for the year of 23 percent or \$43 million. Deposits due to other banks declined \$2 million, and deposits of the U. S. government were reduced to \$41 million, about half the volume at the end of 1946. This compares with deposits of the U. S. government of \$550 million at the end of 1945, over 12 times the current figure.

HEAVY LOAN EXPANSION CONTINUED

The demand for bank credit continued in substantial volume during the year, as usual, slightly stronger during the second half of the year than during the first six months. An increase of \$161 million (27 percent) in loans in 1947 brought the year-end total to \$754 million. This represents the largest year-end volume of loans for member banks in this area since 1930 and is substantially above the pre-war volume.

The loan expansion was, however, by no means uniform. Miscellaneous loans to individuals, largely consumer loans, showed the greatest percentage jump in 1947, spurring upward by 42 percent to \$122 million by the year-end. Loans on nonresidential urban real estate experienced the next larg-

est relative increase of 41 percent, rising from \$22 million to \$31 million in 1947.

Commercial and industrial loans accounted for just over half the total expansion, though they represented only 40 percent of the loan volume outstanding at the beginning of 1947.

Loans on urban real estate continued a persistent rise during 1947 to a total outstanding of \$134 million by the year's end, a 33 percent expansion.

DAKOTAS register largest relative member bank deposit increases for the district.

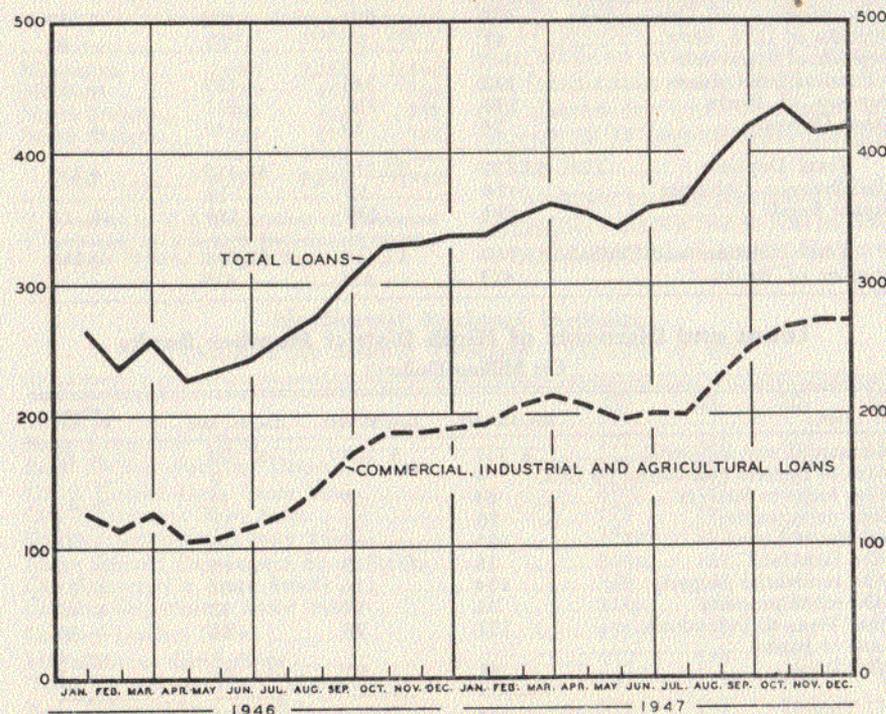
Member bank investments reflect shift out of intermediate maturities.

Loans on farm land, as was true of 1946, continued to rise at a rate considerably lower than the average relative expansion for all loans. These loans increased from \$16 to \$18 mil-

Ninth District Member Bank Deposits
(In Million Dollars)

	12/31/46	6/30/47	12/31/47	Change During 1947
Minnesota	\$1,994	\$1,920	\$2,121	\$ +127
Montana	448	419	477	+ 29
North Dakota	238	231	265	+ 27
South Dakota	304	308	347	+ 43
N. W. Wisconsin.....	184	183	187	+ 3
U. P. Mich.....	149	149	155	+ 6
TOTAL	\$3,317	\$3,210	\$3,552	\$ +235

NINTH DISTRICT WEEKLY REPORTING MEMBER BANK LOANS, 1946-47
(In Million Dollars)



Note: Month-end figures in all cases.

lion during 1947, with all the increase centered in the first half of the year.

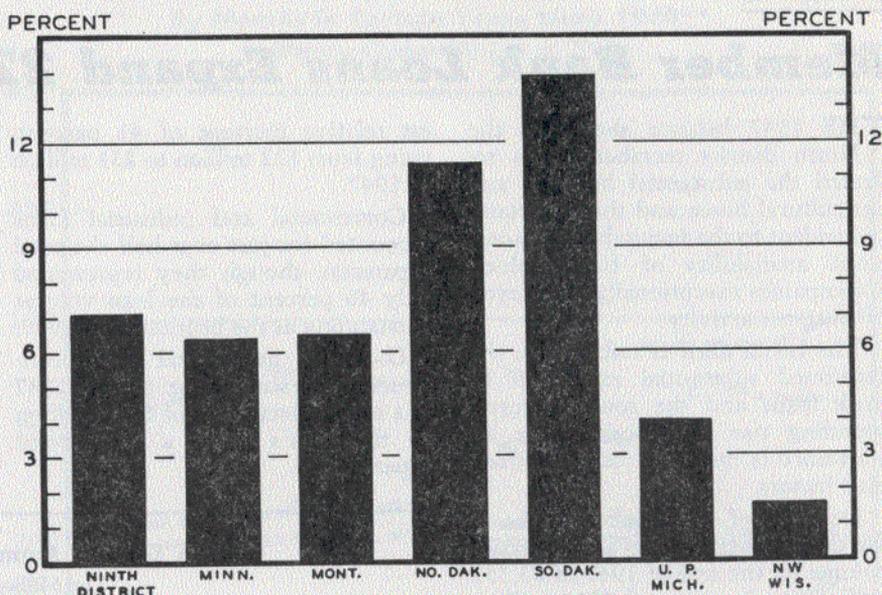
Loans on securities continued through 1947 the downward trend of the preceding year, shrinking from \$31 million at the beginning of 1947 to \$26 million at the end.

The general conclusion seems inescapable that the demand for credit was general in scope and characteristic of boom demands for credit.

BANKS SHIFT TO SHORTER MATURITY SECURITIES

One of the more important monetary and credit developments of 1947 was the slight stiffening of credit terms, particularly during the latter part of the year. In a sense this was to be expected and has been a comparatively regular part of the picture after a boom has progressed for some time. During 1947 three steps were taken which probably re-

PERCENTAGE INCREASE IN MEMBER BANK DEPOSITS, 1947



Note: Percentage increase from December 31, 1946, to December 31, 1947.

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

	Dec. 31, 1947	June 30, 1947	Dec. 31, 1946	\$ Change During 1947
Loans and Discounts.....	\$ 754	\$ 664	\$ 593	+161
U. S. Govt. Securities.....	1,827	1,767	1,912	- 85
Other Investments.....	186	162	144	+ 42
Cash and Due from Banks.....	967	795	840	+127
Other Assets.....	26	26	25	+ 1
Total Assets.....	\$3,760	\$3,414	\$3,514	+246
Demand Deposits of Individuals, Partnerships and Corporations....	1,926	1,674	1,753	+173
Time Deposits of Individuals, Partnerships and Corporations....	929	901	872	+ 57
Deposits of U. S. Govt.....	41	33	81	- 40
Deposits of States and Political Subdivisions.....	232	246	189	+ 43
Deposits of Banks.....	390	326	392	- 2
Other Deposits.....	34	30	30	+ 4
Total Deposits.....	\$3,552	\$3,210	\$3,317	+235
Miscellaneous Liabilities.....	14	15	14	.....
Capital Funds.....	194	189	183	+ 11
Total Liabilities and Capital....	\$3,760	\$3,414	\$3,514	+246
Number of Banks.....	475	473	470	

Loans and Discounts of Ninth District Member Banks (In Million Dollars)

Type	Dec. 31, 1947	June 30, 1947	Dec. 31, 1946	\$ Change Yr. 1947
Commercial and industrial.....	\$ 321	\$ 267	\$ 239	+ 82
Loans to farmers guaranteed by CCC	4	1	9	- 5
Other loans to farmers.....	65	65	52	+ 13
Loans on securities.....	26	22	31	- 5
Real Estate Loans.....	183	161	139	+ 44
On farm land.....	18	18	16	+ 2
On residential property.....	134	116	101	+ 33
On other property.....	31	27	22	+ 9
Other loans to individuals.....	122	98	86	+ 36
Loans to banks.....	.....	.....	1	- 1
Other loans.....	33	50	36	- 3
Total.....	\$ 754	\$ 664	\$ 593	+161

tarded moderately the tendency for banks to shift out of short-term government securities and into commercial loans.

First, the pegged rate of 0.375 percent on U. S. Treasury bills was relaxed in July and the so-called repurchase option provision was terminated. The bill rate was then allowed to adjust itself in the market in relation to other securities. By December the bill rate had risen to a monthly average of 0.95 percent.

Second, the rate on certificates of indebtedness was allowed to rise from $\frac{7}{8}$ percent to $1\frac{1}{8}$ percent, the transition to the new rate beginning with the certificates maturing on August 1, 1947.

Third, on December 24 the Federal

Continued on Page 538

Ninth District Member Bank Holdings of U. S. Government Securities

(In Million Dollars)

	Dec. 31, 1947	June 30, 1947	Dec. 31, 1946	\$ Change Yr. 1947
Treasury Bills	\$ 39	\$ 18	\$ 27	\$ + 12
Certificates of Indebtedness	207	213	286	- 79
Treasury Notes	189	175	216	- 27
U.S. Savings Bonds	82	67	70	+ 12
Other bonds, 5 yrs. from call	511	394	360	+151
Other bonds, 5-10 yrs. from call	585	712	765	-180
Other bonds, 10-20 yrs. from call	151	120	120	+ 31
Other bonds, after 20 yrs.	63	68	68	- 5
Total.....	\$1,827	\$1,767	\$1,912	\$ - 85

BUSINESS**1947 Income Boost Stems from Rising Prices**

THE Ninth district economy during 1947 found all plants and equipment operating close to full capacity. Some types of skilled laborers were scarce throughout most of the year. Individuals unemployed were largely those seeking better jobs than they had previously held.

The trend of industrial production in this district can be estimated only indirectly, since the national index of industrial production, which measures the trend of physical output, is not broken down by geographical areas.

The consumption of electrical energy by industrial plants in the Northwest is an indicator of the output of finished products. According to Federal Power Commission reports, the four states wholly in this district in 1947 consumed 16 percent more electrical energy than during the preceding year.

The sales made by power companies to commercial and industrial users constituted over one-half of their total sales. These sales increased by approximately 12 percent, almost as much as those made to residential users.

DOLLAR INCOME HIGH

The high level of economic activity coupled with the substantial rise in prices and wages has boosted the incomes of individuals significantly above the previous year level. The rise in prices has boosted substantially both farm and business incomes.

The index of wholesale prices, as compiled by the U. S. Bureau of Labor, rose by 15 percent between December 1946 and December 1947. The index of retail prices, as compiled by the U. S. Department of Commerce, rose during the past year by approximately 10 percent (the increase from December 1946 to September 1947 was 7 percent).

The volume of agricultural products marketed, coupled with the rise in prices, has boosted the 1947 cash farm income for this district to approximately \$3½ billion, which is 29 percent larger than in 1946.

Wage earners' income, in the aggregate, rose largely through higher

hourly rates and a larger number of individuals on payrolls. Average weekly earnings of production workers in Minneapolis manufacturing plants during the last quarter of 1947 were approximately \$4.25 higher than during the first quarter of the year. In the St. Paul manufacturing plants, the rise in average weekly earnings was even greater, approximately \$8.00.

In addition to the higher wages paid to labor, the number of workers in Ninth district manufacturing plants was about 7 percent larger than in 1946. This has raised significantly the aggregate payrolls in the district.

The large farm and business incomes plus the expanded payrolls created a total 1947 income exceeding all previous records. The 1947 income payments were estimated for the states wholly within the district. These payments represent the amount of income received by individuals residing in these states.

**Income Payments in the
Ninth District**
(In Million Dollars)

	1945 ^{1/}	1946 ^{1/}	1947 ^{2/}
Minnesota	2,666	3,082	3,446
Montana	539	669	764
North Dakota.....	588	624	748
South Dakota.....	599	673	782
Total	4,392	5,048	5,740

^{1/} Compiled by U. S. Department of Commerce.

^{2/} Estimated by Research Department of Minneapolis Federal Reserve Bank.

Northwest Business Indexes

(Adjusted for Seasonal Variations—1935-1939 = 100)

	Dec. 1947	Nov. 1947	Dec. 1946	Dec. 1945
Bank Debits—93 Cities	322	339	282	237
Bank Debits—Farming Centers.....	375	367	330	250
Ninth District Dept. Store Sales.....	276p	281	251	199
City Department Store Sales.....	299	295	272	218
Country Department Store Sales.....	254p	267	231	180
Ninth District Department Store Stocks.....	306p	281	281	155
City Department Store Stocks.....	269	250	269	149
Country Department Store Stocks.....	336p	306	290	160
Country Lumber Sales.....	173p	126	142	157
Miscellaneous Carloadings	152	143	154	138
Total Carloadings (excl. Misc.).....	105	135	103	99
Farm Prices (Minn. unadj.).....	302	287	265	175

p/ preliminary

**WHOLESALE prices rose 15%;
retail prices about 10%.
Department store sales rose
10%.**

Amount of construction contracts awarded expanded rapidly during latter half of year.

1947 iron ore shipments were a peacetime record.

The estimates were based on the trend in cash farm income in the respective states and estimated total income payments for the United States. Cash farm income by states for the first 10 months of 1947 was secured from the U. S. Department of Agriculture. The farm income for the last two months was estimated from the seasonal trend in farm income for the respective states. An estimate of the 1947 national income payments was secured from the U. S. Department of Commerce.

On the basis of the above estimates, the Ninth district in 1947 secured a larger share of the total national income than in the preceding year. National income payments for 1947 have been estimated at \$190 billion, which represents an increase of 12 percent from the preceding year, while an estimate of \$5,740 million for the four states wholly within this district for 1947 represents an increase of 14 percent from the preceding year.

The larger income payments do not necessarily reflect a rise in real income or in the amount of goods and serv-

ices that the majority of individuals can buy with their dollar income. The cost of living in Minneapolis in September 1947 was 8 percent higher than in December 1946. It is safe to assume that living costs rose by at least 10 percent during 1947.

A comparison between the rise in department store sales and retail prices reflects a leveling off in the physical volume of merchandise sold. Dollar sales in the Ninth district for 1947 were 10 percent larger than in the preceding year. Since retail prices rose also by approximately 10 percent, the aggregate units of merchandise sold most likely did not increase.

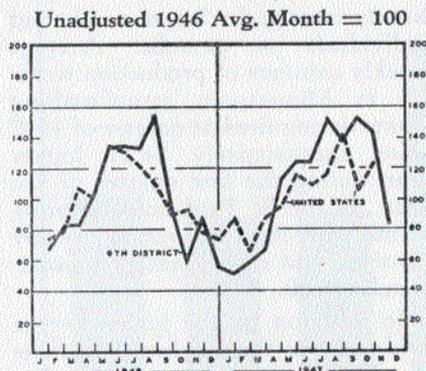
The relatively larger rise in farm income as compared with non-farm income is reflected in the trend of department store sales. In the rural areas, dollar sales during 1947 rose more than in the urban areas. For instance, dollar sales of country department stores in 1947 were 12 percent larger than in the preceding year, while for city department stores the increase was only 9 percent.

CONSTRUCTION ACTIVITY SLUMPED FROM 1946 PEAK

On the basis of contracts awarded, construction activity in general during the past year was about 5 percent below the 1946 level. Figures available on all types of construction, other than residential, for the entire Ninth district indicate that contracts awarded during the first 11 months of 1947 totaled \$166 million. This represents an increase of 4 percent over the same period in the preceding year. Since VJ-day residential construction reached a peak in 1946. In that year \$103 million worth of contracts were awarded, while in 1947 it fell short of the former total by approximately 20 percent.

Commitments made for industrial building since VJ-day reached a peak in 1946. Contracts awarded in this district, excluding Montana and the Upper Peninsula of Michigan, as compiled by the F. W. Dodge Corporation, totaled over \$31 million, a figure far greater than for any other peacetime year. In the boom year of 1929, contracts awarded for industrial building totaled only slightly over \$12 million. The amount of contracts awarded in 1946 was exceeded by only one war year, 1942, when \$65½ million worth of contracts were awarded.

INDEX OF CONSTRUCTION CONTRACTS AWARDED IN 9TH DISTRICT AND U. S. (Residential Construction Excluded)



Source: Estimated by Board of Governors from figures compiled by F. W. Dodge Corporation.

During the past year, contracts awarded totaled approximately \$20 million, a decrease of 36 percent from the preceding year.

Commitments made for commercial building were large in 1946 but were even larger in 1947. During the two years approximately \$17 million and \$19 million worth of contracts were awarded, respectively. The latter total was equalled only in 1930.

Since construction activity in the Ninth district slipped during 1947, it is of interest to note how the severity of the slump in this area compared with that which occurred over the entire nation.

On the accompanying chart, the average monthly amount of contracts awarded during 1946 for all types of construction, excluding residential, was plotted as 100 percent. On this

Index of Department Store Sales by Cities (Unadjusted 1935-39 = 100)

	Dec. 1/	Percent Change 2/ From Year Ago Jan.-Dec.	
Minneapolis	473	+ 14	+ 7
St. Paul	422	+ 13	+ 11
Duluth-			
Superior	.....	+ 22	+ 13
Great Falls	504	+ 6	+ 15
La Crosse	394	+ 12	+ 12
Mankato	404	+ 15	+ 6
St. Cloud	521	+ 12	+ 1

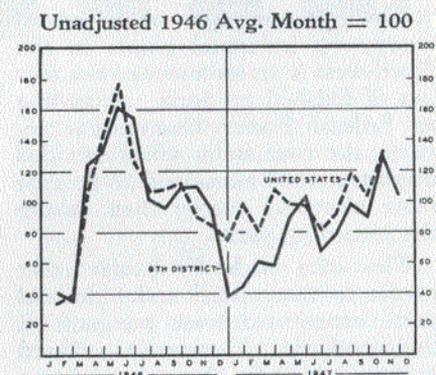
1/ Based on daily average sales.

2/ Based on total dollar volume of sales.

basis, a direct comparison can be made of the level of activity during 1947 in the nation and in this area. It is evident from the chart that the amount of contracts awarded in this district declined more during the first quarter but increased more during the next three quarters than in the nation.

A similar chart plotted for residential building indicates that the slump in this type of building was decidedly more severe in this area than in other regions. However, from the low

INDEX OF CONTRACTS AWARDED FOR RESIDENTIAL CONSTRUCTION IN NINTH DISTRICT AND IN U. S.



Source: Estimated by the Board of Governors from figures compiled by F. W. Dodge Corporation.

point reached at the beginning of 1947 there has been a more rapid recovery in this district than in the nation.

According to the amount of building permits issued, however, more building plans were initiated during the past year than in the former year. Seventy-five cities in this district issued building permits which aggregated 10 percent more in value than in the former year. High costs and shortages of materials and of skilled labor apparently held up a substantial proportion of these construction plans.

DISTRICT MINERAL OUTPUT EXPANDS

The 1947 output of minerals increased on account of a larger output of iron ore and gold.

Iron ore shipments from Lake Superior ports during the 1947 season totaled 78 million tons, which repre-

sents an increase of 31 percent over the 1946 shipments. The 1946 shipments of 59 million tons were, however, the lowest since 1939; bottlenecks in operations and crippling labor strikes caused this unusually low output.

The 1947 season proved to be a peacetime record year. The 78 million tons shipped was surpassed only by the four war years from 1941 to 1944. The all-time peak was reached in 1942 when 92 million tons were shipped from the Lake Superior ports. The previous peacetime record was set in 1929 when 65 million tons of ore were shipped from this region.

In spite of the large iron ore shipments, stocks at docks and at blast furnaces on November 30 aggregated 43 million tons, only slightly over 1 million tons larger than a year ago. Thus, the demand for iron ore again will be large during the coming season.

During the past year there was some evidence that gold production may have leveled off. Even though production for the first 11 months was 33 percent larger than for the same period of 1946, there was no indication of an increase in the monthly output. As compared with the pre-war level, gold production is still at a low figure. Average monthly production in 1947 was 34,964 troy ounces, while in 1939 and 1940 it was 52,002 and 53,606 troy ounces, respectively.

Copper production in 1947 exceeded the 1946 output by a small margin of 2 percent. Production throughout the year remained quite stable, which may indicate that the industry has stabilized itself.

Silver production declined 4 percent in the past year. In this district, silver is primarily a by-product in the

Sales at Ninth District Department Stores¹

	% Dec. 1947 of Dec. 1946	% Jan.-Dec. 1947 of Jan.-Dec. 1946	Number of Stores ^{2/}	
			Increase	Showing Decrease
Total District	114	110	209	33
Mpls., St. Paul, Dul.-Sup.....	114	109	20	3
Country Stores	114	112	189	30
Minnesota	114	108	56	9
Central	113	102	7	1
Northeastern	111	107	4	0
Red River Valley.....	112	108	4	0
South Central	114	112	13	3
Southeastern	115	111	11	1
Southwestern	114	109	17	4
Montana	115	113	26	4
Mountains	116	112	11	1
Plains	113	113	15	3
North Dakota	115	116	41	6
North Central	115	112	8	1
Northwestern	119	112	6	0
Red River Valley.....	124	123	16	1
Southeastern	109	110	9	4
Southwestern	(3)	(3)	....	....
Red River Valley-Minn. & N. D....	122	120	20	1
South Dakota	116	111	37	8
Southeastern	121	114	11	4
Other Eastern	110	108	19	4
Western	115	110	7	0
Wisconsin and Michigan.....	113	111	29	3
Northern Wisconsin	108	112	7	1
West Central Wisconsin.....	113	111	13	2
Upper Peninsula Michigan.....	115	112	9	0

^{1/} Percentages are based on dollar volume of sales.

^{2/} December 1947 compared with December 1946.

^{3/} Not shown, but included in totals. Insufficient number reporting.

mining of base metal ores, especially copper. A decline in the output of silver generally is traced to smaller quantities of copper ores and tailings treated for silver.

FREIGHT CARLOADINGS UP

As a result of increased 1947 production, a larger volume of raw materials and finished products moved through the Ninth district economy. Total carloadings less miscellaneous were 9 percent larger than in the preceding year.

Of the agricultural products, grain

and grain products shipments were 1 percent larger than in 1946, while livestock shipments declined by 23 percent.

Forestry products increased by 7 percent. Iron ore shipments, as previously stated, far exceeded those in 1946. Coke shipments were 21 percent larger and coal loadings were almost equal to the number loaded in 1946.

Finished merchandise shipped in less-than-carload lots was nearly equal to the volume shipped in the preceding year. END

1947 SAW RECORD \$3½ BILLION FARM INCOME

Continued from Page 525

The contrast of farm incomes in 1947 with 1946 and pre-war is even more pronounced in certain areas of the district. In North Dakota for example, cash income per farm for the 1935-39 average was \$1,531. In 1947, it was \$10,347, an increase of 675 percent.

There are fewer farms now com-

pared with pre-war, and this fact tends to accentuate the differences in average income per farm to some extent. There were an estimated 454,337 farms in the Ninth district in 1940 compared with only 432,154 in 1945.

The trend of farm income in 1948 will, of course, be influenced by farm prices and production. It would be excessive optimism to expect confidently that another bumper crop may be produced in 1948.

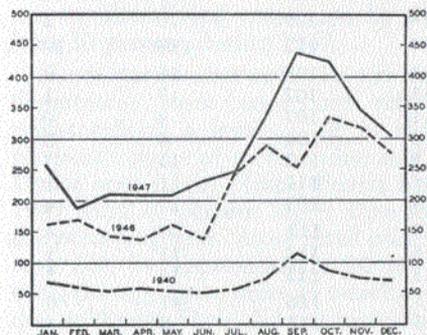
Certainly, there will be less livestock to market, assuming that farmers will endeavor to maintain normal breeding herds. In fact, when farmers start increasing livestock numbers, marketings may decline proportionally.

The weather during the summer of 1948 in the Ninth district, the U. S., and for that matter in all agricultural lands, will pretty much determine farm income levels for Ninth district farmers.

Concluded on Next Page

NINTH DISTRICT CASH FARM INCOME BY MONTHS FOR 1940, 1946, AND 1947

(In Million Dollars)



Source: "The Farm Income Situation."

AGRICULTURAL LOANS BY BANKS INCREASE IN 1947

Commercial banks in the Ninth district expanded the dollar volume of agricultural loans during 1946 and 1947. The expansion started from a low base, and the proportion of such loans to bank deposits is still relatively low.

Member banks in the district increased their farm real estate loans 28 percent from mid-1946 to mid-1947. At the same time, other loans to farmers advanced 18 percent.

This increase in bank loans is partly due to increased availability of new farm equipment, an increasing number of young farmers taking over farm operations as the older farmers retire, and increased prices of farm land and equipment.

In spite of the increase in agricultural loans in recent months, the over-all debt position of Ninth district farmers does not appear excessive.

Total farm real estate debt in the Ninth district was estimated at only \$539 million on January 1, 1947. This compares with \$827 million on January 1, 1940, and the peak of \$1,745 million on January 1, 1923.

Although complete data are lacking, it appears that farmers' short-term debts are less than 50 percent of the peak following World War I.

LAND VALUES SHOW SHARP INCREASE DURING 1947

Farm land prices in the Ninth district got into high gear during 1947 with sharper advances than for the

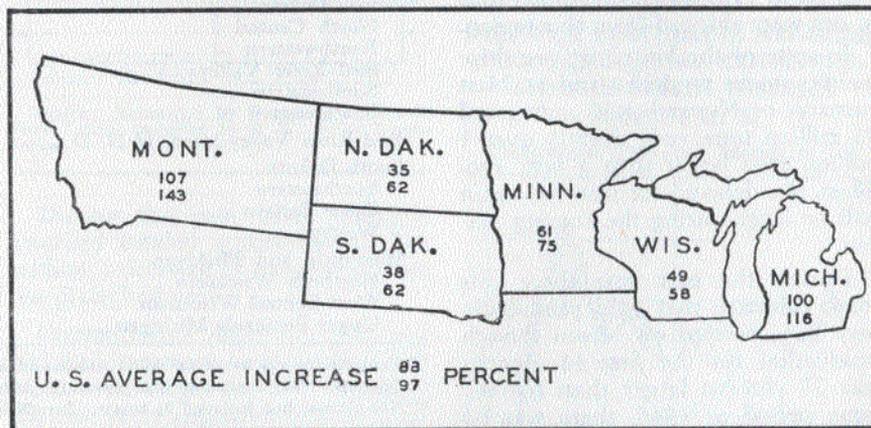
country as a whole. Increases were particularly noticeable in the wheat areas of the district. For example in the Dakotas, farm land values went up from 135 and 138 percent of the 1935-39 average on November 1, 1946, to 162 percent on November 1, 1947. Increases were also sharp in Montana, with lesser increases registered in Minnesota and Wisconsin.

(See chart.)

In spite of sharp increases in value during 1947, land prices in the district have had less of a rise since pre-war days than for the country as a whole. In view of extremely favorable wheat crops and wheat prices, it is encouraging that land values have not had much greater inflation.

END

PERCENTAGE INCREASE IN NINTH DISTRICT FARM LAND VALUE FROM 1935-39 AVERAGE TO: NOVEMBER 1, 1946 (TOP FIGURE) NOVEMBER 1, 1947 (LOWER FIGURE)



Source: Current Development in the Farm Real Estate Market Nov. 1, 1946 and 1947.

January-October Cash Farm Income¹
(Thousands of Dollars)

State	1935-1939 Average	1946	1947	1947 in Percent of 1946
Minnesota	\$ 281,466	\$ 823,711	\$ 1,083,353	132%
North Dakota	92,795	400,914	605,231	151
South Dakota	89,304	397,725	561,836	141
Montana	73,817	221,710	298,307	135
Ninth District/ ²	584,578	2,040,829	2,776,984	136
United States	6,683,437	19,112,576	24,170,416	126

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

Average Prices Received by Farmers, Ninth District¹

Commodity and Unit	December 15 1937-1941 Avg.	December 15 1946	December 15 1947	Parity Prices ^{2/} United States December 15, 1947
Crops				
Wheat, bushel	\$0.75	\$1.94	\$2.85	\$2.17
Corn, bushel .....	.44	1.06	2.34	1.57
Oats, bushel .....	.28	.74	1.11	.978
Potatoes, bushel .....	.48	1.13	1.49	1.83
Livestock and Livestock Products				
Hogs, 100 lbs.....	6.88	22.45	24.74	17.80
Beef Cattle, 100 lbs.....	7.23	17.10	19.65	13.30
Veal Calves, 100 lbs.....	8.61	17.15	22.93	16.50
Lambs, 100 lbs.....	8.04	17.80	21.69	14.40
Wool, lb. ....	.27	.42	.43	.448
Milk, wholesale, 100 lbs.....	1.75	4.74	4.27	4.29
Butterfat, lb. ....	.34	.92	.93	.705
Chickens, live, lb.....	.118	.233	.189	.279
Eggs, dozen .....	.238	.387	.491	.632

1/ Data compiled from Dec. 29, 1947, "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.

1947's BOOM PROVIDES 1948's MAJOR HERITAGE

Continued from Page 523

that our foreign trade created considerable upward pressure on prices (particularly certain ones) in 1947. Our exports approached \$15 billion in 1947; our imports almost \$6 billion. This lopsided trade created a net export surplus of roughly \$9 billion. This is, of course, inflationary. There was \$9 billion of income paid out in the production of goods which did not turn up on the shelves to be purchased with the incomes. Nor did an offsetting volume of imports appear. These income dollars were all dressed up and with no place to go.

On the other hand, the inflationary impact of our foreign trade should not be overemphasized—heavy as admittedly it was. Exports in 1947 of \$14.8 billion were 6.4 percent of gross national product, surprisingly close to the roughly 5 percent of the late Twenties and considerably below the 9.7 percent of 1919 or the 9.2 percent of 1920, and almost equal to the 6.2 percent of 1921 (a depression year).

Relationship of U. S. Exports to Gross National Product

(In Billion Dollars)

Year	Mdse. Exports	G.N.P.	% Exports to G.N.P.
1919	7.8	80.6	9.7%
1920	8.1	88.0	9.2
1921	4.4	70.5	6.2
1928	5.0	96.9	5.2
1929	5.2	103.8	5.0
1940	3.9	100.5	3.9
1946	9.5	203.7	4.6
1947	14.8	231.0	6.4

U. S. Agricultural Exports and Cash Farm Income

(In Billion Dollars)

Year	Agric. Exports	Cash Farm Income	% Agric. Exports to Cash Farm Inc.
1919	4.1	14.6	28.1
1920	3.4	12.6	27.0
1921	2.1	8.2	25.6
1928	1.9	11.1	17.1
1929	1.7	11.3	15.0
1940	0.5	8.3	6.0
1946	3.6	24.5	14.7
1947E	3.8	30.4	12.5

Source: Data for 1919-1940 "Agricultural Outlook Charts, 1948," U. S. Department of Agriculture, November, 1947, p. 2; 1946-1947 data from "The Demand and Price Situation," U. S. Department of Agriculture, December, 1947, p. 5. 1947 estimated on basis of first three quarters. Cash farm income data from the "Agricultural Statistics Yearbook" and "The Farm Income Situation."

Even the proportion of cash farm income accounted for by agricultural exports; 12.7 percent in 1947, was considerably below the 17.1 percent of 1928 and the 15.0 percent of 1929.

One of the most reassuring features of the 1947 economic picture was the cash surplus of the federal government. This cash surplus, which differs from the conventional budgetary surplus by measuring only the difference between cash receipts from the public and cash payments to it, was \$5.6 billion for the year.¹

This process therefore meant that the federal government extracted \$5.6 billion more from the public than it paid back to the public. In this manner some of the upward pressure on prices from the use of supplementary sources of purchasing power by consumers and businesses (plus the net export surplus) was relieved.

This brief description of the picture of 1947 business developments is enough to highlight the elemental fact that our major problem of the year was excessive purchasing power. While it may seem unrealistic to state it this way, in a very fundamental sense the problem was also that the price level was too low to maintain a balance between incomes and expenditures. With production at capacity levels, the only possible response could be rising prices.

EXCESS DEMANDS FINANCED FROM TWO SOURCES

There are, broadly speaking, two sources by which consumers and businesses (and governments) can push their spending beyond their incomes or receipts. One is by drawing down bank balances or cashing bonds. This, as described earlier, has been a source of supplementary purchasing power of considerable importance. To the extent that wars are not financed by taxes, they leave a heritage of liquid assets in the hands of businesses and individuals which, as they are expended, have contributed to postwar price rises.

Another important source has been the 25 percent expansion in bank loans. An expansion of bank loans places purchasing power in the hands of a borrower without a corresponding reduction in the purchasing power of someone else. When productive

resources are not fully employed, as during the pre-war decade, such an expansion in purchasing power serves us well.

When, however, resources are fully employed, the case is not so clear. Rising prices then are about the only response which the economy can make to the added purchasing power which an expansion of bank loans represents. This is precisely, of course, what happened in 1947. Bank loans increased 24 percent nationally; the wholesale price index advanced 16 percent; industrial production increased by less than 1 percent.*

This is not to imply that banks were engaged in speculative lending. It does mean that in 1947, as is apt to be true during any period when capacity production has been achieved, loans which in each individual instance seem sound and of a bona fide character may in the aggregate merely permit businesses or consumers more effectively to bid against each other for scarce materials, driving up prices. The facts on prices, production, and bank loans suggest that this is substantially what was occurring in 1947.

'48's FIVE MAJOR QUESTIONS

The five major questions, which only 1948, at the ripe old age of 366 days, can answer, are these:

First, what will be the size of our exports and the extent to which they will be matched by offsetting imports?

Second, what will be the investment decisions of business?

Third, will businesses be able to acquire the funds necessary to the financing of this volume of investment in plant, equipment, and inventories (capital formation)?

Fourth, what will be the relationship between governmental receipts and expenditures?

On the answers to these questions largely hinges the answer to the final one. Will 1948 witness a continuation of the present upward trends in production, prices, and incomes?

—Paul W. McCracken

* This is true only when measuring the index of industrial production from the beginning to the end of 1947. The 1947 average was about 10 percent above the 1946; but this is largely because of artificially low levels of production in 1946. At the end of 1947 the Federal Reserve industrial production index was about one percent above its level at the beginning of the year.

MEMBER BANK LOANS EXPAND 27% IN 1947

Continued from Page 527

Open Market committee lowered the support price on government bonds to slightly above par.

The inevitable uncertainty incident to these even moderately tempering actions, together with other developments only indirectly related to monetary policy, precipitated a considerable shift in bank-held debt from 5-10 year bonds to 1-5 year securities. Most of this shift occurred during the latter part of the year.

Member banks in this district reduced their portfolios of U. S. government securities from \$1,912 million at the end of 1946 to \$1,767 million by June 30, 1947, increasing them to \$1,827 million by the end of 1947. These moderate changes in total holdings obscure important changes in the type of securities held. During the last half of the year, holdings of bonds five to 10 years from call declined from \$712 million to \$585 million, a decline of 18 percent in the six-months period. Most of this apparent shift out of bonds 5 to 10 years from call is to be explained by the fact that a substantial volume of securities, classified throughout 1946 in the 5 to 10 year group, moved into the 5-years-from-call group by 1947. Since holdings of bonds callable after 10 years increased by \$26 million, the net decline in holdings of longer-term bond holdings (callable after five years) was \$101 million.

As would be expected, holdings of bonds with shorter maturities increased substantially during this period. Holdings of bonds five years or less from call increased \$117 million during the last half of 1947; notes increased \$14 million; and bills \$11 million. Of the shorter-term issues only holdings of certificates declined from June to December 1947.

These developments are, of course, precisely what would have been expected in view of the heavy demand for funds and the inevitable uncertainties introduced with even moderate changes in policy. Investors tend to shift into the shorter-term issues pending a clarification of developments. Since a major problem in 1947 was the almost excessively heavy demand for funds, with consequent

Assets and Liabilities of 20 Reporting Banks

(In Million Dollars)

	Nov. 26, 1947	Dec. 31, 1947	Jan. 14, 1948	\$ Change Nov. 26-Dec. 31
Assets				
Comm., Ind., & Ag. Loans.....	\$ 254	\$ 252	\$ 254	\$ — 2
Real Estate Loans.....	53	55	55	+ 2
Loans on Securities.....	20	20	19	....
Other Loans	90	91	93	+ 1
Total Loans.....	\$ 417	\$ 418	\$ 421	\$ + 1
U. S. Treas. Bills.....	18	10	33	— 8
Certificates of Indebt.....	39	40	40	+ 1
U. S. Treas. Notes.....	64	66	67	+ 2
U. S. Govt. Bonds.....	603	580	576	— 23
Total U. S. Govt. Sec.....	\$ 724	\$ 696	\$ 716	\$ — 28
Other Investments	68	70	71	+ 2
Cash and Due from Banks.....	457	526	476	+ 69
Miscellaneous Assets	16	14	14	— 2
Total Assets	\$1,682	\$1,724	\$1,698	\$ + 42
Liabilities				
Demand Deposits, I. P. C.....	\$ 817	\$ 858	\$ 814	\$ + 41
Demand Deposits, U. S. Govt.....	26	17	14	— 9
Due to Other Banks.....	342	340	365	— 2
Other Deposits	387	402	398	+ 15
Total Deposits.....	\$1,572	\$1,617	\$1,591	\$ + 45
Borrowings	2	0	0	— 2
Miscellaneous Liabilities	11	10	10	— 1
Capital Funds	97	97	97	....
Total Liabilities and Cap.....	\$1,682	\$1,724	\$1,698	\$ + 42
Excess Reserves	10	12	— 4	+ 2

upward pressure on the general price level, such developments undoubtedly exercised some salutary restraining influence on credit and capital expansion.

Two other banking developments in the district during 1947 warrant some comments. One was the continued expansion in holdings of securities other than of the U. S. government (Other Investments in the table). During 1947, holdings of these earning assets rose from \$144 million to \$186 million, a rise of 29 percent. During the two-year period ending on December 31, 1947, these assets in member banks in this area have expanded by almost 50 percent—from \$125 million at the end of 1945 to \$186 million currently.

INCREASE IN CAPITAL FUNDS LAGS BEHIND EXPANSION IN RISK ASSETS

The other change in the banking picture during 1947 was the \$11 million of funds added to the capital accounts of member banks. This 6 percent increase was slightly less than

the roughly 7 percent increase in assets. The so-called capital-to-deposit ratio therefore declined from 5.53 percent at the end of 1946 (4.35 percent at the end of 1945) to 5.46 percent at the end of 1946.

An alternative comparison which has been used in recent years, in addition to the capital-to-deposit ratio, is the ratio of capital to risk assets—the latter usually defined as all assets except vault cash, balances due from other banks, and U. S. government securities.

For member banks in this district the ratio of capital to these risk assets was 28.1 percent at the end of 1945, 24.0 percent at the end of 1946, and 20.1 percent at the end of 1947. The latter is somewhat lower than the corresponding ratio for 1940, which was 21.3 percent (though considerably higher than, for example, the 14.6 percent of December 1929).

The data clearly suggest therefore that the admittedly substantial additions to capital funds in recent years have not kept up with the increases in riskier assets. END

The 1935-39 Average and the Years 1944 to 1947 in the Ninth Federal Reserve District

BUSINESS

Northwest Business Indexes (Monthly Averages — 1935-39 = 100)

	1943	1944	1945	1946	1947
Bank Debits—93 Cities	182	200	211	252	306
Bank Debits—Farming Centers.....	185	206	226	293	359
Ninth District Department Store Sales	148	164	185	247	273 _p
City Department Store Sales.....	152	170	197	261	284
Country Department Store Sales.....	145	159	174	233	262 _p
Ninth Dist. Department Store Stocks	151	169	165	212	267 _p
City Department Store Stocks.....	141	153	157	208	242
Country Department Store Stocks.....	159	181	171	214	286 _p
Country Lumber Sales	137	115	121	125	136 _p
Miscellaneous Carloadings	120	129	127	127	132
Total Carloadings (excl. misc.)	124	126	119	112	123
Farm Prices—Minnesota	171	171	175	212	272

p—Preliminary

Index of Department Store Sales by Cities (Monthly Averages — 1935-39 = 100)

	1943	1944	1945	1946	1947
Minneapolis	156	176	207	276	294
St. Paul	142	156	181	242	269
Duluth-Superior	163	185	205	242	274
Great Falls	185	199	209	273	314
LaCrosse	150	164	174	226	253
Mankato	162	181	202	242	256
St. Cloud	180	218	259	334	336

Bank Debits

	1935-39 Av.	1944	1945	1946	1947
TOTAL—108 Cities	\$ 9,988,121	\$19,672,630	\$20,998,772	\$24,964,152	\$30,403,101
Minneapolis	4,076,953	8,023,312	8,589,221	10,062,865	12,334,351
St. Paul	1,929,849	3,813,602	4,010,888	4,550,699	5,338,788
South St. Paul.....	264,108	595,499	539,746	671,408	984,867
Duluth-Superior	566,771	1,123,146	1,161,570	1,253,206	1,495,154
Michigan—14 Cities.....	251,171	464,821	502,549	601,568	724,769
Minnesota—38 Cities	791,036	1,451,762	1,565,949	2,056,285	2,463,669
Montana—15 Cities	747,514	1,410,675	1,524,498	1,753,480	2,097,608
North Dakota—13 Cities.....	561,721	1,173,919	1,278,802	1,620,197	1,982,296
South Dakota—16 Cities.....	514,531	1,094,174	1,230,635	1,592,905	2,025,969
Wisconsin—7 Cities	284,467	521,720	594,914	801,539	955,630

(T-h-o-u-s-a-n-d-s)

Country Check Clearings

	1935-39 Av.	1944	1945	1946	1947
TOTAL	\$ 2,085,295	\$ 4,135,602	\$ 4,616,783	\$ 6,096,571	\$ 7,801,576
Minnesota	1,016,178	1,897,312	2,069,002	2,735,702	3,468,877
Montana	242,415	491,402	579,920	759,640	952,279
North and South Dakota	535,293	1,220,993	1,353,533	1,772,427	2,338,788
Michigan and Wisconsin	290,712	525,895	614,328	828,802	1,041,632

(T-h-o-u-s-a-n-d-s)

Retail Sales

	1935-39 Av.	1944	1945	1946	1947
414 Lumber Yards (Board Feet).....	100,921	115,843	122,092	125,744	137,039 _p
414 Lumber Yards (Dollar volume)....	\$ 14,744	\$ 24,652	\$ 27,206	\$ 35,326	\$ 48,037 _p
City Department Stores (19 stores)...	62,344	106,086	123,154	163,991	178,634 _p
Country Dept. Stores (500 stores)...	69,872	111,362	120,458	163,014	186,150 _p
Minnesota (176 stores).....	21,887	34,121	36,651	50,154	56,576 _p
Montana (80 stores).....	15,264	22,398	24,298	32,833	37,815 _p
North Dakota (92 stores).....	12,478	21,256	22,234	31,830	37,123 _p
South Dakota (85 stores).....	9,795	17,270	19,840	25,953	29,405 _p
Mich. and Wis. (67 stores).....	10,448	16,317	17,435	22,244	25,231 _p

p—Preliminary

Inventories, December 31

	1935-39 Av.	1944	1945	1946	1947
421 Lumber Yards (Board feet).....	56,293	59,639	27,246	20,444	56,431 _p
14 City Department Stores.....	\$ 11,961	\$ 15,612	\$ 15,881	\$ 28,953	\$ 27,724
110 Country Department Stores ¹	5,613	7,740	7,078	13,275	15,329 _p

¹ Inventories for 1946 and 1947 reported at retail. Inventories for earlier years reported at cost.

p—Preliminary

Accounts and Notes Receivable, December 31

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
385 Lumber Yards	\$ 2,135	\$ 1,808	\$ 2,307	\$ 2,446	\$ 4,157 ^p
14 City Department Stores.....	7,263	7,157	7,973	13,136	17,035 ^p
p—Preliminary					

Freight Carloadings — N. W. District

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
TOTAL	4,764	5,979	5,847	5,631	6,024
Grain and Grain Products.....	453	714	744	676	682
Livestock	168	219	227	235	181
Coal	308	294	397	367	370
Coke	68	100	95	81	97
Forest Products	433	596	483	520	556
Ore	790	1,479	1,414	1,125	1,436
Miscellaneous	1,551	1,974	1,951	1,952	2,027
Merchandise—LCL	990	499	532	675	675

Electric Power Production (KWH)

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
TOTAL	1,986,043	5,612,137	5,571,751	6,070,503	7,044,838
Minnesota	1,509,249	2,622,190	2,677,213	2,937,868	3,496,182
Montana	1,392,160	2,459,863	2,317,961	2,458,609	2,764,383
North Dakota	198,608	289,411	312,104	352,741	418,145
South Dakota	138,890	240,673	264,473	321,285	366,128

Life Insurance Sales

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
TOTAL	\$ 207,564	\$ 255,218	\$ 283,721	\$ 459,941	\$ 487,476
Minnesota	148,572	169,487	184,446	294,323	304,256
Montana	22,720	26,259	31,280	53,158	57,956
North Dakota	17,781	28,245	33,830	54,627	57,821
South Dakota	18,491	31,227	34,165	57,833	67,443

Manufacturing and Mining

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
Flour Production:					
Minneapolis Mills (bbls.)	6,007	7,542	8,196	8,384	9,480
Other N. W. Mills (bbls.).....	9,031	11,078	14,538	14,634	15,374
Flour Shipped from Mpls. (bbls.).....	6,552	6,610	7,249	7,309	8,158
Linseed Product Shipped (lbs.).....	226,529	926,340	630,360	667,200	690,840
Iron Ore Shipped (gross ton).....	40,030	81,170	75,714	59,357	77,898

Construction Contracts Awarded in Ninth District

	1935-39 Av.	1944	1945	1946	1947
			(T-h-o-u-s-a-n-d-s)		
TOTAL	\$ 87,002	\$ 40,823	\$ 83,335	\$ 243,648	\$ 241,288
Public Works	32,593	11,488	10,314	52,002	66,539
Public Utilities	8,133	5,053	7,760	27,353	24,562
Total Building	46,276	24,282	65,261	164,293	150,187
Residential	19,640	5,979	19,547	94,026	77,871
Commercial and Industrial.....	8,453	15,003	30,301	48,692	41,335
Educational	8,496	1,307	1,466	3,048	8,672
All Other	9,687	1,993	13,947	18,527	22,309

Business Failures in Ninth District

	1935-39 Av.	1944	1945	1946	1947
Number	235	8	11	18	48
Liabilities	3,549,000	113,000	171,000	710,000	5,714,000

AGRICULTURE

Cash Income from Farm Marketings (USDA)

	1935-39 Av.	1944	1945	1946	1947 ¹	1947 in Per- cent of 1946
(T-h-o-u-s-a-n-d-s)						
Ninth District—TOTAL	\$ 744,407	\$2,142,135	\$2,303,578	\$2,717,221	\$3,509,394	129%
Crops	188,621	709,921	828,861	920,907	1,306,999	141
Livestock and Livestock Products	491,981	1,343,621	1,387,864	1,679,637	2,085,718	124
Government Payments ²	63,805	88,593	86,853	116,677	116,677	100
Michigan (15 counties)	11,852	27,452	29,245	34,644	39,039	112
Minnesota	346,863	838,967	900,983	1,107,905	1,331,194	120
Montana	92,904	271,779	269,255	315,712	382,271	121
North Dakota	113,247	460,919	482,383	519,773	720,664	138
South Dakota	110,244	366,469	436,990	514,033	675,648	131
Wisconsin (26 counties)	69,297	176,549	184,722	225,134	243,901	108

¹ 10 months actual and 2 months estimated.² 1947 Government Payments estimated to be the same as 1946.

Source: "Farm Income Situation."

Farm Production 4 Northwest States¹

	1935-39 Av.	1944	1945	1946	1947	1947 in Per- cent of 1946
(T-h-o-u-s-a-n-d-s)						
Wheat (Bu.)	141,102	295,930	282,615	282,989	284,624	101%
Corn (Bu.)	208,096	432,881	354,803	388,788	293,833	76
Oats (Bu.)	220,275	346,148	481,606	371,382	331,223	89
Barley (Bu.)	101,791	115,907	112,105	114,781	125,640	109
Rye (Bu.)	23,185	8,027	7,656	6,550	12,185	186
Flaxseed (Bu.)	19,303 ²	18,095	29,879	18,214	33,361	183
Soybeans (Bu.)	2,218 ²	4,556	6,794	11,017	14,435	131
Potatoes (Bu.)	35,890	41,279	47,195	41,167	38,280	93
Wool (Lbs.)	50,260	57,324	48,286	41,554	34,236	82
Milk (Lbs.)	11,943,000	13,000,000	13,034,000	12,896,000		
Butter (Lbs.)	380,813	356,187	328,211	268,552	323,544	120
Eggs (Doz.)	207,833	478,500	478,250	495,417	485,000	98

¹ Data from United States Department of Agriculture for Minnesota, Montana, North Dakota, and South Dakota.² 1936-45 Average.

Farm Real Estate Mortgage Indebtedness, January 1

	1935-39 Av.	1944	1945	1946	1947	1947 in Per- cent of 1946
(T-h-o-u-s-a-n-d-s)						
Michigan (15 counties)	\$ 12,671	\$ 10,679	\$ 10,149	\$ 10,146	\$ 10,899	107%
Minnesota	387,703	324,655	304,641	273,364	257,698	94
Montana	87,154	46,187	41,684	39,904	40,912	103
North Dakota	181,156	110,390	91,461	80,778	76,146	94
South Dakota	180,998	107,451	98,788	87,222	83,109	95
Wisconsin (26 counties)	114,472	82,634	76,001	70,804	70,628	100
Ninth District	964,153	681,996	622,724	562,218	539,392	96

Source: "Farm Mortgage Debt in the United States, 1940-1947" U.S.D.A., November, 1947.

Land Values March 1¹ (1912-14 = 100)

	1935-39 Av.	1944	1945	1946	1947	1947 in Per- cent of 1946
Michigan	88	134	145	167	194 _p	116%
Minnesota	86	110	115	129	143 _p	111
Montana	53	80	89	102	117 _p	115
North Dakota	65	70	76	83	92 _p	111
South Dakota	52	57	62	68	77 _p	113
Wisconsin	86	102	110	120	135 _p	113

¹ Source: USDA—Land Value Conference, dated June, 1947.

p—Preliminary

Ninth District Farm Prices¹ (Monthly Av.)

	1935-39 Av.	1944	1945	1946	1947	1947 in Per- cent of 1946
Wheat	\$.87	\$1.39	\$ 1.46	\$ 1.72	\$ 2.40	140%
Corn	.58	.99	.93	1.27	1.74	137
Oats	.26	.64	.60	.71	.89	125
Barley	.46	1.03	1.00	1.25	1.74	139
Rye	.47	.98	1.24	1.98	2.68	135
Flax	1.66	2.84	2.87	3.81	6.52	171
Potatoes	.63	1.16	1.44	1.24	1.36	110
Hogs	8.37	13.05	13.91	16.87	24.45	145
Beef Cattle	6.95	11.54	11.71	14.62	19.02	130
Veal Calves	7.81	12.92	13.23	14.85	21.15	142
Sheep	4.03	6.21	6.32	7.32	8.12	111
Lambs	7.88	12.20	12.77	14.78	19.67	133
Chickens	.13	.21	.22	.23	.22	96
Butterfat	.29	.52	.52	.68	.77	113
Milk	1.59	2.70	2.69	3.41	3.62	106
Eggs	.20	.31	.35	.34	.40	118
Wool	.23	.43	.42	.43	.42	98

¹ Data from "Agriculture Prices," United States Department of Agriculture.

Livestock Numbers, 4 Northwest States, January 1¹

	1935-39 Av.	1944	1945	1946	1947	1947 in Per- cent of 1946
			(T-h-o-u-s-a-n-d-s)			
All Cattle and Calves.....	7,170	9,825	9,789	9,874	9,544 _p	97%
Dairy Cows.....	2,931	3,217	3,078	2,909	2,780 _p	96
Sheep and Lambs.....	6,101	8,612	7,490	6,424	5,290 _p	82
Hogs.....	3,464	9,590	6,200	6,940	5,805 _p	84
Chickens.....	29,650	53,518	48,781	48,724	45,700 _p	94
Turkeys.....	942	854	763	767	538 _p	70

¹ Source: USDA, Livestock on Farms.
p—preliminary

BANKING

All Member Bank Total Deposits

	1935-39 Av.	Dec. 31, 1944	Dec. 31, 1945	Dec. 31, 1946	Dec. 31, 1947
			(T-h-o-u-s-a-n-d-s)		
TOTAL.....	\$ 1,036,345	\$ 2,800,157	\$ 3,424,936	\$ 3,317,232	\$ 3,551,851
Michigan—15 Counties.....	58,413	118,475	149,376	148,618	155,052
Minnesota.....	695,966	1,833,276	2,178,417	1,993,818	2,121,191
Montana.....	119,182	337,974	425,198	448,109	477,458
North Dakota.....	49,717	170,729	223,152	238,214	264,565
South Dakota.....	65,413	199,944	270,327	304,222	346,825
Wisconsin—26 Counties.....	47,652	139,759	178,466	184,251	186,760

City Member Banks

	1935-39 Av.	Dec. 31, 1944	Dec. 31, 1945	Dec. 31, 1946	Dec. 31, 1947
			(T-h-o-u-s-a-n-d-s)		
Loans and Discounts.....	\$ 175,656	\$ 233,331	\$ 267,658	\$ 335,483	\$ 417,928
U. S. Government Securities.....	174,924	929,523	1,069,420	792,908	695,419
Other Securities.....	43,434	41,449	55,223	57,612	70,812
Total Deposits.....	560,186	1,497,485	1,733,227	1,516,715	1,617,377
Dem. Dep. Ind., Pt. and Corp.....	244,867	616,746	674,201	777,669	859,040
Tim. Dep. Ind., Pt. and Corp.....	120,455	165,963	207,210	237,476	249,520
Public Deposits.....	57,994	413,981	466,244	145,572	150,426
Due to Banks and Other Dep.....	136,869	300,795	385,572	355,998	358,391
Estimated Excess Reserves.....	19,779	10,017	11,216	9,215	12,929

Country Member Banks

	1935-39 Av.	Dec. 31, 1944	Dec. 31, 1945	Dec. 31, 1946	Dec. 31, 1947
			(T-h-o-u-s-a-n-d-s)		
Loans and Discounts.....	\$ 136,792	\$ 174,240	\$ 183,779	\$ 257,052	\$ 335,874
U. S. Government Securities.....	128,818	794,601	1,088,657	1,119,261	1,131,545
Other Securities.....	102,534	63,177	69,798	86,298	115,273
Total Deposits.....	476,159	1,301,971	1,693,938	1,800,517	1,934,474
Dem. Dep. Ind., Pt. and Corp.....	171,966	635,295	824,293	975,244	1,067,018
Time Dep. Ind., Pt. and Corp.....	229,188	420,032	553,262	634,970	679,279
Public Deposits.....	52,767	190,323	247,468	124,680	122,688
Due to Banks and Other Dep.....	22,238	56,321	68,915	65,623	65,489
Estimated Excess Reserves.....	19,367	37,754	48,485	33,322	30,703

Interest Rates (Percent)

	1944	1945	1946	1947
Minneapolis Commercial Banks.....	2½ - 3	2½ - 3	2½ - 3	2½ - 3
Commercial Paper (Net Rate).....	1	1	1	1
Minneapolis Federal Reserve Bank*.....	1	1	1	1

*Rate raised to 1½ effective January 12, 1948.

Minneapolis Federal Reserve Bank

	1935-39 Av.	Dec. 31, 1944	Dec. 31, 1945	Dec. 31, 1946	Dec. 31, 1947
			(T-h-o-u-s-a-n-d-s)		
Loans to Member Banks.....	\$ 99	\$ 0	\$ 0	\$ 0	\$ 0
Twin Cities.....	0	0	0	0	0
Minn., Wis. and Mich.....	56	0	0	0	0
North Dakota and Montana.....	12	0	0	0	0
South Dakota.....	30	0	0	0	0
Industrial Advances.....	999	0	0	0	0
Total Earning Assets.....	75,868	465,835	630,640	639,552	666,184
Mem. Bank Res. Balances.....	122,225	317,789	385,403	398,589	450,552
Fed. Res. Notes in Circulation.....	132,502	475,794	551,859	592,688	626,969
Total Gold Certificate Reserve.....	208,697	366,305	359,767	378,418	454,855