

MONTHLY REVIEW

OF
 AGRICULTURAL AND BUSINESS CONDITIONS
 IN THE
 NINTH FEDERAL RESERVE DISTRICT

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Minneapolis, Minnesota

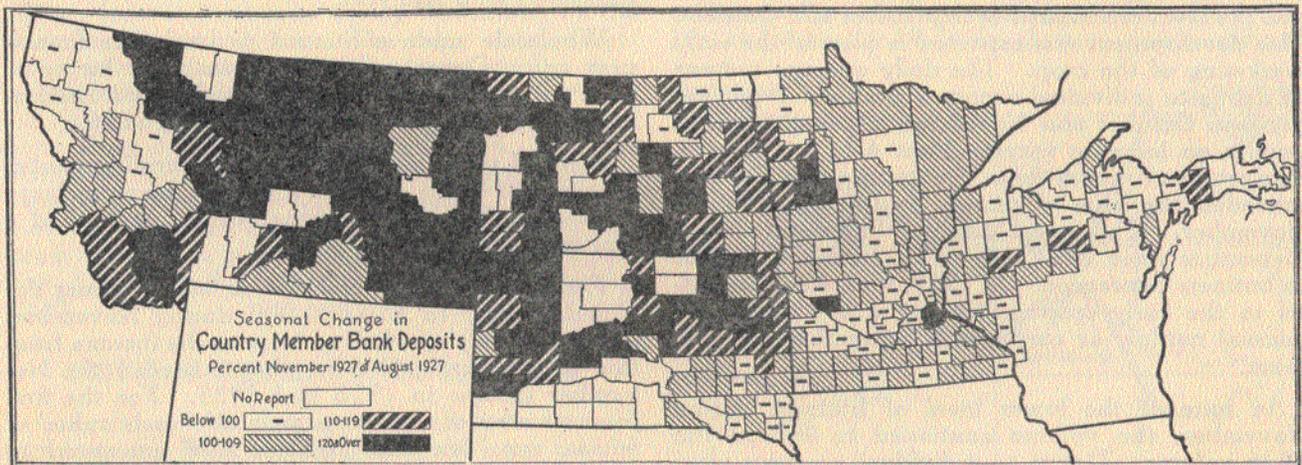
December 29, 1927

1927 CROP INCOME AND BANK DEPOSITS

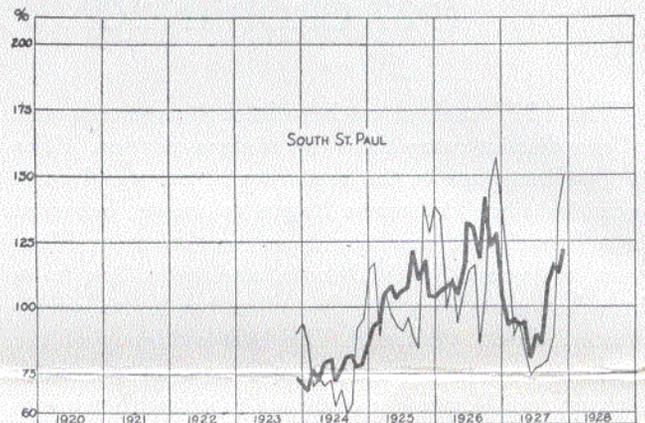
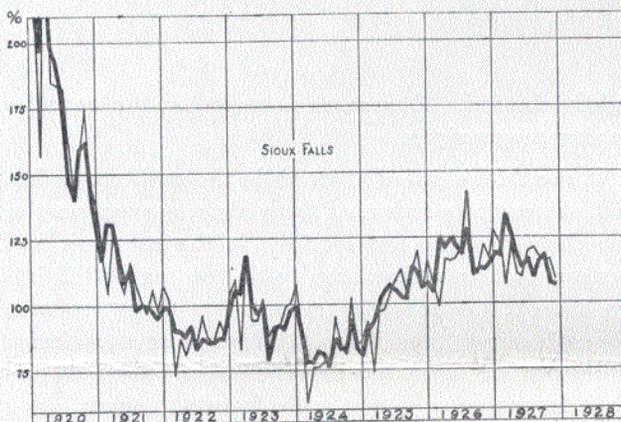
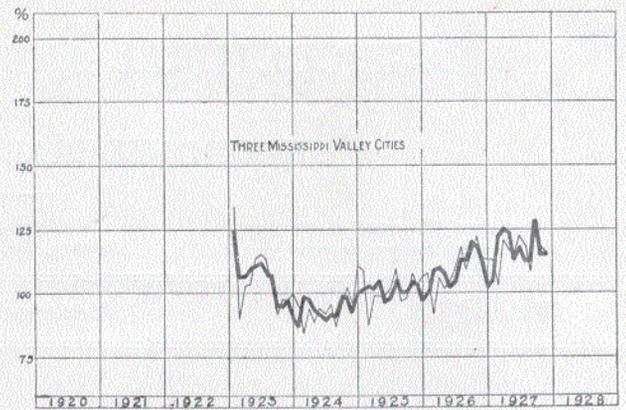
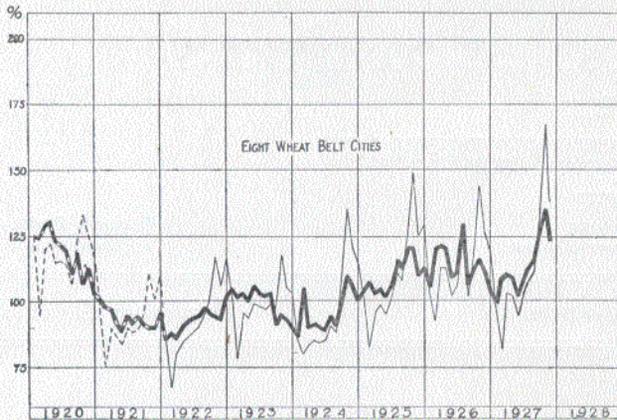
The 1927 cash crops benefited the western part of the district more than the eastern portion. The largest increases in the resources of our rural communities since the crops began to move, occurred in a broad belt reaching from northwestern Montana to eastern South Dakota, and extending in its broadest part from the Canadian border to southwestern South Dakota. The best evidence of the location of the crop benefits is the increase between August and November in deposits at member banks (excluding Minneapolis, St. Paul and Duluth). The map at the foot of this page shows the picture very clearly. Deposit increases of 10 percent, or more, occurred in the counties shaded black or with heavy bars. Smaller increases occurred in the counties

lightly shaded. Decreases occurred in the counties having minus signs.

It should be noted that while the cash crops furnish the major portion of farm income over most of our district, there are sections in the southern and eastern portion where hog, cattle feeding and dairy-ing income are most important. In these sections, the cash crops, even if the yield per acre were large, could not be expected to cause as pronounced deposit increases as in the grain farming region. Hog marketing and the cattle movement from feed lots reach a peak later in the year than grain marketing. Consequently, bank deposits in the hog and cattle feeding territory increase about ninety days after the increase in the grain farming region.



The black areas in the map above show the counties where member bank deposits increased 20 per cent or more between August 24, 1927 and November 9, 1927, which is the principal crop marketing period. Lighter shadings denote smaller increases and minus signs denote decreases in member bank deposits during this period. The white areas represent counties in which no member banks are located.



Debits to Individual Accounts at Banks in the Smaller Reporting Cities of the Ninth Federal Reserve District. Heavy curves represent figures adjusted to eliminate seasonal changes; light curves represent unadjusted figures as percentages of the average month.

DISTRICT SUMMARY OF BUSINESS

The November volume of business did not maintain the level established in September and October. This development was expected in view of the early marketing of the crop. The daily average volume of debits to individual accounts declined 7 percent between October and November, although there is usually an increase varying from 4 to 11 percent. The return of money from circulation in this district exceeded the issue of money by this bank during November. This event has not happened during November since 1921. In 1921, it was attributed to business depression. In 1927, it may be attributed to the early crop movement which caused an unusual outflow of currency in September and October.

In spite of the lower level of business during November, the volume continued to exceed the 1926 volume. Debits to individual accounts were 18 percent larger in November, 1927 than in the corresponding month last year. A small part of this increase was due to the fact that the month had one more business day this year. Of the non-agricultural industries of the district, building and iron mining reported smaller volumes in November than

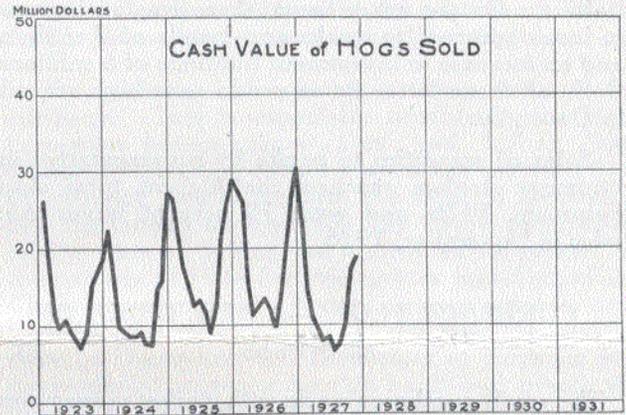
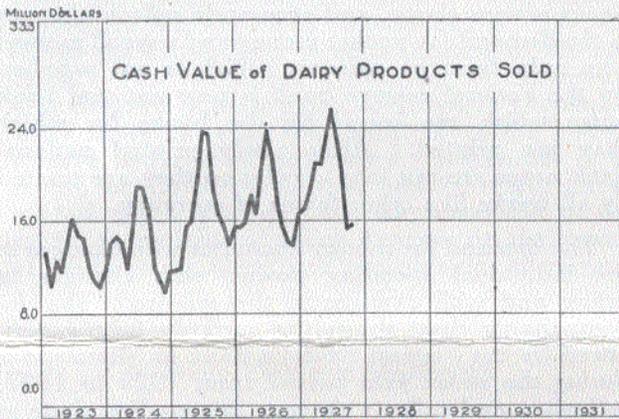
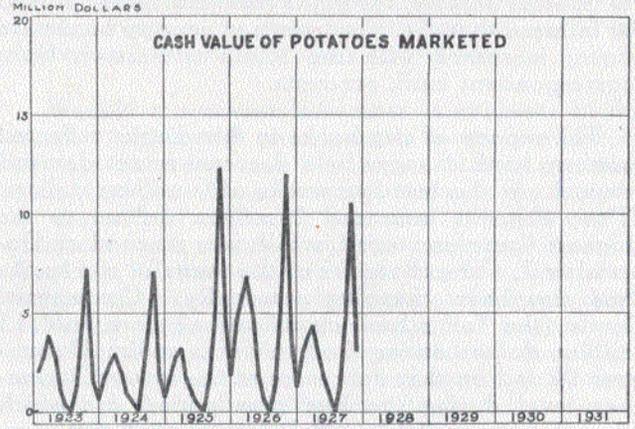
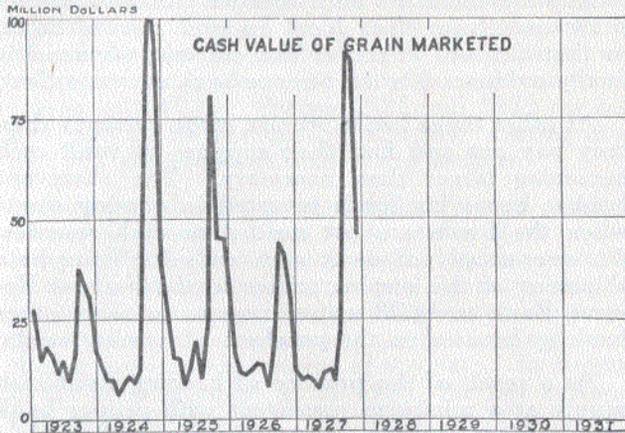
in the corresponding month a year ago and flour mills and linseed mills increased their shipments as compared with last year.

Wholesale trade continued to be larger than a year ago. Department store sales were larger at St. Paul but smaller at Minneapolis and Duluth-Superior as compared with November, 1926.

Sales of securities to the general investing public, exclusive of banks, reached a volume nearly as large as the October, 1927 volume, which established a new high record.

Farm income from cash grains and potatoes declined sharply to \$50,000,000 during November, which was only one-half as large as the income from this source during October, but exceeded the November income in 1926 and 1925. For the first four months of the crop year the cash value of wheat, rye, flax and potatoes sold amounted to \$270,000,000, as compared with \$156,000,000 in this portion of the 1926 crop year and \$289,000,000 in the corresponding portion of the 1924 crop year, which established a new peace-time record.

Other forms of farm income showed divergent trends. The income from dairy products during



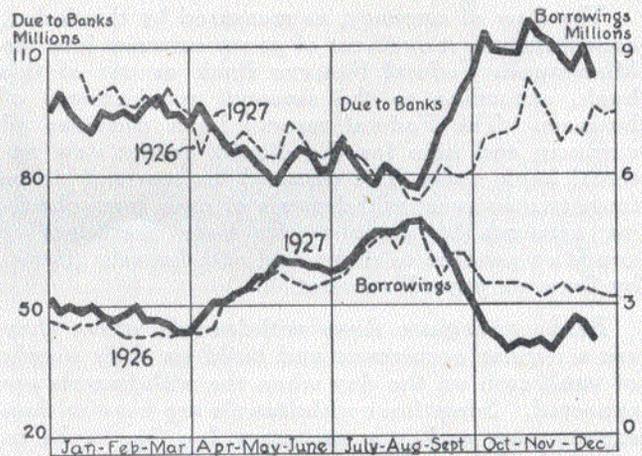
Estimated Income to Northwestern Farmers, By Months, from the Sale of Cash Grains, Potatoes, Dairy Products and Hogs, 1923-1927. The prices used are terminal market prices for representative grades.

October (the latest month estimated) and the first ten months of the calendar year was about 10 percent larger than in the corresponding portions of 1926. Income from hogs during November, on the other hand, was only fair. The value of hogs marketed was estimated to be 29 percent smaller than in November, 1926, and smaller also than the total for November, 1925, but it exceeded the totals of November, 1923 and November, 1924. Smaller market receipts of cattle, calves and sheep probably offset the higher prices for these classes. The feeder movement to the country during November was much larger than in November, 1926. Feeder steers were bought at the highest prices since September, 1920.

DISTRICT SUMMARY OF BANKING

Country member banks increased their borrowings from this bank slightly during the latter part of November, but this increase was cancelled during the first two weeks of December. Apparently, borrowings by country banks are following the customary seasonal trend, which will be generally downward until the end of March. It also appears that an investment program by country banks is

occurring similar to that of the winter of 1924 and 1925, for deposits carried by country banks with city banks reporting to this office declined from 116 million dollars on November 2 to 103 million dollars on December 14. In the absence of any evidence



Country Bank Conditions in the Northwest, as indicated by borrowings from this Federal Reserve Bank and by deposits with city correspondent banks.

of unusual demand for funds from customers, it is to be inferred that the investments of country banks are being increased with the funds withdrawn from correspondent bank accounts.

The reports of city banks in this district reflected country bank changes by a decrease in net demand deposits in the last five weeks of 9 million dollars. Time deposits increased 2 million dollars to the highest figure on record, which was reached on December 7. The character of the assets of city banks has also been changing seasonally. Commercial loans (the "all other" classification) decreased 13 million dollars during the five weeks ending December 14 and on that date were at the lowest December level during the five year period for which records are available. Balances carried with correspondent banks were also reduced 13 million dollars. On the other hand, there was an increase in loans secured by stocks and bonds of 7 millions and an increase in investment holdings of 6 millions. Both of these latter items made new high records in December.

Sales of securities to banks by representative investment dealers reached the highest total since February, 1926, and were 73 percent larger than sales in November, 1926.

CURRENCY FLOW—A NEW INDEX OF BUSINESS

The small purchases made with pocket money constitute a large part of the nation's business. Owing to the great number of individual transactions and the relative unimportance of each transaction there are few indexes reflecting in satisfactory manner the changes in volume of this mass of business. With the hope of throwing some light upon this important subject, we are presenting the flow of currency in the northwest as an interesting index of this phase of business.

The flow of currency, as measured by this index, constitutes the movement of paper currency into the Minneapolis Federal Reserve Bank or out of this bank, according to the seasonal requirements of business. The Federal reserve bank provides all currency and coin for the district except new national bank notes. The demand for currency arises from two sources; withdrawals of cash from checking accounts by persons who have purchases of goods or services to make and withdrawals of cash by firms on payroll account.

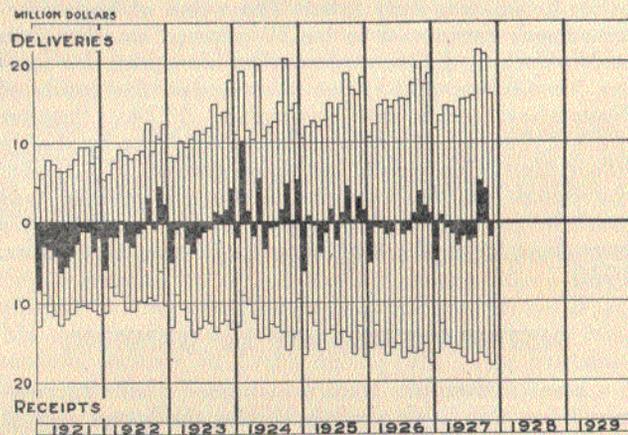
Banks anticipate these withdrawals where they are a regular occurrence and build up their supply of vault cash on the day when the withdrawals are expected. Sometimes withdrawals are heavier than expectations and it is necessary for the banks to replenish their ordinary supply of vault cash after the withdrawals have taken place. Banks which are not members of the Federal Reserve System draw cash from their correspondent banks which

usually are members and member banks ordinarily draw cash from their local Federal reserve bank, so that the full effect of the currency demand is finally evidenced in the reserve bank currency flow.

At other times banks receive more currency than they pay out and find their supplies of vault cash becoming larger than necessary. The observant banker keeps his funds invested in earning assets when the funds are not needed as cash reserves. An over-supply of vault cash calls for immediate shipment of the surplus, either to the Federal Reserve Bank to build up reserves or to some other bank to be used in the purchase of earning assets.

As a result of the practice of keeping vault cash supply at a minimum consistent with proper bank management, the flow of currency out of the Federal reserve banks and back to the Federal reserve banks is very elastic, and accurately reflects changes in the demand for pocket money and payroll money. The only form of currency which is not supplied by the Federal reserve bank is new national bank notes which are issued by the banks for which they are printed. After newly printed national bank notes are put into circulation they are treated by all banks like other forms of currency.

The demand for money fluctuates with changes in the individual spending power, with changes in prices and with changes in the seasons. The accompanying chart shows the currency flow experienced by the Federal Reserve Bank of Minneapolis during the seven year period from 1921 to 1927, inclusive, and reflects changes in spending done in the district. The columns above the zero line represent the monthly volume of currency payments by this Federal Reserve Bank to other banks in the district. The columns below the zero line represent receipts of currency from banks in the district. The solid black portions of the columns represent the net outflow or inflow of currency, by months.



Monthly Outflow and Inflow of Currency at the Minneapolis Federal Reserve Bank and Helena Branch Combined. Shipments to and from commercial banks only are included in the chart. The black portions of the bars represent the NET outflow or inflow of currency.

Throughout the whole of 1921 and during the first three months of 1922 more currency was received by the Federal Reserve Bank than was shipped. No pronounced outward movement occurred until 1924. During 1925 and 1926 the outflow and inflow practically balanced. During most of 1927 the inflow exceeded the outflow.

Seasonal changes in spending are very marked. The year begins with a rapid return flow of currency which is no longer needed after the cessation of the Christmas buying rush and the completion of year-end payments. Intermediate movements with the net return of currency predominating, occur during the next six months of the year. In August, if the crop is early, as in 1925, the net currency movement is outward. September and October are the main crop moving months and the usual currency movement is rapidly outward. This outward movement was especially pronounced in 1927, owing to the exceedingly rapid marketing of the cash crops. The November movement of currency is also outward in most years, although in November, 1927 more currency was returned to the Federal reserve banks than was issued. December is the month of Christmas buying and as might be expected, there is a net outward movement of currency, the volume of which depends on the volume of trade to be done and the amount of currency which has been put into circulation in the earlier months of the fall.

Daily Currency Movement

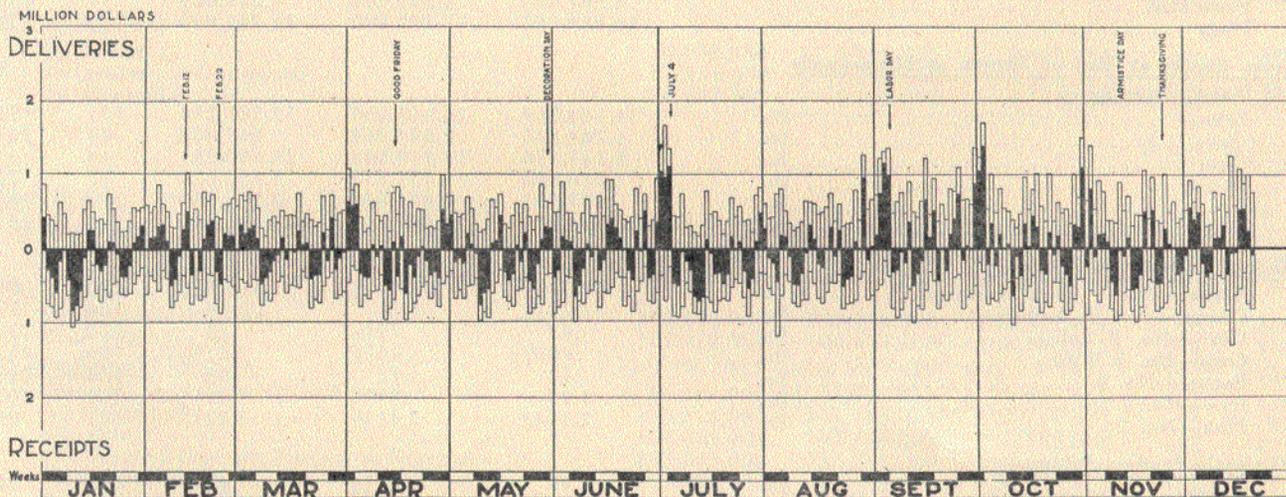
The daily movement of currency into the Federal Reserve Bank of Minneapolis and out of this bank and the net inward or outward movement is shown in the chart at the foot of page 93. These records have only been maintained through the year 1927 and December, 1926, and do not include the volume of the Helena branch. These daily records

are presented to show in more detail the currency flow in response to conditions which the banks are forced to meet in their daily operations.

Weekly movements are most in evidence in this chart. The usual movement is a net outflow on Friday, Saturday and Monday. This is probably caused by payroll and holiday demands for currency at the end of the week and the replenishment of depleted cash supplies by the banks on Monday. Tuesday, Wednesday and Thursday are days of net inflow of currency to the Federal Reserve Bank, probably caused by the spending of payroll and holiday money, which is deposited by stores and other firms with their banks and returned by these banks to the Federal Reserve Bank.

Month-end and quarterly demands for currency are also clearly evidenced in the months of March, April, June, August, September and October.

The national holidays cause some demand for currency. This is especially notable in the days preceding Independence Day and Labor Day. Christmas spending causes a sustained outward flow of currency, beginning with the 16th of December and continuing through the day before Christmas. At the time of writing, we are forced to depend on the records of 1926 for evidence of the effect of the Christmas demand. Records are available only through December 15, 1927. During the first 15 days of December, 1927, receipts of currency and payments of currency by this bank had practically balanced, which was exactly the occurrence during the first 15 days of December, 1926. Beginning with December 16, 1926, however, the net outflow of currency during the next eight business days amounted to 2½ million dollars. It is almost needless to say that a return flow of currency set in during the week following Christmas.



Daily Outflow and Inflow of Currency at the Federal Reserve Bank of Minneapolis during 1927. The chart does not include the records of the Helena branch and represents only shipments to and from commercial banks.

COMPARATIVE STATISTICS OF BUSINESS IN THE NINTH FEDERAL RESERVE DISTRICT

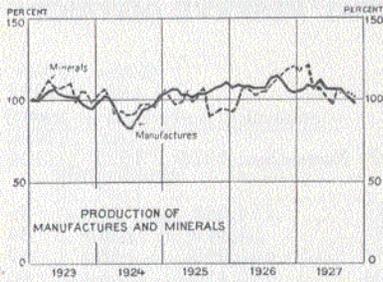
		November, 1927	October, 1927	November, 1926	% Nov. 1927 of Oct. 1927	% Nov. 1927 of Nov. 1926
Debits to Individual Accounts—						
	Unit					
17 Cities		\$964,440,000	\$1,119,304,000	\$817,920,000	86	118
Minneapolis		452,753,000	550,833,000	397,575,000	82	114
St. Paul		201,515,000	201,547,000	161,100,000	100	125
Duluth-Superior		147,287,000	193,193,000	99,932,000	76	147
8 Wheat Belt Cities		72,201,000	86,572,000	65,379,000	83	110
3 Mississippi Valley Cities		20,798,000	21,172,000	20,413,000	98	102
South St. Paul		52,234,000	47,052,000	54,612,000	111	96
Sioux Falls		17,652,000	18,935,000	18,909,000	93	93
Carloadings-Northwestern District—						
Total	Cars	537,656	738,426	582,922	73	92
Grains and Grain Products	Cars	59,357	86,070	45,410	69	131
Livestock	Cars	40,146	43,938	45,077	91	89
Coal	Cars	44,977	44,738	51,475	101	87
Coke	Cars	5,083	5,163	6,818	98	75
Forest Products	Cars	65,333	72,437	72,632	90	90
Ore	Cars	23,738	123,009	62,084	19	38
Merchandise—L. C. L.	Cars	144,002	154,132	140,263	93	103
Miscellaneous	Cars	155,020	208,939	159,163	74	60
Building Permits—						
Number—18 Cities		1,358	1,853	1,175	73	116
Value—18 Cities		\$ 2,928,900	\$ 3,252,800	\$ 3,939,100	90	74
Minneapolis		1,132,300	1,304,800	1,437,200	87	79
St. Paul		722,700	711,900	1,523,700	102	47
Duluth-Superior		300,900	236,900	358,200	127	84
4 Wheat Belt Cities		206,900	255,300	237,000	81	87
6 Mixed Farming Cities		373,900	625,100	361,300	60	103
4 Mining Cities		192,200	118,800	21,700	162	886
Building Contracts Awarded—						
Total		4,976,700	7,063,100	5,281,300	70	94
Residential		2,474,000	3,343,400	3,628,000	74	68
Commercial and Industrial		613,300	1,360,500	571,000	45	107
Public Works and Utilities		1,695,300	835,500	208,200	203	814
Educational		63,000	196,200	495,600	32	13
All Other		131,100	1,327,500	378,500	10	35
Cash Value of Farm Products Sold—						
Bread Wheat		27,537,000	50,821,000	16,726,000	54	165
Durum Wheat		7,924,000	18,432,000	6,685,000	43	119
Rye		3,092,000	5,835,000	1,399,000	53	221
Flax		7,956,000	14,823,000	6,152,000	54	129
Potatoes		3,064,000	10,534,000	3,467,000	29	88
Fluid Milk		1,301,000	1,309,000	1,203,000	99	108
Hogs		18,989,000	17,282,000	26,741,000	110	71
Grain Stocks at End of Month at Minneapolis and Duluth-Superior—						
Wheat	Bu.	34,144,369	26,040,650	19,383,214	131	176
Corn	Bu.	1,704,821	2,044,461	647,408	83	263
Oats	Bu.	8,747,236	18,819,044	26,680,056	46	33
Barley	Bu.	1,046,880	1,355,575	3,892,629	77	27
Rye	Bu.	977,502	4,844,870	8,570,797	20	11
Flax	Bu.	4,794,315	4,680,753	3,181,670	102	151
Median Cash Grain Prices—						
Wheat—No. 1 Dark Northern	Bu.	\$1.31 ⁷ / ₈	\$1.31 ¹ / ₂	\$1.48 ³ / ₄	100	89
Durum—No. 2 Amber	Bu.	1.25 ³ / ₄	1.21	1.64	104	77
Corn—No. 3 Yellow	Bu.	.82	.79 ³ / ₈	.73	103	112
Oats—No. 3 White	Bu.	.46 ¹ / ₂	.44 ⁷ / ₈	.41 ⁵ / ₈	104	112
Barley—No. 3	Bu.	.78	.72	.62	108	126
Rye—No. 2	Bu.	1.00	.91 ³ / ₄	.93 ¹ / ₂	109	107
Flax—No. 1	Bu.	2.13 ¹ / ₄	2.11 ³ / ₄	2.22	101	96
Wholesale Produce Prices—						
Butter	Lb.	.46	.45 ¹ / ₂	.47	101	98
Milk	Cwt.	2.63	2.60	2.50	101	105
Hens—4 ¹ / ₂ Pounds	Lb.	.18	.19	.17 ¹ / ₂	95	103
Eggs	Doz.	.37 ¹ / ₂	.32 ¹ / ₂	.45	115	83
Potatoes	Bu.	1.05	1.05	1.58	100	66

NINTH FEDERAL RESERVE DISTRICT

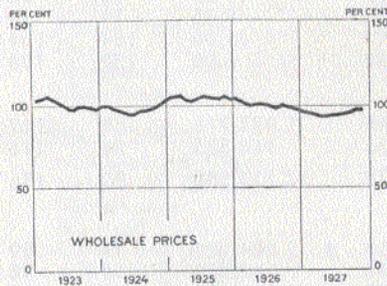
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COMPARATIVE STATISTICS OF BUSINESS IN THE NINTH FEDERAL RESERVE DISTRICT
(Continued)

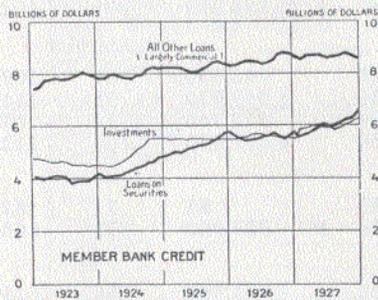
	Unit	November, 1927	October, 1927	November, 1926	% Nov. 1927 of Oct. 1927	% Nov. 1927 of Nov. 1926
Livestock Receipts at South St. Paul—						
Cattle	Head	132,887	163,570	154,648	81	86
Calves	Head	54,886	51,747	65,619	106	84
Hogs	Head	424,007	286,594	486,099	148	87
Sheep	Head	136,098	205,004	150,450	66	90
Median Livestock Prices at South St. Paul—						
Butcher Cows	Cwt.	\$ 7.00	\$ 6.75	\$ 5.25	104	133
Butcher Steers	Cwt.	10.00	9.50	7.25	105	138
Prime Butcher Steers	Cwt.	14.00	14.00	10.00	100	140
Stocker and Feeder Steers	Cwt.	8.00	7.50	6.00	107	133
Veal Calves	Cwt.	11.00	12.00	9.50	92	116
Hogs	Cwt.	8.50	10.25	11.25	83	76
Heavy Hogs	Cwt.	7.75	9.75	9.75	79	79
Lambs	Cwt.	13.50	13.00	13.00	104	104
Ewes	Cwt.	6.00	6.00	6.00	100	100
Flour—						
Production—Twin Cities & Duluth-Superior	Bbls.	1,253,356	1,409,248	1,072,714	89	117
Shipments from Minneapolis	Bbls.	1,113,165	1,374,333	960,835	81	116
Linseed Products Shipments from Minneapolis.						
	Lbs.	44,109,810	44,693,978	32,533,338	99	136
Retail Sales—						
Department Stores		\$ 2,582,830	\$ 2,795,400	\$ 2,604,000	92	99
Furniture Stores		524,420	616,680	532,930	85	98
Country Lumber Yards	Bd. Ft.	12,428,000	16,247,000	12,001,000	76	104
Retail Merchandise Stocks—						
Department Stores		\$ 6,991,340	\$ 7,006,140	\$ 7,217,220	100	97
Furniture Stores		2,921,130	2,949,040	3,059,120	99	95
Country Lumber Yards	Bd. Ft.	74,658,000	80,397,000	73,666,000	93	101
Life Insurance Sales (4 States)						
		\$ 23,255,000	\$ 23,085,000	\$ 22,898,000	101	102
Wholesale Trade—						
Farm Implements		171,110	261,920	160,030	65	107
Hardware		2,179,160	2,286,960	1,967,370	95	111
Shoes		459,690	622,600	552,760	74	83
Groceries		5,454,850	5,467,460	4,891,870	100	112
Business Failures—						
Number		68	88	83	77	82
Liabilities		\$ 1,153,335	\$ 660,024	\$ 721,000	175	160
Securities Sold—						
To Banks		4,199,600	3,956,500	2,425,900	106	173
To Insurance Companies		1,414,000	1,462,000	2,056,100	97	69
To General Public		9,122,400	9,608,800	4,164,900	95	219
Ninth Federal Reserve District Member Banks—						
In Cities under 15,000 Population						
Net Demand Deposits		Dec. 7, 1927	Nov. 9, 1927	Dec. 29, 1926	% Dec. 1927 of Nov. 1927	% Dec. 1927 of Dec. 1926
		\$195,763,000	\$199,152,000	\$183,588,000	98	107
Time Deposits		260,242,000	257,261,000	265,656,000	101	98
In Cities over 15,000 Population						
Net Demand Deposits		284,800,000	290,718,000	240,507,000	98	118
Time Deposits		188,472,000	185,631,000	168,268,000	101	112
24 City Member Banks—						
Loans Secured by Stocks and Bonds		Dec. 14, 1927	Nov. 16, 1927	Dec. 15, 1926	1927	1926
		\$ 96,154,000	\$ 93,926,000	\$ 72,322,000	102	133
All Other Loans		168,013,000	173,102,000	178,119,000	97	94
Securities		129,493,000	127,188,000	110,702,000	102	117
Net Demand Deposits Subject to Reserve		247,743,000	253,059,000	220,657,000	98	112
Time Deposits		133,679,000	132,755,000	126,473,000	101	106
Borrowings at Federal Reserve Bank		1,250,000	0	700,000	0	179
Minneapolis Federal Reserve Bank—						
Loans to Member Banks		3,541,935	2,024,054	3,996,704	175	89
Federal Reserve Notes in Circulation		61,263,955	62,681,600	67,887,765	98	90



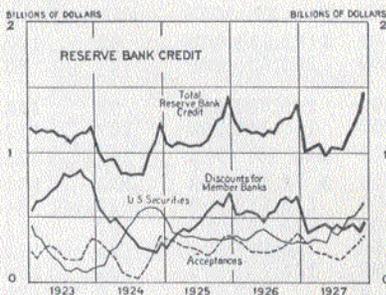
Index numbers of production of manufactures and minerals, adjusted for seasonal variations 1923-25 average=100). Latest figures, November, manufactures, 98, minerals 101.



Index of United States Bureau of Labor Statistics (1926=100, base adopted by bureau). Latest figure, November 96.7.



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures are averages for first three weekly report dates in December.



Monthly averages of daily figures for 12 Federal Reserve Banks. Latest figures are averages of first 22 days in December.

Summary of National Business Conditions (Compiled December 23 by Federal Reserve Board)

Industrial activity and freight carloadings declined further in November, while retail trade showed more than the usual seasonal increase. The general level of wholesale commodity prices, after advancing for four months, remained practically unchanged in October and November.

PRODUCTION: Output of manufactures and minerals was reduced in November, and the combined index of production, after adjustments for customary seasonal variations, fell below the 1923-1925 average for the first time since 1924. The largest decline was in the output of automobiles, owing largely to preparation for production of new models. Iron and steel production has also declined further and in November was the lowest since 1924. In December, however, inquiries for iron and steel increased. Textile mill activity was slightly curtailed in November but continued at a higher level than in previous years. There were decreases in the production of coal, building materials and leather and shoes. Building contract awards showed seasonal declines in November and the first two weeks of December, and were slightly smaller than in the corresponding period of last year.

The total value of about 50 crops in 1927 is estimated by the Department of Agriculture at \$8,430,000,000, an increase of \$635,000,000 over 1926. The greatest increases in value were shown for cotton, corn, barley and oats, while the largest decrease for any individual crop was shown for potatoes. The physical quantity of production of the 17 principal crops was about 2 per cent less than last year, but 3 per cent above the average of the last ten years.

TRADE: Retail trade increased slightly more than is usual in November. Compared with a year ago, retail trade of department stores, mail order houses and chain stores was larger, while wholesale trade continued in slightly smaller volume in nearly all reporting lines. Freight carloadings declined during November and in the early part of December were smaller than in the corresponding period for the past four years. There were large decreases in loadings of all classes of commodities.

PRICES: The general level of wholesale commodity prices, as measured by the index of the Bureau of Labor Statistics, after a continuous advance since early in the summer, remained at practically the same level in November as in October. Changes were relatively small in all groups, increases occurring in foods and hides and leather and decreases in farm products, textiles, fuels and building materials. In the first two weeks of December, prices of wheat, cattle, hogs, cotton, pig iron and soft wood lumber declined, while those of silk, woolen goods, hides and sole leather advanced.

BANK CREDIT: Between the middle of November and the middle of December total loans and investments of member banks in leading cities showed a considerable increase, reflecting continued growth in the volume of loans on securities and in the banks' investment holdings. In the same period, loans, chiefly for commercial purposes, which reached a seasonal peak in October, showed a further slight decline.

At Federal reserve banks the seasonal increase in currency requirements and the continued demand for gold for export during the four weeks ending December 21 were reflected in a growth in member bank borrowing. At the end of this period, the total volume of Reserve bank credit in use was larger than on any other date in the past six years.

Somewhat firmer conditions in the money market in December were reflected in increased rates on call money. Rates on prime commercial paper and bankers' acceptances remained unchanged during the month.