

MONTHLY REVIEW

OF

AGRICULTURAL AND BUSINESS CONDITIONS

IN THE

NINTH FEDERAL RESERVE DISTRICT

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DISTRICT SUMMARY FOR THE MONTH

Business conditions in July in this district were quite different from those prevailing a year earlier. There was an increased volume of business as shown by larger carloadings and greater shipments of ore, coal, flour and linseed products. There was a greater money value indicated by bank debits, of which a portion is due to the higher level of prices prevailing for grains and livestock. Business confidence was decidedly better than a year ago, as reflected in more permits granted and contracts awarded for building construction, and a larger wholesale trade, especially in farm implements, shoes, dry goods and hardware. Speculative interest was considerably greater, as shown by an increase in grain futures dealt in and a substantial increase in the sales of stocks, industrial bonds and foreign bonds, coupled with declining sales of Government bonds. Purchasing power, particularly in the agricultural sections of this district, was greater. There were increased sales of lumber at retail and of life insurance. Financing was easier. Federal Reserve Bank loans to member banks were 7 million dollars less than a year ago, interest rates to customers of member banks were slightly lower, and public participation in the purchase of securities greater. Interest rates paid by Minnesota farmers on choice first mortgage loans have reached levels lower than those prevailing at any time during the past 30 years. This general improvement, as compared with the preceding year, was well maintained in the early part of August. The individual debits at banks during the first half of August exhibited a gain of 21 per cent over a year ago, as compared with a total increase for the preceding month of but 13 per cent.

When business conditions in July are compared with those in June, the declines apparently exceed the gains. Midsummer dullness explains many of the seasonal declines in the volume of business of different kinds. Speculative interest, as reflected in futures trading in grains, declined. Building permits granted and contracts awarded declined. Financing conditions, although continuing easy, exhibited signs of change. Interest rates and the loans of this Federal Reserve Bank both rose slightly in connection with harvesting and moving the crops. Public buying of securities was reduced. Mixed trends

were shown in prices of grains and livestock and in wholesale trade.

We are at the turning point of marketing, financing, and spending the proceeds of another crop. Some hesitation in business conditions during this pre-crop month are but natural. Business during the coming months will be determined by the outcome of the prices and the size and quality of this crop. The pronounced increase of business confidence in this district as compared with a year ago is an important influence affecting current and prospective business.

TOPICAL REVIEWS

Debits to individual accounts at banks in seventeen cities in this district were nearly 13 per cent larger during July than during the corresponding month a year ago, but July debits at these cities were 6 per cent smaller than debits during June, which is more than the seasonal reduction expected at this time of year. Cities in all parts of the district experienced increases in debits over the volume of a year ago, with South St. Paul showing the largest increase, amounting to 41 per cent. Increases in other cities and groups of cities were as follows: Minneapolis, 11 per cent; St. Paul, 6 per cent; Duluth-Superior, 18 per cent; the eight wheat belt cities, 22 per cent; the three Mississippi Valley cities, 15 per cent; and Sioux Falls, 19 per cent.

The most important development reflected by debits to individual accounts during July has been the great increase in business in the wheat belt cities, whose reports have great significance because they represent the agricultural portions of this district, although they do not constitute a very large part of the total debits reported to this office. The 22 per cent increase in July over June for these cities is extraordinary as no increase whatever is to be expected in July over June, according to figures compiled showing the typical year for this group of cities. Debits at these eight wheat belt cities amounted to \$57,465,000 in July, which is the largest total for this month which has been reported since July, 1920.

Debits to individual accounts in the seventeen cities during the two weeks ending August 12 were nearly 21 per cent larger than in the corresponding

period a year ago. All the cities reported increases. These increases were especially marked at Fargo, Sioux Falls, and South St. Paul. At Fargo, during the two week period in 1925, debits amounted to \$8,163,000, and in the corresponding period in 1924 they totaled \$5,144,000. At Sioux Falls, debits amounted to \$8,128,000 in the two weeks ending August 12 this year as compared with \$6,391,000 in the corresponding period a year ago. At South St. Paul, debits amounted to \$14,585,000 in the two weeks ending August 12 this year as compared with \$8,819,000 in the corresponding period a year ago.

Carloadings of freight in the northwestern district, as reported by the American Railway Association were 10.1 per cent larger during July than in the corresponding month last year. Omitting less-than-carload shipments, whose tonnage changes are not always the same as changes in the number of cars loaded in this group, the increase in carloadings over July, 1924, was 9.8 per cent. All groups of commodities showed increases except livestock and grains and grain products. There was a decrease of 24 per cent in livestock loadings and a decrease of less than 1 per cent in loadings of grain and grain products. Among the groups showing increases, the largest percentage increase, amounting to 64 per cent, occurred in loadings of coke, which are comparatively insignificant in this district. Loadings of coal increased 24 per cent, ore loadings increased 16 per cent, miscellaneous commodities shipments increased 15 per cent, less-than-carload shipments increased 11 per cent, and forest products shipments increased 2 per cent.

Carloadings during July were less than 1 per cent larger than carloadings during June. This is a little better record than is to be expected judging from the experience of the six preceding years. From computations made in this office, the normal expectancy of change between June and July is a decrease of about 1 per cent. There were increases in loadings during July as compared with June in coal, ore, less-than-carload shipments and miscellaneous commodities.

Shipments of key commodities into the Northwest trade territory continue to record great advances over shipments in the corresponding month a year ago. Cars of agricultural implements and vehicles forwarded from Minneapolis during July, 1925, were 748 in number as compared with 268 cars forwarded in July last year. Shipments of representative forest products amounted to 343 cars in July this year as compared with 266 cars a year ago. Furniture shipments amounted to 35 cars in July this year as compared with 26 cars a year ago.

Flour production in Minneapolis, St. Paul and Duluth-Superior was larger during July than in June, or in July a year ago, according to figures received from the Northwestern Miller. The increase over July a year ago was 15 per cent and the increase over June was 26 per cent.

Shipments of flour and linseed products from Minneapolis were larger in July than in the corresponding month a year ago, the increases amounting to 9 per cent in the case of flour and 43 per cent in the case of linseed products. Flour shipments were 10 per cent larger in July than in June, but shipments of linseed products were 15 per cent smaller.

Grain receipts decreased more than the customary amount at Minneapolis and Duluth-Superior between June and July, and the July volume of receipts was only equal to receipts in July a year ago. Wheat receipts declined 35 per cent in July from the June volume and other grain receipts also showed marked reductions, except corn, for which grain the receipts were 2 per cent larger. As compared with receipts in July a year ago, this year's receipts of barley were treble last year's volume, and oats and flax receipts were double. Wheat receipts were 8 per cent smaller, receipts of corn were 40 per cent smaller and receipts of rye were only one-eighth as large as in July last year.

Stocks of grain in terminal elevators at Minneapolis and Duluth-Superior were 60 per cent larger at the end of July this year than on the corresponding date a year ago. Almost all of the increase was in oats, the volume of which was 53 times as great as a year ago, amounting to more than 15 million bushels this year as compared with less than 300,000 bushels a year ago. Stocks of barley and flax were also larger than a year ago, but stocks of wheat, corn and rye were smaller. Rye stocks in particular have shown a great reduction and were only one-tenth as great as rye stocks a year ago. There was a marked reduction in grain stocks at Minneapolis and Duluth-Superior during July, amounting to 37 per cent. The reduction was most pronounced in wheat, corn and rye.

Sales of grain futures during July were 33 per cent larger at Minneapolis and 44 per cent smaller at Duluth than future sales in July a year ago. The volume of future sales of rye at Minneapolis showed the only decline at that market, and at Duluth the volume of flax future sales showed the only increase, as compared with a year ago. Future sales at both markets were smaller in July than in June, although sales of wheat futures were larger at Minneapolis and sales of flax futures were larger at both markets.

Cash grain prices at Minneapolis were lower in July than in June. The median price of the best grade of flax was 18 cents lower in July than in June; rye declined nearly 17 cents; oats declined 5 cents; and wheat and corn declined 3 cents. The price of barley remained the same. All grain prices were higher than a year ago except oats.

Livestock receipts at South St. Paul during July were smaller than in the corresponding month last year, although receipts of cattle were 28 per cent larger. Receipts of sheep were 22 per cent smaller; receipts of hogs were 15 per cent smaller; and receipts of calves were 1 per cent smaller than a year

ago. As compared with receipts during June, there were seasonal increases during July in receipts of cattle and sheep, and seasonal decreases in receipts of calves and hogs.

The feeder movement was larger during July than in July a year ago. Shipments of feeder cattle to the country were 28 per cent larger; shipments of calves were 10 per cent larger; and shipments of hogs were 24 per cent larger. On the other hand, shipments of feeder sheep were 33 per cent smaller. As compared with June, the July feeder movement was more than double in the case of cattle and sheep, but smaller in the case of calves and hogs. All of these changes are apparently seasonal events.

The June Pig Survey of the United States Department of Agriculture reveals a somewhat smaller number of spring pigs in 1925 than in 1924 throughout the United States and in this district, with the exception of Montana. In Montana there was an increase of less than 1 per cent in the number of pigs saved this spring as compared with the number saved last year. Favorable weather conditions and other factors increased the average number of pigs saved per litter this year as compared with a year ago. In Minnesota the average number of pigs saved per litter was 5.7 this year as compared with 5.0 a year ago. The greatest improvement in this district was in Montana, where the average number of pigs saved per litter increased from 5.2 in the spring of 1924 to 6.3 this year. The number of sows bred, or to be bred in this district, for fall farrowing in 1925 is larger than the number of sows which farrowed in the fall of 1924. Montana shows the greatest increase, amounting to nearly 50 per cent, and increases for the other states are as follows: North Dakota, 20 per cent; Minnesota, 8 per cent, and South Dakota, 4 per cent. The United States Department of Agriculture states that in pre-

vious surveys the fall farrowings have been 20 to 25 per cent less than the numbers reported bred, but that with the increased prices of hogs this summer and prospects for a large corn crop, it is probable that actual farrowings this fall will more nearly approach the numbers reported bred than during the three previous years.

JUNE PIG SURVEY

	Pigs saved in spring of 1925 compared with spring of 1924	Sows farrowed Spring of 1925 compared with Spring of 1924	Sows farrowed Spring of 1925 compared with Spring of 1924	Sows bred, or to be bred, for fall farrowing in 1925 compared with sows farrowed in Fall of 1924	Average number of pigs saved per litter Spring 1925	Average number of pigs saved per litter Spring 1924
	%	%	%	%		
Minn.	99.6	88.0	71.9	107.7	5.7	5.0
No. Dak.	88.6	78.7	68.0	120.3	5.6	4.9
So. Dak.	88.6	77.6	64.3	104.2	5.3	4.6
Mont.	100.6	82.7	105.0	149.6	5.9	5.9
U. S.	91.3	81.2	64.0	103.5	5.79	5.17

The livestock and range report of August 1 issued by the United States Department of Agriculture states that the condition of the ranges in Montana and the western portions of the Dakotas declined slightly during July due to hot, dry weather, and in the Dakotas feed conditions were slightly poorer than last year. In Montana, however, the condition of the ranges was somewhat better than a year ago.

Livestock prices in July were nearly all higher than a year ago. The increase was especially marked in the case of hogs, which sold at a median price in the South St. Paul market of \$12.60 per hundredweight during July this year as compared with \$7.10 per hundredweight a year ago. Butcher steers sold at \$9.00 per hundredweight, as compared with \$8.25 per hundredweight last year. Veal calves sold at \$9.25 per hundredweight, as compared with \$7.75 a year ago. Lambs sold at \$13.75

AUGUST 1, 1925, PRODUCTION FORECASTS AND 1924 PRODUCTION BY STATES, UNITED STATES DEPARTMENT OF AGRICULTURE

(Bushels, except Hay, which is in Tons; 000's omitted)

	Spring Wheat		Winter Wheat		—Oats—		—Corn—		—Potatoes—	
	1925*	1924	1925*	1924	1925	1924	1925	1924	1925	1924
Minn.	22,800	34,313	1,696	2,200	164,846	193,500	145,853	126,336	27,880	44,352
Mont.	35,281	40,775	3,335	10,893	19,933	19,854	9,896	9,198	4,043	3,256
N. D.	102,134	134,618	.....	.....	70,694	93,364	22,000†	22,740	8,910	11,960
S. D.	27,163	33,018	1,069	1,120	83,475	98,050	122,084	99,990	4,663	5,822
4 States ...	192,484	242,724	6,100	14,213	338,948	404,768	299,833	258,264	45,496	65,390
9th F.R.D. ...	187,915	243,055	6,614	14,921	366,642	432,684	317,392	268,121	54,127	76,808
U. S.	262,749	282,636	415,697	590,037	1,387,349	1,541,900	2,950,340	2,436,513	353,266	454,784

	—Rye—		—Flax—		—Barley—		—Tame Hay—		—Wild Hay—	
	1925*	1924	1925	1924	1925	1924	1925	1924	1925	1924
Minn.	7,917	11,780	6,808	8,117	28,342	29,248	3,360	3,501	2,470	2,249
Mont.	2,275	1,750	1,591	2,349	3,906	3,100	2,197	2,260	523	588
N. D.	10,838	13,860	9,875	14,722	34,020	35,100	1,450†	1,639	2,150†	2,153
S. D.	1,938	2,956	4,511	4,299	23,554	22,428	1,525	1,680	2,401	2,487
4 States ...	22,968	30,346	22,785	29,487	89,822	89,876	8,532	9,080	7,544	7,477
U. S.	52,000	63,446	23,500	30,173	214,000	187,875	77,700	97,970	13,300	14,480

*Preliminary Estimate.
†Estimated in this office.

per hundredweight, as compared with \$12.00 a year ago. There were increases in July as compared with June in the prices of hogs and veal calves, and declines in the prices of butcher cattle and lambs.

Wholesale trade in this district during July was in larger volume than in July last year. The most noticeable increase occurred in farm implements for which reports show an increase of 93 per cent. Other increases were as follows: Shoes, 25 per cent; dry goods, 13 per cent; hardware, 9 per cent; and groceries, less than 1 per cent. As compared with the volume of sales in June, the July sales were nearly treble in the case of farm implements, very slightly larger in the case of groceries and hardware, and smaller in shoes and dry goods.

Department store sales in cities of this district were 1 per cent smaller in July this year than sales in July a year ago, and 22 per cent smaller than sales in June. A year ago, the decrease in sales between June and July was only 19 per cent. Stocks of merchandise in these retailers' hands at the end of July were 2 per cent larger than stocks a year ago, but nearly 3 per cent smaller than stocks at the end of June this year.

Retail lumber sales measured in board feet, which are the best available index of the volume of building in the rural portions of this district, were 48 per cent larger in July this year than in the corresponding month a year ago and nearly equal to the June volume of sales this year. Stocks of lumber in retailers' hands at the end of July were 1 per cent smaller than stocks a year ago, but almost exactly equal to stocks at the end of June this year.

The number and valuation of building permits at eighteen cities in this district were 5 per cent larger in July, 1925, than in July, 1924. The valuation of permits was 4 per cent smaller in July than in June, and the number of permits was 9 per cent smaller. The changes between June and July which are to be expected, according to the experience of past years, are an increase of 20 per cent in valuation and a decline of 15 per cent in number.

Banking reports at the close of July reflect greater activity in the rural portions of the district than at the beginning of the month. Country banks increased their borrowings from this Federal Reserve Bank and drew down their reserve accounts and balances with city correspondent banks.

Our selected group of twenty-five city member banks reported a decrease of nearly 9 million dollars in demand deposits between July 1 and July 29. A part of this decrease in demand deposits was in country bank deposits. At six city correspondent banks in the above group the reduction in balances due to country banks amounted to nearly 5 million dollars. The twenty-five banks experienced a reduction in commercial loans of 6 millions. Loans secured by stocks and bonds increased three-fourths of a million dollars. Security holdings and balances due from banks were reduced slightly and borrowings from this bank were increased by a small amount.

This Federal Reserve Bank experienced an increase of 1½ millions in loans to member banks between July 1 and July 29. Banks in all parts of the district were borrowing slightly larger amounts on the latter date than on the former. Federal reserve notes in circulation declined 1½ millions during the month, and member bank reserve accounts were reduced nearly 5 millions. This bank's holdings of purchased bills increased 3½ millions and its cash reserves were reduced 12½ millions.

During the two weeks ending August 12, the twenty-five city member banks which report weekly to this office experienced an increase of 7 million dollars in demand deposits and an increase of more than 2 million dollars in loans, largely in the commercial classification. There was a decrease of less than 2 millions in time deposits and an increase in borrowings at the Federal Reserve Bank. Securities owned by these banks were increased less than 1 million dollars.

This Federal Reserve Bank had an increase of about one-half million dollars in loans to member banks during the two weeks ending August 12.

COMPARATIVE STATISTICS OF BUSINESS IN

	July, 1925	July, 1924	Percentage of Change		July, 1925	July, 1924	Percentage of Change
Debits to Individual Accounts—17 cities	\$788,809,000	\$698,926,000	+ 18%	Grain Stocks at End of Month at Minneapolis and Duluth-Superior ..			
Carloadings in Northwestern District	665,704 cars	604,723 cars	+ 10%	Wheat	5,939,644 bu.	7,110,664 bu.	- 17%
Flour Production at Minneapolis, St. Paul and Duluth-Superior	1,196,825 bbl.	1,033,258 bbl.	+ 15%	Corn	125,169 bu.	203,828 bu.	- 39%
Flour Shipments from Minneapolis	1,077,477 bbl.	990,035 bbl.	+ 9%	Oats	15,501,303 bu.	261,700 bu.	+ 5213%
Lined Products Shipments from Minneapolis	24,004,003 lbs.	16,751,738 lbs.	+ 43%	Barley	430,963 bu.	160,016 bu.	+ 128%
Grain Receipts at Minneapolis and Duluth-Superior—				Rye	648,552 bu.	6,050,738 bu.	- 89%
Wheat	7,018,704 bu.	7,834,761 bu.	+ 8%	Flax	463,823 bu.	103,672 bu.	+ 347%
Corn	714,769 bu.	1,183,687 bu.	- 40%	Median Cash Grain Prices at Minneapolis			
Oats	2,790,257 bu.	1,187,410 bu.	+ 133%	Wheat—No. 1 Dk. Nor.	\$1.65½	\$1.48	+ 12%
Barley	1,787,335 bu.	886,670 bu.	+ 205%	Corn—No. 3 Yellow..	1.05%	.96	+ 11%
Rye	287,810 bu.	2,421,848 bu.	- 88%	Oats—No. 3 White....	.41	.51½	- 20%
Flax	744,987 bu.	383,079 bu.	+ 95%	Barley—No. 3 .....	.33	.75	+ 119%
				Rye—No. 2 .....	.68%	.70%	+ 21%
				Flax—No. 1	2.52	2.45	+ 3%
				Livestock Receipts at South St. Paul			
				Cattle	60,026 head	53,927 head	+ 28%
				Calves	47,076 head	47,689 head	- 1%
				Hogs	208,730 head	245,890 head	- 15%
				Sheep	12,423 head	16,016 head	- 23%

Total borrowings by banks in each state in this district except Wisconsin and Michigan were increased. Member bank reserve accounts increased about 2 millions and this bank increased its holdings of purchased bills by one-third of a million dollars. Federal reserve notes in circulation were reduced one-third of a million.

Interest rates charged by commercial banks in Minneapolis increased slightly between July 15 and August 15, but were lower than on August 15 a year ago. The increase in the month ending August 15 was due to higher rates quoted for time loans with stocks and bonds as collateral. Our weighted average of interest rates on important classes of loans was 4.90 per cent on August 15 as compared with 4.76 per cent on July 15 and 5.11 per cent on August 15 a year ago.

Life insurance sales in Minnesota, North Dakota, South Dakota, and Montana, as reported by the Life Insurance Sales Research Bureau, were 31 per cent larger during July than in the corresponding month a year ago. Sales in all four states increased, the largest increase occurring in North Dakota. A very slight decline in sales was reported in July as compared with June, but this appears to be entirely a seasonal occurrence since a decline has occurred at this time of year in every year for which we have reports.

Sales of securities by representative Twin City investment houses were 23 per cent smaller in July than in the corresponding month last year and 10 per cent smaller than sales during June. The general investing public purchased 11 per cent more securities in July than in the same month last year, but 13 per cent less than in June. Banks purchased 39 per cent less securities than a year ago and 18 per cent less than in June. Dealers purchased a 36 per cent smaller volume from these firms than a year ago, but 15 per cent more than in June. Sales of foreign securities were more than 3 times as large in July as in the corresponding month last year, and sales of stocks and industrial bonds and notes were more than double last year's volume.

Sales of city mortgages increased 30 per cent over the volume in July last year. All other groups of securities were sold in smaller volume in July this year than a year ago, the decrease being especially marked in United States Government bonds, for which the volume this year was only one-fifth as great as the volume sold a year ago. The July volume of sales was smaller than the volume in June in the case of all corporation bonds, United States Government bonds, and municipal bonds. On the other hand, sales of city mortgages showed a great increase of 93 per cent, and there were smaller increases in sales of stocks, foreign securities, and farm mortgages.

Prevailing Rate Borne by First Mortgages on Minnesota Farms Suitable for Savings Bank Investment 1895 to 1925

(Figures furnished by a large Northwestern Savings Bank.)

1895—8 2/7%	1903—6%	1911—6%	1919—5 3/4%
1896—8 1/3%	1904—6 1/4%	1912—6 3/4%	1920—6 1/4%
1897—9%	1905—6 1/2%	1913—6%	1921—6 1/4%
1898—7%	1906—6 1/4%	1914—6%	1922—6%
1899—6 1/4%	1907—5 1/4%	1915—6%	1923—6%
1900—6 1/3%	1908—5 1/2%	1916—5 3/4%	1924—5 1/2%
1901—6 1/3%	1909—5 1/4%	1917—5 3/4%	1925—5 5/8%
1902—6%	1910—5 3/4%	1918—6%	

ANALYSIS OF NORTHWEST FREIGHT CAR LOADINGS 1919-25

Weekly data regarding carloadings of revenue freight in the Northwest district* was presented in graphic form in the April 30, 1925, issue of this review. This data has since been subjected to further analysis in this office. The results of this analysis are shown in the accompanying table and chart.

The table presents seasonal relatives in terms of an average month for each of the commodity groups which we have analyzed. The link relative method of analysis was employed.

*The figures for the Northwest District comprise reports from sixteen railroads operating principally in the Ninth Federal Reserve District, in the adjacent parts of the bordering states and in the State of Washington.

IN THE NINTH FEDERAL RESERVE DISTRICT.

Median Livestock Prices at South St. Paul	July, 1925	July, 1924	Percentage of Change
Butcher Cows	\$5.50	\$5.00	+ 10%
Butcher Steers	9.00	8.25	+ 9%
Stocker and Feeder Steers	5.50	5.25	+ 5%
Veal Calves	9.25	7.75	+ 18%
Hogs	12.00	7.10	+ 77%
Lambs	13.75	12.00	+ 15%
Iron Ore Shipments from Upper Lake Ports	8,525,033 tons	7,280,014 tons	+ 17%
Coal Receipts at Duluth-Superior			
Soft	1,362,574 tons	1,158,084 tons	+ 18%
Hard	139,292 tons	202,741 tons	- 48%
Wholesale Trade			
Agricultural Implements—7 firms	\$7,003,900	\$3,839,280	+ 87%
Hardware—18 firms	2,214,930	2,030,010	+ 9%
Shoes—5 firms	493,480	376,100	+ 25%
Groceries—54 firms	5,917,030	5,884,540	+ 1%
Department Store Sales			
23 Stores	\$2,019,710	2,039,940	- 1%

Retail Lumber Sales 5 1/2 Yards	July, 1925	July, 1924	Percentage of Change
	24,846,000 bd. ft.	16,815,000 bd. ft.	+ 48%
Building Permits (18 cities)			
Number	2,140	2,028	+ 5%
Valuation	\$6,915,000	\$8,559,200	+ 5%
Building Contracts Awarded	\$8,957,900	\$7,046,300	+ 27%
Business Failures			
Number	75	81	- 7%
Liabilities	\$1,765,578	\$1,427,184	+ 24%
25 City Member Banks Aug. 18, 1925		Aug. 18, 1924	
Loans	\$230,655,000	\$224,190,000	+ 3%
Securities	109,855,000	81,922,000	+ 34%
Demand Deposits	228,285,000	198,189,000	+ 14%
Time Deposits	99,774,000	80,615,000	+ 11%
Borrowings from F. R. Bank	2,899,009	538,000	+ 424%
Minneapolis F. R. Bank			
Loans to Member Banks	\$7,331,400	\$14,012,200	- 48%
Federal Reserve Notes in Circulation	61,221,500	63,735,900	- 4%

Monthly Normal Index Numbers of Carloadings in
Northwest District
(Average Month = 100)

	Total Grain & Carload- Grain Liv- ings Products Stock			Coal	Forest Products	Ore	Mdse. L.C.L.	Miso. Com- modities
Jan.	84.1	118.3	117.2	122.1	95.5	7.1	84.5	83.8
Feb.	78.8	87.3	98.6	100.3	111.7	7.2	82.0	79.1
March ...	87.9	90.5	100.5	85.1	128.0	8.1	101.5	94.0
April	84.8	72.6	87.3	58.9	110.2	20.8	102.4	84.8
May 102.5	74.1	93.7	81.1	105.5	142.7	104.0	104.0	101.6
June	115.0	77.1	92.2	80.5	103.7	195.3	107.1	107.1
July	115.0	72.1	87.5	93.9	84.9	202.9	105.0	108.0
Aug.	120.8	116.4	85.1	107.8	99.1	202.4	111.7	111.8
Sept.	119.0	141.1	98.9	119.7	96.2	180.7	104.0	110.5
Oct.	121.2	138.0	117.2	137.1	99.7	151.2	108.5	129.6
Nov.	92.2	108.5	110.9	132.8	88.0	66.8	87.5	99.0
Dec.	73.2	108.0	110.9	118.2	73.5	6.8	91.4	80.7

In the chart, shown on another page, the left-hand portion presents the monthly records as they appeared before seasonal changes were removed. The right-hand half of the chart presents curves illustrating changes in the various groups of carloadings, after allowance for seasonal influences.

In the method of analysis followed, the weekly figures were combined into approximate monthly totals. Seasonal fluctuations were then determined for the monthly records, and such seasonal variations were then eliminated. The table above gives the percentage relation of each month's total in a typical year to the monthly average over a year's period for each of the commodity groups. The curves in the right-hand half of the chart, with seasonal changes eliminated, were plotted relative to a base which represents the average month in the six years from 1919 to 1924. In this part of our analysis, coke has been omitted since it is relatively unimportant in the carloading records of this district.

While limited space prevents a detailed discussion of all the fluctuations in the curves as adjusted to eliminate seasonal variations, it is interesting to note that every group of commodities with the exception of grains and grain products, showed a decline in the year 1921, the decline beginning in 1920 in most of the curves. The same curves have shown improvement in subsequent years which was interrupted by a setback in 1924.

The curves for miscellaneous commodities and merchandise in less-than-carload lots have fluctuated with great similarity from 1922 to the present time. Before 1922, there was evidenced an important increase in carloadings of less-than-carload freight which was undoubtedly due to the beginning of hand-to-mouth buying during the years of great price fluctuations and frozen credits.

Carloadings of grain and grain products vary with the size of the grain crops in the Northwest rather than with changes in business conditions. The effects of delayed marketing of grain in the four years from 1919 to 1922 is clearly shown by the high level of the curve during the spring and summer months; also the rapid marketing of crops during the fall of 1924 stands out very clearly.

The livestock curve shows clearly the effect on marketing of the reduction in livestock holdings during 1920 following the severe winter of 1919 and the great decline in livestock prices which accompanied the forced marketing at that time. During 1920 and 1921, livestock marketings were at a low level. There was a gradual increase of marketing of livestock throughout the years 1922 and 1923. In 1924 a reaction set in, which was interrupted during the winter months when livestock was marketed in abnormal quantities on account of the shortage of feed grains. The decline in marketing during 1925 has been the most abrupt of any reduction shown in this curve during the period surveyed.

In the curve for carloadings of ore, only those months are shown when carloadings are usually important in volume; that is, the months when lake navigation is possible throughout the complete month. During the winter months, the amount of ore loaded is insignificant and small variations in carloadings make tremendous fluctuations in the curve, which, if charted, would merely confuse the reader. The abbreviated curve as shown illustrates very clearly the changes in the national industrial situation, especially in iron and steel, which have taken place during the last six and a half years. It should be noted, however, that iron ore, which constitutes the bulk of the ore shipments in this district, is not mined simultaneously with manufacturing requirements on account of the time necessary to make delivery and to process the ore, as well as for financial reasons; and, therefore, the changes in the adjusted curve of ore shipments do not coincide exactly in time with changes in activity in the iron and steel trade.

The curve of forest products illustrates changes in the volume of building in western states, and not precisely the changes in the volume of building in the Ninth Federal Reserve District. These northwestern carloadings of forest products include shipments principally from Wisconsin, Minnesota, Montana, Idaho, Oregon and Washington, which are marketed over a wide territory to the south and east of these states.

The coal curve shows the changes in the coal supply in the Northwest, with the exception of the coal which is hauled in from the south and east by rail and for which the carloadings are included in the records of other districts. The coal included in the carloadings of the northwestern district is that coal which is mined in North Dakota, Montana, and Washington, and the coal which is trans-shipped by rail from boats at the Duluth-Superior docks. Over a period of years, about equal quantities of coal are mined in this territory and shipped in by boat. It is worthy of note that the carloadings of coal do not coincide precisely with the record of coal mined and shipped in by lake according to other information available, owing to consumption near the mines, consumption at Duluth-Superior without trans-shipment by rail and to differences in carryover at the end of each year.

Two economic changes have been taking place during the last six years which have had pronounced effects on freight carloadings. Most important, probably, is the increase in freight hauled by auto truck. For instance, at the South St. Paul market, there has been a great increase recorded in the number of livestock driven in, largely in auto trucks, during the last six years. In 1919, 1.5 per cent of the cattle received at South St. Paul were driven in to the market and 2.2 per cent of the calves, 1.2 per cent of the hogs, and .4 per cent of the sheep. During 1924, 4.3 per cent of the cattle were driven in and 9.0 per cent of the calves, 4.0 per cent of the hogs, and 4.5 per cent of the sheep. Converting the total number of head of livestock driven to South St. Paul into approximate freight carloads, it appears that about four times as large a quantity of livestock is received in this way at the present time as in 1919. The growth has been gradual, but has increased in rapidity during the last two years. The approximate carloads of livestock driven into South St. Paul for the last six years are as follows: 1919, 1,083 cars; 1920, 1,242 cars; 1921, 1,363 cars; 1922, 2,010 cars; 1923, 3,052 cars; 1924, 3,813 cars. During the first six months of 1925, livestock was driven into South St. Paul amounting to 2,573 carloads as compared with 1,687 carloads in the first six months of 1924, although the total receipts of livestock from all sources have been smaller.

Shipments by auto truck have undoubtedly affected other freight carloading curves, especially the curves of miscellaneous commodities and merchandise in less-than-carload lots. There is, however, no way of measuring the extent of truck shipments of miscellaneous freight.

Hand-to-mouth buying is the second change that has become an important economic factor in merchandising in all lines during the last few years. This policy of carrying small inventories and ordering merchandise only a short time ahead of requirements can be illustrated very well from our records of retail lumber sales and stocks of lumber in the hands of lumber retailers during the last five years. The table given below shows changes in sales and stocks of lumber, both measured in board feet, from 1920 to 1924 as reported by a group of lumber retailers operating in the Northwest. It will be seen that stocks of lumber have been declining rapidly, although lumber sales increased in 1922 and have decreased only moderately in 1923 and 1924. In 1920, average stocks of lumber were larger than the total annual sales during the year. In every succeeding year, and most noticeably in 1924, sales have been larger than average stocks of lumber. This policy on the part of retailers of holding small stocks of lumber has undoubtedly been responsible to a considerable degree for the peaks in shipments of forest products in January of 1922, 1923 and 1925 and in February of 1924, because retailers were then ordering more lumber than usual for early spring requirements.

Retail Lumber Sales and Stocks, 1920-1924

Year	Sales in Board Feet	Pct. of Preceding Year	Aver. Stocks Board Feet	Pct. of Preceding Year
1920	201,432,000	.....	203,175,000	.....
1921	166,053,000	82.4	153,155,000	75.4
1922	185,950,000	112.0	126,744,000	62.8
1923	175,818,000	94.6	127,719,000	100.8
1924	180,231,000	91.1	114,299,000	89.5

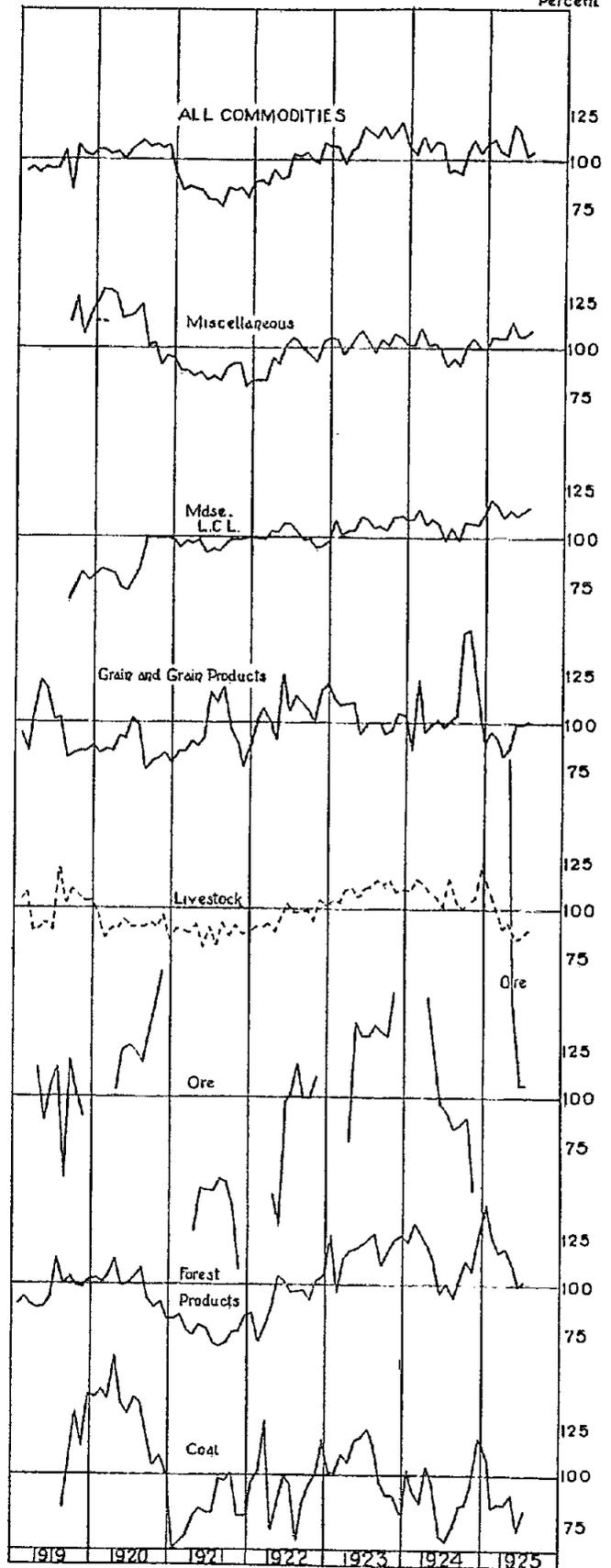
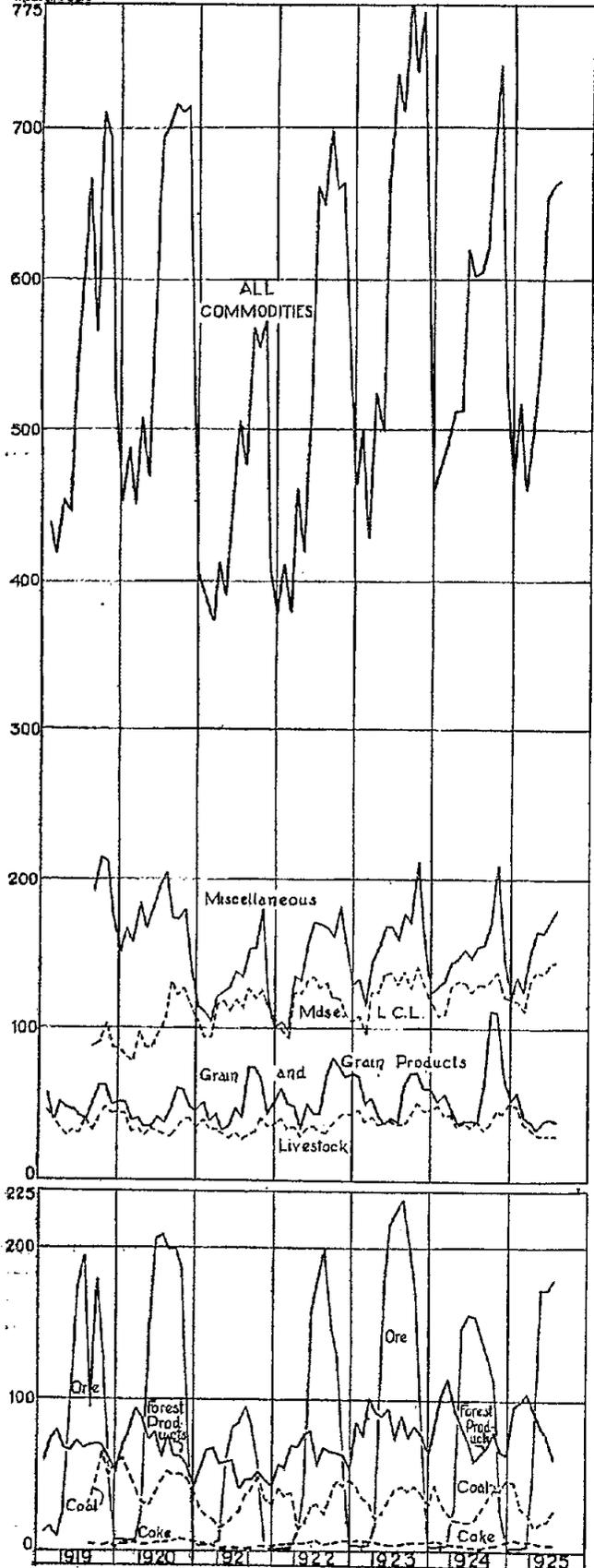
This hand-to-mouth buying policy has been mentioned repeatedly in reviews of economic conditions in all parts of the country and has been given as the reason for the growth in carloadings of merchandise in less-than-carload lots, as stated earlier in this article. Its effects are quite apparent during the year 1920, especially during the month of August, when less-than-carload shipments increased from an index number of 86 to an index number of 100, and miscellaneous commodity shipments decreased from an index number of 123 to an index number of 102. Both of these changes were the sharpest fluctuations in these curves in any one month during the period covered by our chart. In the year and a half following August, 1920, less-than-carload shipments showed almost no decrease, while miscellaneous shipments declined to a very low level. There has apparently been no great change in buying habits from the so-called hand-to-mouth policy since 1922, for both the miscellaneous and less-than-carload shipments curves have followed much the same course since that time.

There remains one further comment to make with regard to interpreting the less-than-carload shipments curve. In the New York Analyst of June 22, 1925, a very ably written article points out that in the United States a car of less-than-carload freight does not represent a constant tonnage. The illustration is given that for the United States as a whole less-than-carload freight increased 39 per cent in 1924 over 1920, while the number of less-than-carload revenue tons was actually 24 per cent smaller in 1924 than in 1920. Apparently much of the less-than-carload business has been lost to the motor truck, or the railroads are giving a more liberal service in this form as a matter of competition to develop and retain the less-than-carload business. We are advised that the less-than-carload shipments in 1924 for the United States as a whole constituted 26 per cent of the total carloadings and but 3 per cent of the tonnage. In this district less-than-carload shipments are but 22 per cent of the total carloadings, and if the carload totals were excluded, no appreciable difference in the direction of the trend for total carloadings would result as can be readily seen by comparing the curves showing magnitudes in the left hand portion of the accompanying chart.

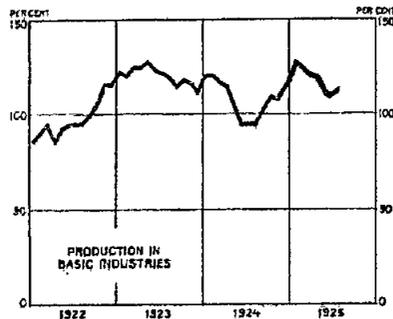
Finally, in basing conclusions on figures for carloadings, one must remember that some variation has been shown in the past in the average tonnage per carload for each group of commodities.

Thousand Cars
775

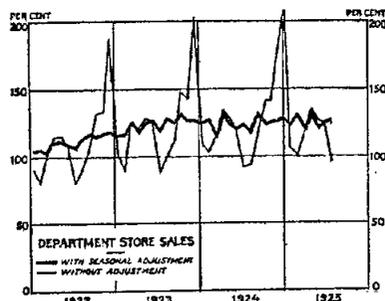
Percent



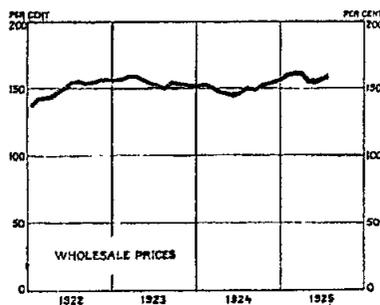
Carloadings of Freight in the Northwest District by Months, 1919 to 1925. Compiled from Weekly Reports of the Car Service Division of the American Railway Association. The curves on the left illustrate changes in the actual carloadings, and the curves on the right illustrate monthly percentage changes from the corresponding months in a typical year.



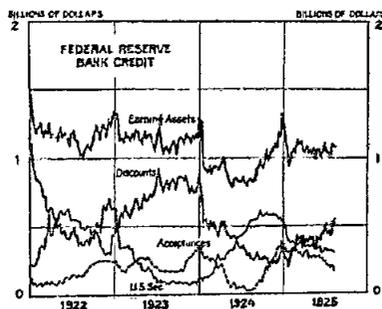
Index of 23 basic commodities, corrected for seasonal variations. (1919 = 100.) Latest figure, July, 112.



Index of Sales of 333 Stores in 117 Cities (1919 = 100). Latest figures, July; Sales with Seasonal Correction, 128; Sales without correction, 96.



Index of United States Bureau of Labor Statistics (1913 = 100, base adopted by Bureau). Latest figure, July, 159.9.



Weekly figures for 12 Federal reserve banks. Latest figures in millions, August 19; total earning assets, 1091; discounts, 559; acceptances, 195; United States Securities, 323.

Summary of National Business Conditions (Compiled August 25 by Federal Reserve Board)

Production in basic industries turned upward in July after a continuous decline since January. Wholesale prices advanced further and the distribution of commodities continued in large volume.

PRODUCTION: The Federal Reserve Board's index of production in basic industries, which makes allowance for usual seasonal variations, advanced by about 2 per cent in July to a point nearly 20 per cent above the low level of a year ago. Increased output was shown for lumber, coal, and cement. Cotton consumption declined less than usual at this season, while the output of the iron and steel industry and the activity in the wool industry continued to decrease. In nearly all the industries, activity was greater than in July of last year. Among industries not represented in the index, the production of automobiles, rubber tires and silk continued to be large. The volume of factory employment and earnings of industrial workers declined further in July, seasonal increases in the clothing, shoe and meat-packing industries being more than offset by decreases in the other industries. Building contracts awarded in July were in only slightly smaller volume than the exceptionally large total reached in June and the total for the first seven months of this year exceeded that for any previous corresponding period.

Estimates by the Department of Agriculture indicated a less favorable condition of all crops combined on August 1 than a month earlier. Expected yields of corn, wheat, rye, tobacco and hay were somewhat smaller than in July, while the indicated production of oats, barley and white potatoes was larger. According to present indications, the yields of all principal crops except corn and barley will be smaller than last year.

The mid-August cotton crop estimate was 13,990,000 bales as compared with a forecast of 13,566,000 bales on August 1.

TRADE: Freight car loadings during July were larger than in June and exceeded those of any previous July; and weekly figures for August indicated a continued large volume of loadings. Sales at department stores showed less than the usual seasonal decline in July and were 3 per cent larger than a year ago, and mail order sales were considerably above those of July, 1924. Wholesale trade continued at the June level and was 6 per cent above the corresponding period a year ago.

PRICES: Wholesale prices advanced further by nearly 2 per cent in July, according to the index of the Bureau of Labor Statistics. Prices of farm products and of miscellaneous commodities rose over 4 per cent, reflecting chiefly increases in livestock and rubber; while in the other commodity groups, price changes were relatively small. The general level of prices in July was 9 per cent higher than a year ago, the rise being chiefly in agricultural commodities. In the first part of August, raw sugar, potatoes, silk, metals and fuels advanced, while grains, leather, hogs and rubber declined.

BANK CREDIT: Demand for commercial credit at member banks in leading cities increased in the first part of August; and the volume of commercial loans on August 12 was larger than at any time since the middle of May, but considerably below the level at the beginning of the year. Loans on securities increased between the middle of July and the middle of August, while the banks' investments showed little change for the period. Discounts for member banks increased at all the reserve banks in recent weeks and the total on August 19 was the largest in more than a year and a half. The reserve banks' holdings of securities and bills bought in the open market continued to decline, but total earning assets in the middle of August were near the high point for the year.

During the latter part of July and the first half of August, conditions in the money market were somewhat firmer. The prevailing rate on prime commercial paper, which had remained at 3 3/4 to 4 per cent since early in May, advanced in August to 4 1/4 per cent.