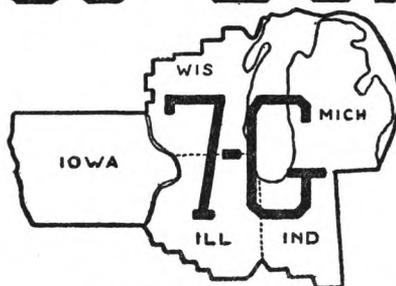


# BUSINESS CONDITIONS

SEVENTH  
FEDERAL



RESERVE  
DISTRICT

Volume 11, No. 10

MONTHLY REVIEW PUBLISHED BY THE  
FEDERAL RESERVE BANK OF CHICAGO

October 1, 1928

## NATIONAL SUMMARY OF BUSINESS CONDITIONS

**V**OLUME of industrial and trade activity increased in August, and there was a further advance in wholesale commodity prices. Reserve bank credit outstanding increased in September, reflecting in part seasonal demands for currency and credit. Money rates remained firm.

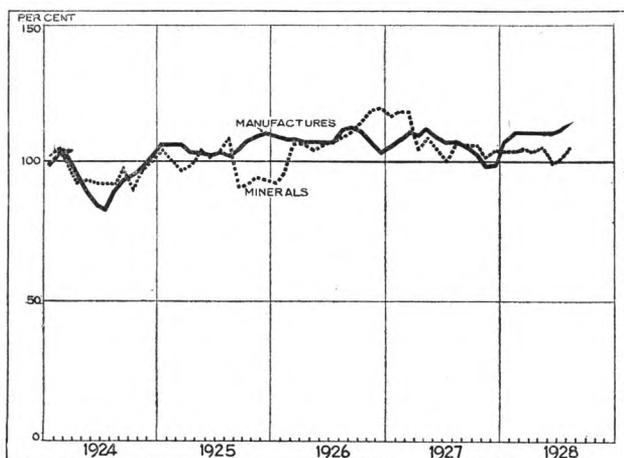
**PRODUCTION**—Production of both manufactures and minerals increased considerably in August, the output of manufacturing plants being larger than at this season of any earlier year. Automobile production was in record volume in August, and available information indicates that output was maintained by many producers at a high level during September. Iron and steel production continued large in August and September, and output of nonferrous metals increased between July and August. Textile mill activity, which had been somewhat reduced in recent months, also showed a substantial increase. Factory employment and payrolls have increased since midsummer and in August were close to the levels of a year ago. In the building industry there was evidence of recession in a sharp decline after the early summer in contracts awarded, which were in smaller volume during August than in the corresponding month of any year since 1924. In the first three weeks of September, however, awards were somewhat larger than last year. Estimates of the Department of Agriculture for September 1 indicate that

yields of principal crops will be larger than last year and above the average for the preceding five years.

**TRADE**—Distribution of commodities showed seasonal increases in August, although sales in most lines of wholesale and retail trade did not equal the unusually large sales of August, 1927. Department store stocks increased as is usual in August but continued smaller than a year ago, while inventories in several lines of wholesale trade were somewhat larger than last year. Freight carloadings were in about the same volume in August as a year earlier. Shipments of miscellaneous commodities and grains were larger and those of coal, live stock, and forest products smaller than last year.

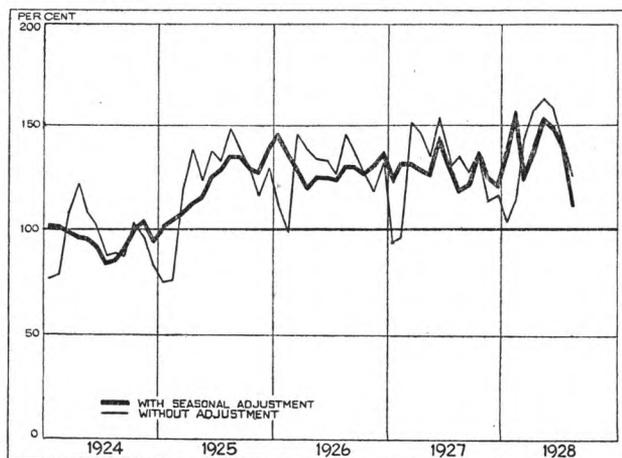
**PRICES**—The general level of commodity prices increased in August and the Bureau of Labor Statistics index, at 98.9 per cent of the 1926 average, was the highest in nearly two years. Increases in August were chiefly in the prices of live stock and live-stock products, which are now higher than at any time since 1920. There were also small increases in fuels, metals, and building materials. Grains and cotton showed sharp declines, and there were decreases also in hides and skins and wool. Since the first of September there have been some declines in live stock and meats and a sharp further decrease in cotton, while prices of pig iron, copper, and petroleum have advanced.

### PRODUCTION OF MANUFACTURES AND MINERALS



Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-1925 average = 100). Latest figures, August, 1928: Manufactures, 114; Minerals, 105.

### BUILDING CONTRACTS AWARDED



Federal Reserve Board's indexes of value of building contracts awarded, as reported by the F. W. Dodge Corporation (1923-1925 average = 100). Latest figures, August, 1928: Adjusted Index, 111; Unadjusted Index, 126.

Compiled September 26, 1928

**BANK CREDIT**—Between the middle of August and the middle of September there was a considerable increase in the loans and investments of member banks in leading cities. Part of the increase was in loans on securities and part reflected a seasonal increase in other loans. Deposits of the member banks also increased during the period. Volume of reserve bank credit outstanding increased during the four weeks ending September 19, in response to seasonal demands for currency and growth in

member bank reserve requirements. The increase in total bills and securities was largely in holdings of acceptances and in discounts for member banks.

During the same period there were further increases in open-market rates on collateral loans and on commercial paper, while rates on bankers' acceptances were reduced from 4 $\frac{5}{8}$  per cent to 4 $\frac{1}{2}$  per cent.

#### WHOLESALE PRICES



Index of the U. S. Bureau of Labor Statistics (1926 = 100, base adopted by the Bureau). Latest figures, August, 1928: Farm Products, 107.0; Non-agricultural Commodities, 96.7.

#### BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

Current activity in the Seventh district reflects expansion in department store, chain, and wholesale trade, in sales of packing-house products, lumber, and retail furniture, and in factory shipments of agricultural machinery, castings, stoves, furniture, and cement. The distribution of creamery butter, flour, and shoes at retail in August decreased in comparison with July; the number of automobiles sold at wholesale and retail showed little change. Department store business during the month, wholesale and retail automobile trade, total value of shipments of meat products and agricultural machinery, together with shipments of flour, creamery butter, stoves, and malleable castings showed substantial increases over August, 1927. Factory shipments of steel castings and furniture, retail furniture trade, and average sales per chain store declined from a year ago.

Weather conditions continue favorable to the maturity of bountiful crops in the Seventh district, with prices of live stock considerably above those of 1927. Quotations for grain are below the level of a year ago.

Production in the iron and steel industry was well maintained during August, with automobile and farm equipment factories operating in record volume. Building contracts declined sharply in August, and totaled slightly less than for the corresponding period of last year. A normal recession from the preceding month in slaughtering and butter production, as well as a seasonal increase in the manufacture of shoes, flour, and furniture was recorded; animal slaughter and shoe manufacturing showed considerable recession in volume from 1927.

In financial phases, loans and discounts of reporting member banks remain at a high level with demand and time deposits above a month ago. Savings decreased slightly from the beginning of August, but showed a gain over last year. Commercial paper sales declined from July,

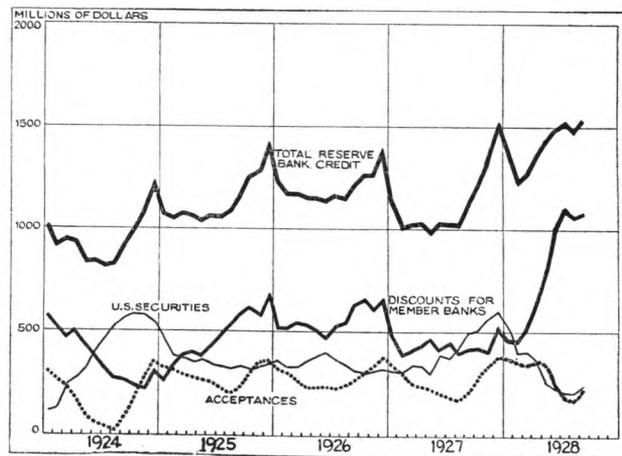
while open-bill market operations and transactions in bankers' acceptances increased; all three showed a recession in activity from 1927. Check payments were at about the same level as a month ago. Money rates continued firm.

#### CREDIT CONDITIONS AND MONEY RATES

Demand for credit is active throughout the district; requirements for cattle feeding and canning have been strong in sections where these industries are important, and other areas also indicate a greater volume of bank credit in use than a month ago or last year. Conditions in the Chicago money market continue firm; banks in that city, however, find themselves well able to care for autumn commercial demand; rates have altered little during the month, a rise from 6 to 6 $\frac{1}{2}$  per cent on brokers' loans being the only quotable change. Collateral and customers' over-the-counter loans continue to carry 5 $\frac{1}{2}$  to 6 per cent, and commercial paper rates are at the level of a month previous, 5 to 5 $\frac{1}{2}$  per cent. The average rate earned on loans and discounts by ten large Chicago banks during August was 5.56 per cent, as compared with 5.44 per cent in July and 4.80 in August, 1927. The corresponding figure for five large Detroit banks in August was 5.61 per cent, and 5.54 in July. In August, 1927, the item stood at 5.27. The prevailing rate in Detroit on commercial loans during the week ended September 15 was 4 $\frac{1}{2}$  to 6 per cent.

Total bills and securities of the Federal Reserve Bank were reduced from \$209,356,000 on August 8 to \$148,936,000 by September 12. On September 19, they aggregated \$164,647,000. The volume on September 12 represents the lowest level of reserve bank credit in use since October 12 last year when it amounted to \$132,283,000. Loans to member banks on August 15 totaled \$152,580,000, and on September 12 had dropped to \$99,217,000, the lowest since May 23, but they recovered on September 19 to \$114,311,000. United States securities on September 19 totaled \$34,-

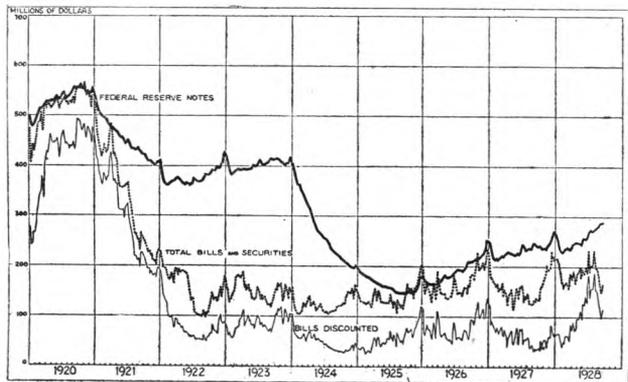
#### RESERVE BANK CREDIT



Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages of first 22 days in September, 1928: Total Reserve Bank Credit, 1,528 million; Discounts for Member Banks, 1,072 million; U. S. Securities, 242 million; and Acceptances, 211 million.

306,000, or about the level maintained since the latter part of July. The volume of Federal Reserve notes in circulation, which have followed an upward trend since the first of the year, on September 19 reached \$288,542,000, the largest amount in circulation since April 30, 1924, with \$290,447,000, and which compares with \$276,194,000 August 15. Total reserves of the Federal Reserve Bank, amounting to \$524,852,000 on September 12, were the largest in volume since the \$534,126,000 reported March 12, 1924. On September 19 they declined to \$518,768,000.

**POSITION OF THE FEDERAL RESERVE BANK OF CHICAGO**



Latest figures, September 19, 1928, in thousands of dollars: Federal Reserve Notes, 288,542; Total Bills and Securities, 164,647; Bills Discounted, 114,311.

After the first of August loans and discounts of reporting member banks receded somewhat; on August 15 they stood at \$2,419,354,000, and on September 12 at \$2,401,108,000. On September 19, however, they rose to a new high mark of \$2,438,743,000. In Chicago, both collateral and commercial loans, following slight reductions, increased again on September 19. In Detroit, both types of loans were reduced shortly after August 15, but recently these items have increased. Total investments on September 19 aggregated \$876,066,000 compared with \$890,568,000 August 15. The reduction occurred principally in Chicago, and particularly in United States securities. Total investments on September 21 a year ago amounted to \$831,118,000. Net demand deposits totaled \$1,874,998,000 September 19, compared with \$1,851,842,000 August 15, and \$1,865,859,000 September 21, 1927, the recent increase being evident throughout the district but principally in Chicago and Detroit. Time deposits on September 19 were \$1,265,551,000, as compared with \$1,245,731,000 August 15, and \$1,172,091,000 September 21 a year ago; the item fluctuated from week to week until recently when it took an upward trend.

Sales of commercial paper by eleven dealers in the Middle West decreased 8.5 per cent in August from the preceding month and were 37.2 per cent less than last year. Individually, ten of the concerns shared in each decline. Most houses reported the demand for bills as rather light from the city banks and fairly good from the country; a few firms, however, experienced a good demand from the city. The supply of paper was only fair. Sales of three local dealers for the first half of September aggregated slightly less than for the corresponding period of August. Demand showed some signs of improvement; the supply continued moderate. Selling rates for August ranged from 5 and 5½ per cent for low to 5½ and 5¾ per cent for high, and averaged 5¼ to 5½ per cent. Rates on September 14

closed at 5¼ to 5½ per cent for low and 5½ to 5¾ per cent for high, with the customary charge 5¼ to 5½ per cent. August 31 outstandings of five dealers in the Middle West totaled 5.0 per cent greater than at the end of July and 20.8 per cent below last August; holdings of twenty-four dealers in the United States amounted to \$458,131,977.

Transactions of six dealers in the Chicago open bill market averaged on a weekly basis 12.8 per cent greater in the quantity of purchases and 67.6 per cent larger in the volume of sales from August 16 to September 12 than for the preceding five weeks. Respective declines, however, of 8.2 and 46.2 per cent were shown from last year. Receipts from other offices increased 281.5 per cent over those from July 12 to August 15 and decreased 43.8 per cent from a year ago. Shipments to other offices averaged 33.6 per cent larger from August 16 to September 12 than in the preceding period and 279.7 per cent in excess of the corresponding figures for 1927. Bills involved principally transactions in packing-house products, cotton, grain, leather, wool, electrical equipment, canned goods, feathers, sausage casings, peanut meats, drugs, lumber, skates, and skins. Supply and demand averaged fair. Ninety-day paper continued to be shown the greatest preference, although other maturities were also in demand at times. Selling rates eased slightly and closed on September 12 at 4½ for 30 days to 4⅞ and 5 for maturities of 180 days. September 12 holdings exceeded those of August 15 by 34.2 per cent, but were 32.7 per cent smaller than on September 14, 1927.

August transactions in bankers' acceptances at sixteen banks in the Seventh Federal Reserve district exceeded those of the preceding month by 42.5 per cent in amount of paper accepted, 132.3 per cent in quantity of purchases, and 94.9 per cent in volume of sales. Respective declines of 31.0, 91.0, and 36.1 per cent were recorded in comparison with a year ago. Individually, however, six of the banks reported a decrease in acceptances from July and five showed a gain in the item over last August. Acceptances of three local banks aggregated 16 per cent less for the first half of September than for the corresponding period of August, and were drawn principally against transactions in packing-house products, grain, coffee, sugar, iron ore, tea, copper, shoes, silk, dried eggs, burlap, rattan, nuts, rugs, and machinery. Liability for outstandings was 5.4 per cent smaller on August 31 than at the close of the preceding month, and 3.2 per cent less than a year ago. Bank portfolios showed a decline of 18.0 per cent from July 31 and of 85.8 per cent from last year, while the volume of their own bills still retained by the banks of origin decreased 26.6 and 86.9 per cent in the respective comparisons. The Federal Reserve Bank of Chicago bought \$20,116,364 of bankers' acceptances during August and had \$13,435,904 of this paper on hand at the close of the month.

**Volume of Payment by Check**—The volume of payment by check for August, as reported by clearing houses of thirty-seven cities within the Seventh district, aggregated \$6,497,659,000, or 0.7 per cent more than in July and 7.2 per cent above August, 1927. In the total for the four larger cities, Chicago, Detroit, Milwaukee and Indianapolis, an increase of 1.1 per cent was recorded over July and of 7.5 per cent over August last year. The amount in Chicago totaled only 0.2 per cent larger than in the preceding month and 2.5 per cent above August a year ago. Data for thirty-three smaller cities showed a decline of 1.8 per cent from July, but increased 5.2 per cent in the yearly comparison.

**Savings Deposits**—The volume of savings deposits in the Seventh district decreased 0.2 per cent on September 1

from the beginning of August, while the average amount declined 0.5 per cent and the number of accounts increased 0.3 per cent, according to a compilation for 206 reporting banks. Gains of 3.5, 2.5, and 0.9 per cent, respectively, were shown in comparison with last year. Figures for Indiana and Michigan continued considerably above a year ago and deposits in Iowa, Michigan, and Wisconsin were larger than on August 1. Wisconsin experienced an increase in average deposits over the preceding month, and Illinois showed a recession in number of accounts from the corresponding date of 1927. Individually, half the banks reported deposits above the beginning of August,

while one-fifth showed a decrease in the item from last year.

**Bonds**—Slightly greater activity has appeared in the bond market since the end of August, and prices have trended slightly upward. Dealers have liquidated to a considerable extent the accumulations on their shelves to make way for autumn financing. Favorably priced high grade public utility issues comprised a large part of August sales, while some interest was manifested in rails, first-mortgage real estate, municipal, and high grade foreign securities. Buying in recent weeks has been mainly by individual investors, rather than by institutions.

## AGRICULTURAL PRODUCTION AND FOODSTUFFS

Present prospects point to bumper harvests in the Seventh district this autumn, with conditions on September 15 maintained at the high level of the preceding month. Corn made rapid progress during the latter part of August and early September, so that mid-month found a large part of the crop already safe from killing frosts, and weather conditions conducive to the maturity of the remainder. Threshing of small grain neared completion. Fall plowing was getting well under way.

of wheat and barley increased over a year ago, but stocks of corn, oats, and rye were below the level on September 10, 1927. Trading in grain futures by members of the Chicago Board of Trade totaled 10.1 per cent larger than in July and 11.7 per cent less than a year ago. Prices declined.

**Movement of Live Stock**—Public stock yards in the United States received a greater number of cattle, calves, and lambs and a smaller quantity of hogs during August than in July. Marketings of cattle, calves, and hogs were considerably below a year ago and the 1923-27 August average; receipts of sheep and lambs increased in both comparisons.

**CROP PRODUCTION**  
Estimated by the Bureau of Agricultural Economics as of September 1  
(In thousands of bushels unless otherwise specified)

	SEVENTH DISTRICT		UNITED STATES		
	FORECAST 1928	FINAL 1927	FORECAST 1928	FINAL 1927	5-Yr. Av. 1922-26
Corn .....	1,042,144	787,986	2,930,586	2,773,708	2,775,634
Total wheat ....	41,393	65,560	901,072	872,595	807,378
Oats .....	617,637	454,805	1,453,829	1,184,146	1,351,723
Barley .....	81,602(a)	55,144(a)	346,027	264,392	192,020
Buckwheat .....	1,617(a)	1,618(a)	15,526	16,029	13,711
Flax .....	328(b)	379(b)	23,448	26,570	20,148
Potatoes (white) ..	76,475	51,925	466,815	406,964	393,776
Potatoes (sweet) ..	1,717(c)	1,524(c)	81,618	93,928	81,101
Dry beans .....	5,037(e)	5,134(e)	15,809	16,891	16,335
Tomatoes for manufacture* .....	213(d)	214(d)	925	1,131	.....
Sweet corn for manufacture* .....	353(a)	194(a)	652	399	.....
Cabbage for kraut* .....	53(f)	41(f)	142	165	.....
Apples (total crop) .....	19,063(a)	12,907(a)	178,949	123,455	.....
Peaches .....	3,245(d)	2,007(d)	66,752	45,463	54,302
Pears .....	1,738(d)	1,195(d)	22,812	18,072	20,677
Grapes* .....	92(a)	63(a)	2,631	2,465	2,095
Tobacco** .....	46,363	32,840	1,371,782	1,211,301	1,337,561
Tame hay* .....	15,556	21,626	87,859	106,468	90,967

\*In thousands of tons.

\*\*In thousands of pounds.

(a) Five states including Seventh Federal Reserve district. (b) Wisconsin, Iowa. (c) Indiana, Illinois, Iowa. (d) Indiana, Illinois, Michigan, Iowa. (e) Michigan, Wisconsin. (f) Indiana, Illinois, Michigan, Wisconsin.

### FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in August, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JULY 1928	AUGUST 1927	
Production (bbls.) .....	+12.7	- 8.4	30
Stocks of flour at end of month (bbls.) .....	+ 2.2	- 7.0	26
Stocks of wheat at end of month (bu.) .....	+62.4	- 8.1	26
Sales (volume) .....	-48.4	+22.1	12
Sales (value) .....	-45.5	+ 9.3	12

Production includes wheat and other flours. Balance of items refer to wheat flour only.

**Grain Marketing**—Interior primary markets in the United States handled wheat and oats in seasonally larger quantities and corn in somewhat smaller volume during August than in July, with receipts and reshipments of corn and oats in excess of last year and the tonnage of wheat reduced slightly from August, 1927. The movement of wheat and corn increased and that of oats decreased in comparison with the 1923-27 August average. Visible supplies of wheat, oats, and barley in the United States showed the customary gain on September 15 over the corresponding Saturday of August, while the supply of other grain declined. Holdings

**LIVE STOCK SLAUGHTER**

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, August, 1928 .....	202,795	442,485	310,843	81,875
Federally inspected Slaughter, U. S.				
August, 1928 .....	716,567	2,545,335	1,196,112	368,799
July, 1928 .....	662,331	2,984,203	1,076,307	361,564
August, 1927 .....	837,858	3,049,893	1,168,404	389,369

Reshipments of live stock to feed lots showed a large seasonal gain over July, and were considerably in excess of last year.

### AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	SEPTEMBER 15 1928	AUGUST 1928	JULY 1928	AUGUST 1927
Native Beef Steers (average).....	\$16.35	\$15.25	\$15.00	\$11.80
Fat Cows and Heifers.....	10.75	10.15	10.00	8.10
Hogs (bulk of sales).....	12.45	11.25	10.70	9.10
Calves .....	18.00	16.60	14.85	14.85
Lambs .....	14.55	14.55	15.60	13.85
Yearling Sheep .....	10.75	11.55	12.60	10.45

**Meat Packing**—August production at slaughtering establishments in the United States aggregated less than in the preceding month and was considerably under a year ago. Employment for the last payroll of the period decreased 1.7 per cent in number, 1.4 per cent in hours worked, and 2.0 per cent in value from the corresponding figures for July. Domestic trade was slightly better for lard, remained good for smoked goods, boiled ham, and sausage, and averaged fair for fresh pork and dry salt meats. Demand for beef and lamb was rather slow during the first half of the month but tended to improve a little at the close. The value of sales billed to domestic and foreign customers by fifty-nine meat packing companies in the United States totaled 3.8 per cent more for August than for July and was 5.9 per cent ahead of a year ago. Domestic demand showed an improvement at the beginning of September over the preceding month. August prices of nearly all products were higher than those of July; quotations for lamb eased. September 1 inventories at packing plants and cold-storage warehouses in the United States fell considerably below the level of August 1 and a year ago, with several of the items showing a reduction from the five-year average. Lard and mutton stocks continued in excess of last year and the 1923-27 September 1 average.

Shipments for export were slightly smaller than in July, although some companies reported an increase. Foreign business remained rather quiet. A good demand for hams developed early in the month in the United Kingdom but slackened later; the Continent made some inquiries for fat backs; the lard trade continued in small volume for this time of year. Prices in Europe trended downward during the month and closed below United States parity. Consigned stocks already abroad and in transit to European countries were indicated as slightly smaller on September 1 than at the beginning of August.

**Dairy Products**—Reports from sixty creameries in the Seventh district show a seasonal decline in August butter production of 12.2 per cent from July, although the tonnage totaled 6.1 per cent greater than a year ago. Statistics released by the American Association of Creamery Butter Manufacturers indicate similar trends for the United States. Sales of creamery butter in the Seventh district declined 8.0 per cent in August from the preceding month and gained 15.4 per cent over last year, according to a compilation for

sixty-two companies. Receipts of cheese at Wisconsin markets from factories within the state were 15.3 per cent smaller during the five weeks ended September 8 than for the preceding period and 4.8 per cent in excess of the corresponding weeks of 1927; redistribution from these centers increased 1.8 per cent and decreased 3.6 per cent in the respective comparisons. Stocks of butter and cheese at cold-storage warehouses and packing plants in the United States showed the customary expansion on September 1 over the preceding month; smaller quantities of eggs were on hand than at the beginning of August. Holdings of cheese and eggs increased over last year and the 1923-27 September 1 average; butter inventories decreased in both comparisons. Smaller tonnages of butter and cheese and larger quantities of eggs were received at Chicago than a year ago; each showed a recession in volume from July. Chicago quotations for butter and eggs advanced in August over those of the preceding month; cheese prices held about steady.

## INDUSTRIAL EMPLOYMENT CONDITIONS

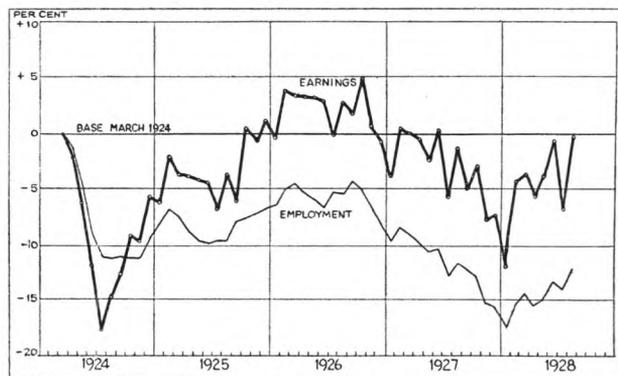
Employment reports for August indicate a general return to industrial activity after the seasonal quiet of July. Payroll amounts especially gave evidence of a reaction, increases in all but one of the groups, that of food products, following the uniform declines of the preceding month. In volume of employment there were declines in the textiles, and the stone, clay, and glass products groups, as well as in food products. The aggregate gain for the period July 15 to August 15 amounted to 1.9 per cent in number of workers and 6.5 per cent in amount of payrolls. This compares with losses of 0.6 and 6.1 per cent, respectively, for the preceding period. In the metals and metal products group gains of 4.8 per cent in men and 8.2 per cent in payrolls approximately balanced the previous losses of 4.1 and 8.9 per cent, respectively. The vehicles group showed substantial increases in both men and payrolls, a condition reflected also in the reports from the Employers' Association of Detroit according to which the volume of employment in that city was 5.5 per cent larger on August 15 than four week earlier, and 7.2 per cent higher on September 11 than on August 15.

The coal industry continued to add more workers, while building and construction work experienced a slight decline in activity. At the free employment offices the ratio of

applicants to available positions showed an improvement, dropping from 151 per cent to 138 in Illinois, from 153 to 113 in Indiana, and from 256 to 215 in Iowa.

### TREND IN VOLUME OF EMPLOYMENT AND EARNINGS AT REPORTING INDUSTRIAL PLANTS OF THE SEVENTH DISTRICT

March, 1924—August, 1928



### EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED			WEEK ENDED		
	AUGUST 15 1928	JULY 15 1928	PER CENT CHANGE	AUGUST 15 1928	JULY 15 1928	PER CENT CHANGE
All groups (10) .....	347,426	340,887	+ 1.9	\$9,439,390	\$8,860,625	+ 6.5
Metals and metal products (other than vehicles).....	141,211	134,714	+ 4.8	3,831,152	3,539,066	+ 8.3
Vehicles .....	36,333	35,015	+ 3.8	1,160,849	1,003,557	+15.7
Textiles and textile products.....	25,856	26,647	- 3.0	600,797	574,358	+ 4.6
Food and related products.....	45,591	46,820	- 2.6	1,140,780	1,176,494	- 3.0
Stone, clay, and glass products.....	14,571	14,690	- 0.8	438,357	414,072	+ 5.9
Lumber and its products.....	26,668	26,475	+ 0.7	643,739	597,186	+ 7.8
Chemical products .....	9,945	9,883	+ 0.6	260,623	250,861	+ 3.9
Leather products .....	14,207	13,907	+ 2.2	320,168	293,426	+ 9.1
Rubber products .....	3,890	3,602	+ 8.0	97,993	82,016	+19.5
Paper and printing.....	29,154	29,134	+ 0.1	944,932	929,589	+ 1.7

## MANUFACTURING ACTIVITIES AND OUTPUT

**Automobile Production and Distribution**—August data on automobile production in the United States show output the largest of any month on record. Passenger cars produced totaled 400,689 or 18.5 per cent above July and 46.0 per cent larger than last August. Truck production in the

United States of 57,740 increased 8.8 per cent in the monthly comparison and was 67.6 per cent above a year ago.

Midwest distributors of automobiles sold fewer cars at wholesale during August than in July but more than in

the corresponding month of 1927. The number sold at retail showed little change in the monthly comparison, and the value declined; both remained at a level above a year ago. Used car sales were smaller than in July, though larger than in August, 1927. Stocks on August 31 of both new and used cars gained over a month previous, while new cars on hand declined from last year and used car stocks gained. Deferred payment sales of twenty-six dealers reporting the item averaged 46.7 per cent of their total retail sales in August, compared with 53.4 per cent in July and 43.8 per cent a year ago.

#### MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in August, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JULY 1928	AUGUST 1927	
New cars			
Wholesale—			
Number sold.....	- 0.3	+14.9	26
Value .....	+ 5.0	+14.0	26
Retail—			
Number sold.....	- 0.3	+49.8	76
Value .....	- 1.8	+23.7	76
On hand August 31—			
Number .....	+ 3.3	-13.1	46
Value .....	+12.2	- 6.8	46
Used cars			
Number sold.....	- 3.3	+22.1	76
Salable on hand—			
Number .....	+ 9.2	+ 8.0	45
Value .....	+ 5.1	+ 3.7	45

**Agricultural Machinery and Equipment**—August sales of agricultural machinery and equipment billed to domestic and foreign customers by seventy-four manufacturers in the United States exceeded those in July by 4.3 per cent in the heavy machinery group, and 0.1 per cent for "all other" (exclusive of barn supplies), but showed a recession of 11.0 per cent in the barn equipment group. Business in the tractor, thresher, combination harvester-thresher line increased 38.4 per cent over a year ago, and gains of 6.2 and 6.3 per cent, respectively, were recorded in the light machinery and barn equipment groups.

#### PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in August, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JULY 1928	AUGUST 1927	
Domestic sales billed.....	- 0.9	+20.5	76
Sales billed for export.....	+17.1	+33.4	42
Total sales billed.....	+ 2.2	+22.9	76
Production .....	+ 4.2	+28.8	74

Production computed from average employment during month. Sales based on value.

**Iron and Steel Products**—A steady volume of miscellaneous orders through August maintained steel operations in the Chicago district at 75 per cent of capacity and toward the end of the month they were advanced to 80 per cent. Farm implement and automobile manufacturers were the largest consumers of steel, but there was a good demand from diversified sources. Pig iron sales also were large; production in the Illinois and Indiana district declined somewhat in August from July, but continued above the rate of a year ago. Pig iron output for the United States increased in both comparisons, as did steel ingot production. Unfilled orders of the United States Steel Corporation totaled 3,624,043 tons on August 31, an increase of 53,116 tons over July 31 and the largest tonnage for that date in August since 1923.

The price tendency in recent weeks has been upward. The composite average of leading iron and steel products, as compiled by *Iron Trade Review*, has risen gradually week by week from \$34.89 on August 15 to \$35.23 September 19. The price of pig iron at Chicago was raised 50 cents the end of August to \$18.00, and again the third week in September to \$18.50. The strength of scrap iron and steel prices at Chicago has been well maintained, and quotations on many items trend upward.

Steel casting foundries of the district booked a smaller volume of new orders in August than in either the preceding month or a year ago; shipments and production increased over July but were less than last year. At malleable casting foundries, shipments, production, and orders booked were larger than a month previous or a year ago. For stove manufacturers in the district all three items increased in the monthly and yearly comparisons.

**Shoe Manufacturing, Tanning, and Hides**—Shoe factories in the Seventh Federal Reserve district increased their production 23.8 per cent in August over the preceding month, according to preliminary estimates of the United States Department of Commerce. Reports sent direct to this bank by representative companies in the district show a larger quantity of leather tanned during the period than in July or last year; sales also gained in the first comparison, but totaled somewhat less than a year ago. Quotations for leather tended to ease.

Chicago trading in packer green hides and calf skins decreased in August from the preceding month. Shipments from the city and purchases by district tanners, however, were reported in excess of July. Prices declined.

**Furniture**—Twenty-four furniture manufacturers of the Seventh district booked orders in August totaling 10.0 per cent less than in the preceding month and 6.9 per cent below the corresponding month of 1927. In the former comparison, however, the majority of companies showed gains, and ten firms had a larger volume of orders than a year ago. Shipments increased seasonally 40.6 per cent over July, but were 7.7 per cent smaller than last August. A larger volume of shipments than new orders, plus cancellations received, resulted in a reduction in the amount of unfilled orders on hand August 31 of 5.4 per cent from those held July 31; the amount was 3.0 per cent smaller than on August 31 last year. Operations increased during August, and exceeded the rate of a year ago.

**Raw Wool and Finished Woolens**—August trading in the raw wool market was generally spotty. A few dealers in the Chicago district report that sales to manufacturers increased considerably in volume over July and were larger than in August of previous years; others report a quiet market. The latter part of the month, however, and in the early part of September, demand was indicated as broader. Prices remained fairly steady at July levels, though lower than those prevailing during June. With manufacturers of finished goods, August was a quiet month, preceding the openings in the first week of September. Greater activity has been apparent since these openings. Prices on the spring lines of men's wear averaged lower in some cases, unchanged in some, and higher in others.

## COAL

Conditions in the Midwest bituminous coal industry remained about the same through August as in July, with wage conferences constituting the principal factor of interest. Many Illinois mines reopened in September following an agreement between miners and operators on a reduction

in the wage scale. With the exception of Southern Illinois, screenings prices in other sections of the district averaged lower after the first of September; prices of domestic coal were higher in some instances. Production in Illinois aggregated 3,835,318 tons for August, or about 700,000 tons

more than in the preceding month; 125 mines were in operation, for an average of 17.1 days, and employing 36,681 men.

For the country as a whole, output of bituminous coal in August totaled 41,108,000 tons, a volume larger than in

July but slightly under production for last August. According to the Ore & Coal Exchange, August loadings of bituminous coal into vessels at Lake Erie ports were the largest for any month on record, the total of 5,666,351 tons being 1,500,000 tons greater than a year ago.

## BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

Increased sales in the lumber industry were reported for August, both wholesale and retail firms showing gains that offset the heavy losses of the preceding month. The aggregate for twenty wholesalers and manufacturers of the district exceeded July by 13.6 per cent in value and 14.2 per cent in board feet measure, and was also slightly larger than a year ago, the increases amounting to 0.2 and 0.7 per cent, respectively, in the two units of measurement. Dollar sales at 229 retail yards also showed a gain over July, 7.3 per cent, but remained below last year's volume, the difference amounting to 10.3 per cent. Outstanding accounts at wholesale were 121 per cent of August sales as against 139 per cent the preceding month and 122 a year ago. At retail the corresponding ratios were 324, 339, and 299 per cent, respectively. Stocks, as reported by wholesale dealers, were generally lighter than in either the preceding month or a year ago; at retail yards conditions showed a wide variation, with the number of decreases reported, however, exceeding the increases. Prices continued firm during August, but were somewhat weaker the early part of September. At Chicago lumber shipments increased

17.8 per cent over the preceding month and for the first time this year reached the volume of the corresponding month of 1927. Receipts of lumber, though slightly below those of a year ago, gained 6.6 per cent over July.

In the cement industry shipments showed a heavy increase over the preceding month but in many sections of the district failed to equal the volume of a year ago. Brick deliveries were less satisfactory, and stocks were reported as considerably larger than a month previous.

**Building Construction**—Contracts awarded in the Seventh district totaled \$108,306,180 in August, a decrease of 23.0 per cent from the July volume and 1.2 per cent less than in August, 1927. Contracts for residential building amounted to \$43,530,268, 16.4 per cent less than in July but slightly larger than a year ago. Permits issued, as reported by fifty cities, showed a decline in estimated cost of 20.8 per cent in the month-to-month comparison and of 19.9 per cent from the corresponding month a year ago. Fifty-three additional cities for which the monthly comparison is available registered a loss from July of 2.4 per cent in estimated valuation.

## MERCHANDISING CONDITIONS

**Wholesale Trade**—August sales in six lines of wholesale trade reporting to this bank totaled larger than in the preceding month, and in four groups also increased over a year ago. In the first eight months of 1928, reporting wholesale drug firms had sales aggregating 3.4 per cent more than in the corresponding period of 1927, wholesale shoes showed an increase of 4.6 per cent, and electrical

supplies a gain of 5.6 per cent; wholesale dry goods, grocery, and hardware firms indicated declines in this comparison of 4.2, 1.9, and 4.1 per cent, respectively. Collections for the majority of reporting lines were larger in August than in the preceding month and were above a year ago. Prices in general were indicated as firm or steady.

WHOLESALE TRADE DURING THE MONTH OF AUGUST, 1928

	Net Sales During Month		Stocks at End of Month		Accounts Outstanding End of Month			Collections During Month	
	PER CENT	CHANGE FROM PRECEDING MONTH	PER CENT	CHANGE FROM PRECEDING MONTH	PER CENT	CHANGE FROM PRECEDING MONTH	RATIO TO NET SALES DURING MONTH	PER CENT	CHANGE FROM PRECEDING MONTH
Groceries .....	(33)+ 8.9	(33)+ 1.9	(21)+ 0.4	(21)- 0.6	(29)+ 1.5	(29)- 5.0	(29) 99.5	(24)+ 2.4	(24)+ 0.2
Hardware .....	(15)+ 7.7	(15)+ 1.8	(10)- 1.4	(10)- 8.7	(15)+ 4.3	(15)+ 1.3	(15) 200.8	(13)- 8.2	(13)- 5.0
Dry Goods .....	(12)+28.6	(12)- 3.7	( 9)- 0.3	( 9)+ 4.5	(12)+11.0	(10)- 0.5	(12) 266.9	(10)+ 0.6	( 8)- 4.4
Drugs .....	(14)+10.2	(14)+ 6.2	(12)- 2.3	(12)- 4.5	(13)+ 2.1	(14)+ 6.4	(14) 137.3	( 9)+ 3.2	( 7)+ 6.0
Shoes .....	( 7)+42.5	( 7)- 7.3	( 5)+ 0.3	( 5)+ 6.6	( 6)+10.2	( 6)+ 4.5	( 6) 246.5	( 5)- 7.0	( 5)+ 5.4
Electrical Supplies .....	(31)+ 8.1	(31)+14.0	(24)+ 3.4	(24)- 7.3	(30)+ 6.3	(30)+ 8.3	(30) 138.2	(23)+ 3.4	(23)+ 7.6

Figures in parentheses indicate number of firms included.

**Department Store Trade**—Total sales during August of 104 department stores in the Seventh district exceeded those of the preceding month by 9.5 per cent, but were only 0.7 per cent heavier than in August last year. Both the larger and the smaller cities showed sales increases in the monthly comparison, with Chicago, Detroit, and Milwaukee likewise indicating gains over a year ago. Sales by Indianapolis firms and by fifty-seven stores in smaller centers were less in total volume than last August. District sales for the first eight months of 1928 aggregated 4.5 per cent more than in the same period of 1927. Stocks on hand August 31 were heavier than either a month previous or a year ago by 7.1 and 3.3 per cent, respectively. The ratio of sales to average stocks, or stock turnover, was 29.6 per cent for August compared with 30.4 per cent in July; for the year to date turnover was 246.7 per cent against 245.6 per cent last year. Collections fell off 11.7 per cent in August from July, but exceeded those a year ago by 8.8

per cent. Accounts receivable on August 31 were 1.0 per cent smaller than a month previous and 7.4 per cent larger than on the corresponding date of 1927. August collections averaged 35.9 per cent of accounts receivable July 31, compared with 35.7 per cent a year ago.

**Retail Shoe Trade**—Total sales during August of twenty-five dealers and the shoe sections of twenty-two department stores decreased 1.7 per cent from July, but gained 0.7 per cent as compared with a year ago. Individually, fourteen dealers and fourteen department stores reported gains in the month-to-month comparison. Sales for the year through August aggregated 1.3 per cent below the corresponding\* period of 1927. Stocks of shoes on hand August 31 of forty firms averaged 12.6 per cent heavier than a month previous and 11.6 per cent above a year ago. Accounts receivable at the end of the month declined 15.5 per cent from July 31 and 9.5 per cent from August 31, 1927, according to the reports of eighteen dealers.\* Collec-

tions during the month were 24.4 per cent less than in July, but aggregated 9.3 per cent more than last August. The ratio of accounts receivable to sales during the month averaged 60.6 per cent for August, 61.5 per cent for July, and 62.6 per cent a year ago.

**Retail Furniture Trade**—Sales of furniture during August increased 33.1 per cent over the preceding month but were 2.2 per cent smaller than a year ago, according to the reports of twenty-three retail dealers and the furniture sections of twenty-six department stores in the district. Gains in installment sales of eighteen dealers averaged 48.5 per cent more and 7.9 per cent less in the respective monthly and yearly comparisons. Total collections by twenty-one dealers were 4.4 per cent heavier in August than in July but fell 1.9 per cent below the level of last August, while collections on installment accounts gained 2.7 and declined 5.5 per cent in the respective comparisons. Accounts receivable August 31 totaled 1.7 per cent more

than on July 31 and 0.4 per cent above the corresponding date of 1927. Stocks on hand of dealers and department stores averaged 2.9 per cent heavier than a month previous and were 4.8 per cent larger than a year ago.

**Chain Store Trade**—A further slight gain (0.5 per cent) was recorded for August over July in the number of chain stores operated by twenty-five companies, and the number remained, as in the preceding month, more than 20 per cent greater than a year ago. Total sales increased 4.5 and 16.6 per cent, respectively, in the monthly and yearly comparisons, while average sales per store gained 4.0 per cent over July but were 3.0 per cent below last August. Men's clothing, shoe, and furniture chains indicate declines in the month-to-month comparison; cigar, musical instrument, shoe, furniture, and women's clothing chains had smaller sales than in August, 1927, with five-and-ten-cent stores, and the grocery, drug, and men's clothing groups reporting gains.

## MONTHLY BUSINESS INDICES COMPUTED BY FEDERAL RESERVE BANK OF CHICAGO

(Index numbers express a comparison of unit or dollar volume for the month indicated, using the monthly average for 1923-1924-1925 as a base, unless otherwise indicated. Where figures for latest month shown are partly estimated on basis of returns received to date, revisions will be given the following month. Data refer to the Seventh Federal Reserve District unless otherwise noted.)

	No. of Firms	August 1928	July 1928	August 1927	July 1927		No. of Firms	August 1928	July 1928	August 1927	July 1927
<b>Meat Packing—(U. S.)—</b>						<b>Wholesale Trade—</b>					
Sales (in dollars).....	59	115.8	111.6	109.3	102.3	Net Sales (in dollars):					
<b>Casting Foundries—</b>						Groceries .....					
Shipments:						Hardware .....	37	103.7	93.4	101.7	97.8
Steel—In dollars .....	15	75.6	72.8	96.3	78.6	Dry Goods .....	12	92.9	85.5	91.2	90.2
In tons .....	15	74.4	71.6	97.1	77.3	Drugs .....	10	96.1	75.4	98.2	73.4
Malleable—In dollars .....	17	71.6	60.0	62.0	55.3	Shoes .....	8	105.9	90.7	100.3	92.9
In tons .....	15	100.8	94.3	79.2	69.4	<b>Retail Trade (Dept. Stores)—</b>					
<b>Stoves and Furnaces—</b>						Net Sales (in dollars):					
Shipments (in dollars).....	12	126.0	85.2	125.8	82.2	Chicago .....	31	90.7	80.1	89.9	76.0
<b>Agricultural Machinery &amp; Equipment—(U. S.)—</b>						Detroit .....					
Domestic Sales (in dollars).....	83	203.9	207.8	166.8	158.5	Indianapolis .....	4	130.8	109.3	126.3	93.0
Exports (in dollars).....	56	298.3	244.7	234.0	158.8	Milwaukee .....	5	81.4	80.0	90.2	77.0
Total Sales (in dollars).....	83	218.4	213.7	177.6	158.5	Outside .....	5	94.9	83.3	90.5	81.9
Production .....	82	145.0	142.0	115.6	113.8	Seventh District .....	60	89.5	82.2	91.3	77.6
<b>Furniture—</b>						Retail Trade—(U. S.)—					
Orders (in dollars).....	27	108.0	129.2	110.5	133.9	Department Stores .....	565	85	78	89	75
Shipments (in dollars).....	27	113.7	75.7	121.3	92.6	Mail Order Houses.....	4	127	119	105	93
<b>Shoes—<sup>1</sup></b>						Chain Stores:					
Production (in pairs).....	32	105.2	87.2	134.9	101.5	Grocery .....	34	205	199	170	167
Shipments (in pairs).....	32	118.9	97.4	152.0	102.8	Drug .....	13	169	164	140	141
<b>Electric Energy—</b>						Shoe .....					
Output of Plants (KWH).....	8	151.8	142.1	133.7	125.9	Five and Ten Cent.....	14	134	128	130	121
Industrial Sales (KWH).....	8	183.0	181.7	160.2	151.6	Candy .....	4	123	118	110	112
<b>Flour—</b>						Apparel .....					
Production (in bbls.).....	32	106.3	94.3	118.3	97.2	Cigar .....	5	197	180	165	157
<b>Output of Butter by Creameries—</b>						Stamp Tax Collections— <sup>3</sup>					
Production .....	74	140.3	156.7	134.3	153.2	Sales or Transfers of Capital Stock.....		197.7	137.8	237.0	80.8
Sales .....	74	127.6	130.9	116.8	130.0	Sales of Products on Exchange—Futures		82.7	86.6	88.5	115.3
<b>Automobiles—</b>						<b>U. S. Primary Markets—<sup>4</sup></b>					
Distribution in Middle West:						Grain Receipts:					
New cars—Wholesale—Number sold.....						Oats .....					
Value .....						Corn .....					
New cars—Retail —Number sold.....						Wheat .....					
Value .....						Grain Shipments:					
New cars—On hand—Number .....						Oats .....					
Value .....						Corn .....					
Used cars—Number sold.....						Wheat .....					
Used cars—On hand—Number .....						Building Construction—					
Value .....						Contracts awarded (in dollars):					
Production (U.S.): Passenger cars.....						Residential .....					
Trucks .....						Total .....					
<b>Freight Carloadings—(U. S.)—</b>						Permits:					
Grain and Grain Products.....						Chicago .....					
Live Stock .....						Number .....					
Coal .....						Cost.....					
Coke .....						Indianapolis .....					
Forest Products .....						Number .....					
Ore .....						Cost.....					
Merchandise and Miscellaneous.....						Des Moines .....					
Total .....						Number .....					
<b>Iron and Steel—</b>						Cost.....					
Pig Iron Production: <sup>2</sup>						Detroit .....					
Illinois and Indiana.....						Number .....					
United States .....						Cost.....					
Steel Ingot Production—(U.S.) <sup>2</sup> .....						Milwaukee .....					
Unfilled Orders U. S. Steel Corp.....						Number .....					
						Cost.....					
						Others (45) .....					
						Number .....					
						Cost.....					
						Fifty Cities .....					
						Number .....					
						Cost.....					

1. Monthly average of mean of production and shipments in 1923-24-25 = 100; 2. Average daily production; 3. First Illinois internal revenue district; 4. Monthly average receipts 1923-24-25 = 100.