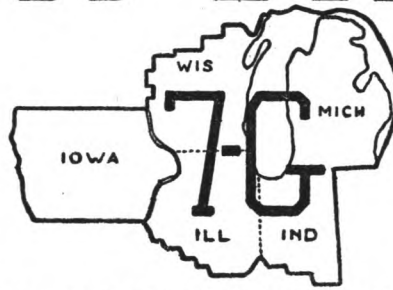


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

Volume 12, No. 5

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

May 1, 1929

NATIONAL SUMMARY OF BUSINESS CONDITIONS

VOLUME of industrial production and of trade increased in March and wholesale prices advanced somewhat. There was a growth of commercial loans of member banks in leading cities in March and the first half of April, while investments and loans on securities of these banks showed a reduction for the period.

PRODUCTION—Output of manufacturers reached a new high level in March. Automobile production was exceptionally large, and steel ingot output was reported to be above rated capacity. Output of refined copper, lumber, cotton and silk textiles, and sugar was also large for the season. There was some seasonal recession from February in the production of wool textiles and leather, and a further decline in production by meat-packing plants. The volume of factory employment and payrolls continued to increase during the month and was substantially above the level of March 1928. Production of minerals as a group declined sharply reflecting reduction in output of coal by more than the usual seasonal amount. Output of non-ferrous metals continued large and petroleum production increased. During the first part of April industrial activity continued at a high rate, although preliminary reports indicated a slight slowing down in certain branches of the steel industry and a smaller output of coal and petroleum.

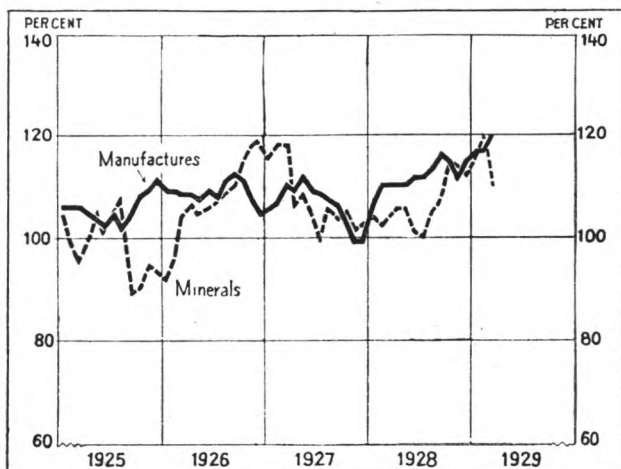
The value of building contracts awarded increased sea-

sonally during March and the first two weeks in April, reflecting in part the award of a few large contracts, chiefly commercial and industrial. The total volume of building, however, continued smaller in March than a year ago. Contracts for residential building and public works and utilities were substantially below the level of March 1928, while industrial and commercial building was in larger volume.

DISTRIBUTION—Railroad shipments of commodities declined somewhat in March but were larger than in the same period of the preceding year. The decline from February reflected smaller shipments of coal and coke, grain products, and live stock, all of which were also below March a year ago. Loadings of ore and miscellaneous freight increased substantially over February and continued above 1928. Sales by wholesale firms in all lines of trade reporting to the Federal Reserve System were seasonally larger than in February. In comparison with the same month a year ago, however, sales in most lines of trade were smaller, except in the case of dry goods, men's clothing, and hardware. Department store sales showed a larger increase in March than is usual at this season, and were larger than in the same month in the preceding year, partly on account of the fact that Easter came in March this year.

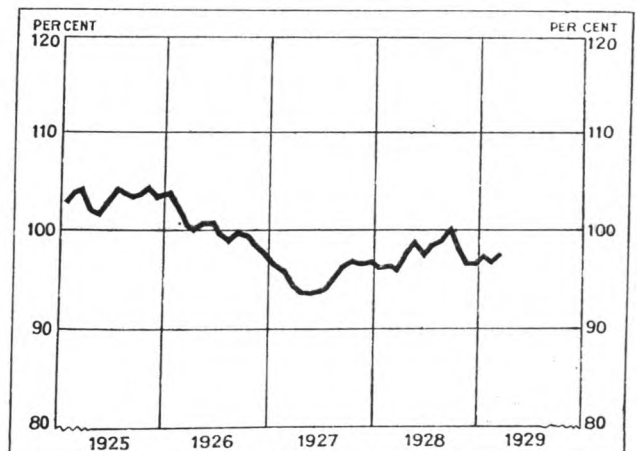
PRICES—Wholesale prices of commodities during March averaged slightly higher than in February, according to the

PRODUCTION OF MANUFACTURES AND MINERALS



Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-25 average = 100). Latest figures, March, 1929: Manufactures, 120; Minerals, 110.

WHOLESALE PRICES



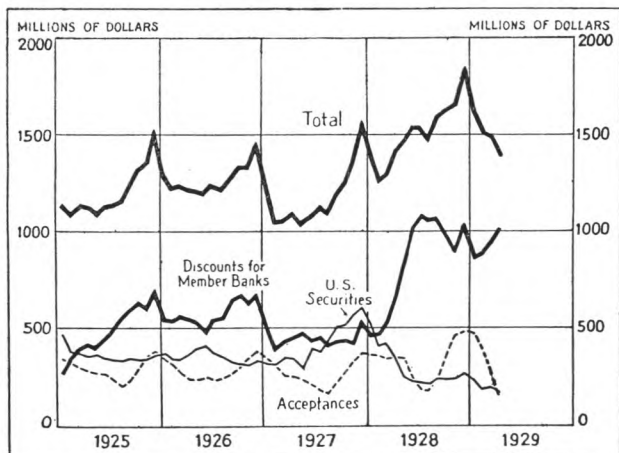
Index of U. S. Bureau of Labor Statistics (1926 = 100, base adopted by Bureau). Latest figure, March, 1929: 97.5.

Compiled April 25, 1929

index of the United States Bureau of Labor Statistics. There were marked increases in prices of copper and lead, and smaller advances in prices of iron and steel and cotton goods, as well as of certain agricultural products, particularly cotton, live stock, meats, and hides. Prices of grain and flour were lower during the month and the price of leather declined, reflecting an earlier decline in prices of hides. Silk and rayon textiles and raw wool were also somewhat lower in price.

In the middle of April prices of live stock and raw silk were higher than at the end of March, while cotton and wool had declined in price. Among the non-agricultural products there were marked declines in the prices of copper, lead, tin and zinc, a further decline in rubber, and increases in pig iron and finished steel.

RESERVE BANK CREDIT



Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages of first 22 days in April, 1929: Total Reserve Bank Credit, 1,389 million; Discounts for Member Banks, 1,010 million; Acceptances, 157 million; U. S. Securities, 169 million.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

The steel and automobile industries continue to feature activity in the Seventh district, March operations attaining record volume, although with few exceptions most other phases of industry and trade likewise have shown expansion. Agricultural machinery production and sales, shipments and production of casting foundries, and the manufacture of butter gained over February and were larger than a year ago. Department store, mail order and chain sales, the retail furniture, shoe and hardware trade, most lines of wholesale trade, and distribution of automobiles increased over a month previous and last March. Seasonal activity in the construction and building material industries was evident, though remaining below the 1928 level. Exceptions to the general expansion are found in production of flour and of meats—with sales in the latter industry, however, heavier than in February or a year ago—in output of coal, and in production of furniture.

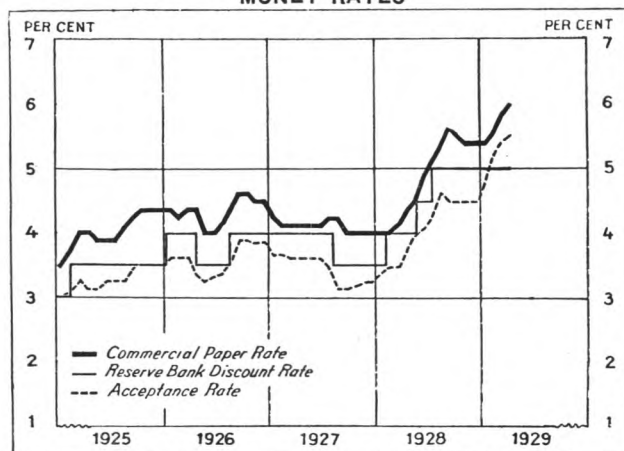
In agriculture, seeding was progressing satisfactorily the early part of April, and the condition of fruit trees and of crops was good. About the same acreage will be planted to corn this year in the district as in 1928, while the acreage of spring wheat, oats, barley, and potatoes will be less. The abandonment of winter wheat and rye acreage is unusually small this year.

A slight easing has been apparent in the Chicago money market, following reductions in loans and discounts of the Federal Reserve Bank and in commercial and security loans of member banks. Rates have shown little change. Com-

BANK CREDIT—Between March 20 and April 17 there was a considerable decline in the volume of member bank loans to brokers and in the banks' holdings of investments. Loans chiefly for commercial and agricultural purposes showed a rapid increase and at the end of the period were near the high level of last autumn. During the same period the volume of reserve bank credit in use declined further as a consequence of additions to the country's stock of monetary gold. A continued rapid reduction in holdings of acceptances carried the total to the lowest point since the autumn of 1924. Security holdings also decreased somewhat, while discounts for member banks increased.

Open-market rates on bankers' acceptances and commercial paper increased further. Rates on collateral loans increased sharply in the latter part of March, but declined in April.

MONEY RATES



Monthly rates in the open market in New York: commercial paper rate on 4- to 6-month paper, and acceptance rate on 90-day bankers' acceptances. Latest figures, averages of first 22 days in April, 1929: Commercial Paper Rate, 5.98 per cent; Acceptance Rate, 5.49 per cent; N. Y. Reserve Bank Discount Rate, 5 per cent.

mercial paper sales in March fell below the preceding month and a year ago, while the volume of bankers' acceptances increased in both comparisons. Check payments were larger than in February or March last year, and savings deposits declined in the former but gained in the latter comparison. The bond market has remained dull.

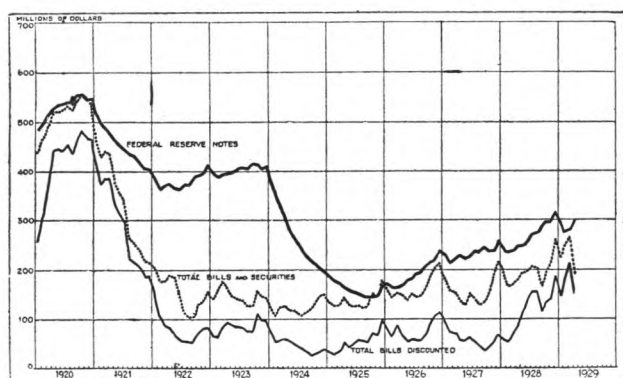
CREDIT CONDITIONS AND MONEY RATES

The firm conditions prevalent in the Chicago money market for some time have moderated slightly in recent weeks, partially in sympathy with easier conditions in other financial centers and in part a reflection of a considerably lessened volume of security loans, although commercial loans have also decreased in volume, continuing a trend operative since the first of March. The level of rates in Chicago is substantially unchanged from that obtaining a month ago. Current quotations are as follows: Stock brokers' demand loans 7 per cent, customers' over-the-counter loans $5\frac{3}{4}$ to $6\frac{1}{2}$ per cent as against 6 to $6\frac{1}{2}$ per cent last month, and collateral loans 6 to 7 per cent. The average rate earned on loans and discounts by seven large banks during the calendar month of March was 6.11 per cent, compared with 5.95 per cent in February and 4.84 per cent in March 1928. In the district as a whole, a trend toward higher rates has manifested itself; the volume of loans on securities has diminished, while a moderately brisk demand for accommodation for commercial purposes is reported. In Detroit the average rate earned on loans and discounts by four large banks in March was 5.85 per cent, compared with

5.85 per cent in February and 5.29 per cent in March 1928. The prevailing rate on commercial loans in the latter city during the week ending April 15 was 5½-6 per cent.

Total bills and securities of the Federal Reserve Bank of Chicago had been reduced from \$284,955,000 on March 20 to \$156,579,000 by April 17. The volume on the latter date represents the lowest level to which this item has dropped since September 12 last year when it amounted to \$148,936,000. Loans to member banks, which on March 20 totaled \$237,173,000, on April 17 had decreased to \$118,514,000, the lowest level since October 10, 1928. United States securities on April 17 totaled \$30,499,000; this compares with \$30,123,000 April 10 and \$26,634,000 on the corresponding date a month previous. The volume of Federal Reserve notes in actual circulation reached \$300,922,000 on April 17 and has shown an upward trend since March 13, when the amount totaled \$277,634,000. Total reserves of the Federal Reserve Bank, amounting to \$531,477,000 on April 17, were the largest in volume since the \$534,126,000 reported March 12, 1924.

POSITION OF THE FEDERAL RESERVE BANK OF CHICAGO



Monthly averages of weekly figures. Latest figures, averages for first three weekly report dates in April, 1929, in thousands of dollars: Federal Reserve Notes, 298,772; Total Bills and Securities, 190,810; Total Bills Discounted, 152,111.

Loans and discounts of reporting member banks in the Seventh district have decreased in volume; a lessened volume of security and commercial loans in Chicago is in the main responsible for the smaller aggregate, which on April 17 amounted to \$2,592,648,000 as against \$2,672,441,000 March 13. In Detroit, commercial loans have shown a moderate expansion in recent weeks; on April 17, however, a slight decrease from the preceding week was recorded. Loans on securities in Detroit have moved upward since the last reporting date in March; in other selected cities, loans on securities have declined slightly, and commercial loans have been on a higher level since the end of February. Investments of reporting member banks have fluctuated considerably from week to week, the \$726,153,000 reported April 17 representing a small drop from the preceding week, and compared with \$744,275,000 on March 13. Net demand deposits moved steadily downward throughout the month of March but on April 10 aggregated \$1,823,547,000 compared with \$1,781,185,000 the preceding week; an additional rise of about 20 million was reported April 17; on March 13 the item stood at \$1,893,336,000. Time deposits of \$1,234,475,000 were reported on April 17, representing a small gain over the preceding week; on April 3 the total was \$1,225,002,000, the lowest volume of time deposits since March 28, 1928.

March sales of commercial paper in the Middle West, as reported by nine dealers, were smaller in the aggregate than

for any month since this bank began recording the figures in January 1923, being 21.7 per cent less than in February and 51.8 per cent below a year ago. Supplies remained fair during the month, while demand ranged between limited and fair. For the first half of April, the sales of four Chicago dealers totaled slightly in excess of those for the corresponding two weeks of the preceding month. The supply of paper showed an improvement during the early part of April; demand remained moderate. March quotations ranged between 5½ per cent for low and 6 per cent for high, and averaged 5¾ to 6 per cent. Rates firmed in April and opened on the fifteenth at 5¾ and 6 per cent for low to 6 and 6¼ per cent for high, the customary charge being 5¾ and 6 per cent with a preponderance of paper moving at 6 per cent. March 30 outstandings of five Mid-Western dealers aggregated 7.5 per cent less than a month previous and were 22.4 per cent smaller than a year ago; the outstandings of twenty-three dealers in the United States amounted to \$386,725,421 compared with \$411,474,136 at the close of February.

Reports from six dealers show that business in the Chicago open bill market from March 14 to April 17 averaged, on a weekly basis, 2.1 per cent greater in the quantity of purchases and 10.1 per cent more in the amount of sales than in the preceding period, and gained 115.1 and 12.1 per cent, respectively, in the two items over a year ago. Receipts from other offices increased 79.8 per cent over those of February 14 to March 13 and were 24.1 per cent above corresponding weeks of last year; shipments to other offices totaled 86.4 per cent larger than in the preceding period and considerably in excess of 1928. Supplies were fair to good at the beginning of the period and poor to fair during the first half of April. Demand ranged between limited and fair; a few of the dealers found it good at times. Bills moved fairly well at the offered rates, with demand centering principally on 90- and 60-day maturities. Listed among the principal commodities involved in the transactions were grain and flour, packing-house products, wool, machinery, lumber, artificial silk, steel, iron, and cellulose. Holdings declined 39.6 per cent on April 17 from March 13 but were 18.0 per cent heavier than last year. Quotations remained firm, following the advance of ¼ per cent on March 21, and closed on April 17 at 5¾ per cent for 30-day offerings to 5¾ and 5¾ per cent for those of 150 and 180 days.

March transactions in bankers' acceptances by fourteen reporting banks in the Seventh district exceeded those of February by 120.4 per cent in the volume of bills accepted, 273.5 per cent in the quantity of purchases, and 38.0 per cent in the amount of sales; gains of 96.9 and 87.0 per cent, together with a recession of 11.0 per cent, were recorded in comparison with a year ago. For the first half of April, the acceptances of three Chicago banks totaled somewhat less than for the corresponding period of March. The liability for outstandings was 11.5 per cent more at the close of March than on February 28 and 47.6 per cent greater than last year. March 30 portfolios totaled 189.1 per cent heavier than at the close of the preceding period and 188.8 per cent in excess of the corresponding date of 1928, although over half of the individual banks reported a recession in both comparisons; holdings contained 78.2 per cent fewer of the accepting banks' own bills than on February 28. The Federal Reserve Bank of Chicago bought \$10,210,074 of bankers' acceptances during March compared with \$18,820,955 in February, and its holdings were reduced from \$37,183,784 at the close of the preceding month to \$13,365,641 on March 30.

Volume of Payment by Check—A gain of 17.6 per cent over February and of 14.0 per cent over a year ago was shown in the March aggregate of payment by check in thirty-eight clearing house centers of the Seventh district. The four larger centers, Chicago, Detroit, Milwaukee, and Indianapolis, gained 17.3 per cent and 15.3 per cent in the two comparisons, and thirty-four smaller cities 19.4 and 6.6 per cent, respectively. In Chicago, the \$5,199,397,000 reported for March, represented a rise of 19.9 per cent over February and of 18.3 per cent above March 1928. The earlier date of Easter without doubt is a factor in the large increase shown in all comparisons with a year ago.

Savings Deposits—Reports from 202 banks in the Seventh district show a decrease on April 1 from the preceding month of 0.3 per cent in the volume of regular savings deposits and average accounts, with the number of depositors remaining substantially the same as on March 1. Increases of 1.6 and 2.1 per cent in total savings deposits and in the number of accounts, respectively, together with a recession

AGRICULTURAL PRODUCTION AND FOODSTUFFS

Farmers' intentions on March 1, according to a compilation by the United States Bureau of Agricultural Economics, indicated about the same acreage to be planted to corn in the Seventh district this year as in 1928, and pointed to a reduction in the area devoted to oats, barley, spring wheat, and potatoes, with an expansion in tobacco and tame hay acreage. The condition of winter wheat averaged better than usual for April 1 and the abandonment was considerably smaller than last spring, so that a reliable statistician has estimated the crop for the five states including the Seventh Federal Reserve district as 95,804,000 bushels compared with the 1928 harvest of 50,918,000 bushels. Commercial estimates of the 1929 crop of winter wheat in the United States range from 547,000,000 to 580,571,000 bushels, in comparison with the 578,964,000 bushels raised a year ago. The United States Department of Agriculture reports winter wheat, rye, and pastures in the Seventh district in better condition at the beginning of the month than on April 1, 1928; vegetation has made rapid growth with ample moisture in recent weeks. Seeding has progressed satisfactorily, although there has been some interruption because of soil conditions. Fruit in many of the counties was in bloom and some of the spring seedings of grain were already above ground by the middle of April.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in March, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	FEBRUARY 1929	MARCH 1928	
Production (bbls.)	- 5.7	-22.1	31
Stocks of flour at end of month (bbls.)	- 2.7	- 0.5	27
Stocks of wheat at end of month (bu.)	-15.8	+ 1.8	27
Sales (volume)	- 1.5	-48.6	13
Sales (value)	+1.3	-51.2	13

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

Grain Marketing—Smaller tonnages of corn and oats and larger quantities of wheat were received at interior primary markets in the United States during March than a year ago or the 1924-28 average for the month; each showed a recession in volume from February. Reshipments from these centers gained for wheat and declined for corn in all three comparisons; those of oats were greater than in February but below March 1928 and the five-year average. April 13 inventories of grain at interior primary markets in the United States were less than a month previous. Stocks of wheat and barley remained considerably in excess of last year; holdings of corn, oats, and rye decreased in this com-

parison. Trading in grain futures by members of the Chicago Board of Trade totaled 18.8 per cent greater than in February and 13.5 per cent smaller than a year ago. Prices declined in March from the preceding month.

Bonds—Conditions in the Chicago bond market remain dull. The volume of trading during the past month has been considerably below the corresponding period of other years. Prevailing money market conditions and the continued interest of the general public in stocks has been chiefly responsible for the present status of the bond market. The trend of prices has remained quite steady during the past thirty days, although at very low levels in all classes of securities. In recent weeks the greatest interest has been shown toward the municipal and public utility issues.

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Movement of Live Stock—Public stock yards in the United States received smaller numbers of hogs and lambs, and a larger supply of cattle and calves during March than in February. The marketing of cattle, calves, and hogs continued considerably less than the 1924-28 March average and was below last year. Lamb receipts were slightly in excess of the corresponding month of 1928.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, March, 1929	191,987	970,948	241,994	139,886
Federally Inspected Slaughter, U. S.				
March, 1929	631,778	3,645,301	1,006,305	408,796
February, 1929	568,622	4,477,633	953,326	311,181
March, 1928	664,948	5,139,754	1,015,861	407,200

Reshipments to feed lots gained in March over the preceding month; the movement of lambs increased over a year ago, while that of cattle decreased.

AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	APRIL 13 1929	MARCH 1929	FEBRUARY 1929	MARCH 1928
Native Beef Steers (average)	\$13.45	\$12.70	\$11.90	\$12.85
Fat Cows and Heifers	10.50	10.20	9.10	9.45
Calves	13.00	15.10	14.00	12.75
Hogs (bulk of sales)	11.40	11.55	10.25	8.10
Yearling Sheep	14.25	14.00	13.85	13.75
Lambs	16.85	16.85	16.40	16.15

Meat Packing—Production at slaughtering establishments in the United States aggregated less in March than in the preceding month and remained considerably below last year. Payrolls at the close of the month also showed a recession of 4.8 per cent in number of workers, 3.9 per cent in hours of employment, and 3.7 per cent in dollar amounts, as compared with February. Domestic demand improved slightly for lard, was fair for fresh pork, smoked picnics, and boiled ham, good for smoked ham, and a little slow for beef, veal, lamb, bacon, and dry salt pork. The total value of March sales billed to domestic and foreign customers by sixty meat packing companies in the United States exceeded that of a month previous by 2.3 per cent and was 11.4 per cent greater than a year ago. Trade in domestic markets averaged fair early in April. Inventories at packing plants and cold-storage warehouses in the United States declined on April 1 from the preceding month and a year ago but remained above the five-year average. Stocks of

lard were larger than on March 1, inventories of beef, lard, and miscellaneous meats increased over the corresponding date of 1928, and beef holdings fell below the 1924-28 average for April 1. Prices advanced in March over those of the preceding month.

Shipments for export totaled somewhat in excess of February. British importers purchased a fair tonnage of hams for Easter, and foreign demand for lard averaged slightly better in March than in the preceding month; trading on the Continent remained rather slow. Prices in Europe averaged nearer Chicago parity than a month previous; quotations for lard in the United Kingdom, however, continued at a slight discount. Consignment stocks, already landed and in transit to European countries, were reported as smaller on April 1 than at the beginning of March.

Dairy Products—March production of butter by sixty-seven reporting creameries in the Seventh district aggregated 19.9 per cent greater than in the preceding month and was 3.9 per cent in excess of a year ago. Similar trends for the United States are shown by statistics of the American Association of Creamery Butter Manufacturers. Sixty-nine

companies in the Seventh district billed a 13.8 per cent larger tonnage of creamery butter to customers during March than in February, the sales volume decreasing 0.1 per cent from the corresponding month of 1928. Inventories of butter and eggs at cold-storage warehouses and packing plants in the United States decreased on April 1 from a year ago and the 1924-28 April 1 average, while the stock of cheese increased. Smaller quantities of butter and cheese and larger holdings of eggs were reported than on March 1. Receipts of American cheese at Wisconsin primary markets, from factories within the state, increased 9.5 per cent from March 8 to March 30 as compared with the preceding four weeks, though remaining 13.7 per cent less than a year ago; reshipments from these centers declined 19.5 and 17.7 per cent, respectively. Chicago receipts of butter and eggs expanded and those of cheese decreased in the comparison with February; each of these commodities showed a recession in volume from last year. Quotations for eggs trended sharply downward at Chicago during March; butter prices also declined from the preceding month, while those of cheese firmed.

COAL

A decided reduction took place during March in output of bituminous coal in this district. Production in Illinois fell from 6,509,196 tons in February to 4,284,951 tons, which compares with 7,149,830 tons in March last year; output for the first three months of 1929 totaled 17,776,343 tons against 18,874,355 in the same period of 1928. The average number of days worked at Illinois mines dropped to 13.5 in March, against 19.0 in February and 20.6 a year ago, while the number of men employed declined to 54,983 from 56,501 in the preceding month and compared with 54,804 last year; the number of mines in operation totaled 183 in March, a reduction of five in the monthly comparison but

nine more than were in operation a year ago. The unseasonably warm weather in March curtailed the demand for domestic sizes of coal in the Chicago market, which effected a weakening in prices on these grades; screenings prices firmed toward the end of March, reduced production having diminished the supply.

Production of bituminous coal in the United States likewise fell off sharply in March, dropping from 47,271,000 in February to 39,347,000 tons, the smallest for any March since 1925. Output for the first quarter, however, exceeded that for the first three months of 1928.

INDUSTRIAL EMPLOYMENT CONDITIONS

The volume of employment at manufacturing plants of the district showed a further expansion during the period February 15 to March 15, reporting firms adding 1.4 per cent more workers and 1.2 per cent in payroll amounts. As during the preceding period, metals and vehicles again led the expansion, the former with an addition of 2.6 per cent and the latter with a gain of 4.4 per cent in the number of workers. Greater activity in the building industry was reflected in an increased demand for building material, and the stone, clay, and glass products group registered a gain of 3.9 per cent in men and 4.5 per cent in payrolls, the first increase in employment in this group since last August. Lumber and lumber products showed a slight gain in both men and payrolls, although there was a reduction in operations at furniture and wood box factories. Chemical products reported increased employment as well as larger payrolls, continuing the upward trend of the preceding month.

Other reporting groups reflected a downward trend in employment. The most definite declines were in the food products group, especially meat packing and flour production; in paper manufacture and in printing decreases were also shown. In the clothing industry some curtailment in operations took place, and activity is below the level of a year ago.

Aside from the manufacturing industries, there was little change in the demand for labor. Building and construction activities have increased, but operations at coal mines show a decline, sales forces both retail and wholesale were reduced slightly, and the public utilities though maintaining the volume of employment show considerable curtailment in payrolls. Employment records at the free employment offices of the various states, however, indicate a general improvement in the ratio of number of applicants to available positions.

EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED		PER CENT CHANGE	WEEK ENDED		PER CENT CHANGE
	MARCH 15 1929	FEBRUARY 15 1929		MARCH 15 1929	FEBRUARY 15 1929	
All groups (10).....	348,151	343,456	+ 1.4	\$10,071,003	\$9,955,450	+ 1.2
Metals and metal products (other than vehicles).....	138,847	135,302	+ 2.6	4,379,987	4,283,647	+ 2.2
Vehicles.....	41,552	39,811	+ 4.4	1,260,306	1,206,295	+ 4.5
Textiles and textile products.....	24,161	24,284	- 0.5	638,442	627,652	+ 1.7
Food and related products.....	42,945	43,477	- 1.2	1,098,523	1,138,404	- 3.5
Stone, clay, and glass products.....	12,529	12,059	+ 3.9	358,805	343,464	+ 4.5
Lumber and its products.....	31,054	30,919	+ 0.4	743,310	738,093	+ 0.7
Chemical products.....	9,036	8,774	+ 3.0	242,419	239,120	+ 1.4
Leather products.....	13,240	13,271	- 0.2	276,517	292,376	- 5.4
Rubber products.....	4,301	4,286	+ 0.4	109,849	110,630	- 0.7
Paper and printing.....	30,486	31,273	- 2.5	962,845	975,769	- 1.3

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—March established another record in automobile production, output gaining over the record February figure. Passenger cars produced by manufacturers in the United States totaled 513,266, an increase of 23.8 per cent over the preceding month and 38.0 per cent above March last year. For the first quarter of 1929, production showed a gain of 46.8 per cent over the corresponding period of 1928. Truck output for March aggregated 69,559, or 18.9 per cent larger than in February and 67.6 per cent heavier than last March. First-quarter production of trucks exceeded the first three months a year ago by 79.3 per cent.

Continued expansion has taken place in distribution of automobiles in the Middle West, data for March recording large gains in both wholesale and retail sales of new cars and in the number of used cars sold, as compared with the preceding month and with a year ago. Stocks of new cars declined somewhat in the month-to-month comparison but are much larger than a year ago, while the number of used cars on hand continues to gain. Deferred payment sales constituted 51.7 per cent of the total retail sales of thirty-eight dealers in March, which compares with an average of 48.6 per cent in February and of 44.3 per cent for twenty-two dealers a year ago.

MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in March, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED	
	FEBRUARY 1929	MARCH 1928	FEBRUARY 1929	MARCH 1928
New cars				
Wholesale—				
Number sold.....	+28.5	+30.9	34	25
Value	+35.0	+20.1	34	25
Retail—				
Number sold.....	+93.6	+49.9	60	41
Value	+87.6	+32.0	60	41
On hand March 30—				
Number	7.4	+40.7	62	43
Value	6.2	+16.5	62	43
Used cars				
Number sold.....	+65.4	+34.5	60	41
Salable on hand—				
Number	+ 5.9	+36.0	60	41
Value	1.4	+15.6	60	41

Agricultural Machinery and Equipment—Sales of agricultural machinery and equipment billed to domestic and foreign customers showed a seasonal expansion in March over the preceding month of 32.3 per cent in the light group and of 28.2 per cent in barn equipment, together with a recession of 7.4 per cent in the heavy group, according to a compilation for seventy-three manufacturers in the United States. Increases of 8.1, 12.9, and 13.6 per cent, respectively, also were recorded over a year ago.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in March, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	FEBRUARY 1929	MARCH 1928	
Domestic sales billed.....	+34.1	+ 5.1	73
Sales billed for export.....	-29.4	+34.8	39
Total sales billed.....	+12.2	+10.4	73
Production	+ 4.5	+23.8	72

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

Iron and Steel Products—March sales and shipments by steel mills in the Chicago district exceeded the heavy volume of February and also that of March last year. Activity in the first quarter of this year has shown considerable gain over the same period of 1928. Despite the high rate of shipments and production, which was practically at capacity throughout the month, orders on mill books at the beginning of April were larger than a month previous. March pig iron production in the Illinois and Indiana district established another record, the daily average output of 25,509 tons exceeding by more than 1,700 tons the previous record

average in February. United States output of pig iron was the highest in the daily average since June 1923. Steel ingot production in the country was in record volume during March, averaging 194,199 tons daily. Unfilled orders of the United States Steel Corporation continued to gain, however, totaling 4,410,718 tons at the end of March, or 266,377 tons more than on February 28 and higher than for any month since February 1926.

Prices of finished steel in the Chicago district have remained very firm. Iron and steel scrap prices which had been weak through the middle of March, have strengthened and shown advances in some lines.

Steel and malleable casting foundries in the Seventh district have been exceedingly active, both shipments and production gaining in March over February and a year ago. Orders booked during the month by malleable foundries increased in the monthly and yearly comparisons; those of steel casting foundries declined from February but were considerably larger than for March last year. Shipments of stove and furnace manufacturers in the district gained in March over the preceding month and were below a year ago, while production increased in both comparisons; orders received declined from February, though exceeding the volume of last March.

Shoe Manufacturing, Tanning, and Hides—Preliminary estimates of the United States Department of Commerce show that 11.6 per cent more shoes were manufactured in the Seventh Federal Reserve district during March than a month previous. Sales of leather exceeded those of February but were below the corresponding period of 1928, while production increased in both comparisons, according to reports sent direct to this bank by representative tanneries in the district. Prices remained firm.

Chicago trading during March in packer green hides and calf skins was in smaller volume than in February; shipments from the city also declined. The prices of packer steer hides eased in March from the preceding month, while those of other offerings firmed somewhat; quotations trended slightly upward in April.

Furniture—Twenty-six furniture manufacturers of the Seventh district booked orders in March totaling 3.4 per cent less than in the preceding month and 3.5 per cent below the corresponding month of 1928. In both comparisons about half of the firms showed an increase in volume of new orders. Shipments followed the usual March trend and registered a gain of 11.8 per cent over February, but in the comparison with a year ago declined 7.3 per cent. Shipments were larger than new orders in March and together with the amount of cancellations, effected a drop in unfilled orders on hand March 30 of 11.7 per cent from February 28; this last item, however, was 13.8 per cent greater than on the corresponding date last year. Production showed a decline from last month and also from March 1928.

Raw Wool and Finished Woolens—Price declines in practically all classes of wool were the outstanding feature of the wool market during March. Trading has been quiet and the demand continues spotty with purchases for immediate needs only. Dealers have shown a lack of interest in the new domestic clip and only a small amount of contracting has taken place in the West. March reports from the finished goods industry in the Seventh district varied somewhat, some mills indicating an increase in production while with others business was not altogether satisfactory.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

A seasonal gain in the demand for lumber was reflected in sales figures for March, nineteen wholesale and manufacturing concerns of the district reporting an increase of 24.7 per cent in dollar value and of 20.4 per cent in board foot measure over the preceding month, while 141 retail yards showed an increase in dollar sales amounting to 41.8 per cent. Outstanding accounts also accumulated but their ratio to monthly sales fell off, averaging 124 per cent for wholesale and manufacturing concerns at the close of March, as compared with 143 per cent a month earlier and 119 per cent a year ago. Retail yards reported corresponding ratios of 303, 395, and 271 per cent, respectively. Sales at retail yards continued below last year's volume, the difference for March amounting to 8.3 per cent. At wholesale and manufacturing plants there was a loss of 1.4 per cent in dollar value and a reduction of 9.6 per cent in board foot measure. Stocks showed practically no change from either a month or a year ago in total volume but a scarcity in the dry stock on hand was noted. Prices were steady in the retail market throughout the month, while quotations at wholesale advanced on certain items and grades of lumber. March receipts of lumber at Chicago were 11.6 per cent larger than in February and shipments out of the city increased 14.0 per cent; receipts totaled 14.2 per cent less than for March a year ago, while shipments were in about the same volume.

The brick and cement industries exhibited renewed activity in March, shipments and deliveries registering heavy increases over February. Manufacturers report, however, that less cement was shipped than a year ago and that the first quarter of the year showed lighter shipments than for several years past.

Building and Construction—Contracts awarded during March in the Seventh district totaled \$107,288,783, a gain of 53.6 per cent over February and 0.7 per cent less than for March last year. Residential contracts amounted to \$35,211,350, or 32.8 per cent of total awards, and were 62.8 per cent in excess of February but 29.0 per cent below a year ago. A comparison of the first quarter of 1929 with the corresponding period of 1928 shows that residential contracts have been 39.8 per cent less this year than last and other contracts 7.3 per cent larger, the total declining 13.6 per cent. Permits issued in fifty cities of the district during the first three months of the year totaled 20.3 per cent smaller in number and 36.6 per cent less in estimated cost than for the same period of 1928. The figures for March showed a heavy increase over February, the number of permits increasing 134.1 per cent and the estimated cost 109.7 per cent. Fifty-four additional cities not included in our index figures, recorded a gain of 209.3 per cent in number and of 96.6 per cent in value over the preceding month.

MERCHANDISING CONDITIONS

Wholesale Trade—Expansion over February took place in the March sales of all reporting lines of wholesale trade, and the majority of groups showed gains over March 1928. In the wholesale hardware, drug, dry goods, and shoe trade, every firm had larger sales than in the preceding month, and the majority of firms in each group except groceries and drugs shared in the gains over March last year. Sales for the first quarter of 1929 exceeded those of the same period in 1928 by 0.9 per cent in groceries, 1.7 per cent in hardware, 6.5 per cent in dry goods, 3.2 per cent

in drugs, and 18.6 per cent in electrical supplies, with a slight decline of 0.3 per cent shown for shoes.

Collections were generally heavier than in February, but fell below a year ago in all lines but dry goods and electrical supplies; comments on this item indicate that collections are poor in certain localities and only fair in others. Prices remain at a steady level, according to the reports of the majority of firms, although an upward tendency is apparent in hardware and electrical supplies; some grocery lines trend downward, while slight advances have been recorded in others.

WHOLESALE TRADE DURING THE MONTH OF MARCH, 1929

	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 SAME MONTH LAST YEAR	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM LAST YEAR	RATIO TO NET SALES DURING MONTH	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR
Groceries	(36)+7.9	(36)-4.1	(25)+4.8	(24)+4.7	(33)+0.5	(33)-9.0	(33) 100.7	(27)+3.5	(27)-3.2
Hardware	(15)+48.4	(15)+8.8	(10)+0.3	(10)-4.0	(15)+16.4	(15)+3.6	(15) 189.4	(12)+12.3	(12)-4.8
Dry Goods	(10)+19.6	(10)+7.6	(8)-0.4	(8)-5.6	(10)+4.4	(10)+1.8	(10) 286.7	(9)+5.1	(9)+7.1
Drugs	(13)+18.5	(13)-1.4	(11)+0.5	(11)+4.2	(12)+7.8	(12)-1.7	(12) 130.4	(8)+3.7	(8)-9.1
Shoes	(8)+92.2	(8)+14.7	(6)-5.3	(6)-4.2	(7)+23.3	(7)+7.0	(7) 227.1	(6)+36.1	(6)-3.8
Electrical Supplies.....	(34)+16.0	(34)+30.1	(27)+1.2	(26)+18.3	(34)+1.3	(31)+30.8	(34) 116.9	(28)+14.3	(24)+18.4

Figures in parentheses indicate number of firms included.

Department Store Trade—A seasonal increase of 26.9 per cent over the preceding month was shown in the aggregate of March sales by 106 department stores of the Seventh district. A gain of 8.0 per cent was likewise recorded over March 1928, the effect of the earlier date of Easter this year being somewhat counteracted by the one less trading day in the month. For the year to date, sales have exceeded those of the first quarter of 1928 by 5.5 per cent. Chicago, Detroit, and Indianapolis stores shared in the gains over March last year, and the aggregate for sixty stores in smaller cities was larger, while the total for Milwaukee firms registered a decline in the comparison; a similar trend has been shown for the first quarter of the year. Stocks at the end of March were heavier than a month previous or a year ago by 6.8 and 2.1 per cent, respectively. The ratio of sales to average stocks

was 33.2 per cent for March this year against 32.2 per cent last March, and for the year to date 91.8 against 90.1 in 1928. March collections fell off 3.7 per cent from a month previous, though gaining 10.0 per cent over a year ago, while accounts receivable on March 30 were 1.9 and 12.6 per cent larger in the respective month-to-month and yearly comparisons. The ratio of March collections to accounts outstanding the end of February averaged 39.8 per cent this year against 40.1 per cent in 1928.

Chain Store Trade—The number of stores and aggregate sales of twenty-two chains increased in March over both February and a year ago. The 2,569 stores in operation represented a gain of 1.8 per cent in the monthly and of 16.3 per cent in the yearly comparison, while total sales showed an expansion of 24.1 and 15.4 per cent, respectively. All reporting groups—drug, grocery, five-and-ten-cent, cigar,

furniture, shoe, musical instrument, men's and women's clothing chains—had larger sales in March than a month previous, and only musical instrument chains reported smaller sales than last March. Average sales per store in March exceeded the February average by 21.9 per cent, but declined 0.8 per cent below a year ago.

Other Retail Trade—Gains of 101.7 and 24.2 per cent over February and last March, respectively, were shown in aggregate March sales of twenty-four retail shoe dealers and the shoe sections of twenty-five department stores. All of the retail dealers and all but two department stores recorded increases in the former comparison, and most dealers and department stores had larger sales than a year ago. For the first quarter of the year, sales totaled 9.0 per cent above the corresponding period of 1928. Stocks of dealers and department stores averaged 7.2 per cent heavier on March 30 than at the end of February, exceeding by 0.6 per cent those of a year ago. Collections by dealers fell off 25.3 per cent in March from the preceding month and were 3.2 per cent below last March, while accounts receivable the end of the month increased 18.8 per cent over a month previous and 12.9 per cent over March 31, 1928. The ratio of accounts outstanding to sales averaged 56.4 per cent for March, 90.5 per cent in February, and 58.3 per cent a year ago.

March sales of furniture by twenty-six dealers and twenty-eight department stores totaled 12.7 per cent more

than in the preceding month and 5.4 per cent above last March; installment sales by dealers increased 14.3 and 6.5 per cent in the respective comparisons. Collections on installment sales were 5.7 per cent larger than in February, though declining 4.8 per cent from a year ago, while total collections increased 1.4 and decreased 6.5 per cent in the monthly and yearly comparisons. On March 30, accounts receivable on dealers' books were 2.4 per cent smaller than a month previous but 0.5 per cent in excess of the corresponding date of 1928. March 30 stocks of dealers and department stores averaged 6.5 per cent heavier than at the end of February and 2.9 per cent more than a year ago.

Retail hardware trade in the five states including the Seventh district increased 78.8 per cent in March over the preceding month and aggregated 7.0 per cent more than in March last year. For the first quarter of 1929, however, sales totaled 1.2 per cent less than in the same period of 1928. All five states recorded gains in the month-to-month comparison, with Indiana and Iowa showing smaller sales than a year ago, and Illinois, Michigan, and Wisconsin a heavier volume of business. Indiana, Iowa, and Illinois have had less trade for the year to date than in the same period of 1928, while Wisconsin and Michigan hardware sales have been larger.

Mail order business in this district was good during March, and showed a gain over March 1928.

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	Mar. 1929	Feb. 1929	Mar. 1928	Feb. 1928	No. of Firms	Mar. 1929	Feb. 1929	Mar. 1928	Feb. 1928
Meat Packing—U. S.—										
Sales (in dollars).....	59	114.7	111.8	103.3	106.2					
Casting Foundries—										
Shipment's:										
Steel—In dollars	15	99.8	93.4	92.3	87.7					
In tons	15	108.9	103.9	98.5	96.0					
Malleable—In dollars	17	85.1	80.4	82.8	63.0					
In tons	15	129.3	111.8	111.4	91.0					
Stoves and Furnaces—										
Shipments (in dollars).....	12	93.6	86.6	96.5	82.7					
Agricultural Machinery & Equipment—(U. S.)—										
Domestic Sales (in dollars).....	83	230.8	172.8	216.8	159.4					
Exports (in dollars).....	56	285.4	405.0	211.4	218.2					
Total Sales (in dollars).....	83	237.1	210.2	216.0	168.8					
Production	82	181.7	177.3	143.9	136.5					
Furniture—										
Orders (in dollars).....	27	96.2	99.2	100.0	93.2					
Shipments (in dollars).....	27	110.9	96.7	115.9	100.9					
Electric Energy—										
Output of Plants (KWH).....	8	163.2	156.9	151.2	145.8					
Industrial Sales (KWH).....	8	189.3	184.9	163.3	155.9					
Flour—										
Production (in bbls.).....	32	83.8	88.9	108.1	105.3					
Output of Butter by Creameries—										
Production	74	101.7	84.8	98.0	88.0					
Sales	74	93.5	81.1	94.8	88.4					
Iron and Steel—										
Pig Iron Production ¹										
Illinois and Indiana.....		147.2	137.3	133.1	127.3					
United States		122.0	116.6	105.1	101.8					
Steel Ingot Production—(U. S.) ¹		145.7	135.0	125.3	121.4					
Unfilled orders U. S. Steel Corp.....		92.4	86.8	90.8	92.1					
Freight Carloadings—(U. S.)—										
Grain and Grain Products.....		91.7	106.2	101.6	106.7					
Live Stock		72.7	82.3	85.8	100.2					
Coal		88.8	126.3	93.7	102.0					
Coke		104.7	123.7	90.6	100.9					
Forest Products		94.5	89.1	95.5	99.5					
Ore		29.8	25.8	22.0	22.2					
Merchandise and Miscellaneous.....		110.8	103.6	106.8	101.3					
Total		100.1	103.1	99.0	98.3					
U. S. Primary Markets—²										
Grain Receipts:										
Oats		41.0	49.0	68.0	57.8					
Corn		104.0	149.7	182.5	206.9					
Wheat		77.8	80.2	75.1	65.4					
Grain Shipments:										
Oats		38.0	31.8	61.5	42.5					
Corn		63.1	73.6	112.1	101.1					
Wheat		48.5	46.6	43.5	37.8					
Wholesale Trade—										
Net Sales (in dollars) :										
Groceries	37	90.2	83.6	94.4	85.6					
Hardware	16	95.8	63.7	88.1	68.5					
Dry Goods	10	88.1	73.7	81.9	70.5					
Drugs	12	108.4	92.2	109.9	90.9					
Shoes	8	126.6	65.9	110.4	76.3					
Retail Trade (Dept. Stores)—										
Net Sales (in dollars) :										
Chicago	33	108.9	88.8	101.2	88.3					
Detroit	4	168.3	142.1	143.1	131.5					
Indianapolis	5	108.6	75.2	105.5	78.9					
Milwaukee	5	106.5	82.0	107.6	83.6					
Outside	54	106.7	75.6	102.7	76.9					
Seventh District	101	118.4	93.9	109.6	92.5					
Retail Trade—(U. S.)—										
Department Stores	527		85	103	86					
Mail Order Houses.....	4		129	125	108					
Chain Stores:										
Grocery	34		229	209	194					
Drug	13		170	163	148					
Shoe	7		88	117	86					
Five and Ten Cent.....	14		122	133	115					
Candy	4		112	119	106					
Apparel	5		147	200	137					
Cigar	4		92	107	96					
Automobile Production (U. S.):										
Passenger cars		173.8	140.5	125.9	98.6					
Trucks		196.8	165.6	117.4	92.4					
Stamp Tax Collections—³										
Sales or Transfers of Capital Stock.....		493.9	589.0	226.1	148.4					
Sales of Produce on Exchange—Futures..		69.8	79.5	57.0	45.0					
Building Construction—										
Contracts awarded (in dollars) :										
Residential		119.9	73.6	168.9	148.3					
Total		156.6	102.0	157.8	158.8					
Permits:										
Chicago	Number	53.6	23.7	74.6	59.0					
Cost.....	Cost	74.8	31.9	129.2	84.8					
Indianapolis	Number	59.1	30.4	75.7	44.8					
Cost.....	Cost	87.5	40.2	62.4	49.5					
Des Moines	Number	45.4	18.0	67.0	33.0					
Cost.....	Cost	28.8	12.1	43.2	179.0					
Detroit	Number	76.8	32.3	78.5	36.3					
Cost.....	Cost	91.3	42.4	143.1	55.9					
Milwaukee	Number	73.8	46.5	73.8	66.1					
Cost.....	Cost	107.1	63.6	93.2	55.6					
Others (45)	Number	83.2	26.1	87.8	43.9					
Cost.....	Cost	88.6	47.9	101.8	63.0					
Fifty Cities	Number	74.2	31.7	80.0	48.0					
Cost.....	Cost	83.4	39.7	120.4	71.6					

¹Average daily production; ²Monthly average receipts 1923-24-25=100; ³First Illinois internal revenue district.