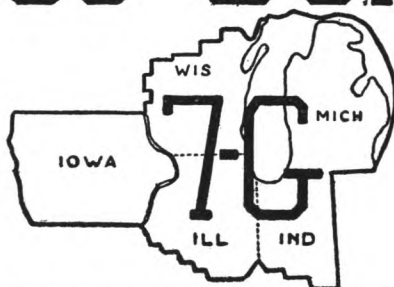


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

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April 1, 1929

NATIONAL SUMMARY OF BUSINESS CONDITIONS

INDUSTRY and trade continued active in February and the first part of March, and there was a growth in the volume of bank loans. Borrowing at reserve banks increased during the period and money rates advanced further.

PRODUCTION—Production continued at a high rate throughout February and the first half of March, and was substantially above a year ago. Automobile output was at a record rate in February, and there was also an unusually high daily average production of copper and iron and steel. Large output in the iron and steel industry reflected demands from manufacturers of automobiles, machine tools, and agricultural implements, and from railroad companies. Preliminary reports for the first half of March indicate further expansion in automobile and iron and steel production. During February the daily average output of coal and crude petroleum also increased, and production of cotton and wool textiles continued large, while silk output declined somewhat from the unusually high level of January. There was also some decline from January in the production of lumber and cement, and in the output of meat packing companies. The high rate of activity in manufacturing during February was reflected in a larger than seasonal increase in factory employment and payrolls, both of which were considerably above the level of

February 1928.

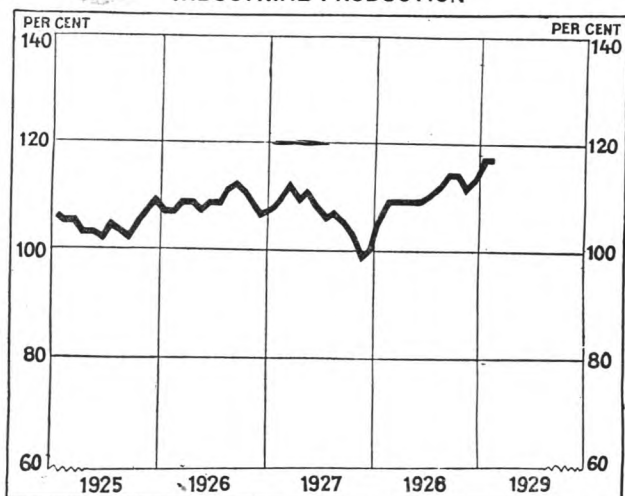
Building activity declined further in February, and the value of contracts awarded was over 20 per cent smaller than a year ago. Residential building contracts showed the largest decline in comparison with February 1928, while those for public works and utilities were only slightly smaller in value, and commercial and industrial building awards increased. During the first half of March, there was some seasonal increase in total building awards, but they continued to be substantially below a year ago.

DISTRIBUTION—February shipments of commodities by rail increased more than is usual for the season, reflecting larger loadings of coal and coke and miscellaneous freight, which includes automobiles. During the first two weeks of March, freight carloadings continued to increase.

Sales of wholesale firms were generally smaller in February than a year ago. In comparison with January, sales of dry goods, shoes, and furniture increased seasonally, while sales of groceries and hardware were smaller. Department stores reported about the same daily volume of sales in February as in the preceding month, and larger sales than a year ago.

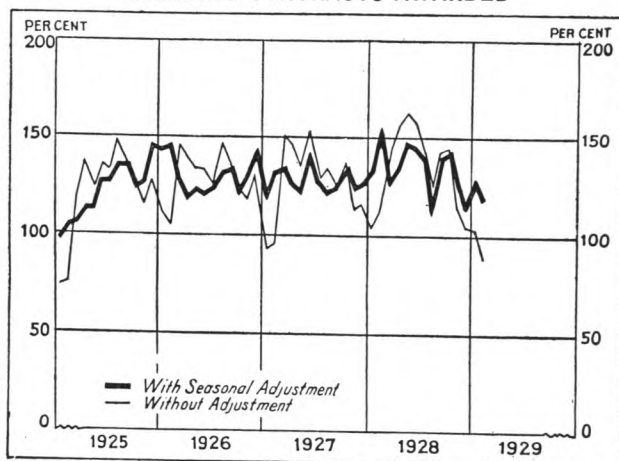
PRICES—The general level of wholesale prices declined slightly in February, and was approximately the same as a year ago. The decline from January reflected primarily

INDUSTRIAL PRODUCTION



Index number of production of manufactures and minerals combined, adjusted for seasonal variations (1923-25 average = 100). Latest figure, February, 1929: 117.

BUILDING CONTRACTS AWARDED



Federal Reserve Board's indexes of value of building contracts awarded, as reported by the F. W. Dodge Corporation (1923-25 average = 100). Latest figures, February, 1929: Adjusted Index, 119; Unadjusted Index, 88.

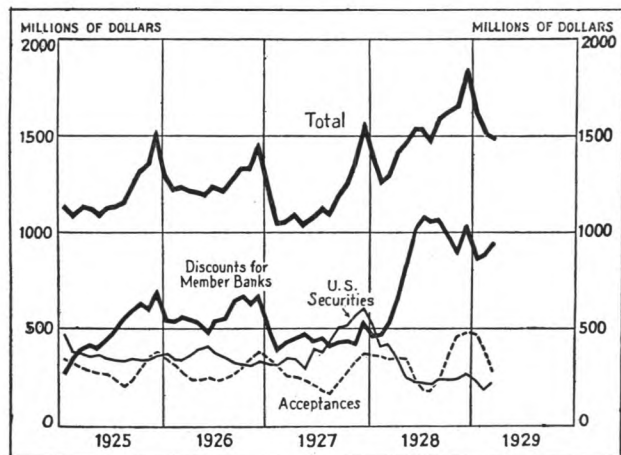
Compiled March 26, 1929

decreases in the prices of hides and leather, live stock, and meats, and small declines in the prices of wool, cotton, and woolen goods. The influence of these declines on the general average was partly offset by increases in the prices of copper, lead, iron and steel, rubber, and grain. During the first two weeks of March, prices of wool and petroleum continued to decline, and rubber prices receded somewhat after a marked rise in February, while leather prices declined sharply. Prices of copper rose further, and there were small increases in prices of hides, raw cotton, and certain grades of lumber.

BANK CREDIT—Between the middle of February and the middle of March there was a rapid growth of loans at member banks in leading cities. The increase was in loans

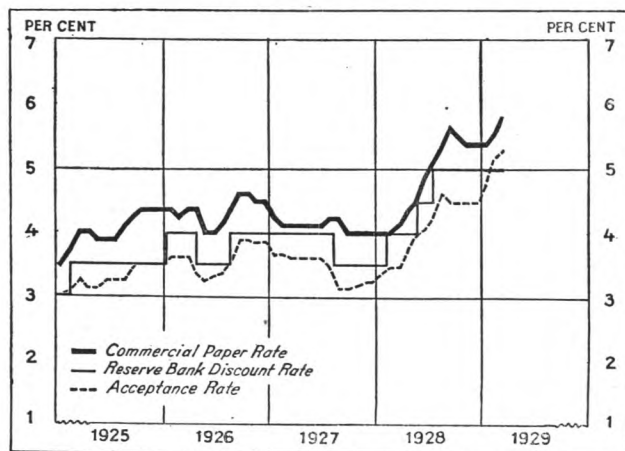
chiefly for commercial purposes, which on March 13 were more than \$200,000,000 larger than four weeks earlier. Investments of the reporting banks declined further during the period. Total volume of reserve bank credit declined somewhat between February 20 and March 20, reflecting for the most part some further gold imports from abroad. Member bank borrowing at Federal Reserve banks was nearly \$80,000,000 larger on March 20 than four weeks earlier, while acceptances showed a further decline of about \$120,000,000 during the period. Security holdings showed relatively little change. Money rates continued to advance. Rates on 4-to 6-month commercial paper rose from $5\frac{1}{2}$ - $5\frac{3}{4}$ to $5\frac{3}{4}$ -6 per cent, and rates on 90-day bankers' acceptances increased from 5 to $5\frac{1}{4}$ per cent on February 13 and to $5\frac{1}{2}$ per cent on March 21.

RESERVE BANK CREDIT



Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages of first 21 days in March, 1929: Total Reserve Bank Credit, 1,495 million; Discounts for Member Banks, 945 million; Acceptances, 288 million; U. S. Securities, 210 million.

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 March, 1929: Commercial Paper Rate, 5.79 per cent; Acceptance Rate, 5.28 per cent; N. Y. Reserve Bank Discount Rate, 5 per cent.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

Current data reflect diverse trends in the business and industrial activity of the Seventh district, the expansion reported in several lines of trade being to a degree counterbalanced by recessions in a number of other distribution phases. Noteworthy gains over the preceding month are recorded for February in automobile and furniture distribution, in wholesale dry goods, shoe and lumber sales, together with factory shipments of agricultural machinery, castings, stoves, and leather. Offsetting these gains are shown a lessened volume of department store trade as compared with January, a drop in average business per chain store, in retail sales of shoes and lumber, and in several wholesale lines. Factory distribution of packing-house products and butter also shared in this downward trend. Numerous gains over last year are revealed by February figures, among them department store sales, the number of automobiles sold, output of agricultural machinery factories and of packing houses, together with expansion in wholesale dry goods, drug, and electrical equipment sales. A recession from February 1928 was experienced by the shoe trade, in retail lumber sales, and in wholesale distribution of groceries, hardware, furniture, and a few other lines.

In production, increases took place in February over the preceding month and a year ago in iron and steel, automobiles, and farm machinery, while operations of packing houses decreased. Coal mining also declined from January

but exceeded February 1928. Building operations fell considerably short of February last year, while employment gained over the preceding month.

Marketing of grain and live stock by farmers was seasonally smaller than in January and less than in the corresponding period of 1928.

Money continued firm. Borrowings at the Federal Reserve Bank, loans and discounts of reporting member banks, and Federal Reserve note circulation stood at a higher level on March 20 than on February 20 or a year ago; deposits of reporting banks decreased, however, in the former comparison. Transactions in bankers' acceptances and dealers' sales of commercial paper declined in February from the preceding month and last year, while operations in the Chicago open bill market increased. Payments by check and debits to individual accounts were smaller than in January but in excess of the corresponding month of 1928.

CREDIT CONDITIONS AND MONEY RATES

Conditions in the Chicago money market are firm, with stock brokers' demand loans continuing to carry 7 per cent, customers' collateral loans 6 to 7 per cent, compared with 6 to $6\frac{1}{2}$ per cent a month ago, and customers' over-the-counter accommodations 6 to $6\frac{1}{2}$ per cent, or one-half per cent higher than at the middle of February, with possibly some preferential loans slightly below the indicated minimum. Demand in Chicago for commercial purposes has been

at a somewhat lower level in recent weeks; security loans have shown an upward trend. The average rate earned on loans and discounts by nine large banks in Chicago during the calendar month of February was 5.95 per cent, a slight decrease from the 5.98 per cent reported for January, although nearly half of the banks reporting the item showed an increase in the monthly comparison. In other sections of the district little change has taken place from a month ago; demand continues active in the more important banking centers. Protracted cold and heavy snows in some agricultural areas have handicapped farmers in moving hogs; cattle, and grain, with resultant slowing-down in liquidation of obligations at country banks in these regions. The average rate earned by five banks in Detroit in February was 5.90 per cent, compared with 5.88 in January and 5.40 per cent in February 1928. The prevailing rate on customers' commercial loans in that city during the week ended March 15 was $5\frac{1}{2}$ -6 per cent.

Total bills and securities of the Federal Reserve Bank of Chicago have shown an almost steady increase since January 30. On March 20 the item amounted to \$284,955,000, which compares with \$273,881,000 on March 13 and \$216,833,000 January 30. Loans to member banks have tended upward during the last two months, and on March 20 expanded to \$237,173,000, the high mark since August 3, 1921. This amount compares with \$189,202,000 and \$83,757,000, respectively, on the corresponding dates a month and a year ago. Federal Reserve notes in actual circulation have changed little in volume since the latter part of January but are at a higher level than a month ago, on March 20 amounting to \$279,967,000 and on February 20 to \$276,946,000.

The volume of loans and discounts of reporting member banks in the Seventh district has continued the upward trend manifest since the end of January; the aggregate on March 20 was \$2,674,192,000, as against \$2,630,842,000 February 20 and \$2,551,360,000 January 30. An increased volume of loans on securities in Chicago and Detroit is in the main responsible for the larger totals in recent weeks; commercial loans in Chicago have shown a downward movement since February 27; in Detroit no definite trend in commercial loans has been evident, but in other selected cities the volume has risen slightly. Investment holdings of reporting member banks have shown a steady decline, reflecting the trend in Chicago and Detroit; in other selected cities the item has moved upward. The total on March 20, however, rose to \$762,665,000, as against \$744,275,000 the preceding week. Net demand deposits have fluctuated widely from week to week; on March 20 the item was reported as \$1,883,710,000, compared with \$1,879,503,000 February 20. On the last reporting date in February, however, an aggregate of \$1,895,387,000 was given. Time deposits, which had shown an uninterrupted upward trend since the first reporting date in February, on March 13 dropped to \$1,266,953,000 from the \$1,274,839,000 the preceding week, and on March 20 a further drop was registered to \$1,243,928,000.

Commercial paper sales of ten reporting dealers in the Middle West decreased 33.9 per cent in February from January and were 31.4 per cent smaller than a year ago. All the reporting firms shared in these recessions. The supply of paper remained fair to good, and the demand ranged between limited and fair. Sales of four Chicago dealers aggregated less for the first half of March than for corresponding weeks of the preceding month. Supplies were better than during the first half of February; demand slackened

and was indicated as coming principally from the country and suburban banks. Selling quotations for February ranged from $5\frac{1}{4}$ and $5\frac{1}{2}$ per cent for low to $5\frac{3}{4}$ and 6 per cent for high, with the customary charge $5\frac{1}{2}$ to $5\frac{3}{4}$ per cent. Rates closed on March fourteenth at $5\frac{1}{2}$ and $5\frac{3}{4}$ per cent for low to 6 per cent for high, averaging $5\frac{3}{4}$ per cent, and then firmed again during the third week of the month. Outstandings of five dealers in the Middle West totaled 0.9 per cent more on February 28 than at the close of the preceding month, but were 15.0 per cent less than last year; twenty-three dealers in the United States had \$411,474,136 in bills outstanding, compared with \$407,684,231 on January 31.

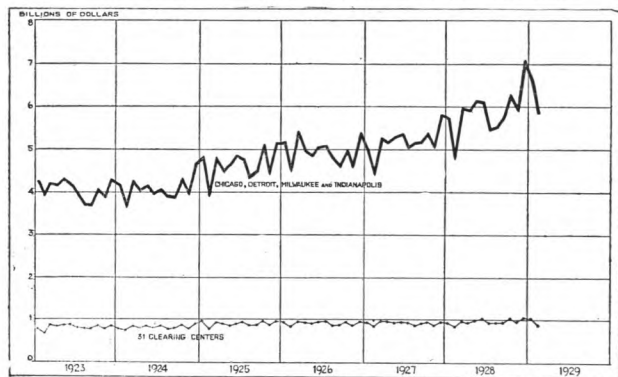
Purchases of six dealers in the Chicago open bill market from February 14 to March 13 exceeded those of the preceding four weeks by 76.4 per cent, while sales increased 71.4 per cent and receipts from other offices gained 40.4 per cent. Gains of 109.0 and 64.0 per cent, respectively, in purchases and sales, with a recession of 17.1 per cent in receipts from other offices were shown in comparison with a year ago. Supplies remained rather small until the beginning of March and then improved. Demand was good from February 14 to 27 but limited during the remainder of the period. Bills were drawn principally against grain, cotton, packing-house products, iron and steel, raw silk, copper, poultry, coffee, sugar, canned goods, casings, and dollar exchange. Selling rates remained firm and closed on March 13 at $5\frac{1}{8}$ per cent for 30-day offerings to $5\frac{3}{8}$ per cent for those of 180 days. Quotations advanced $\frac{1}{4}$ per cent on all maturities on March 21. Holdings declined 15.0 per cent from February 14 and were 0.6 per cent smaller than a year ago.

Fifteen reporting banks in the Seventh district accepted bills 32.6 per cent smaller in volume during February than in the preceding month; purchases gained 70.7 per cent in the comparison, and sales showed a recession of 0.2 per cent. The aggregate of accepted bills fell 0.3 per cent below a year ago, while the volume of sales decreased 14.4 per cent and purchases declined 1.1 per cent. For the first half of March, acceptances of four local banks totaled considerably in excess of those for the corresponding period of February, and involved transactions principally in grain, cotton, packing-house products, textiles, coffee, iron ore, watches, raw silk, hides, artificial silk, burlap, rubber, copper, sugar, paper, and straw hats. Liability for outstandings was at a 2.1 per cent lower level than on January 31 and 34.7 per cent greater than for the corresponding date of 1928. Holdings decreased 10.6 per cent on February 28 from the preceding month and from last year; portfolios contained 18.4 per cent less of the accepting banks' own bills than at the close of January. The Federal Reserve Bank of Chicago purchased \$18,820,955 in bankers' acceptances during February compared with \$35,030,916 in the preceding period, and had \$37,183,784 of this class of bills on hand at the close of the month.

Volume of Payment by Check—Volume of payment by check, as reported by thirty-eight clearing house centers in the Seventh district, continues well above the level of a year ago; the February aggregate showed an increase of 18.4 per cent over February 1928, but a drop of 11.8 per cent from the January total, which is largely accounted for by the shorter month. In the four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, the aggregate gain over February a year ago was 20.5 per cent, and in thirty-four smaller centers reporting volume of check payment, the increase amounted to 6.6 per cent; Chicago alone, with \$4,336,789,000 in February of this year, gained 22.4 per cent over a year ago. As compared with January, Chicago debits to individual accounts dropped 8.9

per cent in February, the four larger cities 11.5 per cent, and the thirty-four smaller cities 14.0 per cent.

VOLUME OF PAYMENT BY CHECK
Checks Drawn on Clearing House Banks, 7th District



Figures used are estimates for calendar months, based on weekly reports to this bank. Latest figures, February, 1929, in thousands of dollars: Chicago, Detroit, Milwaukee, and Indianapolis, 5,857,625; and 31 Other Clearing House Centers, 882,535.

Savings Deposits—March 1 marked a decline of 0.3 per cent in the volume of regular savings deposits in the Seventh

AGRICULTURAL PRODUCTION AND FOODSTUFFS

Grain Marketing—Receipts of wheat and oats increased and those of corn decreased at interior primary markets in the United States during February as compared with January; reshipments declined. Smaller quantities of corn and oats and larger tonnages of wheat were handled at these centers than in the corresponding period of last year. The movement of wheat and corn exceeded the 1924-28 average for February; that of oats showed a recession in the comparison. Visible supplies of wheat at interior primary markets in the United States decreased somewhat on March 9 from the preceding month, and stocks of other grain increased slightly. Inventories of wheat, rye, and barley continued much larger, while holdings of corn and oats remained considerably less than a year ago. Farm inventories of wheat, corn, oats, and barley in the United States were greater and stocks of rye were smaller on March 1 than last March; farm holdings of wheat in the five states including the Seventh district, however, aggregated less than in 1928. Trading in grain futures by members of the Chicago Board of Trade decreased 29.7 per cent in February from the preceding month, but was 2.4 per cent in excess of a year ago. Chicago quotations averaged a little higher than in January.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in February, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JANUARY 1929	FEBRUARY 1928	
Production (bbls.)	-15.8	-15.6	31
Stocks of flour at end of month (bbls.)	- 3.1	+19.4	28
Stocks of wheat at end of month (bu.)	- 3.5	+ 2.6	28
Sales (volume).....	-34.1	-49.8	13
Sales (value).....	-35.5	-55.1	13

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

Meat Packing—Slaughtering establishments in the United States produced a considerably smaller quantity of edible products during February than in the preceding month or a year ago. Employment for the last payroll of the period also declined 4.9 per cent in number of employees, 7.7 per cent in hours worked, and 6.5 per cent in value compared with corresponding weeks of January. Domestic trade averaged fair to good for fresh pork, fair for the majority of

district, as compared with the beginning of February, and also a recession of 0.6 per cent in average accounts with an expansion of 0.3 per cent in the number of depositors, according to a tabulation for 202 reporting banks. Gains of 2.4, 0.1, and 2.3 per cent, however, were recorded over a year ago. Deposits in Michigan and average accounts in Iowa increased over the preceding month, while Indiana and Iowa experienced a decline in the number of accounts. Figures for Illinois and average deposits for Wisconsin were at a lower level than on March 1, 1928. Individually, eighty-two of the banks in the district reported savings deposits in excess of February 1, and sixty-five found them below a year ago.

Bonds—Little activity and price recessions continue features of the bond market. Because of the investing public's interest in the stock market, bonds with stock purchase warrants or convertible features have been the most attractive. A decline was noted in the amount of industrial, municipal, railroad and real estate bonds offered in February, while the public utility group increased somewhat. The aggregate volume of bond offerings during the month was considerably below the corresponding period a year ago. Life insurance companies were important purchasers and also private investors who are taking advantage of the current low price levels to invest for the long pull.

smoked meats, and rather quiet for lard, dry salt pork, lamb, and bacon; demand for dressed beef remained slow until mid-month and then improved slightly. February sales billed to domestic and foreign customers by sixty-one meat packing companies in the United States totaled 2.6 per cent less in value than in January and 5.4 per cent in excess of a year ago. Demand in domestic markets averaged fair early in March, some recession being shown from the beginning of February because of the Lenten season. Stocks at packing plants and cold-storage warehouses in the United States increased on March 1 over the preceding month and continued in excess of the corresponding date in 1928 and the five-year average. Inventories of lamb and mutton, however, decreased from last year, and those of beef were below the 1924-28 average for March 1; both decreased in volume from February 1. Chicago quotations for pork products advanced in February over the preceding month; prices of beef, veal, lamb, and smoked hams declined.

Reports from representative meat packing companies in the United States show that shipments for export were smaller in February than in the preceding month. Foreign trade in lard remained rather quiet; a few fat backs were sold to Continental buyers; and a slight improvement was reported in British demand for American meats, the latter being attributed to a temporary falling-off in imports from Denmark as a result of the cold weather. Prices averaged a little under the United States parity. March 1 consignment inventories of goods, already landed or in transit to European countries, were indicated as slightly larger than on February 1.

Dairy Products—Reports from sixty-eight creameries show that butter production in the Seventh district declined 3.7 per cent in February from the preceding month and was 3.7 per cent below a year ago; statistics of the American Association of Creamery Butter Manufacturers indicate that production in the United States increased in the latter comparison. The quantity of creamery butter billed to customers by seventy companies in the Seventh district aggregated 8.0 per cent less than in February and 5.6 per cent smaller than in the corresponding month of 1928. Wisconsin

sin primary markets received a 16.5 per cent larger tonnage of American cheese, from factories within the state, during the four weeks ended March 2 than in the preceding period, the volume being 13.7 per cent smaller than last year; redistribution from these centers gained 8.7 and 5.8 per cent in the respective comparisons. Holdings of dairy products at cold-storage warehouses and packing plants in the United States were reduced on March 1 from the beginning of February. Butter and egg inventories decreased from a year ago and the 1924-28 average for March 1, while stocks of cheese increased. Smaller tonnages of butter and cheese, and larger quantities of eggs were received at Chicago during February than in the preceding month. Chicago quotations advanced for butter and eggs and declined for cheese in comparison with January.

Movement of Live Stock—Receipts of live stock at public stock yards in the United States showed the customary recession in February from January, and were considerably below last year and the 1924-28 average for the month;

lamb and sheep arrivals increased in the latter comparison.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, February, 1929	176,549	904,309	246,871	102,371
Federally Inspected Slaughter, U. S. February, 1929	568,622	4,477,633	953,226	311,181
January, 1929	735,685	5,737,737	1,150,011	369,010
February, 1928	666,079	5,779,821	1,048,419	373,789

Cattle and calves moved to feed lots in seasonally smaller numbers than in January, the volume also being less than a year ago; reshipments of lambs and sheep decreased from January but were in excess of the corresponding month of 1928.

AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	MARCH 16 1929	FEBRUARY 1929	JANUARY 1929	FEBRUARY 1928
Native Beef Steers (average).....	\$12.85	\$11.90	\$12.55	\$13.25
Fat Cows and Heifers.....	10.25	9.10	9.50	9.15
Calves	17.50	14.00	15.50	14.50
Hogs (bulk of sales).....	11.60	10.25	9.15	8.10
Yearling Sheep	14.00	13.85	13.25	13.85
Lambs	17.05	16.40	16.25	15.40

COAL

Output of bituminous coal from Illinois mines in February of 6,509,196 tons was somewhat lower than in January, but compared with 5,818,244 tons for the same month of 1928. Little change took place from the preceding month in the number of mines in operation or the number of men employed, while the average number of days worked declined from 21.1 to 19.0; as compared with a year ago, the number of mines in operation and the number of days worked were greater, but the number of men employed declined. The demand for domestic sizes of coal continued

good through most of February, but the milder weather has caused a falling-off in recent weeks. Prices on the finer sizes of coal were weak through the early part of March, but have shown some strengthening since that time, while domestic sizes have recently displayed a slight softening tendency.

Production of bituminous coal in the United States during February followed the same trend as in this district, declining from January but increasing over February last year.

INDUSTRIAL EMPLOYMENT CONDITIONS

Employment reports for the period January 15 to February 15 reflected the customary increase in industrial activity, seasonal for this period, plants with an aggregate of 340,000 workers adding 2.1 per cent to this number, while payroll amounts advanced 7.0 per cent. Vehicles and the metal products group led the expansion, the former with a gain of 3.7 per cent in men and 15.4 per cent in payrolls; the latter with increases of 4.0 and 9.0 per cent, respectively. Substantial gains were registered in the chemicals group by paints and oils; in employment at boot and shoe factories; and in rubber products. Smaller gains in the volume of employment but heavy expansions in payroll amounts were reported by furniture and clothing manufacturers. Food products as a group showed declines in both the num-

ber of workers and in payrolls; stone, clay, and glass products also registered losses; and the paper and printing industries showed some reduction.

A further slight curtailment was shown in the volume of employment reported by distributive industries, building and construction operations remained quiet, and there was little increase in the demand for outdoor workers. The ratio of applicants for work to available positions at the free employment offices, however, in general showed a downward trend. For Illinois the ratio fell from 182 per cent to 169; for Indiana from 154 to 136; while in Iowa an increase was recorded, the ratio rising from 316 during January to 336 in February.

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
	FEBRUARY 15 1929	JANUARY 15 1929		FEBRUARY 15 1929	JANUARY 15 1929	
All groups (10).....	341,965	334,882	+ 2.1	\$9,918,902	\$9,273,128	+ 7.0
Metals and metal products (other than vehicles).....	137,345	132,013	+ 4.0	4,346,112	3,985,458	+ 9.0
Vehicles	38,156	36,788	+ 3.7	1,149,066	995,665	+15.4
Textiles and textile products.....	25,556	25,359	+ 0.8	645,835	600,839	+ 7.5
Food and related products.....	43,755	44,132	- 0.9	1,141,934	1,153,123	- 1.0
Stone, clay, and glass products.....	12,535	12,914	- 2.9	355,830	361,725	- 1.6
Lumber and its products.....	27,298	27,057	+ 0.9	648,079	578,294	+12.1
Chemical products	9,039	8,744	+ 3.4	246,643	229,983	+ 7.2
Leather products	12,989	12,716	+ 2.1	289,147	267,397	+ 8.1
Rubber products	4,286	4,139	+ 3.6	110,630	100,662	+ 9.9
Paper and printing.....	31,006	31,020	- 0.1	985,626	999,982	- 1.4

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—Expansion in automobile production continues, with total United States output in February establishing a record. The number of passenger cars produced (407,589) increased 16.7 per cent over January and 40.0 per cent over a year ago. Output of trucks totaled 58,495, or 13.4 per cent larger than in January and 79.2 per cent above February 1928.

New cars sold during February in the Middle West, both at wholesale and retail, showed decided gains over the preceding month and likewise increased as compared with the corresponding period last year, except for a slight decline from last February in the aggregate value of retail sales. Used car sales increased in the month-to-month but declined in the yearly comparison. Stocks continued to gain, those of both new and used cars at the end of February exceeding those held a month previous and a year ago. Of the total retail sales of forty-two dealers, 50.5 per cent were made on the deferred payment plan, which compares with an average of 52.4 per cent in January and of 48.1 per cent for twenty-four firms in February last year.

MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in February, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED	
	JANUARY 1929	FEBRUARY 1928	JANUARY 1929	FEBRUARY 1928
New cars				
Wholesale—				
Number sold	+25.8	+15.7	37	28
Value	+27.2	+ 1.1	37	28
Retail—				
Number sold	+31.9	+23.3	93	73
Value	+53.5	- 1.0	93	73
On hand February 28—				
Number	+27.6	+65.8	64	44
Value	+29.4	+37.8	64	44
Used cars				
Number sold	+26.5	- 4.3	93	73
Salable on hand—				
Number	+11.1	+25.9	61	41
Value	+ 5.7	+15.5	61	41

Agricultural Machinery and Equipment—Reports from seventy-three manufacturers in the United States show that the total value of February sales of agricultural machinery and equipment billed to domestic and foreign customers exceeded that of January by 14.2 per cent in the tractor, thresher, combination harvester-thresher line, 8.6 per cent in "all other" (exclusive of barn supplies), and 7.9 per cent in the barn equipment group. Sales in the heavy machinery group were 70.9 per cent greater than a year ago, while those in the light machinery group and barn equipment declined 1.3 and 5.2 per cent, respectively, in the comparison.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in February, 1929, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JANUARY 1929	FEBRUARY 1928	
Domestic sales billed.....	+16.5	+11.5	73
Sales billed for export.....	- 8.2	+64.8	38
Total sales billed.....	+10.8	+18.8	73
Production	+ 3.3	+25.0	71

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

Iron and Steel Products—The high rate of activity prevailing in January continued through February in the steel industry of the Chicago district, and the first half of March evidenced no decline in the volume of business, which considerably exceeds that of a year ago. Despite heavy specifications, unfilled orders have continued to increase; Feb-

ruary operations were near capacity, averaging about 95 per cent. Second-quarter buying of pig iron also was heavy during February; production in the Illinois and Indiana district averaged 23,794 tons daily, or higher than for any month on record. Daily average output in the United States was the heaviest since April 1926, and larger than for any February since 1925. February production of steel ingots in the United States established a record for the daily average. On February 28, unfilled orders of the United States Steel Corporation totaled 4,144,341 tons, or about 250,000 tons under the corresponding date of 1928 but 35,000 tons in excess of January 31.

Prices have continued firm in the country. In the Chicago district, advances have been made in plates, shapes, and bars. Pig iron in this market remains unchanged, while scrap iron and steel prices have shown some further weakening since the middle of February.

Activity of both steel and malleable casting foundries of the district continues to expand. During February, orders booked, shipments, and production were heavier than either a month or a year previous. Stove and furnace manufacturers report larger shipments and smaller orders booked than in January, and an opposite trend as compared with February 1928; production showed considerable gains in both the month-to-month and yearly comparison.

Shoe Manufacturing, Tanning, and Hides—Production of shoes at factories in the Seventh Federal Reserve district declined 3.0 per cent in February from the preceding month, according to preliminary estimates of the United States Department of Commerce. Reports from representative tanneries show that sales of leather in the district were larger than in January, but below a year ago; production decreased in both comparisons.

February sales of packer green hides at Chicago were in smaller volume than in the preceding month and trading in calf and kip skins remained rather quiet; shipments from the city and purchases by district tanners also were reported as less than in January.

Furniture—A decline of 2.8 per cent from the preceding month and a gain of 10.0 per cent over a year ago were reported in orders booked during February by twenty-six furniture manufacturers of the Seventh Federal Reserve district. In the monthly comparison, fifteen of the firms showed increases, while less than half of them had gains over a year ago. Shipments increased 9.2 per cent over January, though aggregating 4.2 per cent under February 1928. The amount of unfilled orders on hand February 28 was 12.4 per cent more than a month previous and 3.1 per cent heavier than on the corresponding date in 1928. An average rate of operations in February of 73.4 per cent of capacity compared with 76.0 per cent a month previous and was also slightly less than last year.

Raw Wool and Finished Woolens—Conditions in the raw wool market remained quiet during the month of February, although mills purchased in small quantities. A general easing tendency was noticeable in prices the latter part of the month and during the first part of March, particularly in the fine and medium grades. Foreign wools were weak over this period. A smaller volume of the new clip has been contracted so far in 1929 than a year ago. On February 27 the American Woolen Company opened its Fall 1929 line of men's wear with a slight lowering of prices on the more expensive grades.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

An increase in lumber sales was reported for February over January by eighteen wholesale dealers of the district, the gain amounting to 15.4 per cent in dollar value and 14.3 per cent in board foot measure. As compared with a year ago, sales were 1.1 per cent less in dollar units and 7.8 per cent smaller in board foot volume. Outstanding accounts increased also, but less extensively, the ratio to monthly sales amounting to 147 per cent, as compared with 155 a month earlier and 144 last year. Stocks showed little change during the month and were about as large as a year ago. Prices have been firm. The increased demand for lumber in February was mostly from industrial consumers of lumber and from flooring and woodworking plants, as retailers continued to place orders for their immediate requirements only.

With building operations in many sections of the district practically at a standstill, the demand for lumber at retail yards has been slow, and the sales as reported by 232 yards were 12.0 per cent less than in January and 6.1 per cent below February 1928. Outstanding accounts at the close of the month totaled 422 per cent of sales during the month, as compared with 373 and 413 per cent for the preceding month and a year ago. Stocks were slightly heavier than at the close of January, but showed little change in the yearly comparison.

The price trend has been upward in line with replacement costs.

Receipts of lumber at Chicago registered a gain of 5.4 per cent over January, though totaling 13.8 per cent less than a year ago. Shipments out of the city also showed an increase for the month of 14.8 per cent, but fell 2.2 per cent below those of February 1928.

Shipments of cement were at a low point during February because of the unfavorable weather conditions. Stocks are very large, and production has been further curtailed. In the brick industry, also, shipments were lower than a year ago, but showed a slight increase over January.

Building Construction—Contracts awarded during February in the Seventh district amounted to \$69,845,141, a decline of 9.8 per cent from January and 35.8 per cent less than a year ago. Of this total, \$21,619,745, or 30.0 per cent was for residential building. Permits issued in fifty cities during the month showed a gain of 3.1 per cent over January in number but a loss of 11.3 per cent in the estimated cost. In comparison with a year ago, both the number and cost registered heavy declines, of 34.5 and 44.5 per cent, respectively. For fifty-four additional cities giving a monthly comparison, there was a loss of 23.9 per cent in the number of permits issued, with a gain of 29.5 per cent in the estimated cost.

MERCHANDISING CONDITIONS

Wholesale Trade—February sales by half the reporting lines of wholesale trade in this district were larger than a month previous and half the groups recorded gains over February 1928. For the year to date, aggregate sales in the wholesale grocery, dry goods, drug, and electrical supply trade have been heavier by 3.7, 6.3, 7.8, and 14.8 per cent, respectively, than for the corresponding period of 1928, while wholesale hardware sales have declined 1.5 per cent, and wholesale shoe

trade by 12.5 per cent. Collections were generally smaller in February than a month previous and with the exception of the dry goods and electrical supply trade fell below a year ago. Prices were reported as firm by the majority of firms making comments thereon. Impassable roads and severe weather continued to act as deterrents to increased business during February.

WHOLESALE TRADE DURING THE MONTH OF FEBRUARY, 1929

	Net Sales		Stocks at End of Month		Accounts Outstanding End of Month			Collections During Month	
	PER CENT PRECEDING MONTH	During Month CHANGE FROM SAME MONTH LAST YEAR	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	RATIO TO NET SALES DURING MONTH	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR
Groceries	(35) - 9.8	(36) - 2.1	(24) - 0.3	(24) + 1.6	(32) - 0.9	(33) - 7.7	(33) 106.6	(26) - 4.5	(27) - 0.3
Hardware	(13) - 3.2	(13) - 6.6	(8) + 10.9	(8) - 5.6	(13) + 0.0	(13) - 1.2	(13) 238.8	(11) - 19.6	(11) - 4.2
Dry Goods	(9) + 10.3	(9) + 4.7	(7) + 3.1	(7) - 7.3	(9) + 0.4	(9) + 1.3	(9) 324.2	(8) - 12.0	(7) + 10.2
Drugs	(15) - 11.0	(15) + 2.6	(13) + 2.3	(13) + 0.1	(13) - 3.2	(13) - 2.9	(13) 147.5	(9) - 15.3	(9) - 4.8
Shoes	(8) + 23.6	(8) - 13.6	(6) + 2.9	(6) + 5.1	(7) + 6.2	(7) - 1.9	(7) 349.6	(6) - 24.8	(6) - 11.8
Electrical Supplies	(33) + 1.1	(33) + 18.5	(25) + 2.7	(23) + 5.5	(32) - 3.8	(28) + 30.9	(32) 141.6	(25) - 11.4	(24) + 21.1

Figures in parentheses indicate number of firms included.

Department Store Trade—Sales of one hundred department stores in the Seventh district fell off 2.3 per cent in February from the preceding month, but exceeded February a year ago by 1.1 per cent; for the first two months of 1929 sales were larger by 3.9 per cent than for the corresponding period of 1928. In the month-to-month comparison, stores in Detroit and in fifty-three smaller cities of the district reported a heavier volume of aggregate sales, with Chicago, Indianapolis, and Milwaukee showing recessions; as compared with February last year, Chicago and Detroit recorded increases, while in Indianapolis, Milwaukee, and the smaller cities, sales were lower this year. Stocks on hand February 28 were heavier than on January 31 or a year ago by 6.5 and 2.9 per cent, respectively. Stock turnover for the month (the ratio of sales to average stocks) was 29.5 per cent compared with 30.0 for the same period of 1928; turnover for the year to date averaged 59.4 per cent against 59.2 last year.

Collections during February and accounts receivable the end of the month were smaller than for January, falling off 17.0 and 9.2 per cent; as compared with February a year ago, collections increased 8.9 per cent and accounts receivable 11.4 per cent. The ratio of collections during the month to accounts outstanding the end of the preceding month averaged 37.3 per cent for February this year against 39.0 per cent in 1928.

Chain Store Trade—A decline of 0.9 per cent from January was shown in aggregate sales of twenty-two chains operating 2,519 stores during February, while the number of stores increased 0.4 per cent. In the comparison with February a year ago, total sales gained 5.1 per cent and the number of units 15.0 per cent. Average sales per store fell 1.3 per cent below the preceding month and were 8.7 per cent under last February. Drug, five-and-ten-cent, musical instruments, furniture, and women's clothing chains showed aggregate sales larger in February than a month

previous, with grocery, shoe, cigar, and men's clothing chains recording recessions; with the exception of groceries, furniture, and musical instruments, all groups had larger sales than a year ago.

Other Retail Trade—In retail shoe trade February sales of Seventh district dealers and department stores fell 23.3 per cent below January and were 5.5 per cent smaller than in February last year; for the first two months of this year sales totaled 2.1 per cent less than in the corresponding period of 1928. Stocks on hand the end of February gained 11.5 per cent in the monthly and 8.2 per cent in the year-to-year comparison. Collections by dealers during the month and accounts receivable the end of the month declined 3.2 and 24.6 per cent, respectively, from the preceding month with increases of 19.7 and 5.9 per cent shown over a year ago. The ratio of accounts receivable to sales averaged 90.5 per cent for February, 78.4 per cent in January, and 75.8 per cent for February 1928.

Twenty-five dealers and the furniture and furnishings sections of twenty-seven department stores reported sales aggregating 19.5 per cent more in February than a month

previous and 0.1 per cent above a year ago. Stocks had increased 3.3 per cent by the end of February over January 31 and were 6.0 per cent heavier than on the corresponding date of 1928. Installment sales of nineteen dealers gained 38.7 per cent in the month-to-month comparison and 1.4 per cent over a year ago. Collections on this type of sales were 2.5 per cent smaller than in January but 10.5 per cent larger than in February 1928, while total collections increased 0.4 per cent and 3.5 per cent, respectively, in the two comparisons. Accounts receivable the end of February declined 0.9 per cent from January 31 but were 4.3 per cent heavier than a year ago.

Sales of one hundred retail hardware dealers in the five states including the Seventh district totaled 0.1 per cent smaller in February than a month previous and for 104 dealers were 7.4 per cent under a year ago. For the first two months of 1929, sales aggregated 6.4 per cent less than in the corresponding period of 1928. In the month-to-month comparison, only Indiana and Michigan dealers reported increased sales, the gains averaging 16.7 and 1.4 per cent, respectively, while in the comparison with February last year sales in Michigan alone were larger, by 7.9 per cent.

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	Feb. 1929	Jan. 1929	Feb. 1928	Jan. 1928		No. of Firms	Feb. 1929	Jan. 1929	Feb. 1928	Jan. 1928	
Meat Packing—(U. S.)—						Wholesale Trade—						
Sales (in dollars).....	59	111.9	114.9	106.2	104.0	Net Sales (in dollars) :						
Casting Foundries—						Groceries	37	83.8	92.4	85.6	84.3	
Shipments:						Hardware	16	64.0	67.5	68.5	66.3	
Steel—In dollars	15	93.4	79.8	87.7	71.1	Dry Goods	10	73.6	66.7	70.5	62.2	
In tons	15	103.9	88.1	96.0	76.5	Drugs	10	92.2	104.7	90.9	91.7	
Malleable—In dollars	17	80.4	75.5	63.0	58.8	Shoes	8	65.9	53.3	76.3	60.0	
In tons	15	111.8	105.1	91.0	84.7	Retail Trade (Dept. Stores)—						
Stoves and Furnaces—						Net Sales (in dollars) :						
Shipments (in dollars).....	12	87.9	78.6	82.7	60.5	Chicago	33	88.8	92.2	88.3	88.1	
Agricultural Machinery & Equipment—(U. S.)—						Detroit	4	142.1	132.3	131.5	111.8	
Domestic Sales (in dollars).....	83	168.2	136.2	159.4	116.8	Indianapolis	5	75.2	89.4	78.9	86.7	
Exports (in dollars).....	56	256.0	259.5	218.2	109.9	Milwaukee	5	82.0	90.2	83.6	87.4	
Total Sales (in dollars).....	83	186.4	156.0	168.8	115.7	Outside	54	76.7	75.9	76.9	78.2	
Production	82	171.6	168.3	136.5	130.7	Seventh District	101	94.1	95.8	92.5	90.2	
Furniture—						Retail Trade—(U. S.)—						
Orders (in dollars).....	27	107.0	110.5	93.2	122.8	Department Stores	527	85	94	86	88	
Shipments (in dollars).....	27	88.4	80.9	100.9	73.1	Mail Order Houses	4	129	132	108	105	
Electric Energy—						Chain Stores :						
Output of Plants (KWH).....	8	156.9	173.2	145.8	153.1	Grocery	34	229	222	194	187	
Industrial Sales (KWH).....	8	184.9	180.4	155.9	151.2	Drug	13	170	177	148	146	
Flour—						Shoe	7	88	102	86	87	
Production (in bbls.).....	32	88.9	105.6	105.3	102.7	Five and Ten Cent.....	14	122	112	115	104	
Output of Butter by Creameries—						Candy	4	112	106	106	100	
Production	74	84.7	87.9	88.0	88.9	Apparel	5	147	140	137	121	
Sales	74	81.3	85.8	88.4	91.1	Cigar	4	92	91	96	90	
Iron and Steel—						Automobile Production (U. S.):						
Pig Iron Production: ¹						Passenger cars		138.0	118.2	98.6	69.6	
Illinois and Indiana.....		137.3	125.4	127.3	113.3	Trucks		165.5	146.0	92.4	73.8	
United States		116.6	113.1	101.8	94.3	Stamp Tax Collections—³						
Steel Ingot Production—(U. S.) ¹		135.2	124.8	121.4	115.2	Sales or Transfers of Capital Stock.....		589.0	570.1	148.4	194.2	
Unfilled orders U. S. Steel Corp.....		86.8	86.1	92.1	89.5	Sales of Produce on Exchange—Futures....		79.5	39.1	45.0	63.7	
Freight Carloadings—(U. S.)—						Building Construction—						
Grain and Grain Products.....		106.2	104.1	106.7	108.9	Contracts awarded (in dollars) :						
Live Stock		82.3	91.4	100.2	101.5	Residential		73.6	74.7	148.3	128.3	
Coal		126.3	122.6	102.0	106.4	Total		102.0	113.1	158.8	113.6	
Coke		123.7	104.4	100.9	93.3	Permits:						
Forest Products		89.1	80.5	99.5	87.3	Chicago		Number	23.7	28.1	59.0	46.0
Ore		25.8	23.6	22.2	21.8	Cost.....		31.9	48.1	84.8	98.8	
Merchandise and Miscellaneous.....		103.6	96.5	101.3	94.8	Indianapolis		Number	30.4	34.7	44.8	55.3
Total		103.1	97.3	98.3	94.3	Cost.....		40.2	27.0	49.6	74.4	
U. S. Primary Markets—²						Des Moines		Number	18.0	11.3	33.0	25.8
Grain Receipts:						Cost.....		12.1	10.2	179.0	11.9	
Oats		49.0	47.4	57.8	51.7	Detroit		Number	32.3	25.5	36.3	37.5
Corn		149.7	178.3	206.9	174.0	Cost.....		42.4	46.4	55.9	41.5	
Wheat		80.2	64.5	65.4	69.1	Milwaukee		Number	46.5	46.7	66.1	55.3
Grain Shipments:						Cost.....		63.6	55.2	55.6	41.3	
Oats		31.8	41.5	42.5	39.4	Others (45).....		Number	26.1	25.6	43.9	37.6
Corn		73.6	94.0	101.1	92.7	Cost.....		47.9	38.7	63.0	62.0	
Wheat		46.6	47.7	37.8	41.6	Fifty Cities		Number	31.7	30.7	48.0	43.3
						Cost.....		39.7	44.8	71.6	72.9	

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