

FEBRUARY, 1945



# BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

# Department Store Sales Reach New High

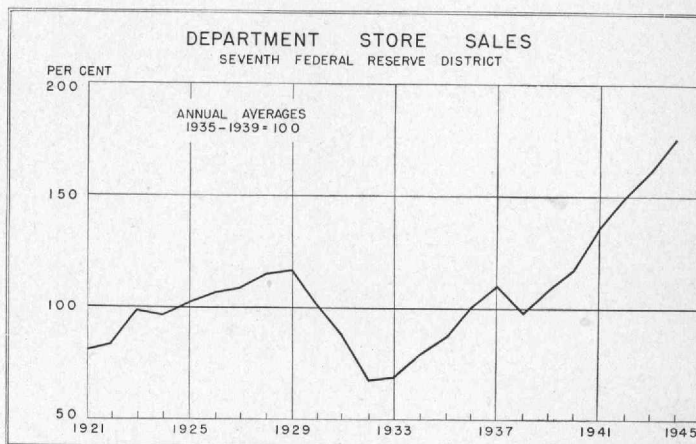
*Index Reflects Continuation of 1943 Tendency*

Department store sales in the Seventh Federal Reserve District are estimated at an all-time high of 1 billion 178 million dollars in 1944. This record volume reflects continued expansion in consumer incomes. The forces which influenced the pattern of department store trade in 1944 were essentially the same as in the previous year, including, in addition to high levels of income, depletion of prewar stocks in certain lines, inferior quality of substitutes, and, to a lesser extent, rationing.

In addition to a larger volume of sales, other ramifications of these forces were the shift in distribution of total sales among various lines, declining inventories, and the larger proportion of transactions effected on a cash basis. In these respects also, the pattern of 1943 was repeated.

## DISTRICT SALES VOLUME ESTIMATED

In the Seventh District, department store sales were 9 per cent over 1943 and 64 per cent over the level of 1939. Although each of the four principal cities in the District—Chicago, Detroit, Indianapolis, and Milwaukee—shared in the gain, Indianapolis and Milwaukee reported the largest relative increases—12 per cent and 13 per cent, respectively, over 1943. Of the total estimated dollar amount of sales in the Seventh District, Chicago stores accounted for 335 million, Detroit stores 186 million, Indianapolis stores 65 million, and Milwaukee stores 82 million dollars.



The revised index of department store sales in this District, based on the 1935-39 average volume of sales, rose to 176 for 1944. It was 161 for the previous year, and 107 for 1939. With the exception of February the monthly index for 1944 was consistently higher than that for each corresponding month a year earlier. February was an exception because of the introduction of shoe rationing in that month of 1943 and its effects on sales of other goods as well as shoes. Fluctuations in the volume of sales from month to month, as indicated by the index, were less erratic than in 1943. This relatively greater stability can be attributed in part to the reduction of "scare" buying as the public became accustomed to rationing and as rationing methods were improved to prevent "runs" on rationed goods.

Throughout the year the index for Indianapolis was maintained at a substantially higher level than that for any of the other principal cities of the Seventh District. Sales in Indianapolis have more than doubled since 1939. Most of the increase took place before 1944 and was attributable to the sharply increased population and expanded payrolls which have accompanied the tremendous increase in business activity in Indianapolis during the war.

For the past two years the Seventh District index of department store sales has lagged behind the national figure. From 1936 through 1942, according to the revised index, these two series coincided very closely. For 1943 the divergence between them amounted to 7 points, and in 1944 the national figure reached 186 compared with 176 for this District.

It should be recognized that part of the increase in department store sales, particularly in the period between 1939 and early 1942, was attributable to price advances. Since price ceilings were imposed in the middle of 1942, however, most of the increase in sales has been due to the shift from lower to higher priced merchandise.

*(Continued on Page 8)*

## INDEX OF DEPARTMENT STORE SALES, 1944 SEVENTH FEDERAL RESERVE DISTRICT

(Average Daily Sales, 1935-39 = 100)

Period	Seventh District	Chicago	Detroit	Indianapolis	Milwaukee
January....	131.0	116.5	142.3	176.1	137.4
February..	131.0	114.8	148.4	164.7	139.6
March.....	159.1	137.2	182.0	207.7	167.7
April.....	166.1	141.7	181.9	209.1	186.0
May.....	169.8	144.1	189.4	215.4	183.3
June.....	159.9	138.7	172.6	191.0	178.6
July.....	138.7	118.3	147.7	171.2	163.2
August.....	150.9	125.9	163.8	196.0	165.2
September.	184.9	154.3	209.4	233.4	204.4
October.....	197.4	168.3	220.8	248.8	211.7
November..	230.8	197.4	256.2	293.7	255.4
December..	294.5	260.7	297.9	374.3	337.5
Annual.....	176.1	151.4	192.6	223.4	194.0

# Basic Material Shortages Intensify

## *Expanded War Demands Limit Civilian Allocations*

The current increasing tempo of war activity stemming from the "Belgian bulge" setback on the Western Front in December has brought a marked upsurge in the demand for most basic materials needed to produce munitions, necessitating curtailment of the Government program to permit moderate resumption of restricted civilian goods production authorized in August 1944.

Manpower stringencies now constitute the principal limitation to further expansion in the output of basic materials, especially heavy metals, textiles, and lumber, all urgently required in war industries. In a few instances, production facilities still restrict output. Munitions production for 1945 nevertheless may equal the 1944 volume, in sharp contrast to earlier estimates which predicted a drastic reduction possibly to 50 or 60 per cent of the 1944 output. There is general confidence, moreover, that the new production goals will be reached through increased utilization and productivity of available manpower and facilities, some new plants, and the continuation of existing or more severe restrictions on civilian items using scarce basic materials.

### MEASURES TO CONSERVE MATERIALS

Producing and conserving basic materials have been major problems ever since Pearl Harbor when war production became the primary objective of the nation. Diversion of many materials from civilian to war use immediately was an obvious necessity. Domestic output could not be expected to meet both regular civilian and unprecedented war requirements, and with strategic material imports reduced, uncontrolled production would soon have depleted stockpiles. The general war program to conserve and augment supplies of materials in the nation, which has developed since 1941, includes several interrelated measures: (1) control of production and end use, including elimination and simplification of thousands of manufactured products to prevent unnecessary use of metals, rubber, lumber, and other materials; (2) use of substitute materials whenever possible to conserve more critical items while maintaining quality; (3) scrap drives to collect metals, rubber, paper, and fats for re-use; (4) salvage of damaged war equipment; (5) expansion and improved efficiency of productive facilities; (6) some price subsidies as an additional incentive to production; (7) stockpile purchases from allied and neutral nations; and (8) consumer conservation to minimize demand for essential civilian goods.

Major impacts of the war upon basic materials have been in the magnitude of demand, the changed nature of end use, and the necessity to develop some few but highly important synthetics and other substitutes to replace import sources of certain materials. Of striking significance, how-

ever, the war has required the re-evaluation of the essentiality of certain materials which by peacetime standards were commonly "taken for granted" or considered only moderately important, but which have constituted increasingly serious bottlenecks during the war. These include paper, leather, lumber, and probably rubber.

### METALS RECEIVE EARLY ATTENTION

Because of their well-known war uses, metals received first attention during the transition to war production. Once the scale of wartime requirements was fully recognized, metal producing facilities were expanded substantially, and even before Pearl Harbor civilians began to feel the effects of the preliminary conversions of metal fabricating plants to war use. Probably nowhere else has the end use of basic materials been so sharply altered during the war than in the case of metals, particularly iron and steel.

Peacetime products of iron and steel included such major consumer items as automobiles, stoves, refrigerators, furnaces, and laundry equipment. The entire iron and steel industry group in 1939 accounted for almost 13 per cent of the total value of manufacturing in the Seventh Federal Reserve District and 20 per cent of the total in the United States. Early in the defense-war effort, huge quantities of steel were required for new plant construction, a factor which accentuated the already greatly enlarged demand, causing severe shortages and necessitating rigid controls. During the war, shipbuilding has replaced automobiles as the largest single consumer of steel, with ordnance items, including combat vehicles, accounting for the bulk of the remaining iron and steel used.

Iron ore, scrap iron, coal, and alloying materials have been needed in quantities that have greatly exceeded pre-war levels. Fortunately the Lake Superior ore deposits have been particularly adaptable to intensive production without extensive outlay for equipment and additional manpower. The supply of coke necessary for blast furnace operations has been threatened from time to time by general manpower shortages and transportation difficulties, but production of iron and steel, however, thus far has not been seriously disrupted by lack of fuel. Scrap iron piles in the nation reached a low point early in 1942, and pig iron was inadequate to meet the needs of the industry without additional scrap. Inasmuch as the blast furnace process requires scrap iron or pig iron to be used with the iron ore to produce the finished metal, salvage drives were organized which were successful in supplying needed quantities of scrap iron from individuals and industries. Experiments with new combinations of metals to produce alloy steels have resulted in successful products known as National Emergency alloy

steels, which provide both economical use of alloying metals and desired physical properties in the new steels.

Among the nonferrous metals aluminum and magnesium have had the largest specialized wartime uses, principally for aircraft and ordnance manufactures. These two metals, although well known in peacetime, were still not extensively used for many purposes because of unfavorable cost differentials with heavier metals. War demands, however, have caused a substantial increase in aluminum use, and literally created a magnesium industry.

Extensive wartime increases in normal uses as well as shifts to new uses of copper, zinc, lead, and many lesser known nonferrous metals have occurred since Pearl Harbor. Development of steel cartridge cases has helped conserve brass, an alloy of copper. The rarer metals such as cadmium, tungsten, and tantalum have played an important role in war production because, although their output may not bulk large, their availability is of vital importance to many war products and processes.

#### NONMETAL NEEDS CONTINUE HIGH

Among textiles, military requirements have taken the entire production of nylon and silk, and from 20 to 30 per cent of cotton, rayon, and wool. Clothing has remained the major end product during the war. In addition, many common household items such as blankets and towels also have been directed in large part to military channels. New and expanded wartime uses of textiles include: cotton duck for coverings, nylon and silk for parachutes and powder bags, and rayon and cotton cord as a major component of tires.

The war has not only brought new chemical products and processes for specialized weapons and substitutes for scarce materials but also a vast expansion in industrial chemicals for established, converted, and new uses. The role of chemicals in providing explosives, plastics, many textiles, and a myriad of other items is well recognized, but it seems certain that numerous chemical adjustments and developments since Pearl Harbor, vital to the war effort, will remain obscure for some time because of their number, complexity, and wartime security value.

Inasmuch as imports supplied about 97 per cent of the nation's prewar crude rubber, loss of foreign sources at the outbreak of war necessitated the development of a synthetic rubber industry and the reprocessing of scrap rubber. Production of tires is the principal use of rubber in peace and war. Curtailment of automobile production and tire and gasoline rationing have afforded a reduction in civilian demand for this material, but military demands for heavy truck, combat vehicle, and aircraft tires have kept the rubber and rubber tire supply situation at a critical level throughout most of the war period.

Except for civilian decorative and specialty products, leather uses have remained relatively unaltered since Pearl Harbor, but the quantity demanded by the armed forces for shoes has been so large as to restrict all types of civilian allocations greatly. Some loss of hide imports has placed additional strain on domestic supplies.

Lumber has been subjected to intensive pressure of demand in the face of manpower shortages since the outset of defense preparations. Principal uses have been construction of: (1) military and naval bases and training stations; (2) industrial war facilities; and (3) war housing; and packaging of war products especially for overseas shipments. The timber industry, moreover, has also faced the critical problem of providing pulp, the basic material for paper and paperboard urgently needed for war packaging as well as for many other uses essential to military operations and civilian life.

The unprecedented fuel requirements of the armed services, war industries, and civilians since Pearl Harbor have combined to create a continuing shortage of coal, gas, and petroleum, especially during the winter heating season. Civilian fuel consumption regulations have been largely confined to petroleum products, indicative that a sharp change has occurred in the consumption of petroleum, particularly from gasoline and fuel oil for domestic transportation and heating purposes to aviation, combat vehicle, and naval fuel.

#### WAR PRODUCTION RECORD

While many problems have been faced in adapting basic materials to specialized war needs, the principal task throughout the war has been to expand production despite manpower shortages, transportation difficulties and related obstacles. The production record of munitions, including all the metal-using industries, rubber, and many chemicals, which currently are being produced at a monthly rate six times the Pearl Harbor level, clearly reveals the tremendous over-all expansion which has occurred in the output of basic materials. Nevertheless, many critical shortages still persist. New production facilities have made possible most of the increases since 1941 when many existing prewar facilities had reached capacity operations because of earlier defense and foreign government orders.

Wartime production of basic materials in general followed an upward trend from 1939-40 to the last quarter of 1943, rising sharply after Pearl Harbor, but there has been considerable variation in the timing of the output peaks among individual materials. Differences in the amounts of increase have depended largely on prewar plant capacity, size and timing of construction of new facilities, equipment and manpower shortages, transportation problems, and the importance of the specific materials to particular phases of the over-all war production program.

Several materials, such as lumber, pulp, certain cotton products, and leather, currently classified as critically scarce, reached their highest production levels late in the defense era or within four months after Pearl Harbor, indicating that their continuing role in the war effort was probably underestimated. The year 1943 marked record outputs of iron and steel and nonferrous metals reflecting the completion of vast expansion programs in facilities to produce many key war materials. Industrial chemicals, coal, petroleum, and rayon did not attain record output levels until 1944.

Not only has the timing of production of basic materials differed widely among individual items, but striking differences also have occurred in the amounts by which production has increased. Some of the largest gains from prewar 1939 levels to record wartime peaks have been made by the chemical and metals groups, with increases of 242 per cent in industrial chemicals, and 173 and 89 per cent, respectively, in nonferrous metals and iron and steel. Wool production expanded more than 74 per cent; rayon, 68 per cent; pulp, 68 per cent; cotton, 61 per cent; and coal, 58 per cent. Among the principal basic materials, lumber has had the smallest wartime output gain, 28 per cent, which occurred very early in the war program, as previously indicated.

In recent months, and particularly since the over-all peak in war production was reached late in 1943, the output of most basic materials has dropped. The sharpest declines have occurred in nonferrous metals, pulp, cotton, lumber, coal, and leather, with less severe declines in wool, iron and steel, industrial chemicals, and petroleum. As an exception to the trend, rayon production has continued to expand.

#### RECONVERSION AUTHORIZATION PROGRAMS

Military successes in the spring of 1944 and prevailing optimism about the future course of the war resulted in the issuance of several Government orders in July and August 1944 to permit (1) the manufacture of experimental models of restricted articles; (2) purchase of machine tools, manufacturing machinery, and similar equipment needed for civilian production; and (3) production of restricted products on a "spot authorization" or local conditions basis.

The first two orders were designed to permit manufacturers to prepare for postwar production, and the "spot authorization" program to fill the gap between war and civilian production by releasing manpower, equipment, and materials, no longer needed for essential purposes.

Between August 15 and December 1 authorization approvals valued at 400 million dollars were given throughout the United States, but relatively few to Seventh District manufacturers because of the widespread acute manpower shortages throughout the Midwest. Favorable consideration was given to applications where the articles could be produced from idle, excess, or frozen materials, and components.

The temporary military reverse in Europe in December 1944 and the concurrent stepped-up war activity in the Pacific area necessitated a sharp curtailment of the limited reconversion authorization programs, which had hardly gotten under way. On December 11, 1944, a joint statement of the Army, Navy, WPB, and WMC temporarily halted for ninety days "spot authorizations" in all Group I, acute labor shortage, areas and certain other areas where resumption of restricted goods production was deemed to interfere with the war effort. The WPB, moreover, specifically limited the manufacture of civilian items generally to the levels allowed during the fourth quarter of 1944. Late in February the "spot reconversion" ban was extended through the second quarter of 1945 for both Group I and Group II areas.

#### MATERIALS SUPPLY OUTLOOK

Important material shortages during 1945 are now judged by WPB officials and industrial executives to include: lumber, pulpwood, copper, certain cotton products, coal, petroleum, leather, aluminum, and cadmium and possibly iron ore. In most cases, manpower is the principal contributory factor to these shortages.

With practically no inventories, the current lumber situation is extremely acute with the most serious gap between supply and demand which has existed during the war. Production in the first quarter of 1945 is expected to be far below the 1944 level and 18 per cent under essential requirements.

Strict regulation of cotton production and consumption will be necessary for some time beyond the first quarter of 1945. Basic needs include duck for tents and denim for work clothes, both of which use roughly the same production facilities.

The recent "brownout" and "curfew" orders are indicative of the general inadequacy of present coal supplies. In addition, gas conservation measures reflect coal shortages. Regions outside the Midwest, and particularly in the South West and Far West, not dependent upon coal for power and fuel, are escaping most of the effects of limited coal supplies. Conclusion of the winter heating period will bring to the rest of the nation seasonal relief from stringencies of this fuel.

The short-run outlook is for possible iron ore stringencies before the opening of the new Great Lakes season probably in March. Ore inventories will be at least at record lows when shipments are resumed. The unexpected renewal of heavy demand for aluminum seems likely to keep production in this industry at high levels for several months.

Natural rubber requirements for war purposes are not expected to be met during the first quarter of 1945, but synthetic rubber production probably will be adequate.

Supplies of roughly 200 items essential to the war production program are still dependent upon import sources, especially South America and Africa. United States imports in 1944 were 3.9 billion dollars, the largest volume since 1929. In certain instances domestic substitutes can be made available, but only by further pressure on already strained resources and facilities. The present outlook is for minimum imports of many of these materials, but continued acute stringencies for several. In December 1944 copper imports exceeded the output from domestic mines for the first time on record.

End of the war in Europe is expected to ease the materials supply situation somewhat, probably reducing Government requirements after a few months by 20 per cent on the average. In the case of many individual items, such as lumber, certain cotton products, and petroleum, however, supplies will remain very short for an indefinite period until manpower can be made available to increase production, and sufficient time elapses to rebuild inventories. Substantial allocations of basic materials to civilians clearly must await victory in Europe, and in many instances victory over Japan, before general requirements can be satisfied.

# War Contracts Surge Upward

## *District Maintains Lead in Supply, Facility Awards*

Recent acceleration of war activity in Europe and the Pacific has brought to manufacturers in the Seventh Federal Reserve District a substantial volume of war supply and facility contracts, reportedly well in excess of one billion dollars since January 1, 1945. These war production developments are the latest in a long series required by the shifting needs of defensive and later offensive war. Further changes are certain to come. Manpower and, to a lesser extent, materials constitute the principal factors which now limit the carrying of new contracts into production. Nevertheless, Midwest industry is expected to operate at or near record levels for most war items throughout the first half of this year.

During the initial six weeks of 1945, new war contracts totaling nearly one billion dollars were awarded within the Detroit WPB region, which includes the southern peninsula of Michigan, and Toledo, Ohio, outside the Seventh District. This amount is nearly one-third of the 1944 annual volume, indicating the vast scale of new war production just initiated in the Detroit area. In the remainder of the Seventh District, new contracts since January 1, 1945, are estimated to have exceeded 400 million dollars. The bulk of these last awards has been to firms in the Chicago industrial area where nearly three-fourths of all war production is now considered "critical," compared with one-third in this classification eight months ago.

### NEW ORDERS INTENSIFY PRODUCTION

It has been the policy of war production authorities to avoid new contract awards in Group I, acute labor shortage, areas. Manufacturing facilities and skills in Detroit and Chicago, presumably not readily available elsewhere, however, have necessitated the current wave of new war orders in these areas which are already devoted overwhelmingly to intensive war production.

The major portion of the newest supply contracts awarded within the Seventh District, which includes most of Illinois, Indiana, Michigan, Wisconsin, and all of Iowa, has been for war materiel similar to that already being produced such as medium and large tanks, ammunition, aircraft parts, and clothing. Production of spare parts for war products already sent overseas is also becoming a highly important element in Midwest industrial output.

War contract data covering the period since January 1, 1945 are based upon tentative estimates of war production authorities. The latest complete supply and facility contract figures released by the WPB, cumulative from July 1940 through December 1944, reveal that the Seventh District has received 42.7 billion dollars in prime non-food war supply contracts, 3.3 billion in publicly-financed industrial facilities, and 0.4 billion in military and naval establishments.

The Chicago District leads all other Federal Reserve Districts in total war supply contracts, followed by New York and San Francisco, and also in industrial facilities, with San Francisco and Cleveland ranking second and third.

The Detroit and Chicago industrial areas dominate Seventh District supply and facility contracts. Detroit has received 33 per cent of the district's supply contracts and 18 per cent of the facility expansion, while Chicago has had 23 per cent of the new facilities, but only 19 per cent of the supply contracts. Milwaukee and Indianapolis have each received more than 5 per cent of the district's total war supply and facility contracts. The twenty-six WPB industrial areas in the Seventh District account for 94.6 per cent of all district supply contracts and 86 per cent of total industrial facility awards. The WPB has defined these industrial areas to cover major concentrations of war manufacturing. In several instances, consequently, a community within a large industrial area, such as Muskegon, Michigan, may actually have received a greater volume of war contracts than entire smaller industrial areas. Nevertheless, these industrial areas, as defined, bring together satisfactorily for war production control purposes the geographically concentrated manufactures of the Seventh District.

### ORDNANCE MATERIALS PREDOMINATE

Seventh District supply contracts cumulative through December 1944 have been distributed as follows in per cent of total: ordnance, 44.4; aircraft, 30.2; shipbuilding, 5.3; and all other, 20.1. Although four areas, Detroit, Chicago, Flint, and Milwaukee, have been awarded 72 per cent of the district's ordnance contracts which total 19 billion dollars, all of the other 22 district industrial areas have had sizable ordnance contracts. Supply contracts for aircraft and parts have centered largely in Detroit, Chicago, Indianapolis, Willow Run, and South Bend-La Porte, aggregating 10.9 billion dollars or 85 per cent of the district total for aircraft. Shipbuilding activity, including parts and equipment, is found principally in Detroit, Chicago, Rockford, LaSalle, Saginaw-Bay City, Milwaukee, and Manitowoc-Sheboygan, which together have been awarded 82 per cent of the district's shipbuilding contracts which are valued at 2.2 billion dollars.

Military facilities have constituted 11 per cent of the total military-industrial facility expansion in the Seventh District during the period from July 1940 through December 1944, compared with 44 per cent in the nation. Within the district's industrial areas, only 6 per cent of total facility expansion has been for military and naval purposes. Battle Creek is the only industrial area where the value of military facilities exceeds that of new industrial facilities.

**DISTRIBUTION OF MAJOR PRIME SUPPLY CONTRACTS AND FACILITIES PROJECTS<sup>1</sup>**

Seventh Federal Reserve District and Industrial Areas<sup>2</sup>  
(millions of dollars)

INDUSTRIAL AREAS Counties Included	SUPPLY CONTRACTS Through December 1944					FACILITIES PROJECTS Through November 1944			GRAND TOTAL
	Aircraft	Ships	Ordnance	All Other	Total	Industrial	Military	Total	
ANDERSON—MUNCIE—MARION..... Delaware, Grant, and Madison, Ind.	9.8	1.3	169.4	144.8	325.3	20.0	.....	20.0	345.3
BATTLE CREEK..... Calhoun and Kalamazoo, Michigan	.2	82.3	85.5	124.3	292.3	11.0	17.5	28.5	320.8
CEDAR RAPIDS..... Linn, Iowa	.....	.....	16.0	190.6	206.6	1.3	.....	1.3	207.9
CHICAGO..... Cook, DuPage, and Lake, Illinois	2,070.8	220.2	2,754.9	3,237.5	8,283.4	767.4	102.5	869.9	9,153.3
DAVENPORT—ROCK ISLAND..... Rock Island, Illinois and Scott, Iowa	2.9	21.5	89.5	180.5	294.5	41.3	.....	41.3	335.8
DES MOINES..... Polk, Iowa	.....	.1	251.5	34.1	285.8	59.3	.....	59.3	345.1
DETROIT..... Macomb, Oakland, and Wayne, Mich.	4,492.4	767.3	8,080.5	899.2	14,239.4	660.8	29.1	689.9	14,929.3
ELGIN..... Kane, Illinois	.....	.....	116.0	121.2	237.2	4.4	.....	4.4	241.6
FLINT..... Genesee, Michigan	110.3	3.3	1,778.6	3.7	1,896.0	102.5	1.3	103.7	1,999.7
FORT WAYNE..... Allen, Indiana	79.9	17.7	545.6	108.5	751.6	51.9	13.6	65.5	817.1
GARY—HAMMOND..... Lake, Indiana	.....	1.5	400.8	214.9	617.2	131.5	.....	131.5	748.7
INDIANAPOLIS..... Marion, Indiana	1,777.3	3.5	286.0	176.0	2,242.8	164.1	7.2	171.2	2,414.0
JACKSON..... Jackson, Michigan	125.5	.8	53.9	95.2	275.4	14.7	.3	14.9	290.3
JOLIET..... Will, Illinois	5.1	.1	182.5	33.9	221.6	125.0	.....	125.0	346.6
LANSING..... Ingham, Michigan	535.9	1.0	483.0	36.7	1,056.7	50.9	.....	50.9	1,107.6
LASALLE..... LaSalle, Illinois	.....	156.9	36.8	18.1	211.8	7.8	.....	7.8	219.6
MANITOWOC—SHEBOYGAN..... Manitowoc and Sheboygan, Wis.	6.1	105.6	47.0	47.5	206.2	8.7	.1	8.8	215.0
MILWAUKEE..... Kenosha, Milwaukee, Racine, and Waukesha, Wisconsin	701.1	133.1	1,062.5	597.4	2,494.2	212.4	2.2	214.7	2,708.8
MUSKEGON—GRAND RAPIDS..... Kent, Muskegon, and Ottawa, Mich.	272.5	13.1	222.6	101.3	609.6	42.2	.6	42.8	652.4
PEORIA..... Peoria and Tazewell, Illinois	.9	3.6	66.3	570.0	640.8	4.3	.....	4.3	645.2
ROCKFORD..... Rock, Wisconsin and Winnebago, Ill.	41.6	328.7	169.1	102.3	641.6	34.3	8.6	42.9	684.6
SAGINAW—BAY CITY..... Bay, Midland, and Saginaw, Mich.	.4	138.9	137.6	70.1	346.9	37.9	3.0	41.0	387.9
SOUTH BEND—LAPORTE..... Elkhart, LaPorte, and St. Joseph, Indiana	1,043.7	1.3	732.5	232.3	2,009.8	125.5	.....	125.5	2,135.3
SPRINGFIELD—DECATUR..... Macon and Sangamon, Illinois	.....	7.8	87.1	250.7	345.6	83.4	3.2	86.7	432.3
WATERLOO..... Black Hawk, Iowa	.7	.2	51.2	9.0	61.1	3.9	.....	3.9	64.9
WILLOW RUN..... Washtenaw, Michigan	1,547.1	.3	25.1	20.4	1,592.9	98.1	5.2	103.3	1,696.1
REMAINDER OF SEVENTH DISTRICT.....	68.8	238.7	1,050.2	963.6	2,321.3	465.2	229.4	694.6	3,015.9
SEVENTH DISTRICT TOTAL.....	12,893.2	2,248.8	18,981.7	8,583.7	42,707.4	3,330.0	423.7	3,753.7	46,461.1
UNITED STATES TOTAL.....	58,036.3	26,896.6	45,393.3	48,656.8	178,982.9	16,910.9	13,254.4	30,165.3	209,148.2

<sup>1</sup>Awards having a value of less than \$50,000 and all awards for foodstuffs are excluded. No allowance has been made for revisions in the estimated final costs of products under cost-plus-a-fixed-fee contracts or under contracts containing a clause with respect to wage rates and materials prices. British Empire contracts cover the period since September 1939. Manufacturing project orders have not been included, for in large part these are subsequently awarded as prime contracts and included in prime contract data. Contracts have been assigned to the industrial areas on the basis of location of the producing plants. The category "facilities" covers only those publicly financed and represents the latest estimate of final cost of each construction project for which a contract has been awarded, or a letter of intent or project order issued, of \$25,000 or more, with the entire estimated value assigned to the project site.

<sup>2</sup>Industrial areas as defined by the War Production Board in March 1944.

Source: War Production Board, Statistics Division, *War Supply and Facility Contracts by State, Industrial Area, and County, December 1944*.

# Farm Labor Tightens

## War Forces Reduction of Farm Population

At the present time it appears that the farm labor situation this year will be a little tighter than it was in 1944. At one time it was expected that there might be some men released from war industries becoming available for farm employment, at least during the critical parts of the season. But this was when an early end was expected to the war in Europe. More recently the situation has been further complicated by the changes or suggested changes in the drafting of men of military age.

### FARM EMPLOYMENT DECLINES

Total farm employment in the United States in 1944 was about 7 per cent less than the average of the period 1935-39, according to estimates of the Bureau of Agricultural Economics. During 1943 the farms of the nation were operated with a total farm employment 5 per cent below the five prewar years. This means, therefore, that the total employment was reduced in 1944 about 2 per cent below the average employed during 1943.

In the 1935-39 period about 10,700,000 people were engaged in farm employment on the average. Roughly three-fourths (77 per cent) of these were family workers, and about one-fourth were hired labor. In the East North Central States (Illinois, Indiana, Michigan, Ohio, Wisconsin) about 1,475,000 were employed on the average during the same period, of whom 77 per cent were family labor. For 1944 the proportion of family labor was unchanged for the nation, but for the East North Central States the proportion represented by family labor had increased to 83 per cent.

The changes from 1935-39 to 1943 and 1944 were at about the same rate for the nation and for the East North Central States in terms of *total employment*, but the *composition* of the changes was quite different for the nation as a whole from what it was in the smaller area. Whereas in the national totals both family and hired labor declined substantially from 1935-39 to 1944, 7 per cent for the former and 9 per cent for the latter, the total in family labor held up fairly well in the East North Central States, declining by only  $\frac{1}{2}$  per cent, while the total of hired labor declined in 1944 by over 25 per cent from the average for the prewar years.

One important reason for the retention of totals of family labor in the East North Central States is the fact that farms in the area are on the whole relatively high in productivity as compared with the average situation in some other parts of the country, and as a result family labor was less subject to the attraction of other employment when the wartime migration got under way. On the other hand the tremendous amount of wartime industrial production that developed in the area made it harder to hold hired labor in the

face of opportunities for higher wages in industrial and urban centers.

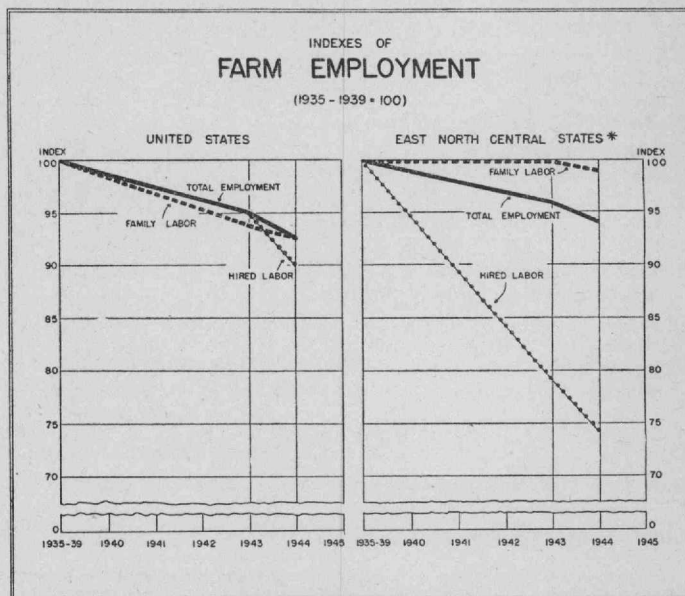
### FARM POPULATION DECLINING

While the farm labor shortage is in some part due to the loss of men to serve in the military forces the much more important factor has been the migration off farms during the war period of people leaving to work in non-farm enterprises. Of the roughly five million people who have left farms since 1940 about one-third have gone into the services and two-thirds have gone into non-farm employment.

These wartime shifts resulting in losses of people off farms of the district were, of course, only a substantial acceleration of the rates of net migration from farms that had taken place in the decade preceding 1940. In the ten-year period between the censuses of 1930 and 1940 it is estimated that there was a net migration from farms of 98,000 for Illinois, 46,000 for Indiana, 141,000 for Iowa, and 83,000 for Wisconsin, with Michigan showing an estimated increase of 13,000, or a net migration from farms of 355,000 persons for the five states of the district taken as a whole.

### INTENSITY OF LABOR VARIES IN DISTRICT

In terms of workers per farm, labor is more important in Wisconsin than in the other states of the district. Combining family and hired labor, the predominantly dairy farms of Wisconsin are typically and normally "two-man" farms. The requirements for Illinois farms are slightly less,



\*East North Central States include Illinois, Indiana, Michigan, Ohio, and Wisconsin.



about one and three-quarters men per farm. About the same requirements are characteristic of Iowa and Michigan farms. Farms of Indiana typically and normally require about one and one-half workers per farm.

When the average size of farm is taken into consideration a somewhat different order is found in the importance of farm labor. Michigan, with its combination of dairy and truck and fruit crop enterprises has the highest labor requirement per acre. Over the state as a whole one family or hired worker is required for each 52 acres in farm land. For Wisconsin an average of 61 acres requires one worker, and for Indiana 68 acres. Labor is less intensively required in terms of acreages in Iowa and Illinois, with a ratio of about 90 acres per worker in Iowa and 80 acres in Illinois.

#### FARMER'S WORKDAY INCREASED

Fantastic claims are sometimes made as to the average hours per day worked by farmers, especially during the past few years when farmers have been heavily overworked, under the burdens of additional livestock and unfavorable weather. Reports made by farmers to the Crop Reporting Board indicate that farmers, especially farm operators, do indeed put in very long hours in terms of the workday of non-farm people.

Throughout the district the 1944 average workday on the farm for the farm operator was 11½ to 12½ hours per day. This compared with 10½ to 11½ hours during 1939. Hired labor averaged on the whole about one hour less per day. Wisconsin and Michigan reports showed the highest 1944 average, 12½ hours for Wisconsin and 12 hours for Michigan. The averages for last year in Illinois, Indiana, and Iowa were close to 11½ hours in each workday.

#### FARM POPULATION DECLINES AFFECT ALL AGES

A decrease of 15 per cent in the farm population of the nation between 1940 and 1944 was recently estimated by the Bureau of Census and the Bureau of Agricultural Economics. A total farm population of 30.5 million in April 1940 is calculated to have declined to less than 26 million in April of 1944.

The estimated decline of 4,760,000 consisted of 3,110,000 males and 1,650,000 females. Thus, the decline for the period was one-fifth for the males and about one-eighth for females. The four-year loss in male farm population aged 20 to 24 years was over 58 per cent, but there was also a decline of 30 per cent in those aged 14 to 19 years. For ages 25 to 44 the drop was 22 per cent. For male youth under 14 years of age the decline amounted to nearly 20 per cent. This was a reflection of the fact that the number of farm families whose head was employed in farming also declined 13 per cent. There was also a drop of 7 per cent in the estimated total male population aged 45 to 64 years. Declines were shown for every age group, male or female, including those over 65 years old.

Among the female age groups losses exceeded 20 per cent for those aged 14 to 19 and those between 20 and 24 years of age. The number of farm women from 25 to 44

declined 7 per cent, while the decrease for those between 45 and 64 was 5 per cent.

It has frequently been said that the production on farms the past two years has been largely accomplished by old men, women, and children. Assuming the above changes by age groups and sex to be substantially correct, this generalization is at best a very considerable exaggeration of the facts. As to "old men," the average age of the male farm population in 1940 was slightly under 29 years, while from the estimated age group distributions for 1944 the average age had risen to 31 years. For those 14 years old and over the average was 39 in 1940 and just under 42 in 1944.

Similarly, the proportion of women in the total farm population has not risen disproportionately. In 1940 females constituted 48 per cent of the total, and women were just under 47 per cent of the total population over 14 years of age. In 1944 females were 49 per cent of total, and the women were estimated to constitute half of the total population over 14. On the other hand, it is certainly true that during the past two years those women who did remain on farms have done a much larger share of the work normally falling to men than they did previously.

Estimates by the Bureau of the Census on the total farm labor force (those working in agricultural rather than total population) indicate a total of 10,660,000 workers in 1940, of whom 11 per cent were female. For 1944 the estimated total labor force was 9,670,000, of whom 22 per cent were female workers.

As to work by children, although there were fewer of them on farms in 1944 than four years earlier, they too have done, especially at critical parts of the season, a larger share of the heavy farm production work than they normally did.

The remarkable performance of the nation's and the district's agriculture during the war is a credit, not to changing age and sex characteristics of the farm population, but to the energy and effectiveness with which farm families worked and utilized their resources, and to very fortunate weather and growing conditions.

#### MILITARY DRAFT ISSUE RAISED

At the beginning of January War Mobilization Director Byrnes instructed Selective Service Director Hershey to press "to the full extent permitted by law" the reclassification and induction of agricultural workers from 18 years through 25 years of age then deferred from military service. It was estimated that there were 364,000 agricultural workers at that time deferred within that age bracket, compared with about 40,000 of the same age group deferred in other occupations.

It is at present generally understood throughout this district that the decision is still up to the local draft boards and they are said to have recently received reminders that they are responsible for deciding cases as they are considered. It appears probable now that a large proportion of the deferred workers in question will not be drafted. But meanwhile the patriotic pressure on the deferred men themselves is resulting in many of them leaving the farm to enter the services.

## DEPARTMENT STORE SALES

(Continued from Inside Front Cover)

### STOCKS CONTINUE TO DECLINE

Total dollar value of inventories of department stores in the Seventh District dropped 8 per cent during 1944. The decline during 1943 was 12 per cent. The over-all per cent decline, however, conceals important shifts in the composition of inventories. Women's ready-to-wear items and small wares, in particular, comprised a larger proportion of total stocks as sources of supplies of standard durable goods were cut off. That stores attempted to maintain their inventory positions in view of uncertain supply and transportation conditions is evidenced by the large volume of unfilled orders during 1944. For all reporting stores in the country these ranged between 5 and 6 times the 1940 average.

Though anxious to obtain supplies of quality merchandise, store owners have been wary of building up stocks of wartime substitutes with which they may be caught when restrictions are released and materials again become available for the manufacture of goods of prewar quality. Many stores made sizable shifts into higher price lines with the result that the effect on inventories of the decline in physical quantities was partly offset by the higher value of goods on hand. The latter tendency partly reflects the increased demand for higher priced goods by consumers seeking to obtain quality products.

Accompanying the rising volume of sales and declining inventories, the sales to inventory ratio for Seventh District stores rose during 1944—sales for the year being 5.7 times stocks at the end of December compared with a ratio of 4.8 for 1943.

### DEPARTMENTAL DISTRIBUTION RESEMBLES 1943

While all the major divisions showed increases in sales during 1944, there were significant declines in a few lines, partly as a consequence of the changing composition of store inventories and partly as a result of an altered direction of expenditures by consumers. In the Seventh District cumulative sales of musical instruments, radios, and phonographs from February through December were 44 per cent below the same period of 1943. Fur sales dropped 31 per cent and major household appliances were down 14 per cent.

These developments represent a continuation of the tendencies which have been apparent in departmental sales shifts since 1941. Over the four-year period sales attributable to housefurnishings departments of the reporting stores in the Seventh District have been a steadily decreasing percentage of total sales, while those represented by ready-to-wear items have increased in relative importance. These tendencies are the outgrowth of the shortage of standard quality household furnishings and appliances particularly in higher price categories, and of the diversion of expendable funds to such items of a luxury nature as can be obtained. This tendency has been characteristic of all of the major Seventh District cities, although in somewhat varying degrees. A detailed analysis of the changing distribution of

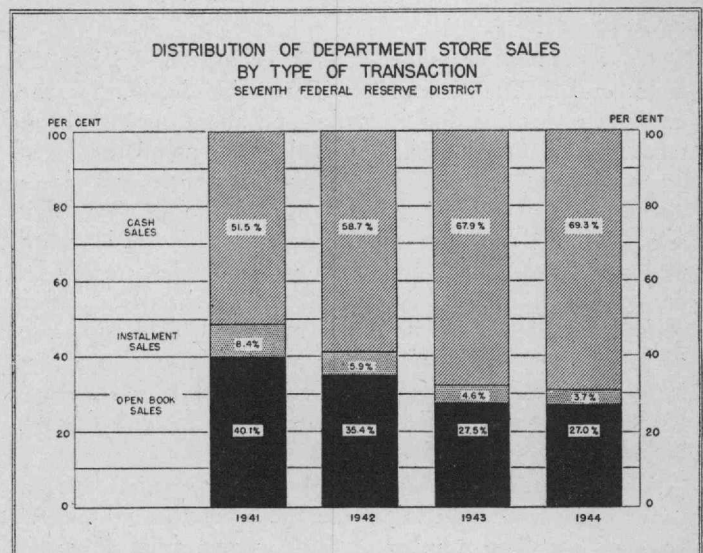
sales among departments in Seventh District stores will be released by the Federal Reserve Bank of Chicago at a later date.

### CASH TRANSACTIONS DOMINANT

One of the more salient though not unexpected wartime trade developments has been the change in the percentage of total sales made on a cash basis. The chart showing the distribution of sales by type of transaction for reporting stores in this District clearly indicates that credit extended by department stores has become less important as a means of financing consumer purchases. Sales made on a cash basis over the four-year period have gained steadily while open book purchases have declined substantially and instalment sales have become a negligible part of total sales. For the year 1944 more than 69 per cent of all sales were for cash compared with 51 per cent in 1941. During the four-year period charge account sales declined from 40 to 27 per cent of total sales.

Numerous factors have operated to alter the prewar pattern of payments. Besides the limitations on credit sales imposed by Regulation W, larger incomes are probably responsible for the major part of the shift from charge account and instalment to cash transactions. Moreover, the concentration of purchases in lines which call for a smaller outlay—as opposed to durable goods and appliances in the household category—has occasioned less need for deferred payments. In this respect department store sales are probably affected less than retail sales generally. The fact that a larger percentage of purchases are made by persons in lower income groups who are accustomed to buying on a cash basis has also influenced the distribution of sales by type of transaction.

There is little reason to believe that conditions limiting materials and supplies for civilian consumption will be altered in the immediate future, and it is reasonable to assume that the various aspects of retail trade will continue to follow patterns similar to those discussed above through most of 1945.



# NATIONAL SUMMARY OF BUSINESS CONDITIONS

BY BOARD OF GOVERNORS OF FEDERAL RESERVE SYSTEM

Factory output continued to increase in January despite severe weather conditions. Department store sales during the first seven weeks of this year have been 14 per cent above the high level maintained during the same period last year.

**Industrial Production**—Total output at factories and mines rose slightly in January and the Board's seasonally adjusted index was 234 per cent of the 1935-39 average as compared with 232 in the preceding three months.

Activity in munitions industries was maintained in January at the December rate, although slight increases were scheduled. In February it was announced that schedules for 1945 production of aircraft and army ordnance items had been increased further. Output of open hearth and Bessemer steel in January was at the lowest rate since July 1942, largely due to severe weather conditions in several important steelmaking areas. Output of electric steel, however, which had been declining since the end of 1943, rose 10 per cent in January, reflecting new military requirements for alloy steel. The War Production Board early in February ordered a 10 per cent increase in aluminum ingot production and announced that a large increase had occurred in output of aluminum sheet since December 1.

Output of nondurable goods rose 2 per cent in January. Production of liquor and beverage spirits increased sharply as a result of the release of distilleries from industrial alcohol production for the month of January. Output of manufactured food products also showed a gain for the month, reflecting increases in the canning and baking industries, after allowing for seasonal changes. Activity at meatpacking establishments declined 10 per cent in January and was at a rate 25 per cent below the same month a year ago. Production in the chemical industries continued to rise, largely reflecting further increases in output of small arms ammunition. Activity at textile and paper mills continued to show little change.

Output of coal increased in January but the tonnage was 8 per cent less than the large volume for January 1944. The production rise was limited by shortages of cars at mines due to congestion in ice-clogged northern railroad yards. In the week ending February 10 output of bituminous coal was the largest for any week since last November.

**Distribution**—Department store sales continued in January and the first half of February at about the same high level that prevailed in the last quarter of 1944 after allowance is made for the usual sharp seasonal decline. Value of sales was 14 per cent greater than in the corresponding period a year ago, with a higher rate of gain shown in February.

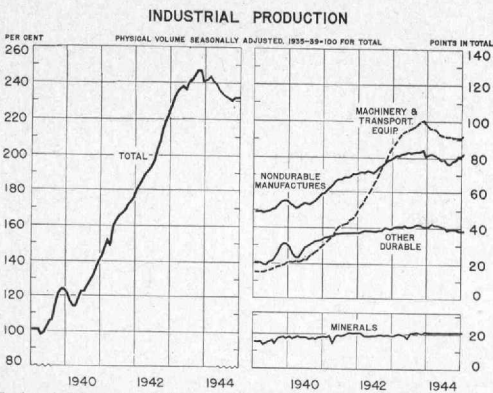
Freight carloadings increased in the early part of January due chiefly to larger shipments of fuel and war materials. At the end of January and in the early part of February, however, two short embargoes were placed on rail shipments of most non-war goods. These embargoes were limited to the northeastern states where heavy snowfalls had resulted in traffic tie-ups.

**Commodity Prices**—Prices of commodities in wholesale and retail markets continued to increase slightly during January. In the first three weeks of February prices of farm products averaged above the January level and small increases were permitted in maximum wholesale prices of various industrial commodities.

**Bank Credit**—With a steady succession of Treasury calls on war loan balances, both demand deposits adjusted and time deposits at member banks increased from mid-January to mid-February. Time deposits maintained the rather rapid rate of increase which has prevailed for the past several months. During this period reporting member banks in 101 cities reduced their total holdings of Treasury bills in order to meet increases in required reserves and a currency drain. At the same time, however, banks continued to make sizable purchases of Treasury bonds, mostly in the eight- to ten-year maturity range. Loans for purchasing and carrying Government securities decreased, particularly loans made directly to customers. Commercial loans also declined slightly.

During the five weeks ending February 21, Reserve Banks increased their holdings of Treasury bills by 630 million dollars and sold 65 million of Treasury bonds. The bill purchases, together with advances of 165 million dollars to member banks, enabled banks to meet a 450 million dollar currency drain and a 270 million dollar growth in required reserves. Although currency in circulation had declined through most of January, the outflow was renewed in the last days of the month and continued at an accelerated pace in February. Excess reserves declined to below 1 billion dollars late in January, about the average level at which they have been between drives during the past year.

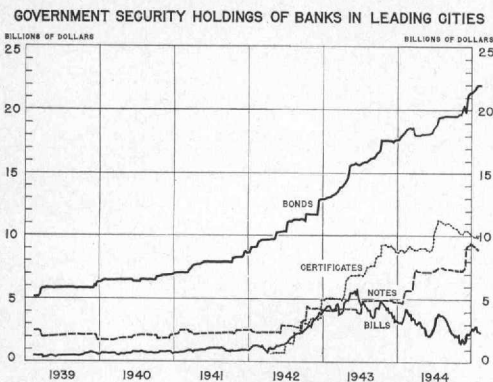
**Government Security Yields**—Following the close of the Sixth War Loan Drive in December, the Government security market was strong during January and the first part of February. The average yield on medium-term, taxable Treasury bonds declined from 1.94 per cent during the last week of December to 1.78 per cent during the week ended February 17. The average yield on long-term, taxable Treasury bonds declined from 2.47 per cent to 2.39 per cent in the same period, the lowest since early December 1941.



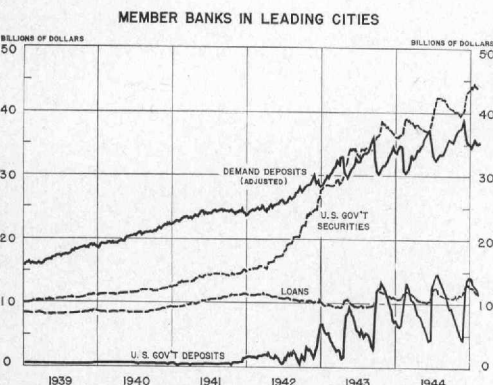
Federal Reserve indexes. Groups are expressed in terms of points in the total index. Monthly figures, latest shown are for January 1945 except total. Latest total figure shown is preliminary for December 1944.



Federal Reserve indexes. Monthly figures, latest sales figures shown are for January 1945, latest stock figures shown are for December 1944.

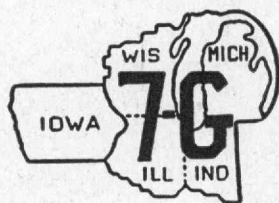


Excludes guaranteed securities. Data not available prior to February 8, 1939; certificates first reported on April 15, 1942. Wednesday figures, latest shown are for February 14, 1945.



Demand deposits (adjusted) exclude U. S. Government and interbank deposits and collection items. Government securities include direct and guaranteed issues. Wednesday figures, latest shown are for February 14, 1945.

**SEVENTH FEDERAL**



**RESERVE DISTRICT**

