

FEBRUARY, 1944



# BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO



# Fats and Oils Prospect Improves

*But Consumers Will Not Gain From Increased Supplies*

An increase in production of fats and oils, except for butter, is expected for the calendar year of 1944, according to reports by the War Food Administration. In spite of the expected increase, civilians will not be allocated any more than last year because the gains will be required by the expanding needs of the military forces, for lend-lease, and for anticipated relief in Europe should the war end this year.

Farmers have an important stake in the production of sources of fats and oils. For farmers in the Seventh Federal Reserve District this stake is particularly important. Income to United States farmers from the marketings of butter fat, the lard in hogs, and from the oil-bearing crops has recently accounted for about 10 per cent of total income from marketings. For the farmers in the five states of the Seventh Federal Reserve District, income from these items has accounted for about 13 per cent of total cash farm income. Roughly one-third of the United States farm income from these sources is paid to the farmers in the five states of the District.

## SOURCES AND USES CHANGED BY THE WAR

Normal consumption of all fats and oils in the United States is about 10 billion pounds of which 2 billion pounds were, before the war, normally imported. Needs for the military forces, for lend-lease, and expanding consumers' incomes have yielded a tremendously increased demand for fats and oils, and the 20 per cent increase in supplies above "normal" is far short of supplying all of this demand. Up to the time of the Pacific warfare, the principal oils from foreign sources were coconut oils from the Philippine Islands and palm oil from the Dutch East Indies. The war has closed these and other important sources to United States trade. Atlantic and Caribbean shipping has greatly improved in the last six months and foreign oils are, therefore, increasing in importance, at least temporarily. However, the bulk of foreign receipts are presently from the Latin

	1935-39	1941	1942	1943	1944
Butter.....	16.8	16.0	15.7	12.5	12.1
Lard.....	11.0	14.2	13.5	14.3	13.9
Shortening, salad and other oils..	18.2	18.9	17.3	16.4	14.3
Margarine.....	2.3	2.2	2.3	3.3	3.6
Total .....	48.3	51.3	48.8	46.5	43.9

Source: War Food Administration.

American countries, principally oiticica, babassu, and linseed oils from Brazil and Argentina.

A little over two-thirds of the fats and oils consumed in the United States are for food uses, while the balance of a little less than one-third is for inedible uses such as soaps, which require over half of the inedible supply, and for other industrial uses, such as drying oils, lubricants, and medicinal products. Allocations for 1944 assign 68 per cent to food uses and 32 per cent for inedible consumption. In general, fats and oils are typically edible or inedible, but there is possible a large degree of flexibility in meeting specific end uses by virtue of the fact that many oils are capable of being shifted within limits to other uses. This permits some displacement over the whole scale of end-product schedules.

## TOTAL ALLOCATIONS INCREASED FOR 1944

Allocations of fats and oils for 1944 total a little over 12 billion pounds. Domestic production is expected to be 11.2 billion this year, compared with 10.8 billion in 1943. Most of the anticipated increase this year will result from the lard and pork fats obtained from the increased marketings of hogs. Cattle slaughter is expected to be larger in 1944 than last year, thus contributing additional amounts of inedible tallow and greases.

The 1944 allocations by the War Food Administration schedule 69 per cent of the total *edible* fats and oils supply for civilian use, 9 per cent for the military forces and other war services, 21 per cent for our Allies, and 1 per cent as a reserve supply. The schedules for the *inedible* fats and oils allocate 89 per cent to civilians, 10 per cent to the military, and 1 per cent to lend-lease and other exports.

The allocations for food use mean that civilians will have less than in any of the last three years and over 10 per cent less than in the five prewar years, 1935-1939. Deficits below the prewar years will be in butter, shortening, salad

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	1939	1940	1941	1942	1943	1944 Goals
Illinois .....	1911	1995	2338	3239	3444	4000
Indiana .....	740	723	815	1319	1464	1600
Iowa .....	564	709	942	1818	2017	2885
Michigan .....	60	72	100	151	103	200
Wisconsin .....	20	25	37	60	68	100
Five States ..	3295	3524	4232	6587	7096	8785
U. S. Total.....	4417	4779	5881	10008	10820	14000

Source: United States Crop Reports.

# Trade Patterns Change in 1943

## Normal Movement Altered in Department Store Sales

Lifted by the highest level of income payments ever attained in the Seventh Federal Reserve District, department store sales in 1943 broke all previous records in dollar volume and possibly in physical quantity as well. The dollar volume was eight per cent above that attained in 1942, and every month, with the exception of January, recorded gains over the corresponding month a year earlier.

The higher level of sales was accompanied by decided shifts in the pattern of distribution which altered typical seasonal movement. The first of these influences was shoe rationing which brought on a wave of scare buying; the second was the voluntary abandonment of special sales events; and the third was the general advancement of Christmas shopping.

### SHIFT IN SEASONAL PATTERNS

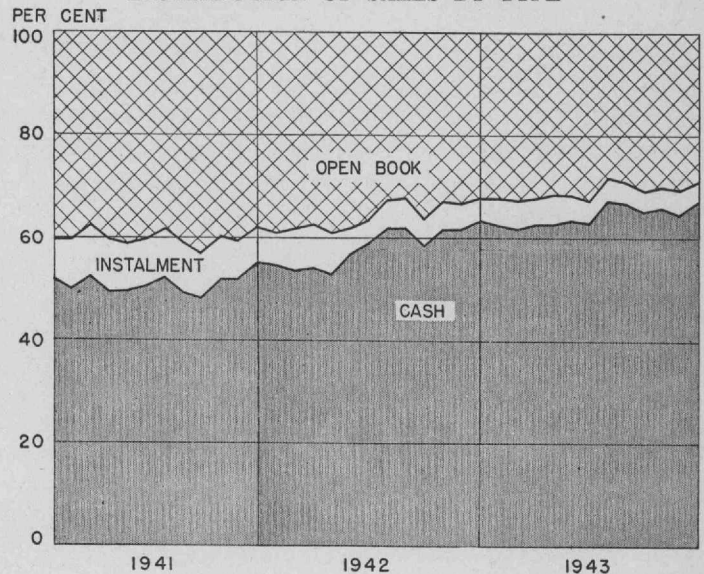
The normal seasonal pattern which places February as the second poorest month in dollar volume of sales was altered by the introduction of shoe rationing. Fears were thus created that rationing might be extended to other items particularly women's ready-to-wear with the result that a thirty per cent gain over the same month in 1942 was recorded and February, 1943 moved into ninth place for the year.

The preeminent place of December in department store trade was unchanged although its supremacy was chal-

TABLE I

DISTRIBUTION OF DEPARTMENT STORE SALES					
By months as per cent of 1943 total					
Period	Seventh District	Chicago	Detroit	Indianapolis	Milwaukee
January.....	6.2	6.6	6.5	6.1	6.0
February.....	7.5	8.0	7.9	7.4	7.0
March.....	7.7	7.8	7.6	7.4	7.6
April.....	8.4	8.1	8.8	8.0	8.4
May.....	7.6	7.6	7.5	7.3	7.5
June.....	8.0	8.1	7.6	8.1	8.1
July.....	6.4	6.2	6.7	6.3	6.6
August.....	7.1	6.7	7.2	7.4	7.0
September...	8.4	8.2	8.5	8.7	8.4
October.....	9.3	9.1	9.4	9.4	9.1
November....	10.2	9.9	10.1	10.6	10.4
December....	13.2	13.7	12.2	13.3	13.9
Year.....	100.0	100.0	100.0	100.0	100.0

### DISTRIBUTION OF SALES BY TYPE



lenged by November when a contra-seasonal movement engendered by early Christmas shopping reversed the normal downward trend and lifted sales to a level sixteen per cent over a year ago, accounting for ten per cent of all sales made during the year. Normally, sales decline from October levels during November and then advance sharply during December. In 1943, the upward movement was continuous from July through December.

The forces were of such wide scope that, although there were pronounced variations in the dollar gains among the principal cities of the district, the shift in the pattern of distribution was strikingly uniform.

Many and varied were the forces at work producing changes in the distribution of goods at retail in the department stores of the district and the nation. While those factors mentioned earlier were exerting influence on the previous seasonal pattern, other forces were exerting even stronger pressure on the composition of sales. Some of those forces were universal and affected all cities in proportionate degree whereas others were working in the opposite direction and producing pronounced changes.

The timing and volume of war contracts, the disappearance of scarce commodities from dealers' shelves, and the introduction of wartime products commonly referred to as "dated merchandise" have caused internal changes both in volume and type of consumers' goods moving through the channels of trade.



Those cities which were thrown into war production early in the defense program gained an initial advantage from the increased payrolls. Moreover, the distribution of inventory was not uniform which caused further variations in the time of forced shifting of consumer choice. Thus, although the major stimulæ to changing consumer expenditures were of general application and tended to produce similar volume and timing changes, local influences accounted for significant variations.

Responding to those influences which were universal, all of the principal cities of the district experienced changes in the volume of goods sold by weeks and by months, and in every instance November showed a contra-seasonal movement.

### SALES SHOW SIMILARITY OF PATTERN

The distribution of sales by weeks for reporting stores in the district and for Chicago, Detroit, Indianapolis, and Milwaukee reveals a similarity in pattern in that the week following Christmas continues to be the poorest of the year, except in Indianapolis where it is next to the smallest in dollar volume. The summer is still the dull season although there is a tendency for June and July to gain in relation to the annual volume. During 1943 those months ranked next to February in percentage of gain over the previous year. The increase for June, 1943 over June, 1942 was 18 per cent and for July was 17.1 per cent. The relative importance of November is apparent for all of the cities.

Buying habits are everchanging, but such changes have been greatly accelerated by war conditions. Some of the shifts in consumer choice have been voluntary while others have been induced by the disappearance of standard products. As rationing, scarcity of merchandise, and substitu-

tion of commodities have taken place, consumers have voluntarily shifted their preferences to unrationed articles and luxury items. These changes have been noticeable in the relative importance of the major divisions of department stores.

These changes are concealed in the year to year comparisons of total sales but are apparent in two tabulations showing comparative sales by departments. Table II shows the relative importance of each group in relation to total sales for 1942 and 1943. Table III shows the percentage changes by principal groups for 1943 compared with 1942.

Department stores which report their sales by departments have an opportunity to measure the efficiency of their operation by sections and thus obtain a yardstick by which to gauge the results of their operations against the performance of other reporting stores in their own city. The major classifications shown in the Table III reveal the uniformity of trend, as well as the variation in gains. All divisions showed substantial gains over 1942 except house furnishings which declined; the recessions in this group ranged from 4 per cent in Chicago to 12.5 per cent in Detroit.

### HOUSE FURNISHINGS DECLINE

Exhaustion of prewar inventories of those household goods that are no longer produced and the inferior quality of many substitutes in this field account for the decline in sales of the house furnishings group. Sales of major household appliances such as electric refrigerators, stoves, vacuum cleaners, and washing machines have declined as much as 77 per cent in Chicago and 61 per cent in the district. Many such appliances are entirely off the market while others are obtainable at few of the stores formerly offering them for sale.

TABLE II

DEPARTMENT STORE SALES BY DEPARTMENTS  
Per cent of main store total

Department	District		Chicago		Detroit		Indianapolis		Milwaukee		All Other	
	1943	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943	1942
Piece Goods.....	6.5	5.9	6.2	5.7	6.6	6.1	5.4	4.9	6.7	5.8	8.4	7.5
Small Wares.....	10.5	10.1	9.9	9.4	10.8	10.6	11.8	11.6	12.0	11.7	10.1	9.8
Ready-to-Wear Accessories.....	21.6	20.8	19.4	18.8	23.0	22.0	26.9	25.6	22.3	21.5	24.5	24.0
Women's and Misses' Ready-to-Wear .....	21.9	19.6	19.8	17.7	26.8	24.1	26.3	24.0	18.3	15.7	21.7	19.4
Men's and Boys' Wear.....	11.6	12.1	13.3	13.8	9.2	9.6	11.5	12.1	9.9	10.7	10.1	10.5
House Furnishings.....	15.7	19.2	15.7	18.3	16.7	21.6	11.1	14.9	16.9	21.4	15.3	18.7
All Other .....	12.2	12.3	15.7	16.3	6.9	6.0	7.0	6.9	13.9	13.2	9.9	10.1
Total — Main Store .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



TABLE III

## DEPARTMENT STORE SALES BY DEPARTMENTS

Per cent change 1943 from 1942

Department	District	Chicago	Detroit	Indianapolis	Milwaukee	All Other
Piece Goods .....	+25.1	+20.1	+23.3	+39.7	+34.2	+33.9
Small Wares .....	+19.1	+17.3	+16.1	+30.2	+20.8	+24.2
Ready-to-Wear Accessories .....	+19.2	+15.5	+18.8	+36.0	+21.4	+22.4
Women's and Misses' Ready-to-Wear.....	+28.6	+25.4	+25.9	+39.5	+36.2	+34.7
Men's and Boys' Wear.....	+9.5	+7.8	+8.2	+21.1	+8.7	+15.6
House Furnishings .....	-6.5	-4.0	-12.5	-4.9	-7.3	-2.0
Total — Main Store.....	+14.8	+11.6	+13.2	+27.2	+17.2	+20.2

Furniture, beds, mattresses, and springs are examples of items in which forced substitutions have had an adverse effect on sales volume. Offsetting those declines, however, have been substantial increases in other items of the house furnishings group such as Oriental rugs, domestic floor coverings, draperies and curtains, lamps and shades, and pictures.

The largest gain has been in the women's and misses' ready-to-wear section. With more money to spend and fewer items to spend it on women have been replenishing their wardrobes. The increase for the district was 29 per cent in 1943. The largest gain was in Indianapolis. All cities shared in the increase and reported their largest percentage gains in the women's wear group.

## ACCESSORIES RANK FIRST

Table II shows that ready-to-wear accessories rank first in dollar volume giving added emphasis to the importance of "little things." Women's and misses' ready-to-wear group is second in total sales and accounts for 19.4 per cent of department store volume. Those two divisions accounted for 44 per cent of all department store sales last year. By way of contrast, men's and boys' wear represented only 12 per cent of sales.

A large percentage of the increase in sales in women's and misses' ready-to-wear occurred in juniors' and girls' wear which increased 35 per cent. Juniors' coats, suits, and dresses increased 36 per cent while furs moved up 40 per cent. It is fair to assume that the younger set received its share of the fur coats. Some of the increase in fur sales was caused by price changes.

With the exception of furs, price does not appear to have been a factor of importance in the increase in volume of department store sales but there was an upgrading in purchases. The Fairchild Publications Retail Price Index, January 3, 1931 = 100, has remained virtually unchanged at

113.1, since July 1, 1942 when over-all price ceiling were placed on retail commodities. The composite index shows an increase of 27.2 per cent since the outbreak of the war in Europe. Other price indexes with somewhat different coverage, however, indicate slight price advances. Although volume presumably was not raised materially by price inflation, it was lifted by a greater number of total transactions and an increase in the average sale. Customers not only bought more items but they also bought in higher price lines in order to obtain better quality.

While customers were changing their buying habits they were also altering their methods of payment. The ratio of cash to total sales has increased steadily since the beginning of the defense program and at the end of 1943 amounted to 65 per cent of total sales. Instalment buying has declined to a relatively insignificant amount. This decline may be attributed, in part, to the contraction in sales of furniture and major household appliances, and, in part, to higher incomes. The latter factor has also contributed to the decline in the ratio of open book or charge account sales. The ratio of open book to total sales was 31 per cent at the close of 1943.

## SALES EXPECTED TO PATTERN 1943

Notwithstanding cancellations and cutbacks of certain war contracts and the release of some critical material for the production of consumer goods, the expectation of large increases in civilian supplies this year is not well founded. Certainly there will not be a sufficient increase to alter the pattern of distribution. None of the curtailments of war production thus far has been based on plans for the widespread resumption of manufacture of civilian goods. Although many metals are expected to be removed from the critical list this year, shortages of manpower will act as a deterrent to the manufacturing of articles much beyond those items necessary to maintain the civilian economy. For the immediate future, at least, department store trade can be expected to follow the general pattern of 1943.



# District Faces Paper Shortage

## Lack of Woodcutters Restricts Pulpwood Supplies

Shortages of paper and paper products are beginning to threaten industrial activity, and available supplies which recently have shown slight improvement must continue to gain if the progress of the war effort is not to be impeded. The Seventh District's fifth most important industry, pulp and paper, now faces what is likely to be its most critical period of raw material shortage. Whereas the wartime essentiality of paper was at one time questioned, it is now becoming widely recognized that the nation's economy at home and overseas is built on paper for newspapers, records, personal uses, writing and communication, building, packaging, wrapping, and as a substitute for some scarce metals. One or more specialized divisions of the paper industry is devoted to each of these uses.

Waste paper is urgently needed at the mills in increasingly greater quantities to replace diminishing supplies of virgin pulp processed from pulpwood logs. Inadequate manpower in the forests especially during the fall and early winter months is now affecting receipts of pulpwood at the mills. This decline comes at a time when demand for paper and paper products is increasing. Great difficulty is anticipated in recruiting labor for logging because of Selective Service withdrawals and the undesirability of work in the forests relative to higher paying industrial war jobs. Throughout the Seventh District and the nation determined efforts are being made to alleviate paper shortages by the organized collection of waste paper and by efforts of farmers and others including war prisoners in wood-cutting operations, but the complete and sustained success of these drives is by no means assured.

Paper firms were able to finance the increased production required by the war principally from their own funds. While the industry will have to undergo relatively little reconversion at the close of the war, substantial funds will be needed for the rebuilding and replacement of worn and obsolete machinery and the development of new products and by-products. It is expected that paper companies will have adequate cash and equivalent holdings and sufficiently strong credit positions after the war to finance most necessary changes.

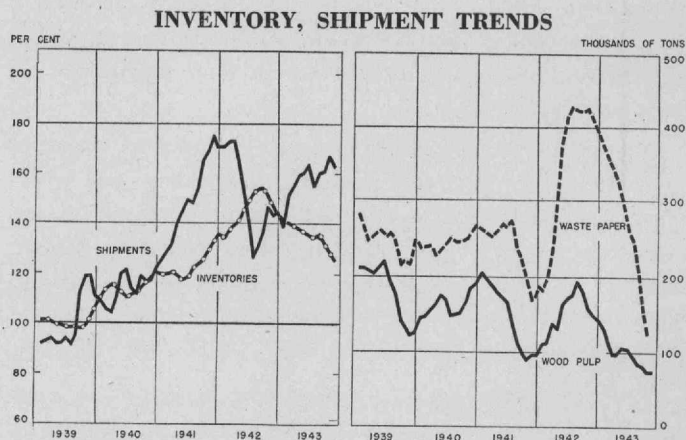
### PULPWOOD SUPPLIES DECLINE

At the present time there appears to be no important shortage of standing timber, manufacturing facilities, or manpower at the paper mills, but the large loss of timber men to other activities and to Selective Service has made the pulpwood supply dangerously low. There is a reported need for 18,500 men in the United States forests and 20,000 in Canadian forests to assure a sufficient supply of pulpwood. Demand for pulp by manufacturers of rayon and plastics to substitute for silk and scarce metals aggravates the tight pulp supply situation.

The district and the nation thus far have only begun to feel the effects of pulp deficiencies. Until January, 1944 pulpwood inventories from last season's cutting were still adequate, but paper mills are now drawing heavily upon accumulated inventories because of the current season's decrease in pulpwood production. At the close of November, 1943 pulpwood stocks were 22 per cent below November, 1942, and pulp inventories were down 49 per cent. It is expected that by March, 1944 stocks of pulpwood throughout the nation will drop to about 13 per cent below the previous wartime low point reached in June, 1943. In peacetime receipts of pulpwood during the first quarter of the year usually approximate consumption. In 1942, however, consumption during this quarter exceeded receipts by one per cent; in 1943, by nine per cent; and it is estimated that in the first quarter of 1944 consumption will exceed receipts by 25 per cent. The WPB reports that at least 14 million cords of domestic pulpwood, one million more than in 1943, must be produced in 1944 to supply the expanded needs for paper and its products.

Prospects for Canadian pulpwood, important source of Seventh District pulp, are improving during the present cutting season. Estimated pulpwood imports from Canada this year, nevertheless, are expected to be 19 per cent lower than scheduled 1943 shipments to this country. Canada plans to make available to the United States 200 thousand tons of newsprint per month. Any newsprint shipped from Canada\*in excess of 182 thousand tons per month will be purchased by the United States Government for use as a stockpile for the second half of 1944.

Plans for further conservation of pulp should also help reduce the shortage; these include greater reduction of the weights of paper, additional mineral and clay fillers, and



Source: U.S. Department of Commerce.

Left hand chart shows indexes of inventories and shipments of paper and allied products, 1939 average = 100. Right hand chart shows inventories of wood pulp and waste paper at the end of the month in thousands of tons.



the more extensive use of groundwood to replace sulphite pulp. Through government limitation orders production of nonessential papers and paper products has been curtailed, and allocations of pulp to essential products such as paperboard containers and construction boards have been increased. These and other recent limitation orders are expected to save over one and one-fourth million tons of paper annually.

#### WASTE PAPER COLLECTIONS IMPROVE

Another answer to the critical pulp shortage has been the increased use of waste materials, including paper, rope, and rags, and the re-use of containers. Various processes for the de-inking of old papers have been perfected so that stronger paper stock can now be made from waste paper. The consumption of waste paper in November, 1943 was 17 per cent higher than in November, 1942, but the available supply of salvaged paper is far short of the demand. Paper mills' use of waste paper reduced such inventories by November, 1943 to 58 per cent below their year ago level. Scrap paper consumption continues to run ahead of receipts, and some Chicago mills are now operating on three and one-half day inventories. Normal recovery of all used paper is about 20 per cent, but at least 55 per cent must now be salvaged in order to maintain needed production and retain practical inventory levels. The paperboard mills in Illinois and Michigan are especially hard hit by the waste paper shortage. Many board mills have been temporarily closed, and others are operating at low capacity rates. Wisconsin mills use very little salvaged paper as raw material and hence are almost entirely dependent upon scarce pulpwood.

Chicago is considered one of the nation's most important waste paper centers. The present salvage drive in the Chicago area is proving successful through an organized system of collection from schools, industrial and office buildings, and neighborhood "curb pick-ups." Paper mills in the Mid-Western states, including Illinois, Indiana, Iowa, and Wisconsin, normally consume approximately 48 thousand tons of waste paper per week, but by the beginning of 1944 collections of waste paper in this area had fallen to 35 thousand tons per week. The city-wide salvage program began on January 15, and collection of waste paper reached 45.6 thousand tons per week by the close of January.

#### INVENTORIES DECLINE STEADILY

Despite raw materials stringencies over-all production of paper has changed little in the past three years. Over 17 million tons of paper were produced in 1943, 16.9 million tons in 1942, and 17.8 million tons in 1941, the record year. Because of limitations on paper production, the increasing demand for paper and paper products has caused a continuing decline in paper inventories over the past year at the mills, in wholesalers' warehouses, and in consumers' stock rooms. Inventories are smaller than at any time since the fall of 1941, while shipments are the largest since March, 1942.

There are now evidences of consumer hoarding of such items as cleansing tissue and paper toweling. Any wide-

spread hoarding similar to the situation in 1941-42 will be extremely serious because the paper industry is not now able to meet essential demands plus hoarding as it did in 1941. At the present time fewer paper making machines are actually in use than at the outbreak of the war.

In 1939 most paper companies had funds or credits which were fully adequate to finance the new business about to be introduced by the war effort for very little conversion of equipment was necessary in the industry. Financial statements for 1942 indicate a comparatively strong status for most companies, and especially for the largest firms. Some expansion in investment was reflected, but it was very moderate compared with that during World War I. Reserves of all types in 1942 were typically small. The spectacular public "paper buying wave" of 1941-42 improved the cash position of paper firms. The financial status of the paper industry has remained comparatively unchanged throughout 1943, but is expected to weaken during 1944 because costs have risen, prices are frozen, raw materials are inadequate, and in many cases irreplaceable equipment is breaking down.

#### FUTURE TRENDS IN PAPER

Shortages in raw materials and finished paper products very likely will continue throughout 1944 and probably for the duration. As long as the war lasts there will be a very high demand for paper. Civilians will feel the shortage more and more unless an unexpected change takes place in the raw material supply situation. A slowing down of the war tempo, however, will make possible the production of more products for civilian use, but the frills in packaging, advertising, and other less essential uses of paper will not be made available until the supply of materials catches up with demand. Systematic collection of waste paper may be continued throughout 1944 and even into the postwar period.

The paper and pulp industry will face no physical re-conversion problems in the usual sense, but much of the existing equipment will be badly in need of major repairs or replacement. Pre-war excess capacity may again threaten the industry, especially if modernization of plants and machinery takes place without shutdown of old equipment. Paper firms will probably be able to finance major non-expansional expenditures, judged by their present financial status.

Keen price competition is expected between manufacturers of similar types of paper, particularly in general purpose paper as opposed to specialty papers. New products arising from wartime research may give new emphasis to the industry, especially in packaging, building, and plastics. Because of the scarcity of timber stands available, new companies are not expected to enter the pulp market, but competition from Alaska, Russia, and Scandinavia is expected. The manufacture of new paper products will attract new ventures into the converting field.

In summary, the paper industry's handicaps are now probably as serious as those of any other war industry, but the long run prospects are promising as soon as raw materials again become plentiful.



# Automotive Industry In War

## Record Output Flows from Seventh District to Battlefronts

In more than two years of wartime activity the automotive industry has delivered nearly 13 billion dollars worth of war products and currently operates at an annual rate of production in excess of 10 billion dollars. Automotive manufacture, the nation's leading peacetime industry, is heavily concentrated in the Seventh Federal Reserve District. The 1943 war automotive production represents an increase of about 45 per cent over the 1942 output which included some civilian goods. Reflecting vast wartime activities, production of the industry during 1943 was divided as follows: aircraft, 43 per cent; military vehicles, 25 per cent; tanks and parts, 15 per cent; ammunition, artillery, and small arms, 9 per cent; and all other, 8 per cent, including marine equipment, small quantities of machine tools, dies, jigs, and miscellaneous articles.

Civilian motor vehicle production was completely stopped early in 1942, and replacement parts for essential trucks and passenger carriers are now the only civilian products manufactured by the industry. Automotive employment has increased almost 50 per cent above prewar levels and payrolls have doubled. Monthly deliveries of war products are steadily increasing, thus lessening the gap between order backlogs and deliveries. The next several months will witness a further rise in output, although the rate of production increase will continue to slow down.

Reconversion problems of the industry will be many and serious, with three to six months the average estimated time necessary to effect the return to peacetime production. Full-scale output of civilian automobiles will require much more time. Accumulated consumer demand is already large, creating an extensive market for automobiles, trucks, and other civilian motor vehicles. Postwar prices, however, are expected by the industry to be substantially higher than in prewar years.

### CONVERSION FOR WAR

Prior to United States entrance into World War II, automotive plants had already received numerous war orders, principally for armaments. After Pearl Harbor a total conversion of plants and equipment to war production was instituted, with automobile manufacture slowing down gradually as conversion progressed. The order to cease civilian car production in February, 1942 eliminated a business which grossed more than 2.6 billion dollars in 1941, and affected a plant investment of approximately 900 million dollars. The automotive group probably underwent the most far-reaching changes to war output of any industry in the Seventh District.

Growing orders for products, rapid conversion, and new facilities soon brought the automotive industry into full war production. The industry which had entered 1942 with

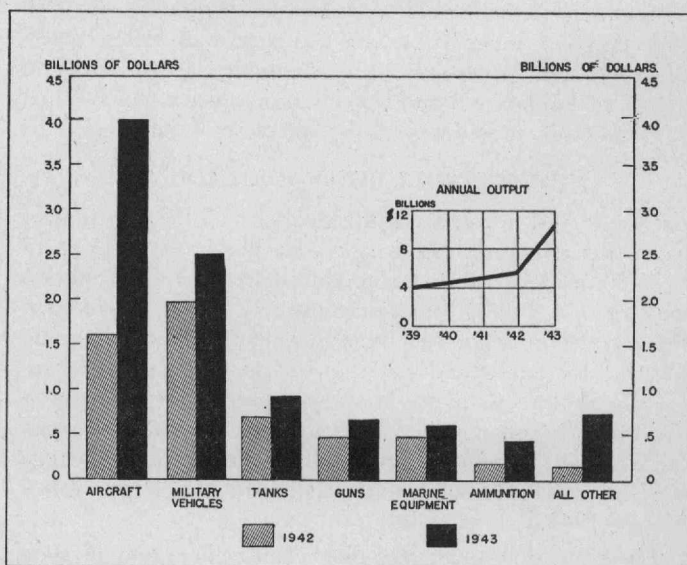
an order backlog of 4 billion dollars began 1943 with 14 billion dollars worth of war orders on its books.

The peacetime automotive industry is composed of two major sections, 1) automobiles, and 2) auto parts. The automobile division normally makes passenger cars, trucks, trailers, motorbuses, truck tractors, motorcycles, and other commercial-type motor vehicles. The war job of the automobile division encompasses many kinds of war products, with the smaller companies tending to specialize in a few types while the "Big Three", General Motors, Chrysler, and Ford, have orders ranging from shell casings to complete planes and tanks. The auto parts division concentrated until very recently on the production of armaments, with a large part of the work as subcontracts for parts and sub-assemblies for other companies within the industry. Current developments in the war theatres have caused a shift in the output of the auto parts companies, placing greater emphasis on aircraft products, and reducing orders for armaments.

### CONCENTRATION IN SEVENTH DISTRICT

The war production program of the motor vehicle industry is being carried on by 1,038 major automotive plants, more than one-half of which are located in the Seventh Federal Reserve District states of Illinois, Indiana, Iowa, Wisconsin, and Michigan. The latter state alone has 316 of these plants, or more than twice the total of any other state, with the greatest number in the Detroit area, the motor vehicle center of the country. Illinois has 98 automotive plants; Indiana, 84; Iowa, 5; and Wisconsin, 49

### AUTOMOTIVE WAR PRODUCTION



Source: Automobile Manufacturers Association.



plants. Ohio, New York, Pennsylvania, and California, lying outside the Seventh District, also have large numbers of automotive factories.

The automotive plants in the Seventh District produce more than three-fifths of the industry's products, with Detroit, Chicago, Milwaukee, Indianapolis, and South Bend the major centers of activity. The industry had its birth in Detroit, which has long been the hub of automotive production. About 80 per cent of the peacetime passenger car output was produced within a 100-mile radius of this city. During the war the industry's activities have become greatly diversified, and plants in other District cities, notably in Chicago, have assumed greater importance.

Not only is the largest proportion of the principal plants centralized in the District, but many of the industry's 22,000 subcontractors are also located in these states, with the majority in the Detroit, Chicago, and Milwaukee areas. About 56 cents of every dollar currently received by the major plants goes to subcontractors.

#### CURRENT PRODUCTION TRENDS

In December of 1939, when World War II was but 90 days old, arms orders of the automotive industry, mostly for trucks, totaled 20 million dollars. This is now just one day's output. In 1943, 29 automotive companies built 60 different types of military vehicles, with the output of vehicles and parts at an annual rate of 2.5 billion dollars. Production of tanks in 1943 reached 900 million dollars; marine equipment, 600 million; and ammunition, 400 million dollars. The replacement parts business of the industry also continues to rise.

The rate of production increase in automotive war products is gradually slackening, and will continue to do so through 1944, since most expansion programs have been completed. Cutbacks in schedules and contract cancellations of some items have taken place because of the shift in military emphasis from armaments to aircraft. Present forecasts would have the auto parts division reach its peak output about the middle of 1944, and then level off near that high point. Output of the automobile companies will follow a similar pattern, with the peak coming later in the year. Some civilian production of trucks and trailers, in addition to a large Army truck program, is expected in 1944.

#### LABOR SITUATION

Employment in the automotive industry has greatly expanded, the industry now employing 760,000 persons as against 400,000 in 1939. Employment in 1943 is almost 50 per cent above the peak month of 1941, with women comprising about 25 per cent of the present total wage earners. Wages continue to rise, increasing labor costs and narrowing profit margins. Labor shortages have been an important factor impeding automotive production throughout the war, and probably will continue.

The end of the war and the subsequent reconversion period will witness at least a temporary large decline in

the industry's employment. Thousands of workers will be discharged in the Detroit area alone, and the region is likely to face one of the nation's most critical conversion problems.

Though employment will fall off drastically during the process of reconversion if all war work of the industry is immediately stopped, it will gradually rise again if the six billion dollar a year motor vehicle industry that many automotive men believe possible is achieved. Such a sustained use of facilities would do much to reduce long-run unemployment in the industry after the war. Employment will be helped still further if some aircraft production is continued at least for a while. Normal prewar production was about 4-4.5 billion dollars.

#### PLANNING FOR THE FUTURE

Recent contract cancellations and cutbacks in automotive war production have led some to believe that a return to pleasure car production is imminent, but most estimates place resumption of auto production as far away as July 1, 1945, and even this date may be overly optimistic. In mid-1945 there will be approximately 21 million cars in service in the country, with almost 17 million of them over five years old. Of this group approximately 4 million will be between ten and twenty years old. It has been estimated therefore that about 15 million cars should need replacing by July, 1945. Roughly one million trucks will also be needed.

The reconversion period will be difficult for the automotive industry. Major problems to be settled will be the disposal of government-owned machinery in the plants, disposition of raw materials and semi-finished products, and the reopening and rebuilding of auto assembly lines. From three to four years will be needed to meet the backlog of civilian demand at the normal rate of production.

According to a consensus of the "Big Three" and their independent rivals the first automobiles made after the war will cost from 25 to 40 per cent more than the same models did in early 1942 when the industry converted to war production. The first after-war cars will be adapted 1942 models having a few changes in interior finish and external trim for promotional purposes. Increased wages, higher overhead costs, and the advance in the price of raw materials are said to contribute mainly to the increased automobile costs. As there were established markets for automobiles in certain price ranges, however, the automotive companies no doubt will try to keep price increases at a minimum, especially in the so-called low price field where the bulk of the sales are made.

Automotive leaders are now preparing for a large expansion and modernization program. Plans of five companies, General Motors, Chrysler, Studebaker, Packard, and Nash-Kelvinator, call for combined cash outlays of 1.1 billion dollars. This amount will be used to meet the anticipated consumer demand, and to pay for conversion expenses, rebuilding inventories, and advertising. These five companies normally account for about 70 per cent of total automobile production.



## Fats and Oils Prospect Improves

(Continued from Inside Cover)

and other oils, offset only in part by larger supplies of lard and margarine than were available in the peacetime period.

Allocations are made by the War Food Administration on a quarterly basis. For the first quarter of 1944 they show a reduction from those made in the fourth quarter of 1943 amounting to 5 per cent for butter and only a fraction of a per cent for lard, and shortening, cooking, and salad oils. The allocation for margarine is increased 20 per cent.

Important outlets for edible fats and oils in 1944 will be: butter, about 28 per cent; lard, 32 per cent; shortening, salad oils, and other edible oils, about 33 per cent; and margarine, eight per cent.

Important outlets for the inedible fats and oils are: for soap, which this year will take 54 per cent of the total inedible supply; for paint and varnish and other drying purposes, 15 per cent; for lubricating oils, 7 per cent; for textiles and leather, 5 per cent; for rubber manufacture, 4 per cent; and for other miscellaneous industrial uses, 15 per cent.

The principal sources of the total supply of fats and oils are: butter, 20 to 25 per cent; lard and pork fat, about 20 per cent; tallow and other greases, 15 to 18 per cent; cottonseed, about 13 per cent; flaxseed, 6 to 8 per cent; and soybeans, at present, about 7 to 8 per cent. These sources account for roughly 85 per cent of the total supply; the small balance is made up from about 20 other sources each constituting from a fraction of a per cent to 3 per cent of the total.

### SUPPORT PRICES RAISED

Until the matter of food subsidies is settled and the extension of the Commodity Credit Corporation is achieved, it is not certain what the program of support prices will be. However, the War Food Administration has announced increased support prices for the important oil seed crops. For soybeans produced in 1944, the price to growers of \$1.94 per bushel for green and yellow soybeans, grade No. 2 or better, is established at country elevators or other normal delivery points. This compares with \$1.80 for the 1943 crop. Production goals for 1944 call for an expansion of soybean acreage, but preliminary indications at the present time suggest that farmers in the important soybean areas may be considering the reduction of their acreage from that sown last year. This may be, in part at least, due to the tight feed situation and the price relationships between corn and soybeans which appear to many producers at the present time to make corn a more profitable crop than soybeans.

In this connection the soybean industry has been greatly expanded to meet wartime needs for fats and oils. Acreages harvested in recent years in the five Seventh District states and in the United States are shown on the first page.

The support price for flaxseed is based on \$2.95 per bushel for No. 1 seed at Chicago and Minneapolis. This is a rise of roughly 10 cents from the 1943 level. The support level for peanuts is also higher for this year by 10 dollars

per ton. Hogs are at present, of course, covered by the support program of \$13.75 at Chicago but the War Food Administration has announced that the support is to be \$12.50 after October 1. It is expected from preliminary indications that due to the feed situation, farmers will reduce their hog production and that 1945 will see a rather sharp reduction in the contribution of lard and pork fats to the fats and oils supplies, probably as much as 400 to 500 million pounds.

In general the prospect is good for 1944 from the supply standpoint. Progress in the European theater, however, means a positive increase in the demand for fats and oils for diets to relieve hunger and misery in the liberated countries. This adds up to probably an extremely tight situation in 1945, especially with the decline in pork production and in butterfat output as well.

### ADJUSTMENTS EXPECTED AFTER THE WAR

Serious readjustments may be expected in the fats and oils situation, however, when price supports become ineffective. At present these are scheduled to continue for 2 years after the end of hostilities. Once the Pacific war proceeds to the point where important sources of oils are again freed and the output becomes available in this country, and the peak of European demands has been reached or passed, considerable downward pressure may be expected on oil-bearing crops and animal fat products produced in this country. When that pressure rises it may prove difficult to maintain support prices effectively.

Corn Belt farmers will then be faced with the problem of adjusting their farm enterprises to meet the changing situation. Soybeans may be found to be a lower cost source of oils than hogs, since using corn to produce lard is considered by many to be a relatively expensive and wasteful method of obtaining oil and fat. If the competitive price situation in fats and oils forces down prices the adjustment which suggests itself for the Corn Belt farmer may be to reduce corn output more than soybeans, thus increasing the relative importance of soybeans as a source of oil, and providing the hog farmer with ample supplies of suitable protein supplement. This adjustment would be in the direction of a lighter, meatier hog and pork products more acceptable to the consumer. This might mean also a shift in types of hogs. Such adjustments are, of course, something for the future to decide. But for 1944 demands from all sources will be considerable in excess of supply and farm enterprises producing fats and oils will continue to be in a very favorable position. There are some indications that many hog producers are making drastic reductions a part of their production plans. While there have been some discouraging factors in the recent hog situation, many wise producers still regard hogs as a profitable enterprise for the coming year.

#### THIS MONTH'S COVER

Mississippi River bridge connecting  
Iowa and Wisconsin.



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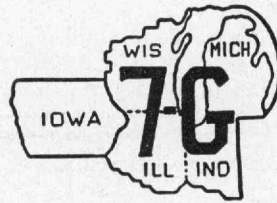
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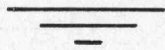
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