

THE BUSINESS REVIEW



FEDERAL RESERVE BANK OF PHILADELPHIA

OCTOBER 2, 1944

PLANS for the ultimate large-scale reconversion of industrial plants are developing on an ever broadening front, although emphasis must remain for the present on efforts to meet promptly the continuing heavy requirements for war materials, supplies, and equipment. Specific preparations now are in the making to shift a substantial proportion of the nation's capacity out of war production as the conflict in Europe approaches a climactic phase with the opening of the battle for Germany. Although the successful termination of this campaign still may be some months away, the very magnitude of the reconversion task that lies ahead suggests the urgency of implementing the initial measures undertaken earlier this year by the War Production Board.

Authorizations are being given an increasing number of small producers with munitions-free facilities to resume the output of approved civilian goods, provided neither manpower nor materials are employed at the expense of the war effort. When the so-called "Spot Authorization Plan" first went into effect, applications for limited reconversions were not given consideration if they applied to plants located in tight labor areas. Several weeks ago, however, procedure was relaxed in this respect, as evidenced by the official approval of plans for a few small firms in the Philadelphia area to resume the manufacture of articles for the civilian market.

Going one step further, regional representatives of the War Manpower Commission for this district subsequently authorized producers still

engaged in war production to establish "conversion departments" to facilitate the transition to peacetime output when the expected large scale contract terminations come at the close of hostilities in Europe. Similar measures have been taken elsewhere in the country; even the automotive industry, the nation's largest single producer of armaments, has received permission to assign a limited number of engineers and technicians to production planning for civilian vehicles.

Meanwhile, productive activity in the country as a whole appears to have stabilized at approximately the level reached in mid-summer. Total industrial production in August was about 4 per cent under a year earlier and 6 per cent below the wartime peak reached last fall. Over-all output of munitions rose slightly in the month but was a little short of the volume scheduled by the War Production Board. Satisfactory progress appears to have been made in several critical categories, with production in some cases rising steeply to record high levels. Further gains must be made in most major programs to meet 1944 goals.

Total nonagricultural employment was slightly greater than in July, although the number of wage earners was about one million less than in August 1943, according to the Department of Labor. Employment in agriculture increased seasonally during August but the industry approaches the year's peak demand for farm labor with about 400,000 fewer workers than a

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The Economy of the Third Federal Reserve District

Impact of War On Manufacturing — Employment*

FOR every two workers in Pennsylvania factories before the war, there are now three. But in many cases they are not the same workers, nor are they in the same plants, nor are they making the same products. For every 10 workers in pre-war steel mills making steel for refrigerators and automobiles there are now 16 workers making steel for jeeps and shells. For every 10 men employed in building freighters and tankers before the war, there are now 85 employed in building army transports and battleships in addition to the pre-war products. For every 10 workers employed in aircraft manufacturing before the war, there are now 185 making fighter craft and flying fortresses.

Over-all growth

In 1939 about 858,000 wage earners were employed in Pennsylvania factories. By 1943 this number had risen to more than 1¼ million, an increase of almost 400,000, or 46 per cent. War has demanded a more intensive utilization of available manpower as well as increased employment. The average number of hours worked per week thus rose from 36 in 1939 to 45 in 1943.

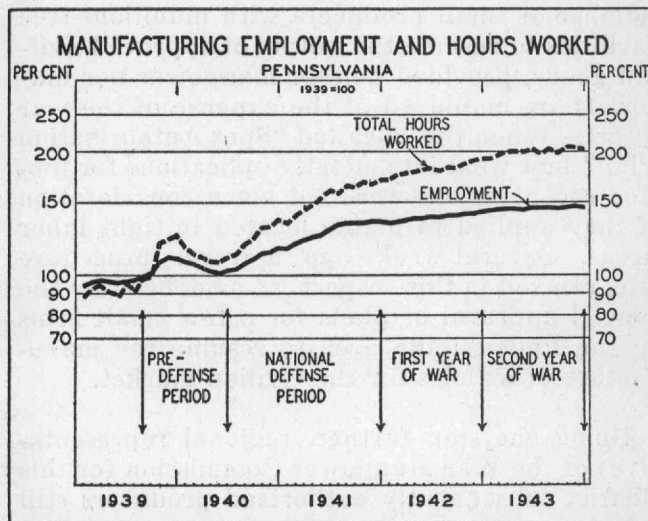
Immediately following the outbreak of war in Europe, there occurred a sharp upturn in both employment and hours worked but it was of short duration. However, by June 1940 when our national defense efforts got under way, employment and hours worked rose again and continued to expand. The year and a half of national defense preparation was characterized by the greatest gains of the war period. Employment increased 32 per cent and total hours worked 55 per cent. Unemployment, which was about 8 million for the country as a whole in March 1940, had declined to 3 million by December 1941 and bottlenecks had developed in numerous industries because of shortages of skilled personnel.

Despite heavy withdrawals into the armed forces, manufacturing employment in Pennsyl-

vania increased 6 per cent during the first year of the war. This was accomplished largely by drawing on the population reserves outside the normal working force such as housewives, students, and retired persons, and, to some extent, by diverting workers from nonmanufacturing occupations into the more essential manufacturing industries. By 1943 accessions from these sources began to fall off. After a slight increase in the first two months of the year, manufacturing employment remained at an almost constant level.

Total hours worked also tended to level off after our entrance into the war. However, hours worked afford more flexibility than employment; in both 1942 and 1943 hours worked increased more rapidly—13 and 5 per cent respectively, in contrast to increases of 6 and 2 per cent in employment.

When total manufacturing employment in Pennsylvania is broken into its more important component industries, employment changes between 1939 and 1943 show variations ranging from an increase of almost 1,800 per cent in aircraft to a decline of 34 per cent in hosiery. In Table 1 it will be seen that all increases of 60 per cent or more in employment are confined to the distinctly "war" industries. Those industries in which employment increases ranged be-



* Since figures for the Third Federal Reserve District are not available, data for the State of Pennsylvania are used throughout this analysis.

tween 12 and 36 per cent include producers of raw materials for war industries and essential food industries which were expanded by demands of our armed forces and Lend-Lease requirements. Below this group comes, with few exceptions, an array of consumers' goods industries restricted in their production by priorities and generally unsuccessful in obtaining replacements for wage earners lost to the armed services and to "war" industries.

TABLE 1: EMPLOYMENT AND HOURS IN SELECTED MANUFACTURING INDUSTRIES IN PENNSYLVANIA

Average 1939--Average 1943

Industry	% increase in employment	% increase in total hours worked	Average weekly hours 1943	Average weekly hours 1939
Aircraft.....	+1,756	+2,214	49.6	43.1
Shipbuilding.....	+ 777	+ 952	49.0	41.0
Electrical machinery.....	+ 165	+ 234	46.7	36.7
Structural iron and steel.....	+ 115	+ 169	46.5	37.1
Foundry products.....	+ 109	+ 162	46.8	37.0
Motor vehicles, bodies and parts..	+ 102	+ 140	46.3	38.8
Machinery except electrical.....	+ 85	+ 134	50.0	39.2
Nonferrous metals.....	+ 75	+ 98	45.2	37.5
Heating and plumbing supplies...	+ 69	+ 126	47.1	36.0
Steel works and rolling mills.....	+ 60	+ 95	43.9	34.0
Canning and preserving.....	+ 36	+ 50	40.7	37.4
Blast furnaces.....	+ 35	+ 65	45.4	36.7
Brick, tile, and terra cotta.....	+ 31	+ 52	36.0	32.1
Glass.....	+ 27	+ 47	40.2	34.1
Slaughtering and meat packing...	+ 21	+ 24	44.7	41.6
Coke.....	+ 14	+ 43	43.5	35.4
Bread and bakery products.....	+ 12	+ 29	44.7	40.3
Woolen and worsted goods.....	+ 7	+ 24	42.7	36.5
Men's furnishings.....	+ 5	+ 12	37.1	33.6
Men's and boys' clothing.....	+ 4	+ 29	38.5	33.3
Confectionery.....	+ 4	+ 14	42.2	38.8
Cotton goods.....	+ 3	+ 16	41.3	37.7
Printing.....	+ 3	+ 6	40.2	36.6
Petroleum refining.....	+ 3	+ 19	42.5	36.0
Paper and wood pulp.....	+ 0	+ 15	47.1	41.5
Knit goods.....	- 1	+ 8	39.9	36.6
Tanning and leather finishing.....	- 11	- 2	40.5	37.9
Silk and rayon goods.....	- 11	+ 1	40.0	35.0
Cement.....	- 12	- 5	40.6	37.2
Shoes.....	- 13	- 4	40.5	36.6
Hosiery.....	- 34	- 24	39.4	34.7
Total manufacturing.....	+ 45.9	+ 100	44.8	36.3

Changes in employment do not tell the complete story of wartime manpower utilization. To stretch the available labor force to meet production schedules or to compensate for un-replaced workers, the average work-week has been increased considerably in every one of these industries. In 1939, only five of the industries studied had an average work-week of over 40 hours while in 1943 only five had an average work-week of less than 40 hours.

In the industries where employment gains were the greatest, average hours worked per week generally were also the greatest. It appears that any further expansion in produc-

tion in these industries will have to be achieved largely through increased employment rather than through longer hours. In the remaining industries, considerable leeway still exists to expand production through longer hours. This is particularly true of the industries having an employment increase of less than 12 per cent. This suggests the possibility of additional transfers of wage earners from the latter industries to those already operating at full capacity. This is, of course, what the War Manpower Commission has attempted to achieve by ordering a 48-hour week for industries in areas such as Philadelphia which have a critical manpower shortage.

The fact that production has been expanded by an increase in average hours as well as by greater employment is important for the post-war period. It suggests that when demand falls off in certain industries, production may be contracted substantially without a corresponding decline in employment simply through reducing the average work-week.

Of course, the shorter work-week is by no means the complete solution to full post-war employment. Wage earners will have to shift from one industry to another and from one area to another, training programs will be necessary to create a labor force with the skills sought by employers, and workers of school age must be urged to complete their education. Furthermore, many workers now but not normally in the labor market are expected to withdraw.

Impact of war on the distribution of manufacturing employment

Wartime changes have altered considerably the industrial pattern of the state as shown by the redistribution of manufacturing employment. Table 2 shows the distribution of workers employed in 1939 and 1943.

One of the most important changes has been a pronounced shift of workers into durable goods manufacturing. In 1939, Pennsylvania's manufacturing wage earners were divided nearly equally—47 per cent in durable and 53 per cent in nondurable. By 1943 the demands of war for metals and metal products had brought about a complete alteration in this ratio. Wage earners engaged in durable goods manufacturing comprised 61 per cent of the

total while those in nondurable goods manufacturing accounted for only 39 per cent.

The group comprising iron and steel and machinery manufacturing employed one-third of all manufacturing wage earners in 1939 and by 1943 its proportion had increased to 42 per cent. Electrical machinery almost doubled its share of the total, increasing from 3 per cent to almost 6 per cent. Non-electrical machinery likewise gained in importance in the economy, rising from 5.5 per cent of the total to 7.0 per cent. Although steel works and rolling mill products made a gain in their relative position, it is interesting to note that blast furnaces, which supply steel works with one of their raw materials, actually lost ground. This is accounted for largely by the growing use of scrap metal as a raw material for steel mills.

TABLE 2: DISTRIBUTION OF WAGE EARNERS IN SELECTED MANUFACTURING INDUSTRIES IN PENNSYLVANIA, 1939-1943

	Employment		Percentage distribution	
	1939	1943	1939	1943
Iron and steel and machinery	290,400	527,700	33.8%	42.2%
Blast furnaces.....	5,700	7,700	.7	.6
Steel works and rolling mills.....	139,900	223,600	16.3	17.9
Foundry products.....	15,100	31,600	1.8	2.5
Structural iron and steel.....	8,400	18,000	1.0	1.4
Heating and plumbing supplies.....	14,200	24,000	1.7	1.9
Machinery except electrical.....	47,500	87,600	5.5	7.0
Electrical machinery.....	28,000	74,200	3.3	5.9
Nonferrous metals	17,400	30,500	2.0	2.4
Transportation equipment	28,000	134,300	3.3	10.7
Motor vehicles, bodies and parts.....	13,600	27,600	1.6	2.2
Shipbuilding.....	6,600	57,600	.8	4.6
Aircraft.....	1,300	23,500	.1	1.9
Lumber products	23,800	21,300	2.8	1.7
Furniture.....	11,500	10,700	1.3	.9
Lumber and planing mill products.....	9,000	7,300	1.0	.6
Stone, clay, and glass	45,100	55,100	5.3	4.4
Brick, tile, and terra cotta.....	10,400	13,600	1.2	1.1
Glass.....	17,300	22,100	2.0	1.8
Textiles	144,700	125,000	16.9	10.0
Cotton goods.....	5,400	5,600	.6	.4
Woolen and worsted goods.....	14,200	15,300	1.7	1.2
Silk and rayon goods.....	36,700	32,800	4.3	2.6
Hosiery.....	41,700	27,400	4.9	2.2
Knit goods.....	15,900	15,800	1.9	1.3
Clothing	90,300	89,100	10.5	7.1
Men's and boys' clothing.....	22,000	23,000	2.6	1.8
Women's clothing.....	33,500	28,800	3.9	2.3
Men's furnishings.....	30,400	32,000	3.5	2.6
Food products	61,600	68,900	7.2	5.5
Bread and bakery products.....	25,100	28,100	2.9	2.2
Slaughtering and meat packing.....	6,500	7,900	.8	.6
Canning and preserving.....	5,200	7,000	.6	.6
Confectionery.....	9,500	9,800	1.1	.8
Leather and leather products	27,900	25,600	3.2	2.1
Shoes.....	16,100	14,000	1.9	1.1
Leather tanning and finishing.....	8,100	7,300	.9	.6
Paper and printing	50,600	53,000	5.9	4.2
Printing.....	28,900	29,700	3.4	2.4
Paper and wood pulp.....	15,200	15,300	1.8	1.2
Total durable goods	404,700	768,900	47.2	61.4
Total nondurable goods	453,600	483,400	52.8	38.6

(Individual industries are selected and do not add to group totals.)

The most outstanding increase took place in the transportation equipment group. Its wage earners in 1939 were but 3.3 per cent of the total compared with 10.7 per cent in 1943. Shipbuilding grew in relative importance from less than 1 per cent to almost 5 per cent, while the aircraft industry employed almost 2 per cent of the total in 1943 in contrast to a negligible percentage in 1939.

Of the remaining three groups producing durable goods only nonferrous metals gained in relative importance. The share of lumber and its products declined from 2.8 per cent to 1.7 per cent of the total; stone, clay, and glass products declined from 5.3 per cent to 4.4 per cent. These declines are explained by the fact that most of the necessary war construction had been completed by 1943 and unessential construction was restricted.

In nondurable goods the percentage of total employment declined in every major group as well as in each component industry. The textile group experienced the greatest relative decline. It decreased in importance from almost 17 per cent in 1939 to 10 per cent in 1943. Among the textiles, hosiery and silk and rayon goods showed the most striking losses; wage earners in the former fell from 4.9 per cent of the total to 2.2 per cent and in the latter from 4.3 to 2.6 per cent.

Closely associated with the relative decline in textiles was the shrinkage in the proportion of total wage earners engaged in clothing manufacture. In 1939, 10.5 per cent were thus employed in contrast to 7.1 per cent in 1943. Wage earners employed in the manufacture of women's clothing represented only 2 per cent of the total in 1943 compared with almost 4 per cent in 1939. Declines also were shown in the remaining nondurable groups—food products, paper and printing, and leather and leather products.

Manufacturing employment by areas

Although the over-all employment gain in manufacturing in Pennsylvania appears large when viewed in isolation, in comparison with other areas of the United States it becomes much less striking. In Table 3 the percentage increases in wage earners and salaried employees (not entirely comparable with previous figures which deal only with wage earners)

from 1939 to 1943 are shown for the large geographical areas of the United States and for Pennsylvania, New Jersey, and Delaware.

TABLE 3: WAGE EARNERS AND SALARIED EMPLOYEES IN MANUFACTURING 1939 AND 1943

	Percentage increase from 1939 to 1943	Percentage distribution	
		1939	1943
New England.....	+ 45%	11.7%	10.5%
Middle Atlantic.....	+ 48	28.9	26.7
Pennsylvania.....	+ 42	10.3	9.1
New Jersey.....	+ 58	5.8	5.7
East North Central.....	+ 62	27.7	27.8
West North Central.....	+ 78	5.2	5.7
South Atlantic.....	+ 44	11.8	10.6
Delaware.....	+ 77	.3	.3
East South Central.....	+ 59	4.4	4.4
West South Central.....	+ 85	3.6	4.2
Mountain.....	+ 64	.9	1.0
Pacific.....	+ 154	5.8	9.1
Total—United States....	+ 61%	100.0%	100.0%

Pennsylvania's increase in manufacturing employment—42 per cent—was well below the average for the United States as a whole—61 per cent. New Jersey, partially included in the Third District, was also below the national average with an increase of 58 per cent while Delaware was considerably above, with an increase of 77 per cent.

Percentage gains in employment were smallest in the eastern and east central regions—areas that were highly industrialized before the war. For their industries war meant conversion of existing plants to the production of war products. The largest gains were registered in the Pacific and west south central areas where the war hastened the process of industrialization.

In terms of per cent distribution of the country's manufacturing employment, these divergent rates of growth meant that any area expanding less rapidly than the United States as a whole necessarily contracted in relative importance. Hence, in general, proportions in the East declined while those in areas west of the Mississippi increased. The wage earners and salaried workers engaged in manufacturing in Pennsylvania now represent 9.1 per cent of the total compared with 10.3 per cent in 1939. New Jersey's proportion also declined somewhat while Delaware's increased slightly.

Not only did manufacturing employment as a whole increase much more rapidly in the United States than in Pennsylvania, but employment in all of the various types of industries save one rose faster nationally than in Pennsylvania. As a result, all but one industrial group—stone, clay, and glass products—employed a smaller proportion of the country's wage earners than in 1939. This is revealed by Table 4.

Large relative declines in Pennsylvania's position occurred in iron and steel and machinery, in textiles, and in clothing manufacturing. These are all industries in which Pennsylvania ranks fairly high. The decline of Pennsylvania's position in durable goods manufacturing was relatively greater than in nondurable goods. The fact that employment in practically all of the industrial groups grew less rapidly in the state than in the country as a whole suggests that the multitudinous requirements for war were met by greater expansion of plant, equipment, and employment of all kinds in areas outside of Pennsylvania.

TABLE 4: PROPORTION OF PENNSYLVANIA WAGE EARNERS TO TOTAL UNITED STATES—1939-1943

	1939	1943
Iron and steel and machinery.....	16.3%	14.4%
Nonferrous metals.....	7.6	7.3
Transportation equipment.....	5.0	4.6
Lumber products.....	3.2	2.5
Stone, clay, and glass.....	15.3	15.5
Textiles.....	12.6	10.2
Clothing.....	11.4	10.4
Food products.....	7.2	7.0
Leather and leather products.....	8.0	7.7
Paper and printing.....	8.5	8.2
Total durable goods.....	11.2%	9.3%
Total nondurable goods.....	9.9	8.6
Total manufacturing.....	10.5%	9.1%

After the war Pennsylvania will no doubt retain its present position as one of the leading industrial states, but a redistribution of its workers among the durable and nondurable industries may be expected. Employment in durable goods industries, such as aircraft and shipbuilding, is basically a war phenomenon. Post-war employment in durable and nondurable industries may be expected to approach a close semblance to the pre-war pattern.

Full-Fashioned Hosiery Industry

Post-war employment in Philadelphia will depend in large part upon the ability of its many industries to adjust to changing conditions. The full-fashioned hosiery industry has had much experience in adjusting to rapid change. Meteoric growth, lush profits, high wages, overdevelopment, labor difficulties, changing technology, new raw materials, and migration all occurred within the comparatively short span of one generation.

The hosiery industry consists of two major branches, based on a fundamental difference in manufacturing process. Seamless hosiery is circular knit whereas full-fashioned hosiery is knitted flat and subsequently seamed into tubular form. Full-fashioned is the larger of the two branches. In 1939 the 500 establishments in the United States employed 97,000 workers, paid out \$100 million in wages, and produced \$277 million of merchandise. The seamless branch had somewhat fewer plants, employed only two-thirds as many workers, paid less than one-half as much in wages, and value of output was just half that of the full-fashioned division.

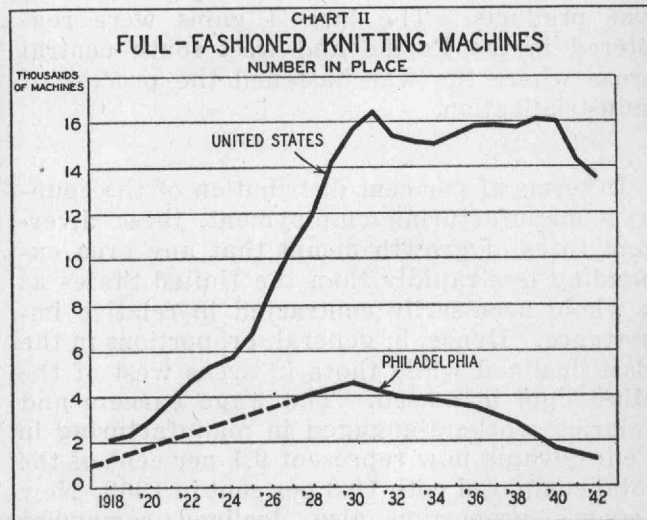
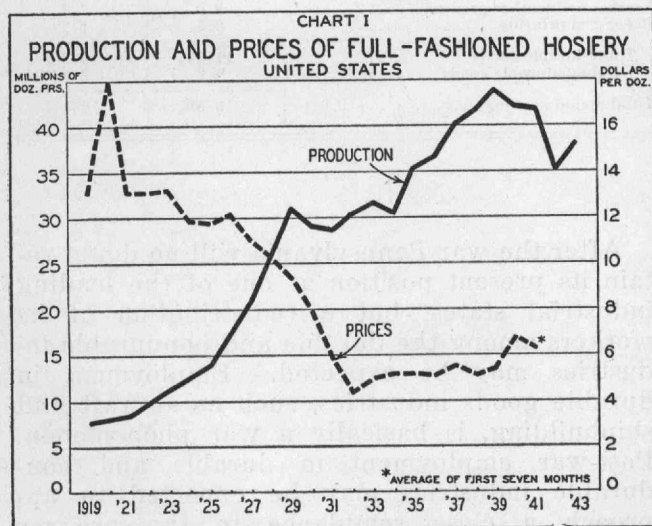
There are a number of other significant differences between these two branches of the industry. In the full-fashioned branch, silk was the principal raw material before the war; in 1940 the industry used about 80 per cent of all silk consumed in the United States. The market for full-fashioned is confined almost entirely

to women's hosiery and the industry customarily supplies 77 per cent of the total women's wear market. Compared with seamless, full-fashioned is more dependent upon skilled labor, pays higher wages, requires more capital, and has undergone greater changes in technology.

Growth of Full-Fashioned Industry

The full-fashioned industry has gone through two distinct periods of growth: first, a decade of rapid development from 1919 to 1929, and second, a period of readjustment from 1929 to 1939. During the first period, production of hosiery quadrupled, rising from 7.5 million to 31 million dozen pairs, as shown in Chart 1. The basic reason for this rapid growth was changing styles in women's clothing. As a result of the introduction of the short skirt about 1925, hosiery became a more important part of feminine attire, and the full-fashioned industry was called upon to meet a tremendous increase in demand. The unusual growth was due also in part to the popular acceptance of sheerer construction and lighter colors. During this period there was a substantial shift in raw material from cotton, which accounted for almost half of the full-fashioned hose produced in 1919, to silk, which accounted for almost 90 per cent in 1929.

As a result of the rapidly rising demand, there was a tremendous inflow of new equipment during this period. The number of knit-



ting machines in place increased from 2,400 in 1919 to 14,000 in 1929 (Chart 2).

During this decade manufacturers made handsome profits and workers made high wages. Average full-time weekly wages of knitters rose from \$33 in 1919 to \$67 in 1928—in Philadelphia some knitters earned over \$5,000 annually. The rapid expansion of the industry was further stimulated by the falling price trend of silk, its principal raw material. Wholesale prices of full-fashioned declined from \$13 per dozen in 1919 to \$9 a dozen in 1929.

Following the rapid growth, the industry entered a decade of readjustment beginning with the business recession in 1929. Rising production was momentarily halted, as seen in Chart 1, and for the entire decade from 1929 to 1939, the volume of output increased at a slower rate, rising from 31 million to a peak of 44 million dozen pairs. The slower rate of expansion also is revealed by changes in the rate of consumption. Annual per capita consumption which rose from 1.8 pairs in 1919 to 7.6 in 1929—a threefold increase—rose to 11.4 in 1939—an increase of 50 per cent in the latter decade.

It has been estimated that the industry had been over-developed by approximately 30 per cent. From 1929 to 1934, widespread readjustments had to be made. A number of the weaker firms went out of business. Wage rates were reduced by a national agreement with the union. In order to keep down unit costs, most firms continued to operate at full capacity with the result that the market was flooded and

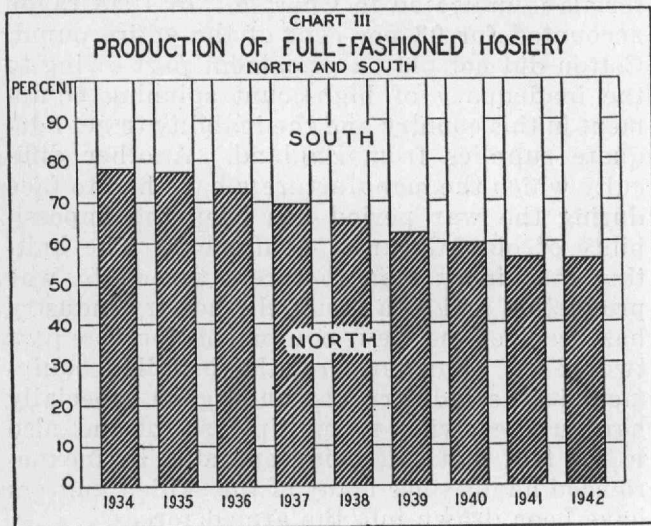
prices declined. This was the period when wholesale prices declined from \$9 to \$5 per dozen pairs and full-fashioned hose was re-tailed as a loss leader at 39 and 49 cents a pair. This was also the period when manufacturers sought to strengthen their position by moving into lower labor cost areas and North Carolina rose to challenge Pennsylvania—the historic center of the industry. Between 1929 and 1939 the South increased its proportion of the equipment in the industry from 7 to 28 per cent and the number of its hosiery workers from 6,600 to 34,000. By 1939 the South produced 38 per cent of the national output as shown in Chart 3. During the same period the number of wage earners employed in the North remained almost stationary around 62,000 workers. Lower cost labor in the South was especially attractive because wages constitute an important element in the manufacturer's cost structure.

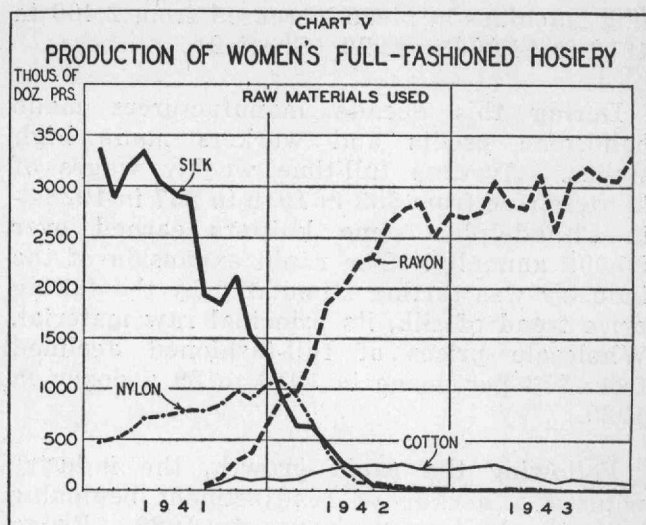
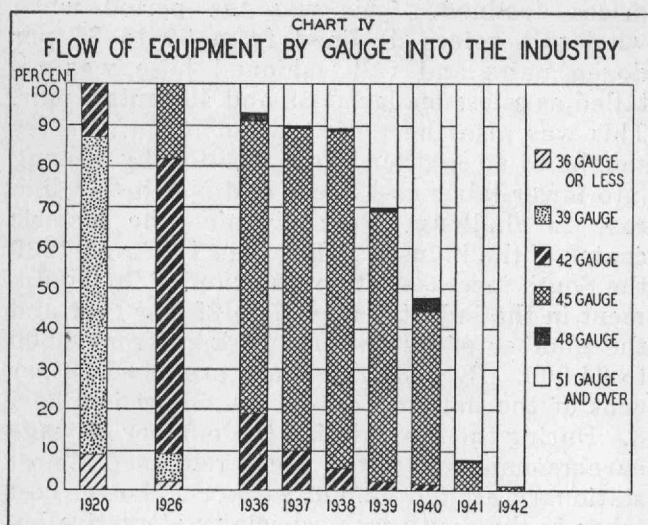
After the depression of the early thirties, the industry resumed expansion but with less vigor. Employment rose from 84,000 in 1935 to a peak of 97,000 in 1939. The growth during the latter part of this period was due to the invasion of the seamless market, the growing volume of low-priced lines, ranging from 59 to 89 cents at retail, introduction of sheerer weights, and demand for a greater variety of colors to match feminine costumes.

Economic characteristics of the industry

Full-fashioned hosiery is a highly competitive industry. Capital investment is high—56 per cent of total assets are tied up in plant and machinery which is in contrast with 41 per cent in the automobile industry. The large proportion of capital sunk in specialized equipment puts pressure upon the manufacturer to secure its maximum utilization. Labor costs are high, largely because 65 per cent of the workers in the industry are in the skilled brackets. Between 1929 and 1939, the ratio of direct labor to value added rose from 45 to 64 per cent, which was an important factor promoting the shift to low labor cost areas.

An important element in the competitive situation is the difference in wage rates prevailing in the different regions. In 1938 all full-fashioned workers averaged 58 cents in the South and 69 cents in the North. Competition is accentuated further by the existence of both union and non-union shops. The North is more completely unionized than the South.





Another element in the competitive situation is the flexibility of capacity. In order to attain low unit costs, manufacturers operate two and three shifts. Multiple-shift operation has been more prevalent in the southern branch of the industry.

Competition in this industry has been intensified still further by rapid technological developments. The more progressive manufacturers have kept ahead of their competitors by constant improvement of equipment. They have installed higher gauge, multiple-section, and high-speed machinery. The rapidity of technological change is illustrated in Chart 4. In 1920, over 75 per cent of the new equipment flowing into the industry was 39 gauge or lower; in 1942, 99 per cent of the new equipment was 51 gauge or higher. However, the old equipment, unless it is scrapped, plagues the industry by contributing to excessive output of "low end goods" produced by the manufacturers who buy the second-hand machinery at bargain prices.

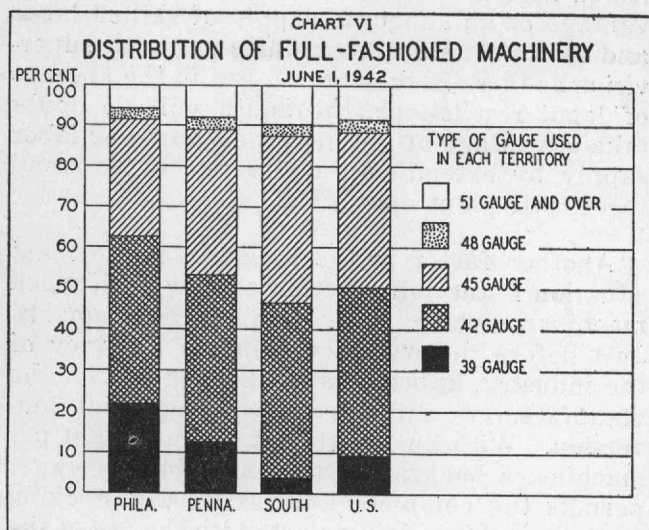
There is also competition between the manufacturers of branded and unbranded hosiery. The former market the products under their own name and the latter produce hosiery for mass distribution by chain stores and other large distributors who sell at low price levels under their own rather than the manufacturer's name.

Another development of recent years which has complicated the competitive situation is the rise of commercial finishing. By full-time utilization of his specialized equipment, the inde-

pendent dyer and finisher can usually perform these operations at lower cost than the integrated manufacturer. The small manufacturer is benefited by the services of the commercial dyer and finisher.

Wartime Developments in the Industry

Since the beginning of the national defense program, the full-fashioned industry has had its full quota of wartime adjustments. One of the first major problems arose in August 1941 when silk was frozen. This stimulated the production of nylon hose which was already being produced as rapidly as the new synthetic yarn was available, but in February 1942 nylon went to war also. This left only rayon and cotton, both inferior raw materials for full-fashioned production. The extent of the shift in raw materials is indicated in Chart 5. In 1943 rayon accounted for 93 per cent of the entire output. Cotton did not play a prominent part owing to the inadequacy of high-count spinning equipment in this country and the inability to get adequate supplies from England. Another difficulty which the manufacturers have had to face during the war period has been the impossibility of obtaining new equipment. The knitting machinery manufacturers turned to war production and as a result the hosiery industry has received no new equipment for the past two years. Furthermore, the installed equipment in the industry has undergone especially hard usage owing to multiple shifts and also to the fact that it is being operated by inexperienced hands since many of the skilled knitters have been drawn into the armed forces.



Full-Fashioned Hosiery Industry in Philadelphia

In 1939 the full-fashioned industry of Philadelphia represented about 10 per cent of the national totals in terms of employment, equipment, and output. This area has found the competitive going particularly difficult because, as shown in Chart 6, it operates much antiquated machinery. In June 1942, about 22 per cent of the equipment in Philadelphia was 39 gauge which is in contrast with 4 per cent of this low gauge equipment in the South and 10 per cent for the entire industry. Similarly, only 38 per cent of Philadelphia's equipment was 45 gauge and higher whereas the South had 53 per cent of its equipment in such machinery and the industry as a whole had 50 per cent. The obsolescence of equipment in this area would have been somewhat greater but for a three-year rehabilitation program which was begun in 1938. At that time the union entered into a contract with the manufacturers in which they agreed to abandon the uniform piece-rate system which had been in effect since 1929 and to negotiate percentage wage reductions with each individual manufacturer depending upon his financial status and his willingness to utilize the savings obtained from wage reductions to install new machinery. As a result of this agreement, Pennsylvania manufacturers in 1941 for the first time in many years took more new Reading machines than the South.

The full-fashioned industry of Philadelphia employed about 9,800 workers in 1939. According to estimates received by the Research Com-

mittee of the Committee for Economic Development of Philadelphia, about 6,600 workers were employed in June of 1943. It is estimated that in the first post-war year employment will rise to about 7,500 which would be almost 25 per cent below the pre-war level. According to the survey, less than 10 per cent of the output in June 1943 was for war and three-fourths of the firms anticipated no reconversion problems.

Post-War Problems

The immediate reconversion problems which this industry will have to face have to do with raw materials, equipment, capital, and labor. The industry is expecting the unleashing of a tremendous backlog of demand on the part of its 40 million customers whom they have been unable to satisfy both as to quantity and quality of product during the war period. Perhaps the most pressing problem will be that of raw materials.

Knitting yarns and especially yarn for full-fashioned hosiery must be of the highest quality and no doubt there will be a scramble for yarn as soon as the Government releases its priorities. Just before the war, nylon accounted for 20 per cent of all full-fashioned hosiery yarn and after the war, demand for nylon hose can be satisfied only to the extent that adequate supplies of the synthetic yarn become available. As soon as the war ends, the duPont Company can supply 18 million pounds of balanced leg and welt yarn and the company is planning to expand nylon capacity to 23 million pounds which would be enough to make 37½ million dozen pairs of hosiery, but it will take from a year to 18 months before production of nylon can be stepped up to that level.

Another factor which may delay immediate post-war resumption of nylon hosiery production even if millions of pounds of nylon are available, is the limitation of facilities at several stages in the manufacturing process. Assuming a huge demand for knitting yarns, throwing facilities will be taxed to the limit and may be one of the first bottlenecks. It will take some time also to produce enough sizing machinery for conditioning nylon and preboarding equipment to shape the hosiery. The industry will have done well if it steps up nylon hosiery to 40 per cent of total hosiery output within two years after the war.

In the meantime, rayon hosiery of coarser construction will doubtless supply the largest part of our needs. There is also the possibility that rayon may retain a strong hold on this market after the war because the new high tenacity rayon, used exclusively for tire cord and other military needs during the war, will be a much better hosiery raw material than pre-war rayon yarns. Silk is not expected to stage a strong comeback because synthetic yarns are much improved in quality and they have a distinctly superior advantage of greater price stability in contrast with raw silk.

Another difficulty with which the manufacturers are confronted is that of equipment. For some time the industry will not be able to obtain all of the knitting machinery that it will need. The Textile Machine Works, which manufactures most of the knitting equipment, expects to get into production within three to six months after termination of its Government contracts, but it will require approximately a year before the company can attain full capacity output. The inability to obtain new equipment to replace the hard-worn machinery may fall more heavily on the Philadelphia area since a larger proportion of its equipment is obsolete. The flow of new equipment into the industry will depend also in part upon the financial status of the individual manufacturer. A modern 51-gauge, 30-section machine equipped with automatic welt turning, costs \$20 thousand, and the installation of such new equipment will require substantial capital resources.

The long-run outlook for employment is uncertain because of numerous technological changes that are constantly taking place. The use of nylon, which wears approximately twice as long as silk, may reduce considerably the over-all demand for hosiery. On the other hand, nylon lends itself to extremely sheer construction—as fine as 10 denier—and these do not wear as long as 40's or 50's. Furthermore, lace welt hose and other style innovations may be expected. Such developments may very well bring about a demand greater than ever before.

Considerable time will be required to restaff hosiery plants with high-grade personnel. The high degree of skill required to operate the delicate machinery in this industry cannot be acquired overnight. However, as a long-established

hosiery center, Philadelphia has the advantage of an adequate supply of skilled labor and its knitters do not require as much supervision as those in the South. But in the absence of legal restrictions, the South will no doubt take advantage of the increased post-war labor supply by extending the practice of two and three-shift plant operation.

Another factor in the long-run employment situation is the introduction of new high-speed machinery which reduces labor requirements. Just before the war, according to a survey of the industry, approximately 20 per cent of the manufacturers had introduced single-unit conversion. With an investment of only \$200 per machine, a backrack attachment to the legger permits the complete knitting of the stocking on that machine, doing away with the use of the footer. For every three legging machines so converted, the services of one footer, three toppers, and some loopers are eliminated. After the equipment becomes available, further conversion of this type may be expected despite the fact that this process produces a rounded instead of the conventional French or pocket type of heel.

Manufacturers who have the financial resources will install new 51-gauge machines as fast as they can be obtained, but this likewise promises no expanding opportunities for employment. Although the high gauge machines make smaller loops, thus requiring more courses to knit a stocking, productivity is not reduced because these modern machines operate at higher speed.

Philadelphia may expect increasing competition in the period of reconversion and afterwards. The shift to the South may have run its course, but that area which now has 38 per cent of the equipment is a greater threat than this figure indicates. Its equipment is more modern, it is operated more hours, and the employees are lower paid. However, wage rates are not the same as labor costs. Philadelphia manufacturers have the advantage of skilled labor and proximity to large markets, and if equipment is modernized, manufacturing costs can be reduced to strengthen the competitive position of this area.

A possible post-war development which may alter conditions considerably is bare-leg hose. This stocking, of seamless construction, made with nylon yarn on the comparatively new 400-

needle circular head machine, is a potential threat to the full-fashioned industry. If this new seamless hosiery were to attain greater consumer acceptance than the full-fashioned,

as it may in the younger age brackets, the entire complexion of the post-war hosiery industry—seamless and full-fashioned—may undergo vast changes.

Business and Banking

Continued from page 1

year ago. Manpower shortages still are acute in certain war industries and in some sections, including the Philadelphia industrial area. The local scarcity of labor is emphasized by a recent directive from the War Manpower Commission freezing in their jobs an estimated 500,000 men and women employees of war plants. The order as applied to women is without precedent; it reflects an unusually high rate of turnover in recent months, and at the same time suggests the urgent nature of the war work performed in this community.

Industry and trade. Industrial production in the Philadelphia Federal Reserve District decreased 2 per cent on an adjusted basis from July to August, and was 4 per cent below the level of a year earlier. The decline in the month and year reflected largely curtailed operations in heavy industry lines incident to continuing adjustments in the war production program. Productive activity in the eight months ended August was little less than in the same period last year; total output of factory products was largely maintained, and the tonnage of coal mined showed an increase, but the production of crude petroleum was down about one-tenth from 1943.

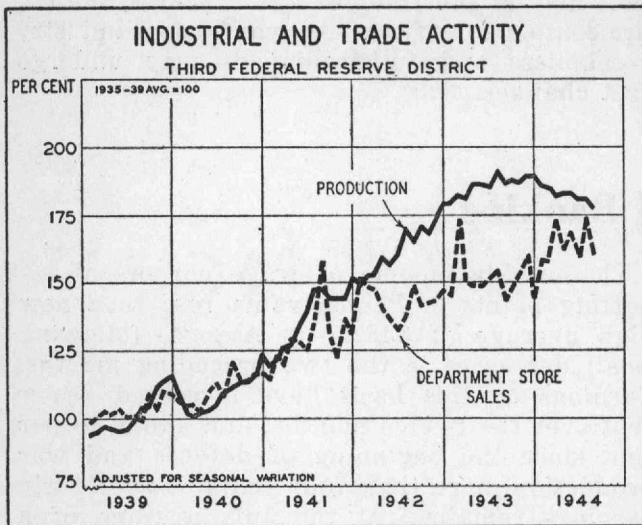
Employment, payrolls, and total working time in Pennsylvania factories, while continuing to fluctuate rather narrowly from month to month, nevertheless have shown a gradual downward tendency over the past half year or more. The number of wage earners was virtually unchanged from July to August, and the volume of wage disbursements and aggregate employee hours worked increased very little. During peacetime, when seasonal influences are much more operative than at present, employment expands about 3 per cent and payrolls rise about 7 per cent in this period. Comparisons with a year ago indicate that small declines persisted in the case of employment and hours, while wage payments were up about 2 per cent.

The weekly income of wage earners at reporting plants in Pennsylvania rose to a new high average of \$48.17 in August, following small decreases in the two preceding months. Earnings on this basis have increased 7 per cent over the twelve months, and about 80 per cent since the beginning of defense and war production more than four years ago. Hourly earnings remained at the July average of a little over \$1.06. The average number of hours worked per employee increased from 44½ in July to 45½, the peak level prevailing in earlier months this year.

The supply outlook for solid fuels used by industry and for heating remains tight. Diminishing reserves of Appalachian coals suitable for making coke and by-products have necessitated the diversion of substantial tonnages from power-generating purposes for which they had

WAR CONTRACT TERMINATION LOANS

Congress recently passed the Contract Settlement Act to provide prompt and adequate financing to war production contractors, pending final settlement of their claims. It authorizes termination loans, commonly known as T loans, to enable contractors to release working capital tied up temporarily in terminated contracts. These loans are to be made available primarily through commercial banks. Guarantees will be executed by the Federal Reserve Banks as fiscal agents of the United States, acting in behalf of the War Department, the Navy Department, and the United States Maritime Commission. All banks in this district have been supplied with printed forms and detailed information. T loans may be guaranteed after a war production contract has been terminated, or commitments for such loans may be guaranteed in advance of cancellation.



been widely used over much of the war period. Stocks at steel mills in particular reached low levels toward the close of the summer, when they were estimated at only a few days' supply, as against a normal working level consistent with wartime demand of about a full month. Over the remainder of this year substantial tonnages of these premium fuels will be allocated to producers of coke and crude steel; other industrial consumers will be required to use more "strip mined" and the lower grades of "deep mined" bituminous coal to meet overall needs.

Sporadic labor disturbances in the anthracite field and in some bituminous mines of western Pennsylvania and several nearby states have brought Federal control of affected properties for the third time in little more than a year. The production of bituminous coal in the country as a whole increased about 10 per cent in August, and was above the level of a year earlier. In the Pennsylvania coal fields, total output of bituminous and anthracite was little larger than in July and in both instances the tonnage mined was less than in August 1943. The production of anthracite in the first eight months was only 3 million tons greater this year than last; requirements for the current season are estimated at about 5 million tons more than in 1943.

Construction activity throughout the country increased slightly further during August but a sharp reversal of this trend is anticipated over the remainder of this year. The War Production Board reported that operations in

August brought the dollar volume installed during the first eight months to little more than \$2½ billion, as against nearly \$5.8 billion in the same period of 1943. Estimates of the full year's construction total indicate a decline of over 50 per cent from 1943 and about 75 per cent from the wartime peak of two years ago. Emphasis has continued to shift to privately financed construction, with dollar volume in this category rising from 22 per cent of the total in August of last year to 39 per cent in the latest month.

In this district, the value of new contracts awarded declined sharply in August to about \$7 million, according to the F. W. Dodge Corporation. Declines in the month of considerably more than one-third were reported for all types of construction except small houses and commercial structures. Total awards were down about one-fourth from a year ago, and in the eight months ended August they showed a decline of 35 per cent. Public works and utilities and educational buildings were the major categories in which the value of contract awards has been larger thus far this year than last. The sharpest declines from 1943 have occurred in placements for multiple-family houses and commercial buildings.

Growing conditions for late crops and pastures in this district improved considerably after heavy rains in mid-September relieved a summer-long drought which had reduced yields of early vegetables and orchard fruits and necessitated heavy supplemental feeding of grazing livestock. Fall plowing, previously delayed by insufficient soil moisture, is proceeding rapidly, although operations remain substantially behind schedule in most sections. The supply of farm labor continues tight, in spite of the increased employment of family workers, personnel recruited from nearby British possessions, and war prisoners.

The persistence of unfavorable weather over much of the principal growing season was reflected in successive downward revisions in the estimated yield of most leading field crops in this district. The production of all but hay and white potatoes, however, is expected to be somewhat larger than in 1943, because of increases in the acreage planted this year. On the basis of September 1 conditions, the Department of Agriculture anticipates that the harvest of

wheat and tobacco will be well above the average for the preceding five years, while yields of corn, oats, hay, and white potatoes will be smaller. A near-record crop of orchard fruits forecast about mid-summer may not materialize, owing to unexpectedly light yields of early varieties of apples and peaches.

Prices of farm products nationally and locally averaged about the same in the first seven months of this year as last, but farm cash income generally was larger than in the 1943 period, owing to increased sales of crops, livestock, and livestock products. In Pennsylvania, New Jersey, and Delaware receipts from the sale of farm products totaling more than \$450 million in the seven months ended July were about 6 per cent greater than in 1943, and the largest for the period in many years, according to Department of Agriculture estimates.

Primary distribution by rail in August remained at about the same high level of other recent months. Freight carloadings in this section on an adjusted basis showed gains in the movement of less than carlot merchandise, coal, and grain, which were approximately offset by declines in other commodity classifications. Total loadings in the first eight months were 6 per cent greater than in the same period of 1943, with the sharpest increases reported in the case of livestock, grain products, and solid fuels.

Wholesale trade sales increased somewhat from July to August, reflecting chiefly substantial gains in the case of shoes, hardware, jewelry, and paper. Dollar volume in the aggregate was slightly less than in August 1943, but 3 per cent greater in the first eight months this year than last. Inventories did not change significantly in the month, as increases in stocks of electrical supplies and groceries were largely offset by smaller holdings of dry goods, paper, and hardware. Stocks were larger than a year ago in all reporting lines except paper.

Retail sales in this district did not measure up to seasonal expectations in August. At department and women's apparel stores, dollar volume increased by a much smaller percentage than usual; sales by men's apparel stores, which ordinarily show a pronounced gain, remained at about the level of the preceding month; a sharp decline in sales reported by

shoe stores reflected in part the release of a considerable quantity of ration-free footwear during July. Increases over a year ago were substantial, ranging from 11 per cent at department stores to 24 per cent at establishments specializing in men's apparel. Sales by furniture stores rose 8 per cent in August, normally one of the largest months in point of retail volume, but they were somewhat smaller than a year earlier.

Inventories at retail establishments showed mixed changes from July to August and as compared with a year ago. At department stores stocks on an adjusted basis increased 9 per cent in the month to a little above the 1943 level; small declines were reported in August at women's apparel and shoe stores, with holdings in both lines less than a year ago. Inventories at furniture stores were somewhat larger than in July and showed an increase over August 1943, in spite of the fact that material and labor shortages have made it difficult to maintain a steady flow of merchandise.

REDEMPTION OF UNITED STATES SAVINGS BONDS BY BANKING INSTITUTIONS

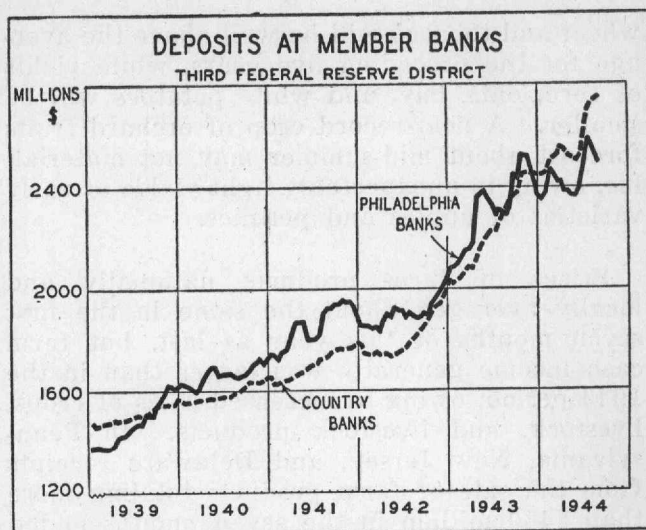
The Secretary of the Treasury has authorized incorporated banks and trust companies which qualify to redeem United States Savings bonds of Series A, B, C, D, and E, beginning October 2, 1944. Redemptions are to be made by qualified institutions, but only for individual owners or co-owners upon satisfactory identification, provided that the name has not been changed in any manner other than by marriage. In the case of Series E bonds, a period of two months from issue date must have elapsed. It is to be hoped that no holder of savings bonds will present his securities for redemption except in cases of absolute necessity. The new plan provides for immediate payment, so that it will be unnecessary to cash bonds well in advance of anticipated financial needs, some of which may never materialize or which may require a smaller amount of cash than had been expected. As investments, these bonds become increasingly valuable the longer they are held.

Banking conditions. Demand for bank credit to finance war production has been limited by advance and partial payments received on war contracts, the use of accumulated earnings, and deferment of tax payments to the year following that in which they accrue. Accordingly, while many of the business loans of member banks in this district were made to finance war operations, total commercial, industrial and agricultural loans on June 30 were only 7½ per cent of outstanding credit and some millions of dollars less than they were shortly before the opening of war in Europe. The volume of such loans may expand in the transition to peace.

Sufficient liquid working capital to meet the requirements of reconversion will not be universal; concerns with funds tied up temporarily in war receivables and inventories will have to be helped through bank credit, including T loans guaranteed through the Reserve Banks. Many banks, particularly in money centers, will be in fully invested positions, with reserves little above requirements, but their large portfolios of Governments assure their ability to increase reserves where necessary to meet the legitimate credit needs of their communities. At the mid-year, 72 per cent of the earning assets of member banks in this district were Government securities.

Recent developments at reporting banks in leading cities of the district have been typical of periods between loan drives. The moderate amount of credit extended to purchase or carry Government securities has been largely repaid. Over the four weeks ended September 20 adjusted demand and time deposits—largely balances of individuals, partnerships and corporations—increased \$82 million; but total deposits were carried down moderately by withdrawals from war loan accounts. Sales of Governments were more than sufficient to meet this decrease in deposits, resulting in somewhat larger reserves with the Federal Reserve Bank.

The reserves of all member banks in the dis-



trict increased \$37 million to \$678 million in the four weeks. Net payments to the Treasury came to about \$25 million, chiefly a result of heavy taxes in the final week, and a like amount of reserves was taken up in meeting the persistent demand for currency. Sharp gains in interdistrict commercial transactions, however, more than compensated for these operations. There was little net change in Reserve Bank credit extended locally; the volume of Treasury bills held under repurchase option reached the highest point of 1944 in the course of the period, but on September 20 was some millions of dollars lower than on August 23.

Total deposits of the country member banks in this district and those of members in Philadelphia were approximately equal at the outbreak of war in Europe. For a time country bank deposits tended to lag in the general expansion that was taking place, but this lag gave way to rapid growth over the past two years. In the last half of August their deposits averaged \$2¼ billion, as against \$2½ billion at the city banks. If customers' deposits alone are considered, country banks stand out even more; excluding war loan and interbank accounts, their deposits in August were close to \$2.5 billion, as compared to only \$1.7 billion at banks in Philadelphia.



BUSINESS STATISTICS

Production

Philadelphia Federal Reserve District

Indexes: 1923-5=100	Adjusted for seasonal variation						Not adjusted		
	Aug. 1944	July 1944	Aug. 1943	Per cent change			Aug. 1944	July 1944	Aug. 1943
				Aug. 1944 from mos. ago	1944 from mos. 1943				
					Year ago	Year ago				Year ago
INDUSTRIAL PRODUCTION	144p	147	150r	-2	-4	-1	144p	142	151r
MANUFACTURING	148p	152	154r	-3	-4	-1	147p	146	154r
Durable goods	225p	237	243r	-5	-8	-4			
Consumers' goods	94p	94	92r	-1	+3	+3			
Metal products	173	186r	173r	-7	0	+4	182	181r	182r
Textile products	71p	70	74	+2	-4	-4	67p	64	70
Transportation equipment	584	597	673r	-2	-13	-7	573	580	660r
Food products	124p	128	115r	-3	+8	+14	116p	119	117r
Tobacco and products	90	80	89	+12	+1	-17	96	86	95
Building materials	34p	34	37	-1	-9	-19	38p	37	42
Chemicals and products	163p	170	165	-4	-1	+5	164p	167	165
Leather and products	96p	105	101	-8	-5	-5	99p	95	104
Paper and printing	98	98	96	+1	+2	+3	96	95	94
Individual lines									
Pig iron	113	107r	124	+6	-9	-3	99	98r	109
Steel	135	151r	139	-10	-3	+1	138	137r	142
Silk manufactures	88	81	88	+9	0	+1	86	79	86
Woolen and worsteds	57p	62	59	-7	-2	0	58p	59	60
Cotton products	49	54	58	-9	-16	-19	44	47	53
Carpets and rugs	59p	56	51	+4	+14	+2	56p	54	49
Hosiery	80	81r	90	-1	-10	-11	70	66	78
Underwear	150	164	166	-8	-10	-9	140	136	155
Cement	27p	28	38	-4	-29	-43	33p	33	47
Brick	48	50	58	-3	-16	-19	50	48	60
Lumber and products	30	30	26	+2	+16	+13	33	33	29
Bread and bakery products				-1*	+11*	+10*	126	125	114
Slaughtering, meat packing	123	138r	120	-11	+3	+24	105	121r	102
Sugar refining	113	121r	98	-7	+14	+37	97	123r	85
Canning and preserving	161p	166	149r	-3	+8	+17	139p	132	167r
Cigars	89	79	88	+13	+1	-16	95	85	94
Paper and wood pulp	85	85r	86	0	-1	0	85	82	86
Printing and publishing	101	100	98	+1	+3	+4	98	97	95
Shoes	118	118	117	-1	0	-5	126	110	126
Leather, goat and kid	76p	91	86	-17	-12	-4	73p	80	83
Paints and varnishes	97	105	95	-8	+3	+5	99	98	97
Coke, by-product	171p	172	167r	0	+3	+6	168p	168	163r
COAL MINING	80	78r	84	+2	-5	+8	80	77r	84
Anthracite	77	74r	81	+4	-5	+7	77	74r	81
Bituminous	106	114r	112r	-7	-5	+9	100	101	105
CRUDE OIL	382	340	404	+12	-6	-11	382	340	404
ELEC. POWER—OUTPUT	442	434	424	+2	+4	+6	420	404	403
Sales, Total	442	444	444	0	-1	+7	420	417	422
Sales to industries	320	356	339	-10	-6	+8	330	363	349r
BUILDING CONTRACTS									
TOTAL AWARDS†	49	57	50	-14	-1	-53	48	52	48
Residential†	8	9	38	-12	-79	-64	9	10	42
Nonresidential†	87	91	65	-4	+34	-44	80	83	60
Public works and utilities†	99	120	42	-18	+133	-45	86	10r	37

* Unadjusted for seasonal variation.

† 3-month moving daily average centered at 3rd month.

p—Preliminary.

r—Revised.

Employment and Income

in Pennsylvania

Industry, Trade and Service

Indexes: 1932=100	Employment			Payrolls		
	Aug. 1944 index	Per cent change from		Aug. 1944 index	Per cent change from	
		July 1944	Aug. 1943		July 1944	Aug. 1943
GENERAL INDEX	131	0	-4	333	+2	+2
Manufacturing	183	0	-4	498	+2	+2
Anthracite mining	46	0	-9	92	+12	-1
Bituminous coal mining	76	-1	-8	359	+9	0
Building and construction	50	+2	-3	131	+2	+2
Quar. and nonmet. mining	85	-2	-17	264	+2	-22
Crude petroleum prod.	135	+1	-2	248	+1	+14
Public utilities	98	0	-3	148	-1	+5
Retail trade	105	-2	+1	148	-3	+2
Wholesale trade	104	0	-3	148	-1	0
Hotels	102	-1	+3	170	-1	+12
Laundries	103	-3	0	172	-5	+12
Dyeing and cleaning	97	-3	-1	153	-9	+3

Manufacturing

Indexes: 1923-5=100	Employment*			Payrolls*		
	Aug. 1944 index	Per cent change from		Aug. 1944 index	Per cent change from	
		July 1944	Aug. 1943		July 1944	Aug. 1943
TOTAL	118	0	-4	203	+2	+2
Iron, steel and products	128	0	-3	280	+1	+2
Nonferrous metal products	205	+1	+4	430	+2	+7
Transportation equipment	161	0	-9	298	+4	0
Textiles and clothing	79	0	-6	120	+4	0
Textiles	72	0	-6	112	+5	+1
Clothing	105	0	-8	159	+2	-1
Food products	127	+2	+6	193	0	+13
Stone, clay and glass	84	-1	-6	128	+4	+1
Lumber products	52	0	+1	87	+3	+10
Chemicals and products	117	0	-6	212	+1	+1
Leather and products	73	-1	-9	117	0	+2
Paper and printing	101	0	-1	149	+2	+3
Printing	94	0	+2	131	+1	+4
Others:						
Cigars and tobacco	52	0	-15	74	0	-8
Rubber tires, goods	147	0	+7	308	+2	+20
Musical instruments	85	-1	+1	171	+22	+17

* Figures from 2837 plants.

Local Business Conditions*

Percentage change—August 1944 from month and year ago	Factory employment		Factory payrolls		Building permits value		Retail sales		Debits	
	July 1944	Aug. 1943	July 1944	Aug. 1943	July 1944	Aug. 1943	July 1944	Aug. 1943	July 1944	Aug. 1943
	Allentown	0	-6	0	-1	-7	-80	+3	+11	-7	+1
Altoona	0	-2	+7	+5	+9	+223	+10	+29	+6	+31
Harrisburg	0	+1	0	+5	-93	-66	+4	+11	-6	-8
Johnstown	0	-5	-4	-1	+41	-6	+14	+35	+2	+16
Lancaster	-2	-3	-2	+3	-48	-16	+3	+3	-8	+30
Philadelphia	-1	-6	+1	+1	-32	-63	+3	+5	-5	0
Reading	0	-6	+6	-1	-46	+63	+2	+8	+4	+20
Scranton	+2	+18	+14	+43	+129	-97	+10	+26	0	+6
Trenton					+4	-70	+12	+22	-1	+2
Wilkes-Barre	+2	0	+11	+5	+41	+113	+3	+23	-2	+17
Williamsport	-1	-12	+1	-10	-56	-15			-7	-12
Wilmington	-2	-11	-4	-9	+167	+78	+6	+24	-14	+14
York	0	-6	+1	-2	-9	+31	0	+13	-8	+13

* Area not restricted to the corporate limits of cities given here.

Hours and Wages

Factory workers Averages August 1944 and per cent change from year ago	Weekly working time*		Hourly earnings*		Weekly earnings†	
	Average hours	Ch'ge	Average	Ch'ge	Average	Ch'ge
	TOTAL	45.5	+1	\$1.065	+6	\$48.17
Iron, steel and prods.	46.8	+1	1.125	+4	52.68	+5
Nonfer. metal prods.	45.3	0	.978	+4	44.34	+4
Transportation equip.	47.9	+1	1.262	+10	60.38	+11
Textiles and clothing	39.9	+1	.766	+7	30.45	+8
Textiles	41.0	+1	.787	+6	32.26	+7
Clothing	37.1	-1	.712	-8	26.64	-9
Food products	43.8	+3	.799	+3	35.31	+6
Stone, clay and glass	41.4	+3	.913	+4	37.68	+7
Lumber products	44.6	0	.773	+6	34.20	+6
Chemicals and prods.	46.1	+4	1.061	+3	48.87	+7
Leather and prods.	42.0	+4	.758	+7	31.98	+12
Paper and printing	43.8	+1	.905	+4	39.84	+5
Printing	41.0	+1	1.047	+2	42.91	+3
Others:						
Cigars and tobacco	41.4	0	.624	+8	25.84	+8
Rubber tires, goods	45.0	+3	1.036	+10	46.62	+13
Musical instruments	51.5	+5	1.014	+10	52.21	+15

* Figures from 2689 plants.

† Figures from 2837 plants.

Distribution and Prices

Wholesale trade Unadjusted for seasonal variation	Per cent change		
	August 1944 from		1944 from
	Month ago	Year ago	8 mos. 1943
Sales			
Total of all lines.....	+ 4	- 1	+ 3
Boots and shoes.....	+44	+32	.....
Drugs.....	+ 2	- 2	- 2
Dry goods.....	+ 4	-12	- 2
Electrical supplies.....	+ 2	+20	- 6
Groceries.....	- 4	- 3	+ 7
Hardware.....	+12	0	+ 5
Jewelry.....	+18	-12	+ 1
Paper.....	+13	-13	+11
Inventories			
Total of all lines.....	0	+ 7	.....
Dry goods.....	- 9	+ 9	.....
Electrical supplies.....	+ 7	+23	.....
Groceries.....	+ 5	+ 8	.....
Hardware.....	- 1	+ 4	.....
Paper.....	- 2	-14	.....

Source: U. S. Department of Commerce.

Prices	Aug. 1944	Per cent change from		
		Month ago	Year ago	Aug. 1939
Basic commodities (Aug. 1939=100).....	182	0	+ 3	+ 82
Wholesale (1926=100).....	104	0	+ 1	+ 39
Farm.....	123	- 1	- 1	+101
Food.....	105	- 1	- 1	+ 56
Other.....	99	0	+ 2	+ 23
Living costs (1935-1939=100).....				
United States.....	126	0	+ 2	+ 28
Philadelphia.....	126	0	+ 2	+ 28
Food.....	136	+ 1	+ 1	+ 46
Clothing.....	139	0	+ 7	+ 41
Rent.....	107	0	0	+ 4
Fuels.....	109	0	+ 3	+ 13
Housefurnishings.....	138	0	+11	+ 37
Other.....	120	0	+ 4	+ 19

Source: U. S. Bureau of Labor Statistics.

Indexes: 1935-1939=100	Adjusted for seasonal variation						Not adjusted		
	Aug. 1944	July 1944	Aug. 1943	Per cent change			Aug. 1944	July 1944	Aug. 1943
				August 1944 from	1944 from	8 mos. 1943			
				Month ago	Year ago	1943			
RETAIL TRADE									
Sales									
Department stores—District.....	160p	174	144r	- 8	+11	+ 8	125p	120	112
Philadelphia.....	143	165	138r	-13	+ 3	+ 6	107	105	102
Women's apparel.....	160p	192	143r	-17	+11	+10	126p	108	113r
Men's apparel.....	133	146	108	- 9	+24	+ 2	97	97	79
Shoe.....	129	163	120	-21	+ 7	- 3	106	126	98
Furniture.....	.....	.....	.....	+ 8*	- 2*	.....	.....	.....	.....
Inventories									
Department stores—District.....	177	161	172	+ 9	+ 2	.....	160	139	156
Philadelphia.....	178	156	175	+14	+ 2	.....	158	134	156
Women's apparel.....	209p	219	218r	- 5	- 4	.....	203p	165	211r
Shoe.....	84	87	98	- 3	-14	.....	83	75	97
Furniture.....	.....	.....	.....	+ 5*	+ 6*	.....	.....	.....	.....
FREIGHT-CAR LOADINGS									
Total	149	150	148	- 1	0	+ 6	151	153	150
Merchandise and miscellaneous.....	133	138	134	- 3	- 1	+ 3	137	138	138
Merchandise—l.c.l.....	90	87	88	+ 4	+ 2	+ 4	90	87	88
Coal.....	176	166	169	+ 6	+ 4	+15	160	158	154
Ore.....	195	215	201	- 9	- 3	+ 6	290	322	299
Coke.....	214	233	216	- 8	- 1	+10	199	214	201
Forest products.....	103	120	108	-14	- 5	+ 6	125	134	131
Grain and products.....	137	122	128	+12	+ 7	+13	133	164	124
Livestock.....	137	171	135	-20	+ 2	+21	132	147	130
MISCELLANEOUS									
Life insurance sales.....	118	122	116	- 3	+ 2	+15	99	116	97
Business liquidations	.....	.....	.....	.....	.....	.....	.....	.....	.....
Number.....	.....	.....	.....	-37*	-54*	-69*	7	12	16
Amount of liabilities.....	.....	.....	.....	-67*	-80*	-86*	3	10	17
Check payments.....	176	187	178r	- 6	- 1	+ 9	157	178	158

* Computed from unadjusted data. p—Preliminary. r—Revised.

BANKING STATISTICS

MEMBER BANK RESERVES AND RELATED FACTORS

Reporting member banks (Millions \$)	Sept. 20, 1944	Changes in—	
		Four weeks	One year
Assets			
Commercial loans.....	\$ 242	+\$ 4	-\$ 1
Loans to brokers, etc.....	35	- 1	- 4
Other loans to carry secur.....	13	- 1	+ 2
Loans on real estate.....	37	.....	- 7
Loans to banks.....	3	+ 1	- 2
Other loans.....	103	.....	- 2
Total loans.....	\$ 433	+\$ 3	-\$ 14
Government securities.....	\$1671	-\$41	+\$163
Obligations fully guar' teed..	62	+ 7	- 10
Other securities.....	157	- 5	- 32
Total investments.....	\$1890	-\$39	+\$121
Total loans & investments.	\$2323	-\$36	+\$107
Reserve with F. R. bank.....	398	+ 22	- 15
Cash in vault.....	27	- 1	- 1
Balances with other banks.....	73	- 5	- 12
Other assets—net.....	51	- 6	- 10
Liabilities			
Demand deposits, adjusted..	\$1677	+\$80	+\$139
Time deposits.....	186	+ 2	+ 24
U. S. Government deposits.....	398	-120	- 99
Interbank deposits.....	362	+ 12	- 8
Borrowings.....	.....	- 2	.....
Other liabilities.....	17	+ 1	+ 4
Capital account.....	232	+ 1	+ 9

Third Federal Reserve District (Millions of dollars)	Changes in weeks ended—				Changes in four weeks
	Aug. 30	Sept. 6	Sept. 13	Sept. 20	
Sources of funds:					
Reserve Bank credit extended in district.....	+16.8	- 9.1	+ 7.8	-17.9	- 2.4
Commercial transfers (chiefly interdistrict).....	+ 0.5	+21.1	+15.0	+53.0	+89.6
Treasury operations.....	+ 0.2	- 2.7	+ 3.1	-25.8	-25.2
Total.....	+17.5	+ 9.3	+25.9	+ 9.3	+62.0
Uses of funds:					
Currency demand.....	+ 5.7	+10.1	+ 5.8	+ 4.1	+25.7
Member bank reserve deposits.....	+12.7	- 0.7	+19.5	+ 5.3	+36.8
"Other deposits" at Reserve Bank.....	- 1.0	- 0.3	+ 0.6	- 0.2	- 0.9
Other Federal Reserve accounts.....	+ 0.1	+ 0.2	- 0.0	+ 0.1	+ 0.4
Total.....	+17.5	+ 9.3	+25.9	+ 9.3	+62.0
Member bank reserves (Daily averages; dollar figures in millions)	Held	Re- quired	Ex- cess	Ratio of excess to re- quired	
Phila. banks					
1943: Sept. 1-15.....	\$411	\$388	\$23	6%	
1944: Aug. 1-15.....	357	349	8	2	
Aug. 16-31.....	361	353	8	2	
Sept. 1-15.....	372	364	8	2	
Country banks					
1943: Sept. 1-15.....	280	208	72	35	
1944: Aug. 1-15.....	284	226	58	26	
Aug. 16-31.....	287	231	56	24	
Sept. 1-15.....	296	238	58	24	
Federal Reserve Bank of Phila. (Dollar figures in millions)					
Discounts and advances.....	\$ 2.2	-\$ 3.0	+\$ 1.6		
Industrial loans.....	4.1	- 0.1	- 0.4		
U. S. securities.....	1129.2	+ 7.8	+ 499.8		
Total.....	\$1135.5	+\$ 4.7	+\$501.0		
Note circulation.....	1324.0	+ 28.7	+ 272.7		
Member bk. deposits.....	678.1	+ 36.8	+ 4.2		
U. S. general account.....	34.6	- 0.4	+ 9.8		
Foreign deposits.....	126.8	+ 0.7	+ 21.3		
Other deposits.....	5.9	- 0.9	- 1.9		
Total reserves.....	1041.3	+ 57.7	- 191.8		
Reserve ratio.....	48.0%	+ 1.3%	- 18.2%		