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THE SHOE INDUSTRY AND EIGHTH DISTRICT DEVELOPMENT

Eighth District participation in national economic expansion reflects in part the continuing adaptation of district resources to effective provision of goods and services for other areas. Important among these "out-flows" of district commodities are the products of the shoe industry.

The input-output structure of the shoe industry provides a basis for understanding the history of the industry and the present concentration of plants in this area. Contrasted with the rest of the nation, district shoe production displays certain differences in output, distributive practices, inputs, and plant size. In general these differences accrue to the advantage of the district.

The domestic market for shoes and the foreign market do not promise rapid growth prospects for the industry as a whole. Nevertheless, the district shoe industry may be expected to remain active and important in further district development.

Eighth District participation in national economic expansion . . .

During the decade 1940-50 the United States experienced tremendous economic expansion. The population grew by more than 20 million persons. Unemployment was reduced to a virtual minimum. Physical output of goods and services increased over 50 per cent.

In that ten year period the nation was faced with the task of repeated large-scale shifts in resource use. It converted once to wartime output, then went back to a predominantly civilian economy, and then again shifted to a state of defense mobilization. These shifts occasioned some major economic problems (particularly inflationary problems) but on the whole the transitions were relatively smooth, testifying to the flexibility and adaptability of our industrial plant and equipment and our labor force as well as to the abundance and variety of our resources.

As an integral part of the national economy, the Eighth Federal Reserve District has contributed its energies and resources to the national effort.* The effectiveness of this contribution is reflected in the development of the district economy during this past decade. The \$3.8 billion district income in 1940 increased by 194 per cent to \$11 billion in 1950. As a consequence the district's share of national income payments rose to 5.1 per cent. Per capita income in the region in 1950 was \$1,055. Manufacturing payrolls grew by 234 per cent and the proportion of total district income earned in manufacturing industries rose from 15 per cent in 1940 to 18 per cent in 1950. Thus the district fully participated in the general expansion.

. . . reflects in part the continuing adaptation of district resources to effective provision of goods and services for other areas.

Ten and one-half million persons reside within the boundaries of the Eighth District. Cut off from all trade with the rest of the world these people could not maintain existing levels of living. Functioning as a completely interdependent part of a larger economy they are able by appropriate utilization of resources at their disposal to achieve an increasing standard of living. This pattern of resource utilization in the district necessarily tends to change over time as the structure and needs of the economy as a whole undergo change. And as district resources become ever more effectively adapted to the requirements of the nation, both district and nation

benefit. That the district has participated so fully in national income growth is evidence of the adaptability of district resources and the increasingly important role played by these resources in the national effort.

As an area experiences economic development the nature of its interdependence with the rest of the world undergoes change. An increasing standard of living will be accompanied by an increasing volume and variety of inflows of commodities and services—to service and supply the growing productive plant of the area as well as to supply consumers. Similarly growing development will be recorded in a greater volume and variety of outflows provided in exchange. Thus this interdependence may be visualized as a two-way flow of commodities and services.

Important among these "outflows" of district commodities are the products of the shoe industry.

Shoe manufacturing has long represented an important link in the chain of interdependence binding this area to the rest of the world. It serves as an illustration of the importance of analyzing district development in terms of its contribution to a larger economy.

Shoe production in the United States for many years has been concentrated in nine states whose combined production currently accounts for almost nine-tenths of annual shoe output. These states (Maine, New Hampshire, Massachusetts, New York, Pennsylvania, Ohio, Wisconsin, Illinois and Missouri) combine into five major regional producing centers: The New England area (about 30 per cent of total output), the New York area (about 17 per cent), the Pennsylvania-Ohio area (about 12 per cent), the Chicago-Wisconsin area (about 9 per cent), and the St. Louis area around which Eighth District shoe production is centered (about 18 per cent).

Figures on district shoe production and consumption illustrate the "export" nature of the district's shoe industry. Estimated Eighth District expenditure on shoes in 1947 was about \$91 million at factory value (at retail value this consumption is around \$151 million). Shoe production in the district for the same year amounted to about \$356 million. If district residents had consumed only shoes manufactured in the area, the volume of shoe outflows to the rest of the nation and the world would have been \$265 million or about 74 per cent of the total value of products. In fact, of course, a substantial volume of shoes sold in the district was manufactured elsewhere, hence total

*This article is the first of a series of Eighth District industry studies developed through input-output analysis. The lead article in the August, 1951 *Review* gave some background of theory and technique for such analysis.

outflow of district manufactured shoes was somewhat greater than 74 per cent of total production.

The input-output structure of the shoe industry . . .

It is what we buy and sell outside the district that links economically this area to other regions. These inflows and outflows binding the area to the rest of the economy are in reality inflows and outflows to and from specific activities within the area, namely, the industries and households. Just as a knowledge of the important inflows and outflows of goods and services to a region aid in isolating those economic forces likely to have the greatest impact on the area, so does an analysis of the input-output structure of an industry aid in understanding its reaction to changing economic circumstances. The inputs (purchases or cost items) and outputs (products) are the links connecting the industry to the rest of the economy and the lines of communication by which economic change is relayed from industry to industry.

Chart I is a condensed picture of the input-output structure of the shoe industry. The most important economic forces influencing the shoe industry through its output connections with the rest of the economy have been all of those forces affecting household demand for shoes. Military demand and foreign trade historically have been relatively unimportant. On the input side, factors affecting leather supply and labor input have had the greatest impact on the shoe industry.

Chart I is a generalization for the entire shoe industry; it depicts average relationships for the industry as a whole. In actual fact, of course, the importance of the various items varies both as to kind of shoes (men's shoes, women's, etc.) and as to type of shoe construction. As an obvious example, the proportion of women's shoe output going to the military is naturally much smaller than that of men's shoes, while the proportion of women's shoes going to foreign trade (exports) is larger than that for men's shoes. Similarly, labor input items vary in importance among types of shoes depending upon the level of skill required and the number of manual operations. For all types and kinds of shoes, however, the labor and leather inputs are by far the most important input (or cost) items. A considerable part of the history of the shoe industry can be explained in terms of the effort to effect savings on these particular cost items.

. . . provides a basis for understanding the history of the industry . . .

The fact that there are two major cost items, labor and leather, has led to locational shifts in

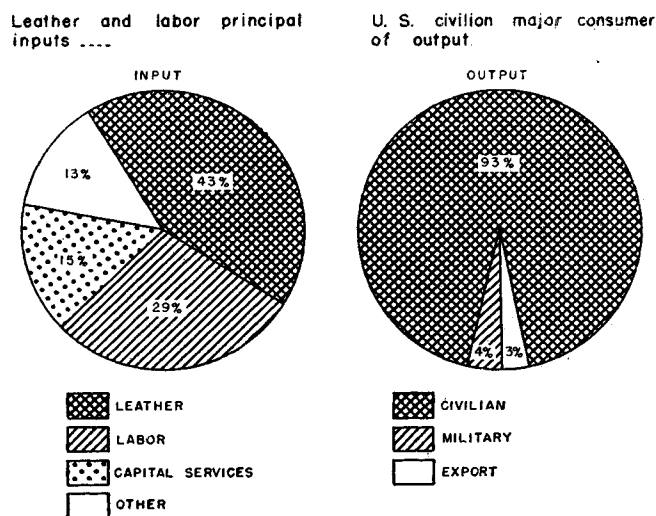
shoe manufacturing in order to minimize these costs. While other cost items are of some importance, and other things being equal may influence a locational decision the historical economic forces operating on the shoe industry via the labor and leather inputs seem to have played the major role.

During the latter half of the nineteenth century several important developments occurred in the shoe industry, in allied industries, and in the economy as a whole that were of great significance for the growth of shoe manufacturing in this district.

Prior to 1860 and the invention of shoe machinery the labor input for shoe manufacturing consisted largely of skilled labor, with some apprentice labor specializing in making parts of shoes. Shoe manufacturing was not yet concentrated in factories and much labor was performed in the home as a spare time occupation. Shoe production was almost completely concentrated in New England, particularly Massachusetts. The leather input came largely from East Coast sources where the supply of organic tanning materials, derived largely from hemlock, oak, and chestnut bark, was still adequate. Hide imports from Europe were handled chiefly at New York and Boston. The market for the industry's output was also concentrated along the East Coast and was accessible for the most part through cheap water transportation.

The growth of railroads in the Midwest opened vast new areas for settlement and gave impetus to an already strong westward population movement. This development affected the shoe industry via its output relationships with the rest of the economy. The expanding market in the West produced a growing attraction for new industry. At the same time the reduction in cost of overland transporta-

CHART I



tion of the finished product and the absence of a supply of skilled labor prevented any large-scale attempt to reduce input cost by shifting operations to the West at that time.

The invention of shoe machinery in 1860 marked the beginning of the transition of shoe manufacturing from a craft industry to an assembling industry. Shoe machinery enabled the substitution of unskilled labor inputs for higher priced skilled labor in a number of important processes. There was a growing supply of unskilled labor in the expanding West. This substitution permitted a reduction in shoe prices and a consequent expansion of the market, particularly for cheap shoes. Technological change thus enabled the resources of the growing area to be adapted to new uses. The pattern of the area's interdependence was changing.

At about the same time the supply of tanning material in the East was becoming depleted, forcing leather tanners westward into new forest areas and increasing the cost of the leather input to Eastern shoe producers. The Midwest was becoming an increasingly important source of hide supplies, a factor further reducing the cost of the leather input to Midwestern manufacturers.

The development of new tanning processes in the latter part of the nineteenth century, such as the use of quebracho extract and non-organic agents, liberated the tanning industry from its dependence on local forest products and encouraged a shift in hide tanning toward the stockyard cities of the Midwest. Thus, technological change in an industry supplying one of its inputs also encouraged the westward shift of the shoe industry.

The first shoe manufacturing plant in St. Louis was established in 1870. By 1900 Missouri and Illinois together were producing 6.6 per cent of total shoe output. The output, however, was distinctly different in quality from Eastern production. Midwestern producers specialized in heavier work shoes and inexpensive shoes, partly because of the nature of the local market and partly because of the unskilled quality of their labor.

As the nation continued its rapid industrial expansion, certain other forces encouraged the growth of shoe manufacturing in the Middle West. The large industrial areas of the East with their available supply of skilled labor were strongly attractive to new high-productivity manufacturing industries and the pressure on wage levels was steadily upward. The development of shoe machinery had given the industry considerable mobility, both because of the system of leasing machinery on a royalty basis made capital requirements low and

new entry relatively easy and because of reduced dependence on the presence of a skilled labor supply.

TABLE 1
MIDWEST PRODUCES INCREASING SHARE OF
NATION'S OUTPUT

Shoe Production Percentage Distribution by States	1899	1909	1919	1929	1939	1949
Massachusetts	45.3	46.1	38.3	25.0	19.5	17.0
Maine	4.8	3.0	4.2	4.0	6.8	6.0
New Hampshire	9.0	7.7	6.4	6.9	9.0	8.0
New York	9.9	9.4	16.5	19.6	16.6	18.0
Ohio	6.9	6.2	6.2	5.3	4.1	4.0
Pennsylvania	5.1	3.9	5.7	4.3	7.7	8.0
Illinois	3.6	3.3	3.4	7.6	7.5	7.0
Missouri	4.4	9.5	9.5	13.8	11.5	14.0
Wisconsin	1.8	2.7	3.8	5.7	3.9	4.0
Other States	9.2	8.2	6.0	7.8	13.4	14.0
United States	100.0	100.0	100.0	100.0	100.0	100.0

The development of better means of transportation, faster rail service and the advent of trucks, made possible large shipments over long distances at relatively low rates. These developments were reflected in the shift of shoe manufacturing out of urban areas to rural areas where wage levels were lower. The shift to the Midwest after 1900 was largely of this nature. In 1900 approximately 73 per cent of the shoe production in Missouri was located in St. Louis. By 1933 the establishment of new plants in rural areas had reduced this proportion to 23 per cent.

... and the present concentration of plants in this area.

Already noted is the fact that one of the major shoe producing areas of the country is centered around St. Louis. According to the last Census of Manufacturers, over 140 plants, employing a total of 47,000 persons, are located in the Eighth District. Some indication of the relative specialization of the area's resources in shoe production is indicated by the fact that 7 per cent of district manufacturing employment is accounted for by shoe production, while only 1.6 per cent of all manufacturing employment in the nation is so engaged. Of all manufacturing employees in the nation in 1947, only 4.5 per cent were residents of the district, whereas 21 per cent of shoe manufacturing employment was here. Wages and salaries paid to shoe workers in this district totaled \$92 million in 1947, or 19 per cent of all wages and salaries in the industry.

Contrasted with the rest of the nation, district shoe production displays important differences in output . . .

The current output of the district shoe industry differs considerably from that of the early years of its development. Previous specialization in cheap

and heavy shoes has given way to a tendency to produce relatively expensive shoes. The average value per pair of shoes produced in this area is about 32 per cent greater than that for shoes produced elsewhere. In the first quarter of 1951 Illinois and Missouri together produced about 18 per cent of the total pairs of shoes made in the nation, but about 23 per cent of the total value. The higher price and quality shoes produced in Missouri are mostly from the St. Louis area proper; the rural plants tend to concentrate on lower quality shoes. Massachusetts' early specialization in quality shoes yielded during the 'thirties to the production of popular priced and inexpensive shoes. Average price per pair is the highest for shoes produced in Wisconsin; New York produces the cheapest shoes on the average.

Of the total number of shoe plants located in the district, over 65 per cent are situated in Missouri. Of these, more than half are engaged entirely in the production of women's shoes, about 16 per cent specialize in men's shoes, 11 per cent produce misses' and children's shoes, 8 per cent youths' and boys' shoes, and 8 per cent are general line plants. The remainder produce infants' shoes and other types. For the nation as a whole, the corresponding percentages are 35 per cent women's, 16 per cent men's, 9 per cent misses' and children's, 3 per cent youths' and boys', and 16 per cent general line.

TABLE 2
SHOE INDUSTRY DISPLAYS REGIONAL SPECIALIZATION . . .
(Percentage State and National Shoe Output by Kind)

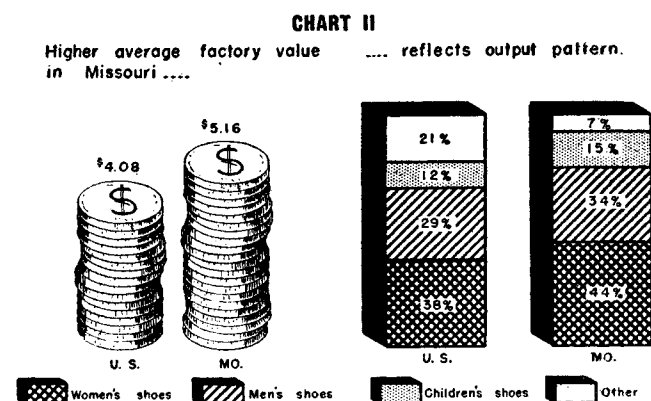
	Mens	Youths and Boys	Womens	Misses and Childrens	Other	Total
Illinois	23.5	4.1	27.9	11.5	33.0	100.0
Maine	20.6	0.9	62.4	2.9	13.2	100.0
Massachusetts	34.2	2.5	42.8	2.1	18.4	100.0
Missouri	33.7	5.9	44.1	8.9	7.4	100.0
New Hampshire	36.4	3.8	52.5	2.1	5.2	100.0
New York	27.1	5.1	20.9	12.5	34.4	100.0
Pennsylvania	11.9	3.8	27.5	21.4	35.4	100.0
Wisconsin	65.4	2.4	14.7	12.0	5.5	100.0
Other States	25.8	1.8	44.1	8.1	20.2	100.0
United States	29.6	3.5	37.6	8.5	20.8	100.0

. . . AND CONCENTRATION

	Percentage of United States Production	No. of Plants		Percentage of United States Production	No. of Plants
United States	100	100	Pennsylvania	8	8
District	21	11	Illinois	7	4
New York	18	19	Maine	6	5
Massachusetts	17	26	Ohio	4	3
Missouri	14	9	Wisconsin	4	4
New Hampshire....	8	5	Other States	14	17

Table 2 indicates the relative proportions of the various kinds of shoes produced by each of the nine leading states and by the nation as a whole in 1942. Each state showed a tendency to specialize

in production of certain kinds of shoes and in some the specialization was pronounced. Missouri production emphasized both men's and women's shoes.



. . . distributive practices . . .

Following World War I the distribution of shoes through wholesalers and jobbers largely was replaced by distribution direct to retail outlets. Increasing importance of and unpredictable changes in style, plus growing product differentiation in a highly competitive industry, laid stress on the importance of quick and direct access to the market. By 1935 the once important wholesale channels accounted for only 4.6 per cent of total manufacturers' sales.

Associated with these tendencies was a consequent increase in the sensitivity of manufacturing output to consumer sales. The risk of substantial inventory loss due to a sudden style change increased the seasonal fluctuations in the industry, particularly in the production of women's shoes. These pressures on manufacturers gave rise to two tendencies which became particularly strong during the 'thirties. First, many manufacturers combined with large distributors, and second, chain stores, mail order houses, and department stores became the most important outlets for shoe distribution. These developments were largely at the expense of independent retail stores.

Distributive practices for shoe manufacturers in the district differ somewhat from those for the rest of the nation. Most of the modern large-scale distributive techniques were initiated and developed by larger firms to whom national distribution is important for the maintenance of a sales volume requiring multiple plant operation. Such firms are relatively more concentrated in this area than in the East. The result is that there are more plants in the district producing factory brands and distributing through owned chain outlets or independent chains than in the East.

In 1950, five out of the six leading women's shoe advertisers, four out of ten leading men's advertisers, and the first five children's advertisers were St. Louis branded lines. Nearly half of the branded lines made in this country are manufactured in this area. This feature of local shoe distribution holds important implications for the stability of the industry in this area, and will be discussed at a later point.

... inputs ...

The most important differences in inputs (costs) between the local shoe industry and shoe manufacturing in other areas seem to be those occasioned by differences in wage rates. While precise comparisons are difficult to make since wage rates vary widely among employees in the same plant and among plants in the same area, general indications are that district wage rates are somewhat lower than those for comparable occupations in other areas. For example, analysis of wages for 23 different occupations in women's shoe manufacturing showed that hourly earnings in the district were the lowest among the principal shoe producing regions. Wage rates in the St. Louis area proper were somewhat higher than in the rest of the district, however. This reflects in part alternative employment possibilities, in part the higher degree of skills found in the city, and in part the higher cost of living in a metropolitan area.

Lower wage rates, of course, do not necessarily mean lower labor costs. The combination of wage rates and labor productivity must be considered in this connection. Evidence that lower wage rates in the area do not imply lower than average productivity tends to be shown by the fact that wage costs as a per cent of total costs are lower in the district than for the nation as a whole. For the entire shoe industry the labor input cost as a per cent of total value of output is roughly 29 per cent. For this region the equivalent ratio is in the neighborhood of 26 per cent.

The cost of the leather input as a per cent of total value of output is somewhat higher for the shoe industry in this district than the national average, 45 per cent as against 43 per cent. Generally speaking, this may be attributed to regional differences in the product mix—types and kinds of shoes produced.

Transportation charges on leather are relatively small, averaging only about 1.18 per cent of the wholesale value at destination for all rail shipments in 1941. While subsequent alterations in rate structure relative to leather prices may have changed

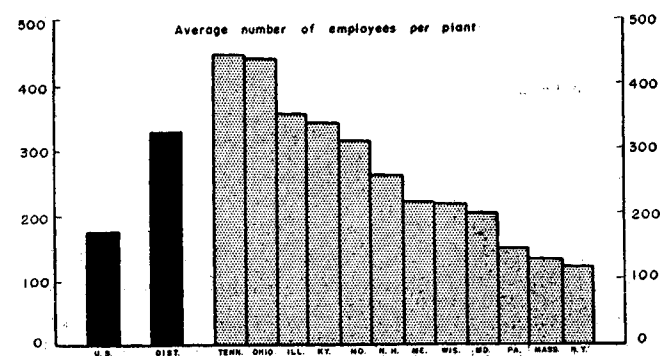
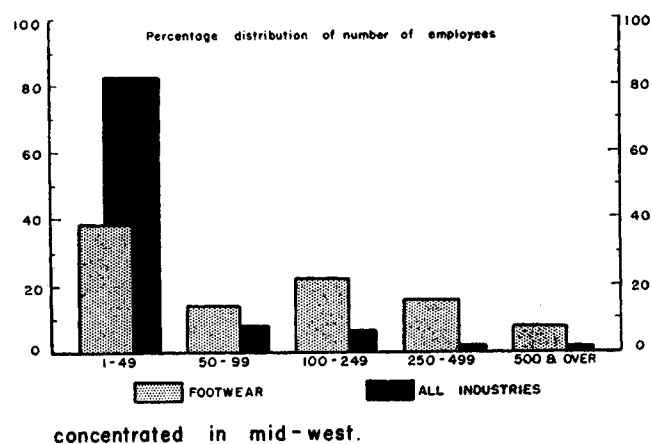
this figure somewhat, the differential in transportation charges for this area as against other areas still is not substantial.

The out-of-pocket expense of machinery to the user is not differentiated on a regional basis. As noted, shoe machinery generally is leased to manufacturers. To a large extent these machinery charges represent variable costs to the industry since the lease arrangement is usually on a royalty or per unit-of-output basis. To the degree that machines may be more effectively utilized in one area than in another, however, there may be some variation in machinery costs.

Power rates in general are lower in this area than in other shoe producing centers, particularly relative to those in New England. This fact largely explains a lower ratio of electricity costs to value of output for producers in the district. However, since total electricity charges represent less than $\frac{1}{2}$ of 1 per cent of value of output, a differential in this cost item is not significant in itself. The input ratio of electricity value to total value of output in this area is about half of the industrywide average.

CHART III

Shoe plants larger than average industry



. . . and plant size.

The shoe industry has displayed a marked long run trend toward an increasing size of plant, as measured by employees per plant. In 1900 the average number of workers per plant was about 90. In 1947 the average establishment employed about 178 persons. Chart III compares the average size of plant in the shoe industry with that for all other industries, and indicates that the average shoe manufacturing plant tends to run larger than the average plant for all manufacturing combined.

There are, however, important regional differences in plant size. Newer plants tend to be larger than older plants. Thus areas most recently attractive to the industry tend to have larger size plants. Chart III contrasts the average size of plant in the important producing states in 1947. It is clearly evident that the states with a younger age distribution of plants have significantly larger establishments. In Missouri the average plant employed 315 persons; in Illinois, 342. For the Eighth District as a whole there were about 330 people at work in an average shoe plant.

In general these differences accrue to the advantage of the district.

The characteristic features of the district shoe industry have been noted as: (1) on the output side—higher-than-average price and quality shoes, greater concentration in women's shoes, and larger scale distributive techniques; and (2) on the input side—lower-than-average labor and power costs, higher leather costs, and larger plant size. They contain in sum certain implications for the outlook for district shoe producers. On the debit side of the account the specialization in relatively expensive shoes and in quality women's shoes makes district shoe production sensitive to style change and introduces a tendency toward strong seasonal fluctuations into the output rate. In addition the higher-than-average price per pair makes for sensitivity to any consumer shift to lower price shoes.

Since the first quarter of this year the shoe industry as a whole has suffered from some softening in the market. The national index of shoe production has gone off since January with output down about 3 per cent from last year's level. District production as a percentage of national production has declined, largely due to the more severe effects of the slack market on district producers than on those in other areas. Commonly associated with an over-all decline in shoe expenditures is a marked shift to lower price and lower quality shoes, particularly in women's shoes. Under exist-

ing circumstances this may well be only a relatively short run phenomenon. If national income continues to rise and with it, real income, a strengthening of the market may be expected. In a stable high level economy the district product mix is well adapted to serve the rest of the nation.

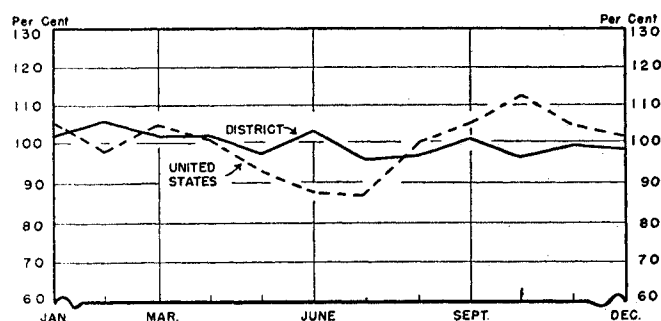
On the credit side there are a number of favorable aspects which encourage belief in the long-run stability of the district shoe industry. Because of the central geographic location, shoe manufacturers located in the district enjoy a favorable freight cost differential on the finished product over other areas to the East, particularly New England, in serving a national market. The advantage is further heightened as the consuming market shifts further West.

In contrast with eastern production centers, district production is dominated by large-scale multi-plant manufacturers. Past experience has indicated that such firms generally fare better during short-run recessions than the smaller firms. The shoe industry is characteristically a highly competitive industry. Relatively low capital requirements encourage an unusual degree of freedom of entry. The result is a great many small firms, in some cases dangerously undercapitalized, competing for a relatively small share of the total shoe business. In an industry where frequently over half of the firms engaged in production report losses, such small firms add a strong element of potential instability.

Experience has also shown somewhat more stability of operation on the part of those firms producing factory brands, producing for stock, and selling through chain stores. These operations are all characteristic of large firms and again more characteristic of district operations than of operations for the country as a whole. Such factors aid in offsetting the sharply seasonal nature of quality women's shoe production. District shoe production actually shows less seasonal variation than the shoe industry as a whole.

CHART IV

Reduced seasonal fluctuations characterize district output.



The larger average size of plant in the district is nearer to the optimum size plant than the average size for the nation as a whole. In general this means more efficient operations, lower costs, and a better competitive position for district producers.

As industrial development in the district continues and income from manufacturing grows, the wage rate differential between urban areas and metropolitan centers in this district and similar areas in other parts of the country may be expected to decrease. However, since many of the shoe plants in this area are located in rural surroundings where the primary alternative source of employment is in agriculture, the disappearance of the existing wage differential may be very gradual.

On balance it would appear that the structure of the district shoe industry is well adapted to district resources, and that the industry will continue to distribute effectively the products of district resources to other areas. The question remains, however, what is the role of the industry in future economic development for this area? Can any significant expansion of shoe output in this area be anticipated?

The domestic market for shoes . . .

Total shoe production in the nation in 1950 (485 million pairs) was about one-third greater than output (361 million pairs) in 1929. Peak production (529 million pairs) in 1946 was 57 per cent more than in 1929. In contrast total industrial output in the United States in 1950 was up 82 per cent from 1929. Over the 21 year period, per capita consumption of shoes in the United States increased from 2.9 pairs to 3.2 pairs per year, about

10 per cent. The balance of the gain reflected population increase. Thus, while both increased per capita consumption and increased population are important factors in domestic demand for shoes, the major expansive element has been population growth.

During the war years total military expenditures on shoes never accounted for more than 11 per cent of total shoe production. The combined purchases of the armed services over the four year period 1942 through 1945 totaled about 9 per cent of production. Current military purchases of shoes amount to about 3 per cent of total output.

Thus there seems to be little likelihood of greater-than-average expansion of the domestic shoe market in the foreseeable future. Per capita consumption changes slowly. There should be increases from continued population gain, but the relative growth of the shoe industry is not likely to be rapid. As real income increases, however, there may be an increasing shift to higher quality shoes. And at the same time it is important to note that a continued period of high level output for the national economy is likely to insure a more stable market than has been the case in the past.

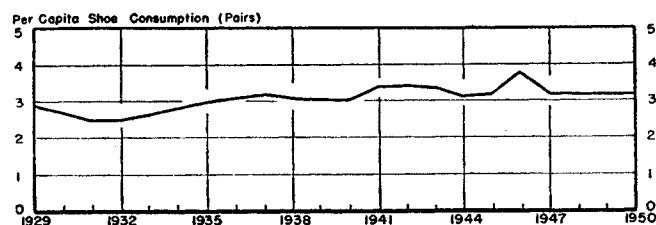
. . . and the foreign market . . .

American shoe exports have never constituted an important market for the shoe industry as a whole. In 1950 exports amounted to only 2.5 per cent of total domestic production and this was four times the proportion exported in 1938. Exports reached unusually high levels during the war and immediate postwar years as American shoe producers were called upon to supply markets usually supplied by foreign producers. There were 13.3 million pairs of shoes exported in 1946. By 1950 this figure had declined to around 3.7 million pairs. As foreign production continues to grow, European producers continue to recover their prewar markets. And as an increasing number of countries impose restrictions on shoe imports, total United States exports seem likely to get smaller rather than larger.

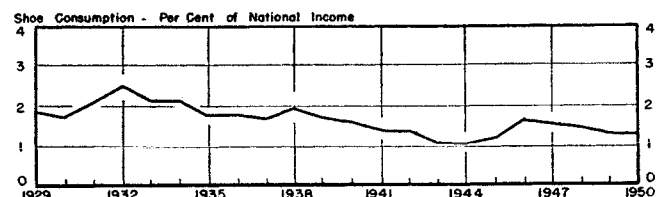
The shifts in the pattern of American exports which have taken place since 1939 are of particular significance for this area. Prior to World War II the leading markets for United States shoe exports were the United Kingdom, Canada, and Cuba. These three countries accounted for 60 per cent of the market for shoe exports from this country. During the war years the Netherlands, U.S.S.R., and Belgium-Luxembourg were the principal importers of American shoes. In 1950, following five years of European recovery, the principal markets

CHART V

Shoe expenditures move with population ----



---- and are a slightly declining portion of national income.



for American shoe exports were in the Western Hemisphere, rather than in Europe.

Table 3 illustrates the shifts that have taken place. It is interesting to note that there is practically no market for American shoes in South America, but a fairly substantial market in the Central American countries and Mexico. It is this group of nations whose demand for United States shoes is likely to be of particular importance to producers in this area. In this respect, even though total shoe exports have not increased significantly, the shift in markets has increased the importance of foreign trade for this area. Also important is the fact that women's shoes dominate the export trade, accounting for 54 per cent of shoe exports in 1950.

Imports of foreign shoes into the United States are also of little importance to the industry as a whole, amounting to only 1.6 per cent of domestic production in 1938 and 1.3 per cent in 1950. These imports consist principally of low-priced low-quality women's shoes. By and large they offer little American market competition for shoes produced in this area. The number of pairs of shoes exported in 1950 was only about 60 per cent of the volume of shoes imported, yet the value of exports was 30 per cent greater than the total value of imports.

... do not promise rapid growth for the industry as a whole.

This brief survey of the market for American shoe production serves to indicate the mature nature

of the industry. Marked acceleration in demand and output is not anticipated, but the industry should look forward to a steady growth paralleling or even exceeding slightly the rate of population growth. And unlike many mature industries, it runs small risk of being supplanted by newer industries or made completely obsolete by technological change.

Nevertheless, the district shoe industry can be expected to remain active and important in further district development.

In historical retrospect, the shoe industry, like many other light manufacturing industries, has played an important role in the economic development of underdeveloped areas. It is no accident that the shoe industry was one of the earliest manufacturing industries to be established in this region, that it was one of the first manufacturing industries established in the budding industrial nations of Eastern Europe in the interwar period, or that the rapidly growing South American nations are carefully nurturing the development of domestic shoe industries as are many other nations on the threshold of economic development.

The primary resource of a newly developing area is an abundant supply of able, potentially productive, but untrained labor. As a mechanized industry with low capital requirements and relatively low-skilled labor needs, the shoe industry is ideally adapted to the utilization of such a resource. The

TABLE 3
CHANGING PATTERN OF WORLD TRADE REFLECTED IN SHOE EXPORT MARKETS . . .

1938		1946		1950	
Country	Percent, total value U.S. Exports	Country	Percent, total value U.S. Exports	Country	Percent, total value U.S. Exports
United Kingdom	31.7	Netherlands	15.6	Cuba	19.5
Canada	17.6	U. S. S. R.	12.3	North Antilles	17.2
Cuba	10.2	Belgium-Luxembourg	12.0	Canada	15.4
Union South Africa	8.2	Canada	7.1	Canal Zone	4.8
Netherlands West Indies	6.4	Philippine Republic	6.6	Philippine Republic	4.2
Philippine Republic	6.1	Yugoslavia	5.9	Mexico	3.9
Panama Canal Zone	4.8	Greece	5.0	Venezuela	3.8
Newfoundland-Labrador	3.3	Panama Canal Zone	4.2	Panama Republic	3.7
Bermuda	2.8	Mexico	2.4	Greece	3.5
Mexico	2.3	Poland-Danzig	2.4	Dominican Republic	2.9
Total Exports:		Total Exports:		Total Exports:	
in pairs	2,308,614	in pairs	13,355,384	in pairs	3,714,470
in dollars	4,391,000	in dollars	41,470,000	in dollars	12,535,000

... AND IN SOURCES OF IMPORTS

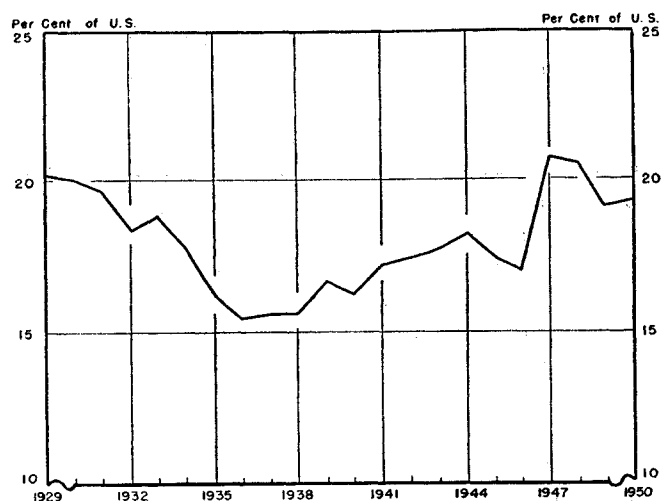
1938		1946		1950	
Country	Percent, total value U.S. Imports	Country	Percent, total value U.S. Imports	Country	Percent, total value U.S. Imports
Czechoslovakia	57.9	Mexico	39.0	United Kingdom	32.7
United Kingdom	10.9	Argentina	27.6	Canada	13.7
Mexico	7.3	Canada	13.2	Mexico	10.0
Italy	4.8	Switzerland	7.1	Switzerland	7.4
Switzerland	4.4	Cuba	4.8	Czechoslovakia	7.1
Japan	3.9	Haiti	4.2	Japan	5.9
Hungary	2.5	United Kingdom	2.1	Haiti	3.9
Netherlands	1.7	Brazil .....	.6	Italy	2.4
Belgium	1.1	Belgium-Luxembourg .....	.3	Australia	1.9
China .....	.9	Uruguay .....	.3	China	1.4
Canada .....	.7	China .....	.2	Belgium-Luxembourg	1.1
Total imports:		Total imports:		Total imports:	
in pairs	6,292,299	in pairs	7,185,744	in pairs	6,088,740
in dollars	3,977,299	in dollars	17,270,530	in dollars	9,378,959

location of a shoe plant in a developing area affords more productive employment for a labor supply drawn largely from agricultural pursuits, raises incomes, trains labor in machine technology, and provides a foundation for further economic development. Characteristically this subsequent development forces decentralization of the industry into newer underdeveloped areas where the process tends to be repeated. The continuing shift of shoe plants out of the metropolitan areas in this and other areas, an example of this tendency, holds important implications for district development.

It is doubtful whether any significant increase in the district share of total shoe production can be anticipated. Chart VI indicates that shoe production in this area as a per cent of total shoe production is leveling off from a peak of 21 per cent in 1947 to something in the neighborhood of 19 per cent. The rapid increase in the share that occurred in the 'twenties is not likely to be repeated again, associated as this growth was with the rapid development of highway transportation, a westward shift of the market, and the vastly increased importance of style following World War I. It should be noted that increase in the district's share of total shoe production was accompanied by the absolute decline of production located in the East rather than with a particularly rapid expansion in total shoe output.

However, the role of the shoe industry in the economic development of the district does not lie

CHART VI
District a major shoe producing center.



necessarily in the attraction of an increasing share of total shoe output to this region. It lies primarily in its role as an agent to maintain and increase the income levels in the nonurban sections of the district. Studies of small area income levels made by this Bank have revealed the extent to which districtwide income measures obscure the fact that many parts of the region are underdeveloped.

The shoe industry provides one avenue by which the economic development and the changing interdependence of the district with the rest of the nation are channeled to the smaller communities.

Guy Freutel



Survey of Current Conditions

At mid-October the district economy, like the national economy, continued to hold in a state of uneasy balance. Industrial output was slightly higher than in late summer, partly reflecting seasonal factors, partly expanding defense activity. The latter factor, however, was not operating as strongly in this region as elsewhere since the district's share of defense contracts is still small relative to its industrial capacity. Employment was holding steady, retail sales were up (seasonally) a little.

These district experiences fairly well paralleled those for the nation as a whole. The Federal Reserve index of industrial production (adjusted) in September was 219 per cent of 1935-39, up just two points from August. September nonagricultural employment dropped slightly as students returned to school, but unemployment showed practically no change. Sales in the nation showed results similar to those in the district.

The state of balance, described as "uneasy", in the economy at present implies that the future may see activity levels either rising or declining from those currently prevailing. The major factor which could lead to a rising trend is the defense program, if it continues to grow as projected. Future Government expenditures are expected to be considerably higher than current expenditures. Growing defense activity would indicate continued high and perhaps growing levels of employment and production. In turn these would mean continued high or growing income.

A major factor on the other side is the continued high level of saving on the part of consumers and the consequent failure of consumer spending to show the gains which might be expected to accompany income growth. Limitations on certain types of civilian goods, particularly housing and durables, could operate to increase the volume of savings relative to income. Bank loans have been showing a smaller increase than occurred in the like period last year and interest rates have strengthened.

The strength of either of these major factors depends to a very marked degree upon the influence of forces external to the district and, in fact, external to the nation. In other words, developments outside the district and outside the nation as a whole probably will be decisive in directing district business activity up or down from its present balanced state during the next few months.

EMPLOYMENT

The number of persons employed in nonagricultural industries, after allowances for seasonal fluctuations, has shown little change over the past six months. With the return of student workers to school, employment decreased as usual in September, primarily in non-agricultural industries. However, the number of jobless in September remained close to the postwar minimum of 1.6 million persons.

Manpower has been in adequate supply generally. There have been very few lags in defense production resulting from manpower shortages which have developed in only a few localities, industries, and occupations. The six major labor market areas in this district (St. Louis, Louisville, Memphis, Little Rock, Evansville, and Springfield) were classified as having moderate labor surpluses in September, the same as in July. Two smaller areas (Crab Orchard, Illinois, and Vincennes, Indiana) were con-

PRICES

WHOLESALE PRICES IN THE UNITED STATES						
Bureau of Labor Statistics (1926=100)	Sept., '51	Aug., '51	Sept., '50	Sept., 1951 compared with		
				Aug., '51	Sept., '50	
All Commodities.....	177.6	178.0	169.5	- 0.2%	+ 4.8%	
Farm Products.....	189.2	190.6	180.4	- 0.7	+ 4.9	
Foods.....	188.0	187.3	177.2	+ 0.4	+ 6.1	
Other.....	166.9	167.3	159.2	- 0.2	+ 4.8	

CONSUMER PRICE INDEX*					
Bureau of Labor Statistics (1935-39=100)	Sept. 15, 1951	June 15, 1951	Sept. 15, 1950	Sept. 15, 1951 compared with	
				June 15, '51	Sept. 15, '50
United States.....	186.6	185.2	174.6	+ 0.8%	+ 6.9%
St. Louis.....	186.2	185.0	174.0	+ 0.6	+ 7.0
Memphis.....	189.9	187.8	179.2	+ 1.1	+ 6.0

*New series.

RETAIL FOOD*					
Bureau of Labor Statistics (1935-39=100)	Sept. 15, 1951	Aug. 15, 1951	Sept. 15, 1950	Sept. 15, 1951 compared with	
				Aug. 15, '51	Sept. 15, '50
U. S. (51 cities).....	227.3	227.0	210.0	+ 0.1%	+ 8.2%
St. Louis.....	238.8	237.2	220.4	+ 0.7	+ 8.3
Little Rock.....	223.0	222.9	211.5	- 0-	+ 5.4
Louisville.....	215.6	214.8	199.4	+ 0.4	+ 8.1
Memphis.....	237.4	234.7	221.5	+ 1.2	+ 7.2

*New series.

WHOLESALE

Line of Commodities	Net Sales		Stocks
	Sept., 1951 compared with		Sept. 30, 1951 compared with Sept. 30, 1950
	Aug., '51	Sept., '50	
Automotive Supplies.....	- 1%	+ 1%	+25%
Drugs and Chemicals.....	- 5	+ 2	.....
Dry Goods.....	-15	-19	+ 9
Groceries.....	-0-	+ 1	+ 42
Hardware.....	-12	-17	+ 8
Tobacco and its Products.....	- 7	-0-	+32
Miscellaneous.....	-0-	+ 1	.....
**Total All Lines.....	- 8%	-12%	+27%

*Preliminary.
**Includes certain items not listed above.

sidered to have substantial labor surpluses in September.

One indication of the general sufficiency of manpower resources in this district is shown by the fact that the construction of the Atomic Energy Commission plant and the two allied electric generating plants in the Paducah area have progressed so far without a serious labor shortage. Approximately 17,000 workers, primarily in construction, are now employed on the three projects, and the peak employment to be reached in December is expected to be about 20,000 persons.

In the St. Louis area employment increased during September in defense plants and retail trade establishments but these gains were offset by layoffs in construction, apparel manufacturing, shoe plants, and automobile assembly and parts plants. Total nonagricultural employment was unchanged from August but was up 2 per cent over the September, 1950, level. Opening of new branch department stores has added to the normal seasonal increase in trade employment.

Employment in Louisville remained close to the peak attained in June. However, manufacturing employment was down about 8 per cent from the maximum reached last winter. Layoffs in textiles, metal working, wood working, and trade and service establishments have occurred in the past two months. However, additional workers were needed by tobacco firms, construction, railroad shops, and governmental ordnance establishments. The increased employment in construction and defense-connected government establishments nearly absorbed the layoffs in manufacturing.

In the seven district states, the volume of insured unemployment in mid-September was down 9 per cent from the amount in August but up 3 per cent from the volume a year ago. In all of the district states except Missouri insured unemployment was down from mid-August to mid-September. The rise in Missouri was attributed primarily to the shoe and garment industries.

INDUSTRY

Eighth District industry in September showed some improvement in rate of output from the previous month and continued to hold above the year-ago level. Relative to a month earlier diverse trends were in evidence as defense production increased and some civilian goods production decreased. Manufacturing output in general was up from August, partly reflecting seasonal factors. Some lines, however, notably steel and lumber, showed declines. Mining activity also increased with coal production rising seasonally while crude oil output remained unchanged. Construction activity declined at about the normal seasonal rate.

Manufacturing—Industrial electric power consumed in the district's major cities in September was up 16 per cent from August on a daily average basis and was 17 per cent above that of September, 1950. Principal contributors to the large gain over the month of a year ago were the nonelectrical machinery, paper and allied products, and rubber industries.

Steel mills operated at 81 per cent of capacity in September—down 5 per cent from August. But operations were 5 per cent above September a year ago.

Lumber production continued the decreasing trend it has shown in recent months. Southern pine mill operations were reduced to a weekly average of 183,000 feet in September from 193,000 feet in August and 215,000 feet in September, 1950. Demand for yellow pine boards was strong. Short and narrow pine boards, however, were in over-supply.

Southern hardwood operators again reduced production slightly in September, as they had the previous month. In comparison with September, 1950, output was down 12 per cent. Low grade hardwoods were still being produced in excess of market demand.

Production of shoes continued at levels below those of 1950. For September, it is estimated that national production declined 3 per cent from the same month last year. For the nine months ended September 30, total production of footwear also is estimated to have declined 3 per cent. Excluding

INDUSTRY

CONSUMPTION OF ELECTRICITY

(K.W.H. in thous.)	Sept., 1951 K.W.H.	Aug., 1951 K.W.H.	Sept., 1950 K.W.H.	Sept., 1951 compared with Aug., '51	Sept., '50 Sept., '50
Evansville.....	15,058	17,186	13,277R	-12.4%	+13.4%
Little Rock.....	12,236	12,217	10,396R	+ 0.2	+17.7
Louisville.....	82,540	86,241	73,993	- 4.3	+11.6
Memphis.....	30,891	29,681	25,321	+ 4.1	+22.0
Pine Bluff.....	10,103	10,103	7,348	- 0-	+37.5
St. Louis.....	101,059	108,377	96,016R	- 6.8	+ 5.3
Totals.....	251,887	263,805	226,351R	- 4.5%	+11.3%

R. Revised.

LOADS INTERCHANGED FOR 25 RAILROADS AT ST. LOUIS

Sept., '51	Aug., '51	Sept., '50	First Nine Days Oct., '51	Oct., '50	9 mos. '51	9 mos. '50
112,312	117,952	118,541	35,322	35,407	1,048,183	1,002,286

Source: Terminal Railroad Association of St. Louis.

CRUDE OIL PRODUCTION—DAILY AVERAGE

(In thousands of bbls.)	Sept., 1951	Aug., 1951	Sept., 1950	Sept., 1951 compared with Aug., '51	Sept., '50 Sept., '50
Arkansas.....	76.6	76.7	81.7	-0-%	- 6%
Illinois.....	167.0	165.4	177.3	+ 1	- 6
Indiana.....	31.2	32.0	31.1	- 3	- 0-
Kentucky.....	31.7	30.6	27.9	+ 4	+14
Total.....	306.5	304.7	318.0	+ 1%	- 4%

military shoes, however, the decline probably was at least 7 per cent. Recently, manufacturers have announced wholesale price reductions on many lines, following a period of lower hide costs and reduced sales.

Livestock slaughter in the St. Louis metropolitan area failed to make the substantial increase in September characteristic of that month over the past four years. Instead, it remained at practically the same volume as last month, and was 5 per cent under a year ago. Farmers were apparently holding cattle off the market to build up their herds and to take advantage of the good condition of fall pastures for further feeding and fattening operations. Cattle slaughter was down 1 per cent from August and 21 per cent under that of September, 1950. Hog slaughter, however, increased 8 per cent over the prior month and was up 11 per cent in comparison with last year.

Only 26 of the 62 Kentucky whiskey distilleries in the district were in operation at the end of September. This number compared with 17 at the end of the previous month, but with 50 for September, 1950. Most distilleries are limiting production of new whiskey because of accumulated stocks. Bottling lines, however, are operating at full schedule, in many cases, to meet dealer orders in anticipation of fall and winter consumer demand.

Mining—Crude oil production in the Eighth District again showed little change in September, but was 4 per cent under production in September, 1950. Percentagewise, Kentucky fields showed the most marked production change, with a 4 per cent increase over August, and a 14 per cent gain over a year ago.

In September, district coal production increased on a daily average basis. It was 5 per cent above that of August and some 7 per cent above that of September, 1950. Despite the daily average increase, a shorter work month resulted in considerably reduced total production for the month in the district and nation.

PRODUCTION INDEXES

COAL PRODUCTION INDEX 1935-39=100

Unadjusted			Adjusted		
Sept., '51	Aug., '51	Sept., '50	Sept., '51	Aug., '51	Sept., '50
161.2*	144.1*	151.2	153.5*	145.6*	144.0

SHOE PRODUCTION INDEX 1935-39=100

Unadjusted			Adjusted		
Aug., '51	July, '51	Aug., '50	Aug., '51	July, '51	Aug., '50
122	107 R	157	125	111 R	162

*—Preliminary.
R—Revised.

Transportation—Railroad freight interchanges at St. Louis in September were down 5 per cent compared with August and were also slightly less than in September, 1950. The downward trend continued during the first nine days of October.

Construction—Construction activity declined slightly during September as a result of Federal restrictions on certain types of building activity and material shortages. Nationally, the total value of construction put in place during September was \$2.8 billion, down 1 per cent from both the preceding month and September, 1950. On a seasonally adjusted basis construction activity changed very little during September.

Private construction continued to decline in September as it has for the past six months, largely as a result of the reduction in home building activity. Private residential construction activity is now about two thirds of the 1950 record levels. Commercial building also continued to drop off in September, reflecting, as it has over the past few months, restrictions on this type of construction. On the other hand, factory building, military construction, and public housing construction activity continued to expand.

Expenditures on new plant and equipment for this year apparently will approximate \$24.8 billion as compared with \$18.6 billion last year. Capital outlays this year are expected to be about 35 per cent higher than in 1950 in dollar values and about 25 per cent more in physical volume. Some slackening in investment in the fourth quarter, however, may result from declining expenditures of nondefense industries, offset only partially by investment in those expanding industries connected with the mobilization program.

While construction activity on projects under way changed but little during September, new projects started, indicated by construction contracts awarded, dropped off considerably. F. W. Dodge Corporation reports for September indicate that contracts awarded in 37 Eastern states were down 16 per cent from the same month a year ago, and

CONSTRUCTION

BUILDING PERMITS Month of September

(Cost in thousands)	New Construction				Repairs, etc.			
	Number	1950	1951	Cost	Number	1950	1951	Cost
Evansville.....	100	83	\$ 322	\$ 158	114	96	\$ 305	\$ 135
Little Rock...	61	79	596	1,380	211	224	112	773
Louisville.....	152	227	1,557	1,585	88	70	124	51
Memphis.....	2,542	2,436	5,483	4,643	192	197	183	221
St. Louis.....	373	347	4,991	3,126	262	280	766	1,002
Sept. Totals.....	3,228	3,172	\$12,949	\$10,892	867	867	\$1,490	\$2,182
Aug. Totals.....	2,923	3,470	\$ 7,812	\$11,537	868	931	\$1,212	\$1,258

TRADE

DEPARTMENT STORES

	Net Sales		9 mos. '51 to same period '50	Stocks on Hand Sept. 30, '51 comp. with Sept. 30, '50	Stock Turnover Jan. 1, to Sept. 30, 1951 1950
	Sept., 1951 compared with Aug., '51	Sept., '50			
8th F. R. District...	+ 7%	— 5%	+ 1%	+ 9%	2.36 2.95
Ft. Smith, Ark. ¹	+18	+ 6	+ 6	+25	2.41 2.89
Little Rock, Ark.....	+11	— 5	— 3	— 3	2.33 2.83
Quincy, Ill.....	+11	— 8	+ 3	+18	2.26 2.52
Evansville, Ind.....	— 4	+ 5	+ 6	+28	2.17 2.78
Louisville, Ky.....	+12	— 4	— 0	— 1	2.74 3.21
St. Louis Area ^{1 2}	+ 6	— 8	— 0	+17	2.24 2.98
Springfield, Mo.....	+ 7	+ 9	+ 1	+ 6	2.12 2.61
Memphis, Tenn.....	+ 8	— 1	+ 1	— 2	2.71 2.99
All Other Cities*....	+ 5	+ 9	+ 6	+ 9	2.03 2.38

*Fayetteville, Arkansas; Harrisburg, Mt. Vernon, Illinois; Vincennes, Indiana; Danville, Hopkinsville, Mayfield, Paducah, Kentucky; Chillicothe, Missouri; Greenville, Mississippi; and Jackson, Tennessee.

¹In order to permit publication of figures for this city (or area), a special sample has been constructed which is not confined exclusively to department stores. Figures for any such nondepartment stores, however, are not used in computing the district percentage changes or in computing department store indexes.

²Includes St. Louis, Clayton, Maplewood, Missouri; Alton and Belleville, Illinois.

Outstanding orders of reporting stores at the end of Sept., 1951, were 43 per cent smaller than on the corresponding date a year ago.

Percentage of accounts and notes receivable outstanding Sept. 1, 1951, collected during Sept., by cities:

	Instalment Accounts			Excl. Instal. Accounts	
	%			%	
Fort Smith.....	46%		Quincy.....	28%	65%
Little Rock.....	46		St. Louis.....	20	48
Louisville.....	21	46	Other Cities....	16	51
Memphis.....	20	40	8th F.R. Dist.	20	46

INDEXES OF DEPARTMENT STORE SALES AND STOCKS 8th Federal Reserve District

	Sept., 1951	Aug., 1951	July, 1951	Sept., 1950
Sales (daily average), unadjusted ³	349	301	269	363
Sales (daily average), seasonally adjusted ³	346	350	344	360
Stocks, unadjusted ⁴	385	392	372	361
Stocks, seasonally adjusted ⁴	347	359	357	325

³Daily average 1935-39=100.

⁴End of Month Average 1935-39=100.

SPECIALTY STORES

	Net Sales		9 mos. '51 to same period '50	Stocks on Hand Sept. 30, '51 comp. with Sept. 30, '50	Stock Turnover Jan. 1, to Sept. 30, 1951 1950
	Sept., 1951 compared with Aug., '51	Sept., '50			
Men's Furnishings.....	+35%	— 8%	+ 1%	+15%	1.35 1.77
Boots and Shoes.....	+26	+ 4	+ 8	+16	3.00 3.24

Percentage of accounts and notes receivable outstanding Sept. 1, 1951, collected during September:

Men's Furnishings	43%	Boots and Shoes.....	39%
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Trading days: Sept., 1951—24; August, 1951—27; Sept., 1950—25.

RETAIL FURNITURE STORES

	Net Sales		Inventories		Ratio of Collections
	September, 1951 compared with Aug., '51	Sept., '50	September 30, 1951 compared with Aug. 31, '51	Sept. 30, '50	
8th Dist. Total ¹	—10%	—23%	— 4%	— 6%	22% 21%
St. Louis Area ²	9	—27	— 4	— 6	30 28
St. Louis.....	—10	—27	— 4	— 6	30 27
Louisville Area ²	—10	—18	— 9	— 5	14 15
Louisville.....	—10	—17	— 9	— 6	13 14
Memphis.....	—13	—18	— 0	—20	14 15
Little Rock.....	8	—32	+ 7	—13	21 18
Springfield.....	+ 3	— 4	— 4	+14	14 17
Fort Smith.....	—13	—21	*	*	* *

*Not shown separately due to insufficient coverage, but included in Eighth District totals.

¹In addition to following cities, includes stores in Blytheville, Pine Bluff, Arkansas; Hopkinsville, Owensboro, Kentucky; Greenwood, Mississippi; Hannibal, Missouri; and Evansville, Indiana.

²Includes St. Louis, Missouri; and Alton, Illinois.

³Includes Louisville, Kentucky; and New Albany, Indiana.

PERCENTAGE DISTRIBUTION OF FURNITURE SALES

	Sept., '51	Aug., '51	Sept., '50
Cash Sales	14%	14%	13%
Credit Sales	86	86	87
Total Sales	100%	100%	100%

down 14 per cent from August, 1951. However, partly as a result of the easier credit terms inaugurated September 1, and partly due to builders' efforts to get construction under way before stiffer material controls are imposed, the number of new homes started in September increased from 85 thousand units in August to 91 thousand units in September.

In the Eighth District construction contracts awarded in the third quarter decreased 11 per cent from the like period of 1950. Residential construction contracts showed a decline of 11 per cent, while nonresidential construction contracts awarded were off 10 per cent.

TRADE

Retail sales during September did not measure up to retailers' anticipations. They had hoped, after suffering sales declines during July and August from a year ago volume, that seasonal buying during the month would place them in a better comparative position. But the weather did little to encourage purchase of seasonal items. And last year sales were heavy during the first-half of the month as buyers tried to get their purchases in ahead of instalment credit controls. The result was that sales for this September were down compared to those of September, 1950.

Except at men's wear stores, the retail value of inventories held by reporting retail lines on September 30 was not much changed from either a month earlier or a year ago. The volume of buy-orders outstanding on the retailers books was sharply below that of a year ago, however.

Department Stores—Sales volume during September for the district as a whole increased 7 per cent from that in August but was 5 per cent smaller than in September, 1950*. One less trading day during September 1951 than a year ago placed the seasonally adjusted index of daily sales at 346 per cent of the 1935-39 average. In comparison the index was 350 per cent in August and 360 per cent in the comparable month last year. Cumulative district sales for the first nine months of 1951 as compared to 1950 showed volume slightly larger this year than last.

* Interpretation of department store sales figures has been complicated somewhat in recent months by a fairly widespread movement to establish suburban branches of downtown stores. This movement is national in scope. In this district it affects primarily St. Louis area sales.

A newly-opened branch department store obtains sales from three sources: 1) existing department stores, 2) non-department stores in the area of the newly opened branch, and 3) to some extent, by increasing the percentage of consumer income spent. To include all such sales volume at newly opened branches, tends to exaggerate the amount of total retail buying insofar as department store sales are taken as a first approximation of such buying. To adjust for the factor of sales gain at the expense of non-department stores, not all of the total sales at newly-opened branch stores are included at present. This percentage of "relocated sales volume" is derived by estimate. When the new branch has been in operation for a year, total sales figures will be included in area aggregates.

Except in the St. Louis metropolitan area and in Little Rock, cumulative 1951 sales gains ranged from slightly larger than last year in Louisville and Memphis to an average gain of 12 per cent in several small district cities.

The retail value of inventories held by reporting district department stores on September 30 was not much changed from a month previous but was 9 per cent above that of last year. The value of outstanding orders at the end of September was slightly below that on August 31 and was sharply below that on September 30, 1950.

Specialty Stores—St. Louis womens' apparel stores reported sales during September were 16 per cent larger than in August but were 18 per cent below those in September 1950. Inventories at the end of September were valued 6 per cent less than a month previous and were slightly below those a year ago.

Men's wear stores sales in the district were substantially larger in September than in August but were 8 per cent below those last year. Inventories at the end of September were 7 per cent larger than on August 31 and 15 per cent larger than on September 30, 1950.

Furniture Stores—September sales volume of reporting furniture stores throughout the district averaged 10 per cent below August and 23 per cent under September 1950. The decline from last year was partly the result of heavy buying prior to reimposition of installment credit controls at mid-September 1950. The retail value of inventories held by district stores on September 30 was 4 per cent less than a month earlier and 6 per cent less than a year ago.

AGRICULTURE

The October 1 forecast for total outturn of crops for the nation was slightly lower than a month earlier. The estimate of the cotton crop on October 1 was 16,931,000 bales, a decline of 360,000 bales from September 1. The decrease was concentrated in the central part of the cotton belt and included a 200,000-bale decline in Mississippi, 40,000 bales in Arkansas, and 10,000 in Tennessee. An increase of 10,000 bales was reported for Missouri.

Rains during September increased the prospects for burley tobacco by about 2 per cent; the October 1 estimate being 566 million pounds. Increases also were reported for fire-cured and dark air-cured tobacco.

Estimated corn production was 26 million bushels less than on September 1. Declines occurred largely in the northern corn belt where frosts in late Sep-

tember caused considerable damage. Corn in the Eighth District, for the most part, was not damaged. The national crop of 3.1 billion bushels forecast is 126 million bushels less than in 1950, but 124 million bushels larger than the 10-year average.

The October estimate of production for other feed and food grains, with the exception of rice and grain sorghums, was lower than that of September. Hay production in 1951 was at record levels for the nation, and pastures generally in the district states were in good condition for the fall grazing season.

Generally favorable weather throughout the Eighth district for the past month sped the harvesting of 1951 crops. Cotton harvesting, for example, was well advanced as a result of the best cotton picking weather in recent years. The 1952 wheat crop, however, was reported at mid-October to need surface moisture in some areas.

Prices received for agricultural products were lower in mid-September than in August. The decline marked the seventh consecutive month of the downward movement in the index of prices received. However, prices of several important agricultural commodities strengthened during the latter part of September and early October, including prices for cotton and hogs. As prices received were lower and prices paid were unchanged for September, the parity ratio (ratio of prices received to prices paid) narrowed 1 point to 103 on September 15.

BANKING

Banks in both the district and the nation expanded their loans during September. In both cases the expansion was roughly the expected seasonal amount and was centered in loans to business. Most of the new loans in the Eighth District went to finance the marketing and processing of farm

AGRICULTURE

CASH FARM INCOME									
(In thousands of dollars)	August, 1951	August, 1951 compared with		August, 1950	8 month total Jan. to Aug. 1951 compared with			1950	1949
		July, 1951	Aug., 1951		1951	1950	1949		
Arkansas.....	\$ 26,621	— 4%	+ 49%	\$ 219,301	+ 31%	+ 4%			
Illinois.....	156,634	— 22	+ 14	1,249,551	+ 14	+ 15			
Indiana.....	102,348	+ 4	+ 21	694,576	+ 18	+ 17			
Kentucky.....	36,287	— 9	+ 20	326,303	+ 7	+ 5			
Mississippi.....	29,712	+ 54	+ 116	190,641	+ 63	— 12			
Missouri.....	104,669	— 9	+ 20	711,217	+ 22	+ 21			
Tennessee.....	34,066	+ 9	+ 26	254,092	+ 19	+ 14			
Totals.....	\$490,337	— 8%	+ 23%	\$3,645,681	+ 19%	+ 13%			

RECEIPTS AND SHIPMENTS AT NATIONAL STOCK YARDS									
	Receipts			Shipments			Sept., 1951	Aug., '51	Sept., '50
	Sept., 1951	Aug., '51	Sept., '50	Sept., 1951	Aug., '51	Sept., '50			
Cattle and calves.....	143,766	+ 3%	+ 9%	81,448	+ 7%	+ 59%			
Hogs.....	235,613	— 11	+ 13	67,349	— 28	+ 19			
Sheep.....	49,174	— 33	— 20	29,070	— 40	+ 20			
Totals.....	428,553	— 10%	+ 7%	177,867	— 19%	+ 35%			

products. For the country as a whole about half the loan expansion went for this purpose, but in addition metal manufacturers, mining concerns, and public utilities substantially increased their borrowings reflecting the growth in loans for defense and defense-supporting purposes.

District Banking Developments—Earning assets rose \$61 million at all district member banks during September. Most of the increase (\$57 million) was in loans, roughly the normal seasonal expansion at this time. As usual in September the loan expansion was primarily at the larger city banks, and reflected in large measure the movement of cotton and other crops off the farm. "Other" (largely consumer) loans also were up somewhat in the month.

Deposits rose \$142 million in the month. A large net inflow of funds permitted banks, both large and small, to build up their cash balances and reduce borrowings.

Business Loan Expansion Since June—From June 27 to October 10 (approximate seasonal low point to latest date reported) business loans rose less than \$60 million at the weekly reporting member banks. By comparison, these loans rose almost \$150 million in the same period last year and averaged about a \$75 million gain in the comparable periods of 1946-49. The smaller expansion this year reflects the Voluntary Credit Restraint Program and the tight money market over most of the period.

At Evansville and Little Rock commercial and industrial loans declined from the end of June to mid-October. At St. Louis, Memphis, and Louisville the rate of expansion was less than usual at this time.

The bulk of the \$60 million loan expansion at weekly reporting banks from June 27 to October 10 went to finance the marketing and processing of farm produce. Over half the increase in loans went to commodity dealers, mostly on cotton at Memphis. The second largest increase went to food manufacturers. By contrast, sales finance companies, wholesalers, retailers, and "other" businesses reduced their outstanding loans in the period. Defense loans, going largely to metal and metal products manufacturers, showed only a slight gain (\$3.5 million) in the period, reflecting the relative lack of defense work in this area. Similarly loans to finance defense-supporting activities rose only \$5 million.

DEBITS TO DEPOSIT ACCOUNTS

(In thousands of dollars)	Sept., 1951	Aug., 1951	Sept., 1950	Sept., 1951 compared with	
				Aug., '51	Sept., '50
El Dorado, Ark.....	\$ 26,950	\$ 27,993	\$ 24,645	+ 4%	+ 9%
Fort Smith, Ark.....	44,877	43,418	45,809	+ 3	+ 2
Helena, Ark.....	9,119	6,517	7,518	+40	+21
Little Rock, Ark.....	135,219	135,708	144,415	-0	- 6
Pine Bluff, Ark.....	34,028	29,653	29,869	+15	+14
Texarkana, Ark.*.....	15,465	14,271	11,790	+ 8	+31
Alton, Ill.....	27,839	29,355	26,035	- 5	+ 7
E. St. L.-Nat. S. Y., Ill..	132,722	145,908	125,791	+ 9	+ 6
Quincy, Ill.....	32,116	33,207	31,449	- 3	+ 2
Evansville, Ind.....	125,318	150,096	133,782	-17	- 6
Louisville, Ky.....	602,547	678,887	568,454	-11	+ 6
Owensboro, Ky.....	43,824	41,139	42,659	+ 7	+ 3
Paducah, Ky.....	26,724	26,296	15,756	+ 2	+70
Greenville, Miss.....	23,298	19,723	22,679	+18	+ 3
Cape Girardeau, Mo.....	12,746	12,494	12,856	+ 2	- 1
Hannibal, Mo.....	10,030	9,534	9,195	+ 5	+ 9
Jefferson City, Mo.....	52,816	49,425	61,659	+ 7	-14
St. Louis, Mo.....	1,702,651	1,775,148	1,659,331	- 4	+ 3
Sedalia, Mo.....	11,018	10,635	11,946	+ 4	- 8
Springfield, Mo.....	74,583	73,406	69,362	+ 2	+ 8
Jackson, Tenn.....	21,353	19,667	19,145	+ 9	+10
Memphis, Tenn.....	571,366	491,795	764,709	+16	-25
Totals.....	\$3,736,609	\$3,824,275	\$3,839,054	- 2%	- 3%

*These figures are for Texarkana, Arkansas, only. Total debits for banks in Texarkana, Texas-Arkansas, including banks in the Eleventh District, amounted to \$36,117.

EIGHTH DISTRICT MEMBER BANK ASSETS AND LIABILITIES BY SELECTED GROUPS

(In Millions of Dollars)	All Member ⁴			Large City Banks ¹			Smaller Banks ²		
	Change from:			Change from:			Change from:		
	Sept. 1951	Aug. 1951 to Sept. 1951	Sept. 1950 to Sept. 1951	Sept. 1951	Aug. 1951 to Sept. 1951	Sept. 1950 to Sept. 1951	Sept. 1951	Aug. 1951 to Sept. 1951	Sept. 1950 to Sept. 1951
Assets									
1. Loans and Investments.....	\$4,075	\$+ 61	\$+166	\$2,362	\$+ 38	\$+ 94	\$1,713	\$+ 23	\$+ 72
a. Loans	1,853	+ 57	+155	1,222	+ 50	+101	631	+ 7	+ 54
b. U.S. Government Obligations.....	1,853	- 8	+ 16	966	- 19	+ 7	887	+ 11	+ 9
c. Other Securities	369	+ 12	- 5	174	+ 7	- 14	195	+ 5	+ 9
2. Reserves and Other Cash Balances.....	1,395	+ 96	+205	876	+ 76	+129	519	+ 20	+ 76
a. Reserves with the F.R. bank.....	684	+ 7	+112	443	+ 1	+ 73	241	+ 6	+ 39
b. Other Cash Balances ³	711	+ 89	+ 93	433	+ 75	+ 56	278	+ 14	+ 37
3. Other Assets	48	- 15	+ 5	29	- 2	+ 2	19	- 13	+ 3
4. Total Assets	\$5,518	\$+142	\$+376	\$3,267	\$+112	\$+225	\$2,251	\$+ 30	\$+151
Liabilities and Capital									
5. Gross Demand Deposits.....	\$4,120	\$+141	\$+332	\$2,534	\$+111	\$+213	\$1,586	\$+ 30	\$+119
a. Deposits of Banks.....	657	+ 34	+102	618	+ 30	+ 95	39	+ 4	+ 7
b. Other Demand Deposits.....	3,463	+107	+230	1,916	+ 81	+118	1,547	+ 26	+112
6. Time Deposits	982	+ 1	+ 16	481	+ 1	+ 1	501	-0	+ 15
7. Borrowings and Other Liabilities.....	51	- 3	- 4	43	- 1	- 6	8	- 2	+ 2
8. Total Capital Accounts.....	365	+ 3	+ 32	209	+ 1	+ 17	156	+ 2	+ 15
9. Total Liabilities and Capital Accounts....	\$5,518	\$+142	\$+376	\$3,267	\$+112	\$+225	\$2,251	\$+ 30	\$+151

¹Includes 13 St. Louis, 6 Louisville, 3 Memphis, 3 Evansville, 4 Little Rock and 4 East St. Louis-National Stock Yards, Illinois, banks.

²Includes all other Eighth District member banks. Some of these banks are located in smaller urban centers, but the majority are rural area banks.

Items "other assets" and "Total Capital Accounts" for smaller banks revised for Aug. 1951.

³Includes vault cash, balances with other banks in the United States, and cash items reported in process of collection.

⁴All member banks as of end of month. Change from month ago and year ago, however, are for identical group of banks.