The Industrial Structure of the Eighth Federal Reserve District

An increasing awareness of the desirability of bringing the relationship between industry and agriculture into better balance is developing in many parts of the Eighth Federal Reserve District. There is also increased recognition that a substantially higher level of community and district income could be achieved through the conversion of a greater proportion of its own raw materials into finished goods in manufacturing plants located within the district.

In order to accomplish these objectives, many communities are attempting to put into operation plans for industrial development which were interrupted by the war. The development of such plans has been stimulated, in areas where war manufacturing was superimposed upon what was traditionally a nonindustrial community, by the desire to regain income benefits suddenly lost at the end of hostilities. Idle war plant facilities in some areas have also provided a stimulus to such programs.

Successful plans for the future industrial development of the district must of necessity take into consideration the present structure of industry. A knowledge of industry as it now exists is the starting point in fashioning a long-range program of industrial development designed to give the people of this district a better balanced economic life and a higher standard of living.

CHARACTERISTICS OF DISTRICT INDUSTRY

The Eighth District is essentially rural in character with about two-thirds of its population in rural communities in 1940. However, industry generally and manufacturing specifically are important to the district economy. In 1940 there were 3.3 million workers employed in the district. Of this total, 484,000 or 15 per cent were in manufacturing, 192,000 or 6 per cent were employed in transportation and public utilities, 128,000 or 4 per cent were engaged in construction work and 70,000 or about 2 per cent were in mining activities. Combined employment in these industries amounted to 876,000 or 27 per cent of total employment. Agriculture, however, employed 2.5 times as many persons as manufacturing and 40 per cent more than the combined total of all industries listed above.

In terms of national production, the output of district manufacturing establishments is relatively small. In 1939, about $2.5 billion of manufactured goods were produced in the area according to Census of Manufactures figures, of which approximately $1.0 billion represented value added by manufacture. The value of production in that year amounted to some 4 per cent of the United States total. During the war period, the value of output increased sharply, reaching a peak estimated at $7.7 billion in 1944 followed by a decline in 1945 to about $6.7 billion. In terms of physical volume of production, output in 1945 probably was more than twice as great as in 1939.

Eighth District industry is typically small business. Manufacturing establishments, measured either in terms of number of employees or value of output, are somewhat smaller on the average than in the nation as a whole. They employ fewer wage earners with wages tending to run below the national average. The value of production and the value added to the cost of materials by the manufacturing process are somewhat less, per wage earner, than in the rest of the nation.

A rather well-defined distinction exists between the average plant located in one of the four major industrial areas of St. Louis, Louisville, Memphis and Evansville and those operating in other parts of the district.* In the industrial areas, average employment per plant is larger than in the remainder of the district, amounting to 48 wage earners per plant in 1939 as compared with 33 in the rest of the district and 43 in the nation as a whole. The value of goods produced in the industrial centers as well as the value added by manufacture averaged 80 per cent greater per wage earner than in the plants outside the leading cities.

CONCENTRATION OF INDUSTRY

As indicated in the accompanying chart district manufacturing is heavily concentrated in the four industrial areas. In 1939, about 45 per cent of the manufacturing establishments were in these centers and they accounted for more than one-half of the total manufacturing employment and for 70 per cent of the value of district manufacturing production. By far the largest is the St. Louis area whose plants in 1939 employed 35 per cent of the manu-

* As used in this article the St. Louis industrial area consists of St. Louis City and County, Missouri and Madison and St. Clair Counties, Illinois; the Louisville area of Jefferson County, Kentucky, and Floyd County, Indiana; the Evansville area of Vanderburg County, Indiana; and the Memphis area of Shelby County, Tennessee.

facturing wage earners and accounted for 45 per cent of the value of manufactured goods produced in the district. Louisville factories produced 13 per cent of the district's output, Memphis 7 per cent and Evansville 5 per cent.

In general, district manufacturing is quite well diversified, although employment as well as the value of goods produced in the nondurable industries is somewhat larger than in the heavy industries.

EIGHTH DISTRICT MANUFACTURING EMPLOYMENT BY INDUSTRY GROUPS—1940

	Number of Employees	Per Cent of Manufacturing Employment
All Manufacturing	484,000	100%
Durable Industries	213,000	44
Basic and Finished Lumber	93,000	19
Machinery	36,000	8
Iron and Steel	35,000	7
Stone, Clay and Glass	20,000	4
Automobiles and Accessories	14,000	3
Non-ferrous Metals	10,000	2
Transportation Equipment	5,000	1
Nondurable Industries	271,000	56
Food Processing	71,000	15
Textiles and Apparel	55,000	11
Leather and Products	46,000	10
Printing and Publishing	27,000	6
Chemicals	22,000	4
Products of Petroleum and Coal	11,000	2
Paper and Products	9,000	2
Miscellaneous	30,000	6

Source: Bureau of the Census.

The nondurable industries employed more than one-half of the manufacturing workers in the district according to the 1940 census of population. Food processing, textiles and leather goods industries were most important and accounted for almost two-thirds of the total nondurable industries' employment. In the heavy industry group, almost 44 per cent of the workers were engaged in the manufacture of lumber and finished lumber products. Production of iron and steel and their products and various types of machinery accounted for 33 per cent of total durable industries' employment.

Most of the production (in terms of value) in the industrial areas is accounted for by the manufacture of nondurable goods. In 1939, from 55 to 60 per cent of the value of output was in the nondurable group. In Evansville, the value of durable goods production was larger than that of nondurable goods, reflecting the relatively large output of machinery, refrigerators, automobiles and other heavy items. Approximately 65 per cent of Evansville's production was in the durable group as compared with about 35 per cent in the St. Louis area and roughly 30 per cent in Louisville and Memphis.

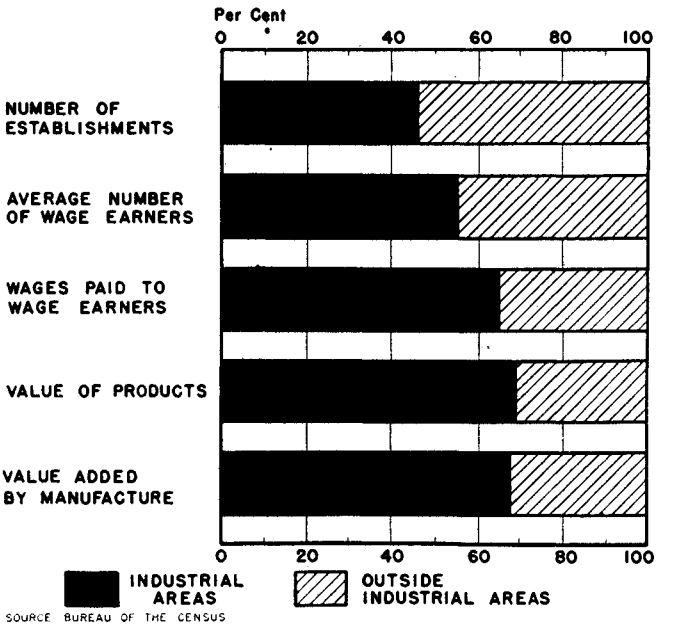
There are some indications, however, that durable goods industries are becoming relatively more important in the district economy. In the St. Louis area, for example, estimated future employment in the heavy industries is expected to account for about 55 per cent of total manufacturing employment as compared with less than 50 per cent in the prewar period. In Memphis, the largest new industrial concern locating in the area is an agricultural equipment manufacturing plant with estimated peak employment requirements of 3,000 workers.

During the war period, the district received new facility awards totaling about $2.2 billion in cost, of which approximately $1.6 billion in cost was for new industrial plant facilities. About 47 per cent of the $1.6 billion represented expenditures for structure and about 53 per cent those for equipment.

The expansion of the district's industrial plant during the war was considerable, more than in any other comparable length of time in history. The net addition to the district's prewar manufacturing capacity, however, tends to be overstated when measured in terms of construction costs, which in wartime were inflated far beyond normal replacement costs. Also the potential usefulness of the increased capacity is less than deflated cost figures would indicate for much of it was designed for straight munitions output and has little peacetime use. A fair amount of the new capacity is, however, useful for peacetime production, either as it exists or as it can be converted.

There has been some progress made in disposing of a portion of the district's major war plants, although the dollar value of assets sold or leased to date is a negligible portion of the total value of such plants constructed. In some instances, for example the alumina plants in Arkansas and the aluminum products plant in Louisville, the adaptation to

ESTIMATED DISTRIBUTION OF MANUFACTURING IN THE EIGHTH DISTRICT - 1939



peacetime production involved no major reconversion problems. The former Republic Aviation plant in Evansville has been converted into a plant for the production of milk coolers, and one part of the Wolf Creek Ordnance Plant in Milan, Tennessee, has been purchased to be used for the production of footwear. While a large part of the district's war-built plants will find no peacetime use, the availability of idle plants should tend to facilitate the efforts of some communities to develop the industry of their areas.

INDUSTRIAL DECENTRALIZATION AND THE FUTURE

In attempting to appraise the outlook for the future development of industry in this district, some attention must be given to the potential benefits that might result from an increase in decentralization of industry. During recent months there has been some indication that at least a part of the initiative with respect to the establishment of new manufacturing plants in the district has come from within industry itself. Although the evidence is insufficient to conclude that a major resumption of the trend toward decentralization is under way, there are indications that during the next few years more companies will attempt to locate production and distribution points in closer proximity to raw materials and consumer markets in an effort to offset rising costs.

Decentralization of industry is not a new idea. In this district its effect has been apparent in several industries for some time. Small factories for the manufacture of shirts, dresses and various other types of garments sprang up throughout the district during the decade prior to the war. The number of shoe factories has increased sharply in recent years, especially outside the major industrial areas. In Arkansas, for example, there are now nine shoe manufacturing plants in operation or under construction as compared with none in 1939. Similar developments also have occurred in the food processing industry; canning factories and, in recent years, frozen food processing plants have been built in increasing numbers in many of the leading agricultural sections of the district.

During the war, the ban on construction of all but essential war production facilities abruptly curtailed expansion plans for most industries. However, the many new plants which were constructed in scattered parts of the country as a part of the war production program as noted led to considerable expansion of prewar productive capacity. Subcontracting to smaller firms frequently resulted in an increase in capacity of existing plants or the construction of new facilities in communities located well outside the nation's industrial centers. To the extent that such war-constructed plants can be adapted to the production of civilian goods, the war plant construction program may prove to be of considerable importance in promoting further decentralization of industry.

Probably the most important incentive to industry to decentralize its operations is the pressure to reduce costs in order to maintain profit margins. Although temporary relief may be sought through higher finished goods prices, industry in the long run is faced with the major problem of protecting profit margins through lower costs. Most of the current emphasis appears to be focused on increased output per man-hour as the primary source of cost reductions, but many companies also are examining distribution costs in an effort to achieve this objective. There are some indications that a considerable shifting of shipping and sales centers may occur as manufacturers strive for reductions in their distribution costs.

The district economy may benefit considerably by an increase in industrial decentralization, particularly in industries that are closely related to the resources of this area and which typically involve relatively small-scale production. Conditions generally seem to be more favorable to the operation of smaller manufacturing plants than of very large establishments in the areas outside the large metropolitan regions. In most parts of the district population concentrations are not sufficient to support manufacturing operations on the large-scale, mass production, long assembly line basis characteristic of major industrial centers.

This does not mean, of course, that no more big industrial plants can be located advantageously in the district. The urban areas, both large and medium-sized, may reasonably be expected to grow, partly through natural increase and partly by migration from rural regions, and thus build up larger pools of industrial labor. At the same time, improved transportation facilities should make it possible to draw on a labor supply scattered over a considerable area. The record of the war years shows that workers from small towns and rural areas can be drawn into large-scale operations at a central manufacturing location and that they can be absorbed with relative ease in training. Where other factors are favorable to industry location, lack of a completely adequate labor supply at that immediate location should not necessarily preclude establishment of relatively large-scale industry.

CONCLUSIONS

The prospects for industry in this district appear bright. The most encouraging factor, perhaps, is that community leaders throughout the district are becoming increasingly aware of the potential advantages which would accrue from a more balanced relationship between industry and agriculture. Particularly in the south is recognition of these advantages growing and in the coming years there should be seen a steady growth of industry, mostly small-scale manufacturing, in that area.

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International Bank Securities

The International Bank for Reconstruction and Development formally began operations on June 25, 1946. Under the Articles of Agreement, 20 per cent of the subscribed capital was to be paid in or be subject to call as needed for operations. Calls for 10 per cent of subscribed capital have already been announced. Two per cent payable in gold or United States dollars was due on or before August 24, and the other 8 per cent payable in the member countries' own currencies is due by November 25, 1946. The Bank has stated that early consideration will be given to calling up the remaining 10 per cent (also payable in the members' currencies) authorized for operations.

The authorized capital of the International Bank is $10 billion (United States dollars), of which $9.1 billion is reserved for the countries that were represented at the Bretton Woods conference which drew up the Bank's Articles of Agreement. At the present time, the International Bank has 38 members and a subscribed capital of $7,670 million, the subscription of the United States being $3,175 million. On the basis of this membership, paid-in capital by November 25 will amount to $767 million, $407.4 million in gold and United States currency, and the equivalent of $359.6 million in currencies of the other member nations.

Actual lending operations probably will begin this fall. The Bank may make or facilitate loans in any of three ways. It may make or participate in direct loans out of its own funds, corresponding to its unimpaired paid-in capital, surplus and available reserves. Since only 20 per cent of its subscribed capital may be called for the purpose of making or participating in direct loans, and since it now has no surplus or reserves, total loans by this method are at present limited to a maximum of $1,534 million. The Bank may also make or participate in direct loans out of funds borrowed in the market. Finally, the Bank may guarantee, in whole or in part, loans made by private investors through the usual investment channels.

It is anticipated that borrowers will desire and the Bank will prefer to make direct loans rather than guarantee private issues. Since demand for loans is likely to be much greater than funds available from paid-in capital, an offering of the Bank's own securities seems likely soon after lending operations begin. Most of these securities probably will be sold in the United States because this nation is about the only member country able to afford large capital exports at present and because general conditions in the capital market here seem to be favorable. Therefore the regulations and principles governing the operation of the Bank which affect the investment status of its securities are of prime interest.

Purposes of the Bank—The purposes of the International Bank may be summarized as follows:

1. To assist in economic reconstruction and development in member countries by facilitating investments for productive purposes.

2. To promote private foreign investment by guaranteeing or participating in loans made by private investors and, when private capital is not available on reasonable terms, to provide financing out of its own resources and from funds raised in the market.

3. To promote the long-range, balanced growth of international trade and the maintenance of equilibrium in balances of payment by encouraging international investment for the development of the productive resources of member nations.

4. To coordinate its financing with international loans made through other channels so that the more useful and more urgent projects will be taken care of first.

5. To conduct its operations with due regard to the effect of international investment on business conditions in the territories of members.

Procedure in Making and Guaranteeing Loans—Additional safeguards have been provided in establishing certain procedures to be followed in making and guaranteeing loans. Applications must be reviewed by a competent committee, which shall include an expert selected by the Governor repre-