

SOME FACTORS IN THE INDUSTRIAL POTENTIAL OF SOUTHERN ILLINOIS

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The industrial potential of Southern Illinois,¹ like that of most areas, depends upon factors operating not only internally but also externally. Internally such items as available raw materials and water supply are natural factors which influence the potential. In addition there is the human factor. How these function within the area is of course important, but also, external forces, both nearby and distant, may retard or enhance development.

INTERNAL FACTORS

Local raw materials.—The varied products of its mines, farms, and forests serve as industrial raw materials in Southern Illinois. Manufacturing is commonly developed on a raw material base in instances where goods are perishable, where transportation costs form a considerable part of delivered costs, or where raw materials are more expensive to ship than the finished products. In Southern Illinois the manufacture of dairy products, bakery products, and ice illustrate the first point; wooden boxes and baskets, concrete products, brick and tile illustrate the second, and charcoal the third. These types do not promise great expansion, but they do promise some, and they provide employment for a segment of the population.

¹ Southern Illinois, as the term is used in this paper, consists of 32 of the 34 southernmost counties of the state of Illinois.

Power.—Southern Illinois is well supplied with electric energy, but the potential is much greater. Existing facilities are adequate for present electric power requirements and for any normal or anticipated load growth. The three major power generating stations within the area are at Grand Tower on the Mississippi, Hutsonville on the Wabash, and at Muddy near Harrisburg, on the Middle Fork of the Saline River. A fourth is being built at Joppa.

All these stations are located along streams because the water requirement of modern steam plants in many urban centers is greater than the water required for all other uses combined.² Water bodies capable of supplying large amounts of condensing water thus are major factors in determining the location of steam plants. In Southern Illinois, therefore, it is to be expected that future plants will be erected along the major streams and their larger tributaries.

The Atomic Energy Commission, through contracts with private companies, is constructing a large power plant at Joppa, Illinois. This plant can favorably affect the industrial potential of the area. Substantial amounts of power from existing sources are now being supplied to

² For example, the "...Duquesne Power and Light Plant near Pittsburgh is reported to require six times as much water for condensing purposes as the entire city needs for all purposes." From Erich W. Zimmermann, *World Resources and Industries*, New York, 1949, p. 609.

this plant by the T. V. A. and a combine of five private power companies in Southern Illinois, Kentucky, and Missouri. Under a compact with the A. E. C. the private power companies are installing inter-connecting lines, so that power excess to the needs of the project can be distributed back through the member systems. A large surplus of power is expected to be available to business and industry when the plant is completed. It is conceivable that the great concentration of power will serve to attract new industry.

Water.—Water is an essential raw material for the nation's industrial plant. Industry cannot survive where water is inadequate in quality or quantity. Southern Illinois, in general, has poor groundwater supplies, but has good surface water sources in the major bordering streams and their tributaries. The southern part of the state is the only portion of central United States which has opportunity to develop industry along both the Ohio and Mississippi rivers.

Minerals.—Mineral production in the area was valued at \$300,000,000 in 1950. This is greater than that of any western state except California. Minerals are not only abundant but also varied. The industrial potential associated with the mineral resource requires that the various minerals be processed in Southern Illinois factories, rather than exported as raw materials. This will occur as industry matures in the southern part of Illinois and the adjacent portions of bordering states.

Local market.—The influence of a

local market upon the industrial potential is a function of both population numbers and purchasing power. The absolute size of the area market, in terms of the 1950 population, is 674,000 persons, so distributed that the average density is 49 per square mile.³ This is too few persons per unit area to create a large enough market to attract new market-oriented industries.

According to estimated data, the effective buying income in 24 of the 32 counties in 1950 was less than \$1200, and in 15 of those counties it was less than \$1000.⁴ When compared to the state average of slightly over \$1700, the effective buying power is relatively low. If the area had the same purchasing power in dollars per square mile as the state, it would still be only one-third as effective. Thus the relatively small market in terms of population numbers and distribution is not compensated by large purchasing power.

However, market-oriented industries might be stimulated if the market were expanding. Unfortunately this is not true. The area lost population according to the 1930 and 1950 census reports. From 1900 to 1950 the net increase was 37,000 persons, or 740 per year, a gain which would not require new market-oriented industries, inasmuch as existing facilities could satisfy the slightly increased demand.

Need for alternative opportunity.—Severe unemployment in the mining counties, together with under-employment in agriculture, pointed up the need for readjust-

³ Density of population for the state is 150 per square mile.

⁴ Based on data in *Sales Management*, May, 1952.

ment of the economic system. In 1940, there were 58,000 persons, constituting 23 percent of the labor force, on public emergency work or seeking work. The decrease of employment in coal mining and in agriculture, the long time major employers in the productive industries, creates a need for alternative employment opportunity. Manufacturing could provide this employment provided those persons were willing to shift to industrial jobs.

In addition to the large number of unemployed there is potentially available a large proportion of those persons who leave the area. For example, between 1940 and 1950 the area population decreased by 48,607, while the natural increase was 57,453. Thus the area lost about 106,000 persons in the 10-year period. This represents 25,000 to 35,000 potential industrial workers, many of whom prefer to stay in the area.

LABOR AS AN UPROOTING OR RETARDING FORCE

There are several aspects of labor which may be considered as negative factors with respect to the industrial potential of the area.

Organization of labor.—It seems reasonable to assume that the hesitancy of some companies, seeking new locations, to establish factories in Southern Illinois is due in part to a history of labor strife. The truth is that the area has an unfortunate labor reputation.

Disregarding strikes in the coal industry, which are national rather than local in origin, there are many work stoppages due to jurisdictional

disputes. The record shows 34 stoppages within two years on the construction job at Joppa. The opening of a new and unused plant at Herrin, valued at \$1,200,000 and intended to employ over 1000 persons, was considerably delayed and seriously jeopardized by lack of understanding between local labor and the new management.

There is nothing inherently wrong with the fact that labor in Southern Illinois is unionized. Labor unions are an established fact in the American economy. Most management officials expect the labor force to be or to become unionized, and some prefer union employees. The disturbing fact, however, is that not only does labor have a poor reputation, but this reputation has spread beyond the borders of the area. As a result it becomes a factor adversely affecting the industrial potential.

Lack of industrial experience.—In any industrial consideration it is important to know the nature and degrees of skill in a labor force, for these are related not only to the present economic status of an area, but also to its potential development. The fact that Southern Illinois has depended for so long upon agriculture and mining as major sources of employment means the lack of a large reservoir of labor with industrial experience. A grouping of employed persons into skilled, semi-skilled, and unskilled classifications shows a higher proportion of the labor force in the semiskilled and unskilled classes than in either the state or the nation. Furthermore, that labor which is present has had but a short and limited experience. This means added costs and some

loss of productive capacity to new establishments because of time spent to train new employees.

Of great significance also is the spread between factory and mining wages. In the fourth quarter of 1951, of 25 selected major industries in the nation, manufacturing as a whole paid only third highest wages, \$1.626 an hour in contrast to \$2.236 for bituminous coal mining.⁵ Factory workers find it difficult to be satisfied with wages lower than their coal-mining neighbors are getting.

This presents a paradox. An industry which has reached its climax and is on the down grade in terms of employment opportunity is indirectly retarding the initiation and development of a substitute. It is a problem which those persons seeking new jobs and those seeking new factories for their communities must take into serious consideration.

Furthermore, the lower skill of labor in Southern Illinois means that the average wage in the area would be less than the average for the nation, and for industries employing mainly unskilled or semiskilled labor, it would be considerably less. Manufacturing in general does not pay high wages, but it can and does provide steady employment which the coal mining industry does not do. This is a significant point for Southern Illinois labor to consider, a point which apparently has been either overlooked or ignored.

LABOR AS AN ATTRACTING OR CONCENTRATING FORCE

In contrast to the several negative aspects of labor just mentioned there

are several factors which make labor an attracting force for new industry.

Unemployment.—The decline in employment in the coal mines and on the farms which began in the 1920's has been continuous. At no time in the past 30 years has the area had a labor shortage, not even during World War II. Instead it has been classed several times as a critical area by the federal government. The long continued lack of sufficient employment opportunity would seem to make labor receptive to an expansion of manufacturing within the area.

Increased urbanization.—As is true for the United States as a whole, there has been an increase in the urban population in Southern Illinois. This means a growing concentration of potential workers in urban centers and a supply of labor more readily available to new manufacturing plants. This concentration is favorable in another respect. Urban centers in the heart of the area are so closely spaced that a 50-mile radius from Herrin includes 250,000 persons, or nearly a third of the area's population. Actually the great number of people concentrated in this particular area has been referred to as a dispersed city.

Commuting readiness.—Another favorable factor is the readiness with which persons in this so-called dispersed city will commute. A survey of 18 industries in seven towns disclosed that 2400 of the 3400 employees did not live in the town where they worked. Some of them drove more than 40 miles. This willingness to drive rather great distances means that a factory is not

⁵ The National City Bank of New York, Arithmetic of steel wage controversy: *Monthly Letter on Economic Conditions, Government Finance*, New York, p. 53, May 1952.

limited to the labor supply of the city in which it locates, but that it can draw workers from adjacent urban centers.

Management and leadership.—Most management at present is from the outside. It is brought in with the new establishment. Present management, however, is well trained, particularly that of the larger and more technical industries in which the management personnel was trained in universities, business, and technical schools.

Outstanding leadership has not been demonstrated. No one has been able to unite area leaders into an aggressive and moving force. Neither has leadership been able to overcome local jealousy in favor of area cooperation and benefit. The nearest approach to area organization is Southern Illinois Incorporated, but its work is relatively restricted.

EXTERNAL FORCES

Effect of St. Louis.—The industrial development of a given area, as stated earlier, is a function of factors operating not only within but also outside its boundaries. Some of the external forces may be significant but at the same time tenuous when attempts are made to observe them. This, however, is not true with respect to the influence of the St. Louis area. The major portion of the area's transportation network focuses upon St. Louis and thus provides possibilities for a strong attachment.

Evidence of this attachment is the dominance of industry in the eight northwestern counties. Approximately one-third of the establishments in Southern Illinois are in

those eight counties. It seems reasonable to forecast that industrial expansion of the St. Louis area will be most favorable to those Southern Illinois counties on its periphery.

Position and transportation.—Southern Illinois lies on the southwestern margin of the so-called American Manufacturing Belt. Three major railroads give Southern Illinois excellent access to that area. Favorable transportation time and rates, plus an adequate supply of qualified labor, could be an important positive factor in the industrial potential. Although the labor requirement is not a reality it can be developed under good leadership. This is essential because position in itself is a static factor and must be implemented by human action.

With respect to transportation the advantage seems to lie with Southern Illinois. Most industries now in the area, except for food products, use imported raw materials and sell to a national market. The presence of such industries indicates that Southern Illinois offers a situation and transportation facilities, along with other factors, which permit those industries to meet competition from more highly industrialized areas of eastern United States.

Position has long been recognized as a major factor affecting the location of industries and the development of cities. The excellent central location of Southern Illinois is emphasized with respect to national population distribution. A business man who wished to establish his plant as near as possible to the exact center of the population of the nation would probably locate in Richland County where the 1950 Census

places the center of population.

The change in geographic distribution of population, reflected by the westward shift of the center of population, has notable economic effects. It influences the geographic distribution of income, of the labor force, and of the business population, as well as the flow of new investments and consumer markets. Southern Illinois by its central position stands to gain from these shifts.

Centrifugal factors in established areas.—It is also a recognized fact that management in the old established industrial areas is faced with such problems as inadequate supplies of labor, congestion, shifting markets, and competition from new areas. In addition increasing taxes, nuisance regulation laws, and high land values in well developed areas lead to changes in location. As these factors become more pronounced they decrease the values of old locations and enhance those of new ones. Southern Illinois stands to gain as industry makes necessary relocations.

Functional relationships with the major manufacturing belt.—Southern Illinois exhibits certain functional relationships with the major manufacturing belt. These may well be strengthened. Functionally it is a source of raw materials consumed outside its border. This relationship may be illustrated by the flow of flourspar into the major industrial belt, chiefly to the steel industry. The contribution of the area is outstanding inasmuch as it is the major domestic source of flourspar.

The southern part of the state also serves the function of processing and

finishing materials imported from and marketed within the manufacturing belt. This second type of functional relationship may be illustrated by many industries in the area. For example, pig iron and steel from St. Louis and Chicago serve as the basic raw materials for several establishments producing space heaters in several towns. Steel products also serve industries making washing machines and refrigerators. These products serve a national market. Southern Illinois has a good start in this type of industry but can develop more.

Recent growth in manufacturing.—Since 1939 the area has expanded its manufacturing structure from 456 to 798 establishments. This growth was accompanied by an increase in the number of employees from 18,000 in 1939 to 30,000 in 1950. Measured on the basis of manufacturing workers per 1000 population the increase amounts to 31 percent. Although this is only about half that of the nation as a whole it is greater than 22 percent for New England and is almost equal to 34 percent for the Middle Atlantic region. This is a significant expansion for an area which is not regarded as being industrialized. Such substantial growth must be regarded as a positive factor in the industrial potential.

It is also important to note the presence of branch plants in the metals, machinery, and transportation industries. These are desirable types in any manufacturing area and Southern Illinois is fortunate in acquiring them. Furthermore, many of them represent branches of major companies, for example, Swift & Co.,

E. L. Bruce Co., International Shoe Co., and Sangamo Electric Co. The factors prompting their selection of Southern Illinois include labor supply, availability of raw materials, and accessibility to markets.

SUMMARY

Although Southern Illinois lies on the margin of the American Manufacturing Belt it has not shared in the industrial growth of that portion of the nation. Industrial development has been slow even though the area possesses assets common to major manufacturing regions.

Several factors are regarded as having adverse effects upon the industrial potential. These include (a) a large proportion of unskilled and semiskilled workers in the labor force, (b) a poor reputation in labor-management relations, (c) inexperience of local leadership in dealing with factory owners, and (d) lack of coordinated area effort to promote industrial development. In addition, the prosperity associated with the rapid expansion of the coal industry created an atmosphere in which there was little incentive for the development of manufacturing.

In contrast there are several factors favoring industrial growth. The

varied products of mines, farms, and forests serve as industrial raw materials. The resource base is varied and capable of sustaining an expanded manufacturing industry. Existing power facilities can be greatly expanded. There is a surplus of labor in the area. Labor commutes readily, which offers flexibility in plant location. Geographical position gives the area a central location with respect to the nation's population, and transportation facilities provide ready access to the Middle West, the industrial Northeast, and the expanding South. Recent acquisition of manufacturing suggests the possibility of further growth.

Natural, economic, and human factors both in and outside the area can contribute to a positive potential for Southern Illinois. Through effective use of the favorable aspects of position, transportation, forests, minerals, power, and the labor force, the prospects for a continued and sound expansion of industry seem favorable. With such development will come a release from an unsatisfactory dependence upon mining and agriculture, the institution of a more balanced economy, more stable employment, and improved living conditions for the people of Southern Illinois.