

ECONOMIC FUNCTION OF DOWNSTATE ILLINOIS CITIES

ROBERT A. HARPER
Southern Illinois University, Carbondale

This paper is a further experiment in the study of economic functions of cities, which has interested geographers for years. It builds upon methods of other geographers, but focuses attention on a different aspect of the problem—the comparison of the combinations of economic functions between cities.

The method of approach follows one used by Harris in his early study.¹ Accordingly, the United States Census figures giving the number of employed workers in each of the major industrial groups have been used.² Table 1 gives these figures for Carbondale. The census statistics have been converted to percentages to facilitate comparison between cities of different sizes.

This paper will attempt to illustrate an approach to functional combination by examining the downstate Illinois cities of over 10,000 population. The downstate cities are here defined as those outside the Chicago and St. Louis urban fringes. Eight of the occupational groupings from the census have been selected for study; they are designated with asterisks in table 1.

TABLE 1.—URBAN OCCUPATIONAL BREAK-DOWN FOR CARBONDALE.

	Population—10,921	Employed—4,066
	Employed	Percentage of employed
Agriculture.....	32	0.79
Forestry and fisheries.....	4	0.11*
Mining.....	33	0.81*
Construction.....	333	8.19
Manufacturing.....	359	8.82*
Transportation and utilities.....	630	15.49*
Wholesale trade.....	117	2.88*
Retail trade.....	615	15.13*
Entertainment.....	253	6.22
Business services.....	197	4.85
Personal services.....	376	9.25
Professional services.....	249	6.12*
Educational services.....	553	13.60*
Administration.....	144	3.54*
Unreported.....	171	4.21

* Used in urban employment profile.

The combination of these eight functions makes up what the author calls the employment profile of a city (fig. 1). The percentage of workers in each of the eight industry groupings is shown by bars, the height of each bar corresponding to the percentage of total employed workers in that industry. This type of representation has been used before,³ but not exactly as it is here.

¹ Chauncy Harris, A functional classification of cities in the United States: Geog. Review, vol. 33, pp. 86-99, 1943.

² Table 35—Economic characteristics of the population, by sex, for standard metropolitan areas and urban places of 10,000 or more, 1950 United States Census of Population: General Characteristics.

³ John Alexander, An economic base study of Madison, Wisconsin: Wisconsin Commerce Papers, vol. 1, no. 4 (Univ. Wis., 1953), p. 90.

The employment profile shown is for an average downstate Illinois city of over 10,000 population. The percentage-in-each-industry column on this figure was arrived at by averaging the percentage of workers in that industry for the 44 downstate Illinois cities.

My aim in using the employment profile is to compare the variation in profile from city to city. Figure 2 shows the profiles for the 44 downstate cities. Each profile is comparable to the average profile shown in figure 1. Cities are not distinguished by size. They range from Peoria, with over 100,000 inhabitants, to Harrisburg, Marion, Macomb, and Monmouth, with slightly more than 10,000 people.

There is great variation in the profiles. Rockford's profile (R, upper center),⁴ with a very large predominance of manufacturing (50%) contrasts markedly with the profile of West Frankfort (WF, south center) where mining is the dominant occupation (39%). But Galesburg would fit into Harris' classification as a "diversified city" where trade and manufacturing are both important.

Galesburg (G, west central), perhaps better illustrates the advantage of the profile approach. No single employment grouping dominates. Retail trade, manufacturing, and transportation are almost equal in importance, with 17, 19, and 20 percent, respectively. Although the profile shows these differences, individual dominant features such as these were effectively shown by Harris' method.⁵

⁴ Cities are distinguished by initials. Only a few cities are located in the text. Refer to an atlas for others.

⁵ Chauncy Harris, A functional classification of cities in the United States: Geog. Review, vol. 33, pp. 86-99, 1943.

URBAN EMPLOYMENT PROFILE
SHOWING PERCENTAGE OF EMPLOYED WORKERS IN
VARIOUS INDUSTRIES

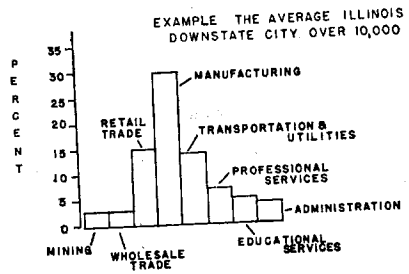


FIG. 1.

Harrisburg and Carbondale appear to show diversification, but not in the importance of manufacturing combined with trade which formed Harris' criteria. Harrisburg has been called a mining town, but notice that retail trade and professional service appear to be almost as important. Carbondale might be considered an educational center under a single classification, but the profile shows that trading and transportation are equally important. Springfield (central) is often considered an administrative center, but, although administration is abnormally high, trade and manufacturing are more significant, revealing much the same values as other central Illinois cities.

Similarities as well as differences between cities are revealed in the profiles. The similarity of Springfield to other central Illinois cities has already been mentioned. Notice also the large number of cities showing a profile like that of Rockford, where manufacturing is overwhelmingly dominant and other industries are of minor importance.

As seen from figure 2, profile similarities and differences reveal a regional character. The Rockford profile, with its greater than normal

EMPLOYMENT PROFILES

DOWNSTATE CITIES OVER 10,000 POPULATION
1950

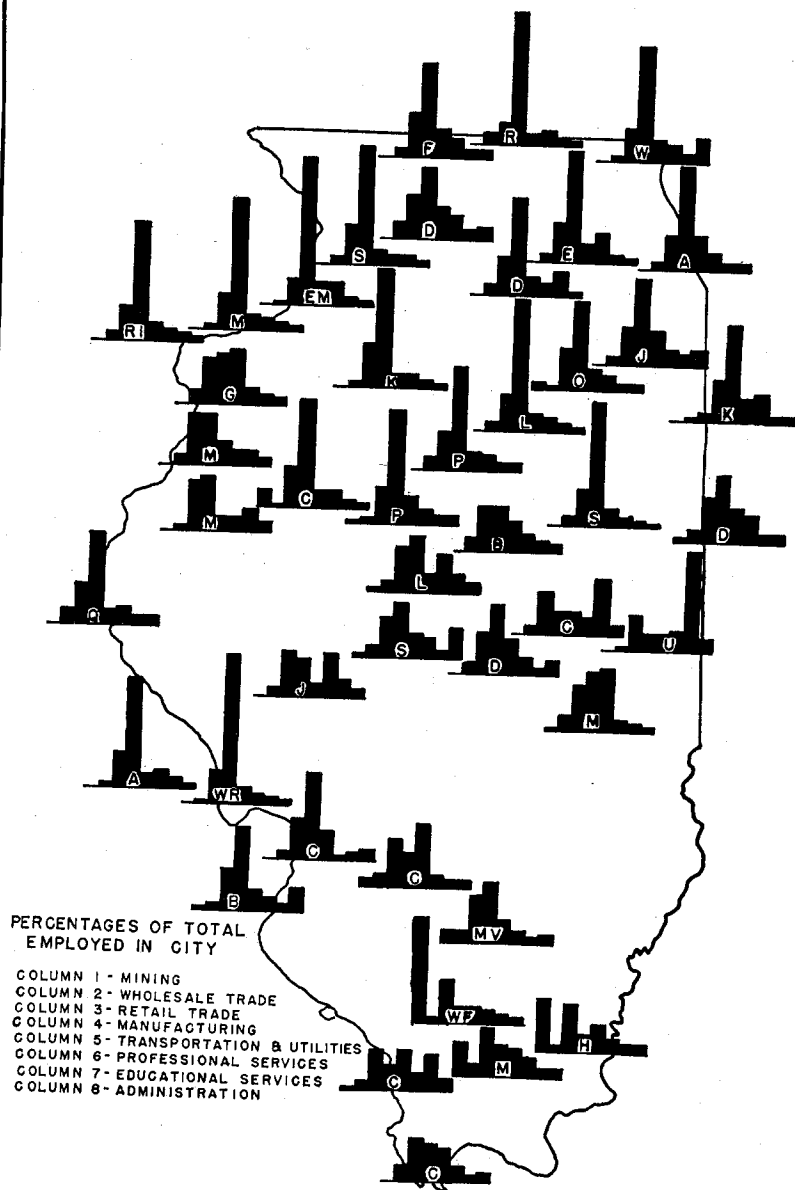


FIG 2.

amount of manufacturing, is found almost without exception throughout northern Illinois, the tri-city area of western Illinois, and the outer fringe of St. Louis. These profiles support extension of the limit of the United States' manufacturing belt across northern Illinois, down the Illinois waterway, and into the St. Louis region, as geographers have done.

However, the profiles of the northern Illinois cities reveal minor variations resulting from differences in secondary functions. Thus, Waukegan, near the Great Lakes Naval Station, shows greater than average administrative function; Elgin, with the state hospital, has a high percentage of professional service. The presence of Northern Illinois State College can be seen in the educational service column of the DeKalb profile. Elgin presents a greater-than-average percentage of transport and utility workers. Further, the great percentage of manufacturing in the tri-cities, Rockford, LaSalle, Pekin, Peoria, and Kewanee leaves a lower-than-normal percentage in most other industry groupings. But these variations do not alter the general uniform profile of these cities. Only Dixon and Freeport, with lower manufacturing totals, show a major variation in the dominantly manufacturing profile of northern Illinois cities.

In central Illinois, away from the Illinois River, changes occur in the urban profile. Manufacturing drops sharply and is replaced in most cities by a slightly higher amount of retail trade than revealed further north. Several types of profiles can be seen. Those of Decatur, Danville, and Quincy, where manufacturing

dominates, resemble the modified manufacturing profile seen in the north in Freeport and Dixon. Springfield and Lincoln present another profile variation, with manufacturing just slightly more important than retail service. The profiles of Galesburg in the west and Mattoon in the east display still another variation; retailing and manufacturing are important, but transportation is not very significant. The profiles of Champaign and Urbana demonstrate their overwhelming dependence on educational service. Bloomington and Jacksonville each has a profile distinctly its own.

Central Illinois cities show greater diversity than cities upstate. In spite of greater variation, the profile of the central Illinois city is distinct from that of northern cities and would not fit into the manufacturing belt.

In southern Illinois other changes occur. Alton and Wood River near St. Louis are exceptions, of course, resembling as they do the manufacturing profile of upstate cities. Belleville and Collinsville on the outer rim of St. Louis have their counterparts in Dixon, Freeport, Decatur, Danville, and Quincy, farther north. Mount Vernon, too, shows almost this same profile, except for the higher-than-normal amount of mining.

The other southern Illinois cities are characterized by very small amounts of manufacturing. The significance of mining is apparent in West Frankfort, Marion, and Harrisburg. In Carbondale and Centralia transportation vies with retail trade for leadership, although in Carbondale the importance of educational services can also be seen.

Cairo, in the extreme south, shows a distinct profile, but the importance of retail trade, manufacturing, and transportation suggests the profiles of certain central Illinois cities.

Comparing the profiles in figure 2 with the profile of the average downstate Illinois city in figure 1, you will observe that the average profile appears to be almost purely arithmetical. Only Joliet and Ottawa (north central) show much correspondence to the average profile.

Variation from the average employment percentage can itself be used to show urban function. In a recent study of New Zealand cities,⁶ functional comparisons were made by a graphic portrayal of variation from average percentage in each in-

dustry. Variation above the average employment percentage has also been considered a criterion in determining basic industries as opposed to service industries.⁷ These alternatives should be kept in mind in judging the value of the employment profile described here.

This paper is a progress report on the employment profile approach to the study of urban function. As such it deals with methods of study and presentation rather than with conclusions. I plan to expand the Illinois study to include all U. S. cities for which data is available. I hope that profile variation will serve as a starting point in investigating the "how" and "why" of urban function.

⁶ L. L. Pownall, The functions of New Zealand towns, *Annals Assoc. Am. Geographers*, vol. 43, pp. 332-350, 1953.

⁷ The economic multiplier in Wichita: *Monthly Review*, Tenth Federal Reserve District, Federal Reserve Bank of Kansas City, vol. 37, no. 9, Sept. 30, 1952.