ECONOMIC DEVELOPMENT TARGETING DATA BASE

by Jerome A. Deichert

Introduction

Local and state economic development practitioners recently have begun to realize that programs and activities must be targeted. A major problem facing communities and other organizations working on economic development is determining how to use limited resources to ensure the highest return in reaching local economic development goals. A targeted program focuses on the economic activities that are most likely to be successful for an area. Targeting can help stretch limited staff, time, and money.

How should economic development efforts be targeted? Ideally, targeting should be driven by information on industry and business performance trends, local and state competitive advantages, and local and regional economic development goals. A set of high-performance industries (high-performance could be defined in many ways) should be screened for compatibility with local competitive advantages, available resources, and goals. These industries and business areas that make it through the screening process become candidates for various economic development programs, including recruitment of new businesses, retention and expansion of existing businesses, or start-up of new businesses.

The Targeting Data Base

The Center for Applied Urban Research at the University of Nebraska at Omaha has developed an Economic Development Targeting Data Base to assist Nebraska's local and regional development groups in targeting their economic development efforts. The data base is founded upon one indicator of industry performance—employment growth. An examination of local growth trends is insufficient to assess industry performance. The long-term prospects of any local industry are influenced by the economic well-being of that industry nationally. Therefore, this study also considers national and regional trends to better assess industry performance.

Data are provided for the United States, the West North Central Region (comprised of Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota), and Nebraska individually. The data base draws from two sources. The source for data about national and regional employment is County Business Patterns. Although County Business Patterns provides comparable data that are easy to obtain, data about many industries in Nebraska are suppressed because of the small number of firms. Therefore, Nebraska's employment data were obtained from the Nebraska Department of Labor.

Employment totals generally were reported for all four-digit Standard Industrial Classification (SIC) codes, although

ABOUT THE AUTHOR

Jerry Deichert is a senior research associate at CAUR and a member of the governor’s Economic Forecasting Advisory Board. His interest in economic and demographic issues in Nebraska has resulted in numerous published articles.
sometimes it was necessary to report data at the three-digit level to retain consistency between the two sources. County Business Patterns does not include all employment for these government employees, railroad employees, and self-employed persons. In addition, agricultural services, forestry, and fishing; mining; construction; and transportation and public utilities were excluded from the total employment in Nebraska with the data in these tables represent private employment. Therefore, data on employment in industries that contain both public and private components (predominantly service industries) consist only of private employment. This especially is true for schools and educational services, social services, hospitals, and some other health services.

Contents of the Data Base

The data base consists of six main files (tables), each containing the same information but sorted differently. Only industries that added employment at all three levels between 1977 and 1984 are included in the files. The files are available on diskette or in printed form. This article describes the targeting data base by examining portions of two tables. The first column of each table contains the SIC code, followed by a brief description of the industry. The third column consists of a three-letter abbreviation of the broad industrial category. The category is the same for all industries in the data base.

The first three columns present the employment and location data. The percentage change in employment from 1977 to 1984 is presented in table 1 but it is arranged in the order suggested by the location quotients. If an industry represents 1 percent of national employment, the location quotient is .75 (1/2). On the other hand, if an industry represents 2 percent of Nebraska’s employment and 1 percent of national employment, the location quotient becomes 2.0 (2/1).

The location quotient is larger than 1, the industry’s local share is greater than its national share. For example, if an industry has an employment concentration that is 25 percent in the state, its location quotient is 2.0 (25/.75 = 2.0). A location quotient smaller than 1 indicates the industry is not meeting local labor market needs; if an industry is employing fewer than 25 percent of the individuals employed locally in a particular industry, its location quotient is .5. All of these industries are probable importers. A location quotient of 1 indicates an industry’s local share is about the same as the national share. The number of individuals employed locally in a particular industry by the state is about the same as the national share. The number of individuals employed locally in a particular industry is about the same as the national share. The number of individuals employed locally in a particular industry is about the same as the national share.

The last two columns contain location quotients for Nebraska. Location quotients can be used to identify communities’ possible competitive advantage. Industry targeting involves more than performance assessment; it should identify the industries that will take advantage of a community’s competitive advantages.

A location quotient compares an industry’s share of total employment in Nebraska with that industry’s share of either national or regional employment. Location quotients can be used to identify industries that bring dollars and jobs into an area. When an industry’s local share exceeds the national average, a portion of that industry’s employment may be considered export employment and may indicate a competitive advantage that should be exploited. If an industry’s local share falls below the national average, that industry may rely on imports into the state, and is a potential candidate for import substitution.

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Table 2
Fastest Growing Industries in Nebraska, 1977-84

Table:<br>
<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Industry by Nebraska Employment</th>
<th>Percentage Change in Employees 1977-84</th>
<th>Industry Size for Nebraska 1980</th>
<th>Location Quotient 1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>5810</td>
<td>Eating and drinking places</td>
<td>RI: 39.9, -5.6, 10.6 (I)</td>
<td>8100</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>9230</td>
<td>Nursing and personal care</td>
<td>Ser: 51.4, 23.0, 1 (I)</td>
<td>5850</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8060</td>
<td>Hospitals</td>
<td>RI: 31.0, 17.3, 1.9 (I)</td>
<td>5850</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>4230</td>
<td>Commercial and other services</td>
<td>FIR: 20.2, 23.5, 12.8 (I)</td>
<td>8050</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5410</td>
<td>Grocery stores</td>
<td>RI: 26.8, 19.2, 11.8 (I)</td>
<td>8060</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6210</td>
<td>Tracking, tracing, and long</td>
<td>TCU: 9.8, 5.2, 4.5 (I)</td>
<td>5410</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6310</td>
<td>Scientific research and</td>
<td>Ser: 7.0, -11.0, 2.0 (I)</td>
<td>5410</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8220</td>
<td>Colleges and universities</td>
<td>Ser: 67.9, 48.6, 1.8 (I)</td>
<td>6310</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8330</td>
<td>Social services</td>
<td>Ser: 56.9, 40.5, 5.9 (I)</td>
<td>8220</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5150</td>
<td>Offices of physicians</td>
<td>Ser: 40.7, 60.0, 31.2 (I)</td>
<td>8330</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6230</td>
<td>Ambulatory health care services</td>
<td>FIR: 17.0, 18.1, 9.8 (I)</td>
<td>5150</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7349</td>
<td>Building and grounds maintenance</td>
<td>Ser: 16.0, 15.3, 5.6 (I)</td>
<td>8230</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7380</td>
<td>Hotel, motels, and</td>
<td>Man: 24.2, 18.0, 9.0 (I)</td>
<td>7349</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5510</td>
<td>New and used car dealers</td>
<td>Ser: 1.3, -7.0, 1.5 (I)</td>
<td>7380</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6690</td>
<td>Religious organizations</td>
<td>Ser: 75.8, 36.0, 0.0 (I)</td>
<td>5510</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5230</td>
<td>Real estate brokers and services</td>
<td>Ser: 24.8, 30.4, 39.7 (I)</td>
<td>6690</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7390</td>
<td>Business services, n.e.c.</td>
<td>Ser: 45.9, 22.1, 7.3 (I)</td>
<td>5230</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>2752</td>
<td>Coconut, nuts, and</td>
<td>Man: 61.0, 69.9, 52.5 (I)</td>
<td>7390</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7499</td>
<td>Building maintenance services,</td>
<td>Ser: 42.0, 63.5, 49.4 (I)</td>
<td>2752</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>4130</td>
<td>Savings and loan associations</td>
<td>Ser: 60.9, 45.7, 39.2 (I)</td>
<td>7499</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6310</td>
<td>Life insurance</td>
<td>Ser: 9.1, 38.9, 39.1 (I)</td>
<td>4130</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8060</td>
<td>Legal services</td>
<td>Ser: 86.4, 33.4, 0.1 (I)</td>
<td>6310</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8220</td>
<td>Offices of dentists</td>
<td>Ser: 56.9, 35.7, 31.4 (I)</td>
<td>8060</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6490</td>
<td>Insurance agents, brokers and</td>
<td>Ser: 36.4, 28.9, 34.8 (I)</td>
<td>8220</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6330</td>
<td>Casualty insurance</td>
<td>Ser: 13.0, 22.6, 21.2 (I)</td>
<td>6490</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7230</td>
<td>Real estate dealers</td>
<td>Ser: 10.3, 13.0, 14.7 (I)</td>
<td>6330</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5151</td>
<td>Title abstractors</td>
<td>Ser: 11.0, 15.3, 17.3 (I)</td>
<td>7230</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>6330</td>
<td>Fire, marine, and</td>
<td>Ser: 14.3, 22.8, 9.3 (I)</td>
<td>5151</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>7240</td>
<td>Newspapers</td>
<td>Man: 14.2, 8.9, 1.2 (I)</td>
<td>6330</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5105</td>
<td>Drug and proprietary stores</td>
<td>Ser: 15.0, 3.1, 0.0 (I)</td>
<td>7240</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>5230</td>
<td>Lumber and other</td>
<td>Ser: 26.2, -2.8, -13.1 (I)</td>
<td>5105</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td>8910</td>
<td>Registering and</td>
<td>Ser: 63.1, 16.3, -27.9 (I)</td>
<td>5230</td>
<td>Location Quotient 1984</td>
</tr>
<tr>
<td></td>
<td>architectural services</td>
<td></td>
<td>8910</td>
<td>Location Quotient 1984</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census, County Business Patterns, and Nebraska Department of Labor, unpublished data. Calculations by Center for Applied Urban Research.

Description of the Complete Data Base

The economic development targeting data base can be used in a variety of ways. The six files provide different ways of arranging the data for analysis. The first file lists all of the industries with national employment gains between 1977 and 1984 by SIC code and provides a starting point from which the remaining tables originate. File 2 ranks the industries by their rates of growth at the national level, allowing for quick identification of the most rapidly expanding industries. File 3 ranks the industries by their rates of change in Nebraska between 1977 and 1984, to facilitate comparisons with national data. Because percentage rates of change are influenced by the employment size of the industry (small changes in small industries will have large percentage changes), file 4 categorizes industries by number of employees in Nebraska during 1984. Then, the industries are ranked by percentage change within the employment size class. File 5 arranges the data by location quotient, and file 6 lists the actual U.S. employment for each industry.

Organizations with a statewide mission or an organization operating in an area where most of the state's employment is for a specific industry may be located in these data base to identify industries that are growing rapidly nationally or regionally, but are stagnating or declining in Nebraska. Once identified, these high-performance industries (at the national and regional levels) could be studied for possible action. The data base will probably be used by industries that are growing nationally and growing even faster in the West North Central Region. These might be called high-performance regions. Once identified, these industries could be divided into two groups, depending on Nebraska's rate of growth. One group could include the high-performance industries that are growing at a rate in Nebraska that is less than the regional rate. The second group could contain industries that are growing faster in Nebraska than throughout the region.

Location quotients can be used two ways. First, industries with location quotients greater than 1 may indicate basic industries for which Nebraska has a comparative advantage. Industries with regional and national location quotients of less than 1 indicate that Nebraska is underrepresented. If both the region and the nation are gaining employment faster than Nebraska, these industries may be candidates for import substitution.

Summary

The previous examples and tables are suggested ways of using the data base. The files (tables) in the data base are a few of many possible ways the data base could be arranged. Users who obtain the data base on diskette will be able to manipulate the files easily.

It should be emphasized that the Economic Development Targeting Data Base, by itself, will not provide all of the information needed for targeting local or regional economic development efforts. Employment trend data and other information that will aid in the identification of high-performance industries—industries that might be best bets for development efforts.

No attempt was made to screen industries for compatibility with the competitive advantages and goals of the state. Furthermore, industries that are adequate for compatibility with the local or region area.

Because two sources of data were used, as stated earlier, there may be inconsistencies in reporting rates and procedures. In addition, data for the states comprising the West North Central Region were suppressed frequently, resulting in estimation of some employment counts. Consequently, caution should be used when comparing national, regional, and state data. The data base is not intended to provide the final solution, but is intended to help narrow the field of feasible industries.

Because an industry has grown in the past, does not guarantee that it will grow in the future. Therefore, the targeting data base should be augmented with employment projections. A report prepared by the U.S. Department of Labor contains projections for three-digit SIC codes for the years through 1995 and would be an excellent supplement to the economic development data base.

For more information about this data base call the author at 554-8311.

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