

2nd Quarter 2012 | 27(2)

TARGETING INDUSTRIAL GAPS AND DISCONNECTS FOR COMMUNITY ECONOMIC DEVELOPMENT

Steven Deller

JEL Classifications: R11, R15

Keywords: Clusters, Community Development, Outreach Education

While some rural communities are still of a “shoot anything that flies, claim anything that lands” mindset, others are looking to be more strategic in how they approach community economic development. Part of the movement toward more strategic thinking has spurred the adoption of cluster development strategies in many states and larger communities. Although the notion of cluster development has a rich and long tradition, it was the highly visible work of Harvard business economist Michael Porter (1990, 1996, 2000, and 2003) that inspired the current interest.

While there are as many definitions of clusters as there are researchers studying them, there are several common elements. Industrial clusters are geographic concentrations of interconnected companies: specialized suppliers, service providers, and associated institutions in a particular field that compete but also cooperate (Deller, 2009; Fesher and Sweeney, 2002; McCann, 2002; Steiner, 2002). A cluster is a geographically bounded concentration of independent businesses with active channels for business transactions, dialogue, and communications that collectively shares common opportunities and threats.

Practitioners generally limit their thinking on clusters to specialized input suppliers but businesses can also be related by specialized labor skills, technologies, and professional or technical development opportunities in addition to common input suppliers. Institutions that can be vital to successful clusters can be trade associations, economic development organizations that facilitate networking, educational opportunities such as those provided by universities and technical colleges, as well as local governments. Local governments can help facilitate networking and ensure that quality services are provided at the lowest possible cost. The emphasis is on dynamic improvement and efficiencies rather than market scale.

Clusters are critical to competition because modern competition depends upon productivity and innovation. These depend on *how* companies compete and not on the particular fields in which they compete. Competition is employing sophisticated methods, or using advanced technology, or offering unique products and services. Clusters can affect competition in three ways: increasing the productivity of companies within the area, increasing competition by driving the direction and pace of innovation which underpins future productivity growth, and affecting competition by stimulating the formation of new businesses which expand and strengthen the cluster itself.

While the promotion of clusters is multidimensional, one critical starting point is the networking of input suppliers. Firms that form the core of the economic cluster can either purchase input supplies from local firms or import from firms outside the local community. In Porter’s classic wine production example, input suppliers include not only producers of grapes but also all of the inputs used in grape production along with supplies required in the wine making process itself. The higher the share of those inputs that can be supplied locally, the stronger and more vibrant the foundations for the cluster. One strategy that communities can pursue is to target key input suppliers for promotion and development.

At the local level the notion of targeting “gaps” and “disconnects” in the local cluster supply chain may be a viable strategy for communities. Since firms can buy locally or import into the region, examining industry import data can identify those industries that are importing particularly large dollar values. Firms that comprise this particular industry may import rather than buy locally for two reasons. First, there is no regional industry that is able to supply the required inputs. Here there is a “gap” in the regional economy, and that industry *may be* targeted for further consideration. If such a local input supply industry does exist but is not utilized, it is a “disconnect” within the regional economy. Again, the industries that appear to be “disconnected” *may be* targeted sets of industries to focus attention on for further action. The idea here is that the region is looking to build stronger relationships within regional clusters by strengthening inter-industry linkages. This is accomplished through the strategy of import substitution.

There could be several reasons for a “disconnect.” The first is a lack of knowledge between the purchasing and selling firms. Here the implication for public policy is clear: implement strategies to build bridges across firms within the respective industries, for example, through networking such as trade shows or chamber of commerce workshops. The second is that the region of analysis is too small in a spatial sense, and from the importing industries’ perspective, they are purchasing locally. For example, an industry in Milwaukee may be importing large levels of a particular input from the Chicago region. From a Milwaukee and/or Wisconsin perspective, this level of importing may not appear to be “optimal,” but from the industrial perspective the relevant region does not stop or start at the Wisconsin-Illinois state line. By further exploring and thinking about where inputs, as well as exports, are flowing, a larger regional approach may become apparent to local policymakers and practitioners. Third, it may be that there are good explanations as to why disconnects exist. These may range from the custom nature of required inputs to the inability to come to contractual terms.

For example, in a study of St. Croix County, Wisconsin, Janke and Deller (2004) discovered that local hospitals were importing a large volume of business management services despite the presence of several local management consulting firms. On further examination by a team of local economic development practitioners, amounting to one phone call to the administrator of the largest hospital in the county, it was determined that the consulting services were highly specialized and a national firm located in the Twin Cities of Minnesota provided nearly all Wisconsin hospitals with this particular service.

There are also several reasons why there may be a significant “gap” in the local supply chain. The size of the gap may not be sufficient to attract one or more firms, encourage a local firm to expand, or encourage entrepreneurial activity to fill the gap. Or it may be that the supplying industry is one that the regional community does not desire. In early stages of the St. Croix study mentioned above, the investigators uncovered a large and vibrant plastics manufacturing industry, which was composed of numerous smaller firms. This industry was importing a significant volume of plastic resins, the basic input into their production processes. A member of the research team familiar with the industry clearly stated that the plastic resins industry was tightly linked to the petroleum refining industry in the southern states and, in his words, “it could stay there.”

The key to the approach outlined here opens the door to providing not only rigorous economic analysis, but also a mechanism to expand the thinking of local policymakers and practitioners. By using input-output analysis (e.g., IMPLAN), potential clusters can be identified. Then a means to strengthen those clusters can be created. By thinking in terms of import substitution, local policymakers and practitioners can move beyond simple recruitment as in the first wave of economic development and move to include second-wave strategies that focus on existing businesses and entrepreneurship. By exploring import and export flows, the concept of the relevant regional structure and the need to think regionally and act in cooperative arrangements can be better understood.

But, as eloquently argued by Buss (1999) from a broader perspective and by Hughes (2009) from an input-output perspective, there are inherent problems with the approach outlined here. For example, the overwhelming volume of detailed data can give the illusion of accuracy and can lead to a situation of “paralysis by analysis” where the community drowns in data and cannot move forward. When used as an educational tool to help policymakers and practitioners to think more broadly and deeply about economic development, however, significant changes can be effected through this kind of analysis.

The Wisconsin Approach

The “Wisconsin Approach” to targeting regional economic development through import substitution proceeds in a multistep process. It is important to keep in mind that the Wisconsin Approach is designed to be a university-based outreach educational program as much as it is a technical analysis program. Two points are critical to note. First, the approach is treated as a team effort between members of the community and university faculty and staff. In Wisconsin, the Cooperative Extension community resource development educator is a key player. Thus strategic research decisions, such as on which industries to focus, are made not by university faculty and staff but rather by the community research team. The research team takes ownership of the process by making decisions at key points in the data analysis through reviewing the data analysis and determining filters that provide direction to the analysis. Second, the key criteria on which to evaluate industries, such as absolute size of the industry by specific metric, such as industry sales per employee or wages and salary income per employee or fastest growing sectors based on the trend analysis, are determined by the research team. By allowing the research team to determine the selection criteria, community values are more closely reflected.

The analysis is composed of three parts. The first part of the analysis uses data from the Bureau of Economic Analysis Regional Economic Information System (BEA-REIS) and focuses on trends where the local economy, or county, is compared to the state and U.S. Trends in population, income, and employment and earnings by industry are shared with the research team. Discussions about relative growth levels of the study area provide an informal “first screen” in terms of the targeting exercise. In essence, drawing attention to and discussing relative growth rates and notions of stability opens the door to a better understanding of which sectors, broadly defined are growth sectors

from a larger macroeconomic perspective. This analysis allows the discussion of the transition from goods to a services-producing economy, instability of goods-producing sectors, and shifts in sources of income. This discussion also allows for an initial discussion about the overall performance of the regional economy to see if the data support or refute local perceptions.

The second part of the analysis uses detailed IMPLAN data to focus attention on which industries dominate the local economy. The idea here is not only to identify the largest industries but also to introduce and discuss the various ways in which the economy can be measured, ranging from industry sales to income and employment. For the research team, rankings of all sectors from largest to smallest are provided for discussion purposes. As part of this step of the analysis, location quotients are introduced into the discussion which helps identify the relative strengths of different industries within the local economy and raises the notion of imports and exports. Based on the decision of the research team, this list of metrics can be narrowed and the “threshold” for reporting to the larger community is determined.

At this step in the discussion, the notion of imports as well as exports is expanded upon through simply reporting the exports by industry, ranked from highest to lowest as calculated by IMPLAN. At this point the research team has two directions to consider: (1) focus attention on the potential clusters identified in the prior analysis and/or (2) focus attention on products that are imported into the region in large quantities.

For example, if the community members of the research team identify food processing as a strong industry that is, growing and providing well-paying jobs, specifically a potential cluster, then the team can use the input expenditure profile provided by IMPLAN to identify imported inputs. By cross-checking with output or supply, one can determine if the imports are due to a “gap” or a “disconnect”. If local supply is low or does not exist a “gap” in the local economy is identified. On the other hand, if local supply is sufficiently large than a “disconnect” is present. If a “gap” is present this may be an industry that should be targeted via recruitment, encouragement of existing business expansion, or new business formation through entrepreneurial activity.

In an analysis of the Fox Valley region of Wisconsin, which is south of Green Bay, one “disconnect” identified was a large flow of raw milk production being shipped out of the region, while at the same time cheese producers were importing large volumes of milk (Muench and Deller, 2001). A true dairy cluster would address that disconnect. The same analysis identified a large “gap” in engineering services and, because of the pay scale in engineering, the community research team elected to focus on this industry. As a result of this analysis the Fox Valley Technical College is partnering with the University of Wisconsin to build a local engineering curriculum.

Local knowledge brought to the research team is vital to helping think through what is a viable import substitution strategy. As noted above there are potentially dozens of reasons why a “gap” or a “disconnect” exists in the local supply chain, and local knowledge can help to identify those reasons. The ultimate goal of the Wisconsin Approach is to not only help identify potential clusters and industries to target via an import substitution strategy, but also to expand the knowledge and understanding of the local economy by the community members of the research team.

Next Steps

The notion of clusters has reenergized many community economic development efforts and has helped move local economic development policy forward on several fronts. First, the discussion of clusters and regional comparative advantage has broadened the thinking of local policymakers to move beyond traditional recruitment strategies that formed the first wave of economic development strategies. Indeed, by looking within the region to identify clusters, interest in building on existing businesses, or second-wave thinking, has been renewed by local policy makers. Although economic development practitioners have long embraced a blending of first- and second-wave development strategies, it has been a tougher sell for politicians to see the value. Second, a focus on clusters makes it clear that individual communities do not exist in isolation and that regional perspectives are required. This has resulted in a number of regional public-private partnerships, which some have argued represent the third wave of development strategies.

The Wisconsin Approach outlined here refocuses the notion of targeting regional economic development toward the idea of import substitution. Using an educational approach, as opposed to simply providing a technical analysis, the framework is used to structure a broader discussion about regional economic structure. The research team, comprised of university researchers and extension educators, but more importantly, members of the community, is an integral part of the study. Key decisions about which industries to focus attention on and how to proceed are made by the community members of the research team. This process both elevates the team’s awareness of the regional economy and empowers them to make more informed decisions about economic development strategies.

The Wisconsin Approach does presume that there are certain levels of social and institutional capital within the region of interest. In other words, the region must be prepared to undertake such an effort. Key players within the region

must be willing and able to be part of the research team. The approach presumes that the community has an active chamber of commerce, economic development corporation, and local government that are proactive in community efforts. If leaders of local institutions expect “the answer” to be handed to them in the form of a consulting report, then they are not ready to undertake the analysis outlined here. Our experience with the Wisconsin Approach is that the data analysis ends up taking a backseat to in-depth and focused discussions about the regional economy.

For More Information

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Steven Deller (scdeller@wisc.edu) is Professor and Community Development Specialist at the Department of Agricultural and Applied Economics, University of Wisconsin-Madison/Extension.

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