A Deep Dive Into Clusters

What's a cluster? It's a regional concentration of related industries in a particular location. Clusters consist of companies, suppliers and service providers as well as government agencies and other institutions that provide specialized training and education, information, research and technical support.

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Clusters enhance productivity and spur innovation by bringing together technology, information, specialized talent, competing companies, academic institutions and other organizations. Close proximity, and the accompanying tight linkages, yield better market insights, more refined research agendas, larger pools of specialized talent and faster deployment of new knowledge.

Regional economies are made up of two types of clusters, each with different patterns of geographic presence and different competitive dynamics.

Traded clusters are groups of related industries that serve markets beyond the local region. They are free to choose their location of operation (unless the location of natural resources dictates where they can be) and are highly concentrated in a few regions.

Because traded clusters compete in cross-regional markets, they are exposed to competition from other regions. Examples of traded clusters include financial services in New York City, information technology in Silicon Valley, and video production and distribution in Los Angeles. Traded clusters are the "engines" of regional economies; without strong traded clusters, it is virtually impossible for a region to reach high levels of overall economic performance.

Local clusters, in contrast, consist of industries that serve the local market. They are prevalent in every region of the country, regardless of the competitive advantages of a particular location. As a result, a region's employment in local clusters is usually proportional to its population. Moreover, the majority of a region's employment comes from jobs in local clusters.

Because local clusters are tied to the regions in which they are located, they are not directly exposed to competition from other regions. Examples include local entertainment such as concerts, sporting events and movie theaters; local health services such as drug stores and hospitals; and local commercial services such as drycleaners and lawn care.

While local clusters account for most of the employment and employment growth in regional economies, traded clusters register higher wages and much higher levels of innovation. Local clusters provide necessary services for the traded clusters in a region, and both are needed to support a healthy and prosperous regional economy.

In Southeastern Michigan, the employment breakdown among local vs. traded sector is 62 percent local and 38 percent traded. For the nation, the breakdown is 64 percent local and 36 percent traded.

Metro Detroit's largest local sectors in 2013, with employment in parentheses, are health services (243k), hospitality establishments (154k), commercial services (133k), and local real estate, construction and development (85k). Net local cluster job creation, 1998 to 2013, is minus 87,634. The only local sectors with positive employment growth over 1998 to 2013 are local health service, local hospitality, and local education and training.

Strong traded sectors in Metro Detroit, with their 2013 employment in parenthesis, are business services (179k); automotive (88.1k); metalworking technology (33.6k); marketing, design and publications (25.8k); upstream metal manufacturing (9.5k); and plastics (5k). All these traded sectors are closely interrelated with automotive. For example, business services include corporate headquarters for General Motors, Ford, Fiat-Chrysler and many auto suppliers.

The local economy is not diversified in its traded sectors, which places Metro Detroit at risk of a negative shock to the automobile industry. Further, while employment in the automotive traded sector has increased since the recession's end, it is down substantially since 1998. Employment in all Metro Detroit traded sectors has fallen by 187,346 since 1998.

Detroit's economy remains exceedingly reliant on the automotive and related traded clusters. Efforts to diversify the local economy have not been successful. Being highly dependent on the cyclical automotive industry, which is subject to global competition and influenced by the price of gasoline and interest rates, makes the Metro Detroit economy particularly vulnerable to a recession or just a slowdown in the automotive sector. *

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