

## Industrial Cluster Analysis, Entrepreneurship and Regional Economic Development

STOUGH, Roger R.

Vice President, Research & Economic Development,  
George Mason University

This paper begins with an examination of the natural resources, market fit and proximal advantages of the Northeast Asia region for the economic development of its various sub-national region centers or clusters. It then examines what is understood about the relationships among industrial clusters, entrepreneurship and regional economic development. The paper then examines the role of knowledge in the economic development and growth process concluding that today knowledge production and the conversion of that knowledge into useful economic knowledge is central to successful economic development and growth and among the many sources of new knowledge universities are one of the most significant. However, the conversion of knowledge into useful economic knowledge or commercial products occurs primarily through entrepreneurship. This raises questions about what the conditions for optimizing the conversion of pure knowledge into economically useful knowledge at the regional level are. Clustering or related economic activity is assumed to be one of these conditions itself because of the presence of accelerated knowledge spillovers that tend occur more frequently in urban environments in general and, more specifically, in industrial clusters. However, it is not sufficient to form and promote the development of such clusters. In the current economy of the modern global era there are many other important ingredients, e.g., capital availability, tax advantages, presence of angel investors, intellectual property management, science parks, business incubators, education and training programs, and physical infrastructure processes. The remainder of the paper examines these factors, the type of leadership needed to support successful cluster development and related best practices. The paper concludes with a discussion of the findings (in the context of several case situations including food centric clusters) of this interpretive analysis and an examination of appropriate public policy measures.