

3 New Businesses and Regional Development¹

3.1 Introduction

Globalization has had an enormous impact on traditional industrial structures — one could even go so far as to say a “shattering” impact. Increasing competition has led to a greater variety of products at low price-cost margins and sellers’ markets are rapidly evolving into buyers’ markets. Today, consumers expect increasingly customized products so that mass production capability is not necessarily the advantage it once was (Piore and Sable 1984). This is especially true for the automotive industry (Womack et al. 1990), where statistics show that producing two cars that are exactly the same color and have exactly the same equipment options happens about as often as a blue moon.

Customer demands for customized products and quick delivery necessitate a highly flexible, fast-reacting production system. Increasing complexity in production has led manufacturers to disaggregate the production process by out-sourcing much of it, a strategy that originated in Japan and is known as *lean production*.² In reducing vertical integration, manufacturers create an external supply chain, a process that has been made considerably easier by low transportation costs and an almost global communication infrastructure. Globalization has made it possible for manufacturers to not only find, but to use, the cheapest inputs for their businesses. However, it turns out that only the production of standardized and labor-intensive inputs has been shifted to countries with competitive labor costs; R&D and

¹ This chapter is based on Falck O, Heblich S (2007) Dynamic Clusters. *Bavarian Program in Economics* BGPE Working Paper 16.

² “Lean production is ‘lean’ because it uses less of everything compared to mass production—half the human effort in the factory, half the manufacturing space, half the investment in tools, half the engineering hours to develop a new product in half of the time. Also, it requires keeping far less than half the needed inventory on side, results in many fewer defects, and produces a greater and ever growing variety of products” (Womack et al. 1990, 13).

capital-intensive production tends to stay close to home. In the automobile industry, for example, it is generally true that first- and second-tier suppliers are located in direct proximity to the original equipment manufacturer (OEM). The low vertical integration in this industry necessitates close R&D coordination between OEM and important suppliers. This network is often complemented by universities and other research establishments, as well as by corresponding service providers. Taken together, this cooperative interlocking creates the sort of regional structure that Michael Porter (1990, 1998) calls a “cluster.”³

In reality, some regions in a single industrialized country enjoy rapid economic growth while others are downsizing or stagnating. This leads to the conclusion that there must be some remaining regional competitive advantages — even in the “Age of Globalization”. During the Industrial Revolution, the availability and accessibility of natural resources was critical to success and the basis for traditional agglomeration theories. For example, regional coal deposits attracted steel production, which led to surrounding and large industrial districts. However, today transportation costs have become less important and hence “traditional arguments for the existence of clusters have been undercut by the globalization of supply sources and markets” (Porter, 1998, p. 208). So, if some areas have a competitive advantage and it is not based on natural resource endowment, but still appears to be regional, what exactly is it? What are the “new” location factors conducive to innovation and growth?

The quest for postindustrial location factors is reflected in new economic theories that have as their goal understanding the comparative advantages of regions in an increasingly globalized environment. Seminal approaches include Porter’s (1990, 1998) “theory of clusters”, Krugman’s (1991) “new economic geography”, and Piore and Sable’s (1984) “theory of collaborative economies”. In general, all three approaches state that regions can compensate for potential disadvantages due to higher wages by setting up stable regional networks that literally bind companies to a certain region. This is good news, especially for those who see globalization as a job-destroying monster. However, when it comes to *how* this regional advantage can be achieved, the three approaches diverge. Porter highlights the importance of inter-industry clusters that will provide a competitive and supportive environment; Krugman focuses on the existence of large-scale firms with increasing returns to scale, leading to industry agglomera-

³ “Clusters are geographic concentrations of interconnected companies; specialized suppliers; service providers; firms in related industries, and associated institutions (for example, universities, standard agencies, and trade associations) in particular fields that compete but also cooperate” (Porter 1998, 197f).