



## Conceptualizing the Kentucky Horse Industry as an Economic Cluster

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October 16 2009 Article # 15099

*"A critical challenge for all U.S. regions is to determine their competitive advantage in the global economy, and industry clusters are a key vehicle for describing, understanding, and enhancing sources of regional competitiveness. In turn, the pressure on a region to continually improve the competitive position of its firms is unrelenting." Goetz, 2004:2*

*In late July 2009 an older gentleman saw the logo on my shirt and asked me about UK's Equine Initiative. I briefly described the mission of the Initiative, and he said that he was in the Thoroughbred business, as were several other members of his family.*

*As I turned to leave, he stopped me cold with the following comment: "Are we going to lose it?"*

*I must have looked puzzled, because he said, "You know, all the Thoroughbreds. Many of my clients took their mares to Pennsylvania and other places. It's not just me. Most everyone I know is having problems."*

*I responded that the Thoroughbred business always goes through cycles of growth and decline.*

*To which he said, "That's true, but this is the worst I've ever seen in all my years in the business. Maybe this time it won't come back."*

*This brief conversation provides a jumping off point for thinking about the horse industry in Kentucky, its opportunities, its challenges, and the threats it faces. Our research suggests that Kentucky's horse industry represents what Harvard Business School economist Michael Porter calls an economic cluster*

### What is an economic cluster?

According to Michael Porter, a Harvard Business School economist, an economic cluster is "a geographic concentration of firms and institutions whose activities are interconnected and interdependent within a particular economic sector."

The idea of an economic cluster encourages us to consider the ways in which value-added activities coalesce around an agricultural or natural resource and then attracts other firms that seek to capture spillover economic opportunities. An economic cluster emphasizes the importance of social relationships and social networks as components of economic capacity and highlights the importance of public investments and public policies in supporting the cluster.

### Kentucky's equine economic cluster

The horse industry in Kentucky is a land-based economic cluster much like the Napa Valley wine industry in California. A cluster might emerge in a particular place for a variety of reasons. In the case of the Kentucky horse cluster, a key factor in its emergence has been the land resources of the central Bluegrass counties--particularly fertile soils built on the karst limestone geology, the predominance of Maury Silt loam soils, as well as a mild climate and adequate rainfall.

The core of Kentucky's equine economic cluster is comprised of the commercial farms, training centers, show arenas, and race tracks that are engaged in horse-related activities such as breeding, sales, training, racing, showing, boarding, and equine-assisted therapeutic and learning programs. It is imperative to understand that Kentucky's equine economic cluster encompasses more than Thoroughbreds, including all horses of all breeds and uses. For example, Thoroughbreds in Kentucky are outnumbered by horses located on small farms and in "backyards" whose purpose is solely their owners' enjoyment.

However, the Thoroughbred breeding and sales component of this economic cluster is considered the strongest in the world with all the infrastructure (stallions, sales facilities, mare management, equine veterinarians, bloodstock agents, transportation services) required to support the industry within a compact geographic area. The significance of this domination of the Thoroughbred industry accounts for the prestige of a Thoroughbred foal bred and born in Kentucky.

Porter (1998b) identifies several key characteristics of economic clusters that contribute to their competitive advantage over single firms or unidimensional industries. What follows is the application of these characteristics to the equine economic cluster in Kentucky.

1. *A growing cluster develops, as well as attracts, entrepreneurs and related businesses who migrate into the geographic area because of the cluster. In other words, success breeds success.*

In Central Kentucky, many businesses provide specialized inputs and services to the core firms of the cluster. These include, but are not limited to, barn builders, farriers, veterinarians, fencing and fence painting companies, pasture mowing and renovation businesses, pest control, farm equipment sales, horse tack and supplies, hay and feed supplies, and bedding.

There also are firms such as equine specialty businesses that can only develop and thrive in the presence of the cluster. In this area, firms specializing in equine materials or services, such as horse farm tours, horse publications, equine podiatry, and equine jewelers or clothiers, complement the cluster's core economic sector.

2. *Clusters flourish in part because of the presence of a large, skilled, and knowledgeable labor pool.*

Competition among businesses within the cluster provides ample opportunities for employment at good wages, which attracts skilled labor. Firms are more likely to consider relocating to the region because they have confidence that employees with specialized skills will be available or that required training can be found. This reduces the search and transaction costs for both new and existing businesses seeking employees.

3. *Within the cluster, specialized information is developed and circulates among firms and institutions, stimulating innovation and facilitating adaptive responses to critical conditions.*

Despite competing for customers and market share, there is also a considerable amount of cooperation among firms based on information networks built on personal relationships. The development and exchange of specialized information stimulates innovation and facilitates adaptive responses to conditions that may influence the health or competitiveness of the cluster. But there is also a level of coordination in market actions and other joint activities that contributes to building trust and social capital among the cluster's firms.

4. *The whole is greater than the sum of its parts. In other words, the activities of individual firms in the cluster are interdependent and can be mutually reinforcing or, can diminish the value of related firms.*

The marketing activities of individual firms within the cluster reinforce those of other firms, strengthening the reputation and image of the cluster to potential customers. Also, the concentration of firms, specialized knowledge, and technical expertise creates a supportive environment for trade and professional associations. Finally, economic clusters might develop businesses that are complementary to each other, as in the tourism and horse clusters.

5. *A cluster builds social capital as well as financial capital. This social capital reinforces the economic potential of the cluster.*

Shared values and norms such as good business practices, quality products and services, trust, reciprocity, and expectations develop within an economic cluster. Frequent contact among the cluster's firms and people helps build social capital and increases the likelihood of joint ventures, strategic alliances, and collaborative work that builds and strengthens the competitive position of the cluster.

6. *A cluster draws the support of public institutions and attracts public investments.*

In all economic clusters, a relationship develops between firms and public institutions, including governments and educational/technical institutions. Local and state governments make public investments directed to public goods and infrastructure that support the activities of the cluster.

#### **Can an economic cluster die?**

An economic cluster can lose its competitive position without constant attention and support. Economic clusters can and have been lost. The decline of an economic cluster may occur for a variety of reasons:

- The emergence of a competing cluster elsewhere;
- The diminishment, degradation, or transition to other uses of the land resources that support a land-based cluster;
- Governmental regulations that restrict the adaptability and flexibility of the businesses in the cluster or intervene in the internal competition among firms;
- The failure to implement public policies that nurture and sustain the viability of the cluster; and
- The failure to make public investments in essential infrastructure.

But underlying all of these might be a psychological tendency to take for granted the presence of an economic cluster and to presume that since it has been here for a long time it will always be here. This can be the death knell of a cluster, for "without ongoing routine analysis, monitoring and nurturing" (Goetz, 2004:2) clusters will find it difficult to sustain their competitive position in a changing global economy.

This brings us back to a parallel to the question posed to me--is the decline of the Standardbred sector of the equine economic cluster in Kentucky a harbinger of things to come? The number of Standardbred stallions standing in Kentucky declined from 95 in 1985 to only five commercial stallions in 2004. Also, the number of Standardbred yearlings by Kentucky sires sold at three major harness racing sales declined from 560 in 2000 to 217 in 2005, and their average value declined from \$35,229 to \$22,687. The Standardbred industry in Kentucky has virtually disappeared, drawn to other states (e.g., New Jersey and Pennsylvania) that have adopted policies (e.g., breeders' incentives) that nurture this segment of their equine clusters. The story at the beginning asks, "Are we seeing the same decline in the Thoroughbred sector of our equine economic cluster?"

#### **Strategies for nurturing the health of economic clusters**

There are many public and private strategies that can nurture the health of economic clusters, but all of them depend on the recognition of the existence and the potential of such a cluster, as well as an understanding that clusters survive and thrive when they are supported. The final factor is making the choice to invest in the cluster.

In many places, there is an understanding that the decision to focus on cluster-based economic development policies yields real benefits. First, studies (e.g., Gabe, 2003; Krugman, 1991) show that new business activity is higher in those places where there is a high concentration of firms in particular industry sectors, reflecting the availability of skilled labor and related firms. Second, given that clusters attract growth, there is a higher return to public investments in economic development in these places than in others (Gabe, 2003). Third, the concept of an economic cluster provides a solution that enables political decision-makers to explain why they are focusing development programs on particular industry sectors. It is not about favoritism or a reaction to special interests, but a reasoned use of scarce resources to stimulate economic growth.

#### **Summary and implications**

The horse industry in Central Kentucky has already passed the market test and done so for more than a century. The initial strength of the Thoroughbred and Standardbred farms in this area enhanced existing firms and stimulated the development of new firms that supported or enhanced the core of this emerging cluster. But there is a danger in assuming that this cluster will always be here. The long-term success of the Kentucky equine economic cluster depends on recognizing its contributions to the overall economy and a commitment to building on this unique asset through cluster-based development policies.

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#### **Further reading**

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