

## CLUSTERS - BENEFITS AND RISKS ROMANIA'S CASE

### Jelieru Daniela - Claudia

Romanian American University, Faculty of Internal and International Commercial and Financial-Banking Relations, 1B Expozitiei Blvd., Sector 1, Bucharest, e-mail: jelieru\_daniela@yahoo.com, phone: 0724.269.966

*A cluster is a geographical concentration of related and supportive industries which compete and cooperate with each other. A famous example of cluster is Silicon Valley in the USA, which concentrates a great part of the cybernetic industry in the USA.*

*The cluster is made up of competitive firms in an industry, plus the supplying and the beneficiary firms, which make up the competitive environment in which the company functions and which benefit from the local infrastructure.*

*In what way does the existence of the cluster influence the competitiveness of the firm?*

*First of all, the related or supportive industries which make up the cluster stimulate the creation of the factors or the specialized mechanism of those which contribute to the improvement of the firm's competitiveness.*

*A concentration of domestic competitors encourages the creation of the new factors – local labour.*

*Keywords: cluster, competitiveness, economic development.*

*JEL: M13,M16*

Context marked by the intensification of interactions between nations, with direct implications on increasing competition, resulted in increased interest of the economic environment on ways of obtaining success in the market. Globalization has forced companies to be competitive, innovative and dynamic in order to pass the market test.

Romania, country reminiscent of communism, difficult to overcome, adapts pretty ponderous to the new requirements of global markets, as in Western firms, the practice of capitalism is more easily applied. Getting forms without substance remains the approach of our country. The problems and solutions to increase the degree of competitiveness are valid on the whole Romanian economy

Competitiveness is applied not only on firms, as one might think, but also on nations, or newer regions. Just as competition between companies increases, all the same happens between nations and regions. Thus, creating a competitive environment will also depend on firms operating in that environment and the rules established by the state. On one companies struggle to gain market share as well, and therefore a higher profit, developing strategies and policies as appropriate which differentiate them from competition. On the other hand, the regions or nations have to struggle to get the competitive advantage to attract on their territory as many investments. The reasons why some nations or regions are more attractive to firms than other economic and fiscal policies of these countries are: the existence of adequate infrastructure and the low level of bureaucracy.

Romania must submit further effort to become a business environment attractive to investors. Moreover, our country must develop a well articulated strategy by which to achieve the final goal: getting a real competitive advantage based on innovation and without artificial support.

### Clusters theory

Regional specialization and the tendency of firms with the same activity profile to crowd in a particular geographical area has been held by economists for a long time. The notion of national and regional specialization, which leads to higher productivity has been stated since the nineteenth century by David Ricardo. A century later, Alfred Marshall presents the causes leading to a higher productivity of industries, such as geographical proximity of firms, labor market specialization, the effects of propagating the knowledge or specialized suppliers.

Many current theories have introduced the concept of "market forces" which tends to focus investments in areas where they offer infrastructure, better access to market specific human capital, and lower risks.

Theory locating economic activities, known as the theory of clusters, launched by Michael E. Porter<sup>118</sup>, refers to the ways and the contributing factors of increasing "competitiveness at the local, national, regional and global market" and is, finally, a way in which a country may face fierce competition of the capitalist economy. This theory justifies the importance of locating, while factors of the development relating to climate and natural conditions, the fertile soil, proximity to geographical location help to the development of the cluster.

Porter's success with theory clusters is largely due to this theory's pragmatism, which is not only a purely theoretical debate, but is also conceived as a useful method for managers, governments, and economic development policy in today's stiff competition. Unlike similar theories, launched by geography, Porter's theory is like a "business strategy, focusing on the idea of productivity, competitiveness and performance. Porter's cluster comes as a solution for companies, but also for savings.

---

118 Michael E. Porter - Clusters and the New Economics of Competition Harvard Business Review, November-December 1998.

The word cluster means to "gather in one place, the group after certain criteria" to get its definition of 'initiator' concept<sup>119</sup> namely, cluster is "a geographical concentration of companies that compete but also cooperate, suppliers of goods and services and institutions which are associated with them."

The definition may seem a little unclear and too general, being criticized in this respect by specialists in geography, such as Ron Martin - Professor at the University of Cambridge and Peter Sunley University of Edinburgh. According to their idea of cluster, this is not just an invention of Porter's, but is a redesccovery of Marshall's idea of the importance of geographical location in the business. This vague definition of the generic term is used intentionally, to cover a wide spectrum of groups and industrial specializations. Cluster is, indeed, a theory approached by Marshall, but Porter's contribution is quite substantial. The concept itself means much more than theory agglomerations. As for the generality of the definition, it is due to existing diversity of clusters. Industrial clusters are agglomerations of companies with similar and interdependent activities, located in a geographic area, operating on a common market and having the same needs, technology and specialization of labor. Firms within clusters develop their comparative advantage in the immediate neighbourhood competitors using the skilled labour, specialized suppliers and, ultimately, the exchange of information between firms. These agglomerations combine development needs of local / regional business with internationalization through Foreign Direct Investment - FDI, putting the value in local resources, know-how, labour force, traditional products and practices, information and network Public and Private Partnership (PPP).

This means to cluster firms in a given region, which results in further exchanges between them, favouring and improving communication and trust aiming to achieve efficiency and flexibility.

Clusters, in essence, assume the existence of interdependent firms whose collaboration is an important factor of competition and the necessary infrastructure and research centres to generate specific innovation in the field.

The latter produces infusion of money, which translates into the development of regional and national economy. Optional, clusters may include government institutions, NGO's or educational institutions.

The purpose of the cluster, besides reducing costs of the immediate neighbourhood companies involved, is to create competitive advantage for that specific location, employees, suppliers, infrastructure, research potential and innovation.

Opinions on the factors that determine the performance of firms in industrial clusters are different. Most opinions support geographical proximity and intense networking between firms as essential elements in increasing performance. Firms present in competitive agglomerations are considered members of a collectivity which facilitates the diffusion of innovation (Abrahmson and Rosenkopf, 1993, and St. Polder. John, 1996). The effects of spillovers generated by firms most developed, leading to the emergence of a process of mimicry and imitation (mimetic isomorphism) of the cluster competitors (DiMaggio and Powell, 1983) and, consequently, enhance competitiveness.

Recently, however, a number of studies have brought to the scene a different opinion on the factors that decide innovation in a cluster. According to the authors of these studies, geographical proximity is not essential in determining innovation. Rather than this, the companies are part of an "elite society" formed in a selective process that has strengthened the position of certain companies to the detriment of others. According to these authors, there is a relationship between the intensity of interactions within small businesses and the higher degree of innovation of the first firm.

### ***Benefits and risks of clusters***

Main benefits identified after adoption of the model clusters are in organizational productivity, regional specificity and increased mobility of information.

Productivity, along with increasing wage levels of employees, are considered the main causes for which there is increased interest for the formation of clusters. Opinions on the subject of "clusters" vary. Productivity achieved by firms within a cluster can only be verified through empirical study of each case. One such project, so difficult to achieve, is now run by Harvard Institute - Cluster Mapping.

Increased mobility of information published online, represents the third main benefit of clustering. It is well known that technology and innovation does not develop in isolated companies but in open environments, where interaction between individuals of different competent organizations appears. The latter, leads to constructive interaction assimilating existing knowledge and generating ideas, products and processes of production. Studies show that the exchange of ideas happens frequently, either directly through the association of member firms, for the purpose of research (Cooke 2004) or indirectly due to labor mobility between firms (Power and Lundmark 2004).

A region may become vulnerable if cluster owned portfolio is too concentrated. Moreover, the cluster can often be not only the answer to increasing the competitiveness of a region, but also the source can come from elsewhere.

Opinions on the ad-hoc formation of clusters, following the deliberate intervention of external forces (eg. local government), are controversial. The reason is that investment risk is high and the result is not predictable.

---

119 Michael E. Porter - Clusters and the New Economics of Competition Harvard Business Review, November-December 1998.

Cluster structure can also be the source of unfortunate events. For example, a cluster made up of small firms may be vulnerable to market disturbances, as clusters of platform anchor on the first firm like a hub and spoke. They may become vulnerable if the first firm goes bankrupt.

### **Clusters in Romania**

A feature of developing economies is the tendency of concentrating economic activity around the capital or cities with great political influence. This happens either on purely objective grounds, or because of government intervention, aiming to concentrate competition around the capital.

Implementation of a "cluster policy" could be regarded as less feasible for countries in developing countries. Generally, clusters in transition economies are less powerful, often lacking FDI support and competition between companies is poor. Among the differences between transition economies and developed countries, there is the transition from planned economy to a market economy, which means lack of experience in competition, lack of collaboration among institutions and lack of trust in government initiatives.

At this time, our economy is in the phase of comparative advantages such as those arising from the production of consumer goods from cheap labor and the less processed natural resources. These benefits are not only temporary and questionable, but they also have devastating consequences, in some cases.

If we view the development stages, according to Dunning and Narula, Romania is located somewhere in the stage two of development, which is dominated, on one hand, by the stage of easy production of goods, with processing that needs cheap labor, and, on the other hand, by the export of raw materials needed for processing standardized goods, of course in search of lower costs and increased efficiency.

In Central and Eastern Europe, according to OECD statistics in 2004, Romania is situated on the lowest level in terms of technological potential. This awareness has made between 2001 and 2004, industrial policy discourse to present clear concepts, in which competitiveness is the key word: "Under the new concept, the European industrial policy of the governments should have as fundamental objectives the increasing of competitiveness." Therefore, Romania should create competitive advantages with the positive effect of duration.

Nowadays, cluster formation in Romania is still poor. They are mostly only at the level of proto-clusters, lacking the mature clusters. Low potential competitive dynamics in the Romanian economy is reflected most directly in the connections between the competitive firms - the debut of clusters - which are found in the first stages of the production process or in final stages. Usually, the final stages, by their nature, need not to generate very large horizontal and vertical links, and do not propagate effects (spillover effects).

On one hand, the Romanian state has tried to promote the agglomeration of firms by public policies, giving rise to "public" clusters, which by law, have the status of industrial, scientific and technological parks. On the other hand, the clusters can be identified by means of statistical and quantitative analysis. Various studies and research projects have been identified several potential clusters in Romania.

The Applied Economics Group<sup>120</sup>, in their study on the emerging clusters in our country, talk about clusters, such as IT in Bucharest, textile clusters in Timisoara or ceramic clusters in Alba Iulia. They have used different methods of study, which is why results have not coincided, and clusters identified were numerous and diverse.

Therefore, the issue of clusters in Romania remains, for now, an open one. Time will show which of these emerging clusters crosses the road to a mature cluster, present in developed countries. In my opinion, the transformation of proto-clusters into mature clusters can be achieved through mutual support and cooperation among the public, private and academic media.

### **References:**

1. Asheim B. - Localised Learning, Innovation and Regional Clusters. Cluster Policies - Cluster Development. Age Mariussen Ed. Stockholm 2001;
2. Mariussen Oge - Cluster policies - cluster development? : a contribution to the analysis of the new learning economy. Stockholm, Nordregio, 2001;
3. Michael E. Porter - Clusters and the New Economics of Competition Harvard Business Review, November-December 1998;
4. Michael E. Porter - Location, Competition and Economic Development: Local Clusters in a Global Economy, Economic Development Quarterly 14, no. 1, February 2000;
5. \*\*\* [www.cluster-research.org](http://www.cluster-research.org)
6. \*\*\* [www.clusterobservatory.eu](http://www.clusterobservatory.eu)
7. \*\*\* [www.oecd.org/dataoecd/36/11/31798594.pdf](http://www.oecd.org/dataoecd/36/11/31798594.pdf), Prospects and challenges for cluster development.

---

<sup>120</sup> [www.gea.org.ro/documente/ro/clustere/identificareclusteredragospislaru.pdf](http://www.gea.org.ro/documente/ro/clustere/identificareclusteredragospislaru.pdf), accessed on 5.05.2009.