

ANALYSIS OF THE POSSIBILITY OF EVOLUTION OF THE ROMANIAN MARKET ECONOMY THROUGH CLUSTER DEVELOPMENT STRATEGIES

*Cristina VLĂȘCEANU*¹
*Mircea Stelian DRAGHICĂ*²

ABSTRACT

In Europe, clusters – especially innovative clusters – are the basis for economic development and innovation, these representing an appropriate framework for business development, collaboration between companies, universities, research institutions, suppliers, clients and competitors that are situated in the same geographical area (local, regional, national, trans-national). The magnitude of industrial clusters is high, worldwide, but the extent of its importance is seen more in the USA and Japan.

In Romania, the industrial cluster has experienced a particular assertion. In the Romanian legislation, the term „cluster” means a group of producers, users/beneficiaries, with the purpose of implementing the best practices from EU, in order to increase competitiveness of the economic operators (HG 918:2006 – „Impact” Program).

The results of the following research will show the vital role of clusters in the development and evolution of local and regional development of a country, in general, and of Romania, in particular. Also, they will highlight what are the cluster development strategies, and what are the regional, national and international programs of cluster support and development.

KEYWORDS: *cluster, development strategy, economic growth, innovation, regional development.*

JEL CLASSIFICATION: *L11, L14, L16, L22, O10, R11, R58.*

1. INTRODUCTION

Clusters - regional concentrations of related firms and organizations - are seen as an important element of economic growth and innovation. But there is little understanding of how clusters come into existence, and little guidance provided on the role of policies in promoting this (Braunerhjelm, P., Feldman, M., 2006).

I believe that the research activity in the area of clusters is extremely important, due to the fact that, the current economical context of Romania is one that is somewhat hostile in terms of the development and encouragement of the business environment. That is why I wanted to involve myself in the process, for a better knowledge on clusters and on the level of easiness of access for companies to development programs in areas specific to clusters. Implicitly, the objective of this paper is to research the cluster phenomena in Romania by analyzing the existing cluster development strategies and programs, through this I hope to raise awareness regarding cluster and underline their importance in the evolution of the market economy.

2. THEORETICAL FRAMEWORK

2.1 Clusters

Large global firms appear now to be seeking explicitly to embed their R&D activities within such clusters in order to gain access to highly localized research and technology competences, while specialized SMEs in these growing clusters often exhibit high levels of inter-firm networking and

¹ Bucharest University of Economic Studies, Romania, crysthina2003@yahoo.com

² Bucharest University of Economic Studies, Romania

use of local business support and institutional resources, hand-in-hand with active globalization of their markets (Keeble, D. & Wilkinson, F., 1999). Thus in their paper Keeble & Wilkinson (1999) seek to highlight the role of collective learning in the recent development of European regional clusters of high technology SMEs.

According to Pierre Laffitte, Honorary Senator of the European Cluster Policy Group, the cluster concept is similar the concept of competitive pole: geographical concentration of public or private undertakings, research centers and educational institutions, working in partnership, under a common development strategy in order to generate synergies and collaborations in innovative projects in the interest of one or more markets.

This is based on the description of the supplier-client relationship and of the value chain (Alfred Marshall – known as one of the founder of neoclassic economy with its theory „Marshall’s trinity” – according to which the functioning of companies in „industrial clusters” brings them competitive advantage, since they have a dense network of suppliers and clients nearby).

In simpler terms a „cluster” means a bunch, bundle, or group. Michael Porter (1990) defines clusters as "a geographic concentration of interconnected companies and institutions in a particular field, which are both in competition and cooperation".

At the clusters development foundation are: geographic proximity of the entities within a cluster (i.e. means of transport and communication, cultural identities, client traditions and preferences), technologic proximity of the entities within a cluster (the closeness of technologies that companies within a cluster use), social proximity of the entities within a cluster (level and type of interaction between the managers and employees within a cluster).

The first cluster created, worldwide, was the cluster in Silicon Valley, USA.

The European Commission established in 2006 „The European Cluster Observatory”. This observatory provides qualitative and quantitative statistics, policies, case studies, and a comparative analysis regarding the situation of clusters in Europe (cluster mapping).

„According to Porter (1998, p.8), clusters are a prominent feature of the landscape of every advanced economy, cluster formation is an essential ingredient of economic development. Clusters offer a new way to think about economies and economic development” (Asheim, B., Cooke, P., Martin, R., 2006).

In the view of Mark Muro & Bruce Katz: „cluster thinking and cluster strategies have the potential to accelerate regional economic growth and assist with the nation’s needed economic restructuring, but they are more a paradigm than a single program. In that sense, the opportunities that a cluster policy framework provides for delivering impact, clarifying economic priorities, and coordinating disparate programmatic efforts will only grow more important in the coming era of intensified competitive pressures and tightened resources.” (Muro, M. & Katz, B., 2010).

The idea that technology development is endogenous to cluster development and that the actions of key individual change agents define both the cluster and the industry seems to warrant more investigation (Breschi, S. & Malerba, F., 2005). Of particular importance is the linking of cluster firms to universities, research institutes or entrepreneurial firms having considerable innovation activity (Cooke, P. & Piccaluga, A., 2006).

2.2 Regional development

According to The Organisation for Economic Co-operation and Development (OECD), „Regional development is a broad term but can be seen as a general effort to reduce regional disparities by supporting (employment- and wealth-generating) economic activities in regions. In the past, regional development policy tended to try to achieve these objectives by means of large-scale infrastructure development and by attracting inward investment. Awareness of the need for a new approach is driven by observation that past policies have failed to reduce regional disparities significantly and have not been able to help individual lagging regions to catch up, despite the allocation of significant public funding. The result is under-used economic potential and weakened

social cohesion.” (OECD, <http://www.oecd.org/gov/regionaldevelopment/regionaldevelopment.html>).

While significant emphasis is now placed upon competitiveness as a thrust in economic strategy in business and in regional economic development, it should be recognized that this is not the only factor that facilitates economic development. Economic development can be achieved through a combination of many factors, including improved leadership, public policy, innovation, population growth and import substitution. However, competitiveness remains a major factors of enhanced economic performance, but it should include elements of the above (Stimson, Robert J. et al., 2002).

3. CLUSTERS IN ROMANIA – HISTORICAL BACKGROUND

Romania, after 1990s, is seeing a slow shift towards a market economy. This development was largely influenced by the legacy of the past, but also by the poor management of the structural reform projects, which did not sufficiently support the macroeconomic reforms. So, instead of a rapid economic reinvigoration, we faced a slowdown in economic growth, or even, at times, a decrease of economic growth.

The over time successive governments have tried, but without much success, to propose and support some projects, plans and strategies that had as purpose the economic development of the country. The differences of opinion and the quite fragile and fragmented political coalitions have left their negative impressions on the economic reforms, but with Romania's integration into NATO and European structures, an opening of the Romanian market and the implementation of strategies after Western models with vast economic experience was seen.

Even though the Romanian economy transformation from an over-centralized state economy to a market economy proved arduous (as shown above), being a more complex process than originally expected, Romania is registering observable progress in some areas.

In the current Romanian economic environment, the pressure on firms is large, being manifested through taxes, inspections, sanctions by some institutions and public authorities. To all these are added the economic recession, the crisis in the EU and the competition. A challenge for the Romanian business environment is the collaboration between research institutions and companies. The solution to these problems is the cluster that helps companies within to solve common problems together, and also to improve the relationship with the management and control state authorities.

Clusters are presented as business infrastructures, showing the conditions in which they developed their situation and organizations with which they affiliated with. After the fall of communism in Romania, a transformation was made from mammoth factories and plants to a pretty feeble clotting of companies and businesses that needed a more effective support from legal frameworks and regional, national, fiscal, economic, industrial and of research public policies. Worldwide, the appearance of clusters was preceded by successful implementation of industrial parks that have gradually become industrial parks specialized in scientific and technological areas, so that later they evolved into business parks and finally into clusters.

The most well known cluster in Romania is the one in the automotive industry, around the Renault investment in Pitesti, followed by the investment of the Ford concern in Craiova, which is added to this cluster. Other areas where clusters were formed are: the food industry (Iasi and Covasna), textiles (Iasi and Timis), constructions and woodworking (center of Romania), and software (Cluj and Bucharest).

4. ANALYSIS OF CLUSTER STRATEGIES AND PROGRAMS IN ROMANIA AS SOURCE FOR ECONOMIC DEVELOPMENT

Many European countries have adopted clusters policies. The European experience has found that the differences in patterns of agglomeration can be related to differences in local environment. The characteristics of clusters are highly dependent on the social, political, and economic environment

of the region. However, from case study comparisons, there appears to be three properties that are common to all successful innovative clusters (McPherson, L., 2001).

Romania has developed over the post-Revolution period, national development programs in order to create a more sustainable economy.

According to the Romanian Government (2005), for the 2007-2013 period, The National Development Plan aims through a Development Strategy to obtain a competitive, dynamic, and prosperous country, by increasing GDP per capita (41% of the EU average) at a level much closer to the EU: the main objective being the recovery of economic development gap, between Romania, and the EU. In the global economy there is a growing demand for innovative, high quality and customized products. Due to rapid technological changes, new markets and new competitors that are becoming more and more efficient are developing. Economic growth is given by high productivity, specific development strategies, a more efficient exploitation of applicable and innovative research, development of infrastructure, facilitated use of public/private funds and resources, a more sustainable management of energy and environment resources. Evolution towards a value-adding economy is sustained by the stimulation of productivity and a more efficient business management. Romania, following the external entrepreneurial development, takes it as a model and tries to adapt it to its needs, promoting diversification of sectors and markets through the emergence of clusters, competitiveness poles, firm networks, etc. Large well-known companies optimize their costs and economic operations, responding to internal and external market developing opportunities just because of the implementation of development strategies and through the support of administrations in this field. The boost of the economy is also given by companies, network firms, SMEs, because they are generators of added value. Development means both vertically and horizontally integration, by creating clusters and network firms that lead to obtaining competitive advantages. Research and innovation must be the priority, by later exploitation, on the market of their results, with the purpose of enlarging the economic activity. In long term, this strategy proposes to affirm the European-regional identity of Romania and by extending and interconnecting these development competitive poles in a functional network at regional, national, and trans-European level.

The competent authorities from the economic field and industry have established projects, guides, after well known model both at the European and international level. In this section I will present some of the means and points of approach of economic development, in the light of these programs and strategies.

In 2009, the Romanian Ministry of Economy financed "Ghid pentru implementarea in Romania a conceptului de cluster inovativ", a guide for implementing, in Romania, the innovative cluster concept. This guide was developed under the InovCluster Project: "Developing the concept of technological pole in the regional plan, and of clusters in regional networks, as support for increasing competitiveness of economic operators from the car industry", financed by the Sectoral Plan for Research and Development in the Industry of the Ministry of Economy, General Industrial Policy and Competitiveness (financing contract no. 12/2008), and it is primarily aimed at stimulating economic operators to promote projects for the creation and development of innovative clusters, with regional, technical and economic support, to increase competitiveness (Ministry of Economy, Commerce and Business Environment of Romania, 2009).

According to EU recommendations on implementation of national frameworks and policies to support cluster-like "engines" of development of the Romanian economy, support programs were made in this regard.

Support strategies for companies will have a positive effect not only on the development of new companies, but also on the formation of clusters, competitive, both on the internal market, as well as on the international markets. Thus, Romania can encourage emergent cluster development by supporting the effort that a group of companies is making to fully capitalize the potential of economical concentration.

Local, regional, global economic growth and globalization have created a fierce competition between cluster owners, each of them trying to provide increasingly better conditions to the potential investors.

Based on the analysis of the situation in Romania, potential clusters were identified in the 8 regions in the following fields, such as textiles, manufacturing, construction, ferrous metal products, and software. The 8 regions are shown in Table 1 below. The European Cluster Observatory report (Center for Strategy and Competitiveness, CSC Stockholm School of Economics, April 2011) "presents the strongest regional clusters in Romania according to the European Cluster Observatory star rating. In total, there are 92 clusters in Romania that have received at least one star (Data source for Romania: Eurostat, Luxembourg, 3-digit NACE Rev. 1.1, 2005)".

Table 1. Industry clusters with 3 stars, from the 8 development regions in Romania

No. Item.	Region	Industry
1	North-West	Apparel
		Farming and animal husbandry
		Furniture
2	Center	Apparel
		Farming and animal husbandry
		Textiles
3	North-East	Apparel
		Farming and animal husbandry
4	South-East	Apparel
		Farming and animal husbandry
5	South-Muntenia	Apparel
		Farming and animal husbandry
6	Bucharest-Ilfov	-
7	South-West Oltenia	-
8	West	Footwear
		Telecom

Source: adapted from CSC Stockholm School of Economics (2011)

As I shown above, clusters are an important source of economic development. Therefore, both public authorities and companies that collaborate with different research centers need to show more interest in finding optimal solutions for cluster formation, maybe, by locating the industries more likely to succeed, or the regions in which developing new clusters will bring much more benefits to the entire country, in general.

5. CONCLUSIONS

Thus the purpose of the paper was discovering and showing the necessity of implementing clusters because, in the current national economy, they have the potential to create a greater added-value than an „isolated firm”.

In this context, the research of the cluster phenomena resulted in finding ways to approach, promoting and understanding this phenomenon, which is still quite difficult to comprehend and dealt with by Romanian companies. The major risk in the lack of knowledge of the cluster concept idea/concept is that companies, especially small ones, will bring a smaller added-value.

Although Romania registered substantial progress in the recent years, it presents serious gaps in terms of competitiveness, in relation to the state in Western and Central Europe. Exactly the access of companies to specialized information, funding sources is difficult, and even blocked by misapplied laws or excessive bureaucracy. The business environment of small and medium sized

firms is affected and can become a roadblock to the development of clusters. Fields (Industries) such as woodworking, construction, tourism, textiles, metallurgy, chemical and petrochemical, are more developed, but not just because of the strategies and the support from the public authorities, but because of the natural advantages/massive intervention from the communist state of forced industrialization. Also, access to consulting services is limited, and this is reflected in the small number of clusters and firm networks in the country.

The pace of market economy development in Romania, in general, and of a region, in particular, essentially depends on the creation of a modern infrastructure. A cluster promotion in Romania is somewhat difficult, both by the scarcity of knowledge of companies, the reluctance of the potential firms, and by the poor promotion by the specialized bodies of this phenomenon, phenomenon which is nonetheless the engine for current growth of the country. The development and modernization of the infrastructure is the essential condition for the progress and prosperity of a country. Clusters are the development engines of the Romanian society that lead to technological progress and increase regional competitiveness. That is why it is critical that we, as a country, recognize the importance and impact of clusters on the evolution and development of Romania.

REFERENCES

- Asheim, B., Cooke, P., Martin, R. (2006). *Clusters and Regional Development*. Routledge NY: Taylor & Francis Group.
- Braunerhjelm, P., Feldman, M. (2006). *Cluster Genesis: Technology-Based Industrial Development*. USA: Oxford University Press.
- Breschi, S., Malerba, F. (2005). *Clusters, Networks, and Innovation*. New York: Oxford University Press.
- Center for Strategy and Competitiveness. (2011). *Star Clusters in Romania*, Stockholm School of Economics, April 2011.
- Cooke, P., Piccaluga, A. (2006). *Regional Development in the Knowledge Economy*. Routledge NY: Taylor & Francis Group.
- Keeble, D. & Wilkinson, F. (1999). *High-Technology Clusters, Networking and Collective Learning in Europe*. England: Ashgate Pub Ltd
- McPherson L. (2001). Clusters Policy: A Future Strategy for Australia. *Innovation: Management, Policy & Practice*, 4 (1-3), 54–69.
- Ministry of Economy, Commerce and Business Environment of Romania. (2009). *Ghid pentru implementarea în România a conceptului de cluster inovativ*. Bucharest. InovCluster Project “Dezvoltarea conceptului de pol tehnologic în plan regional și a clusterelor din rețelele regionale, suport al creșterii competitivității operatorilor economici din industria construcțiilor de mașini”, finanțat prin Planul Sectorial de Cercetare-Dezvoltare în Industrie al Ministerului Economiei, Direcția Generală Politică Industrială și Competitivitate.
- Muro, M. & Katz, B. (2010). *The new „Cluster Moment”: How regional innovation clusters can foster the next economy*. Metropolitan Policy Program, Brookings, September 2010.
- OECD. (2009). *Local Economic and Employment Development (LEED) Clusters, Innovation and Entrepreneurship*. OECD Publishing.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. London: Macmillan.
- Raines, P. (2003). *Cluster development and policy*. United Kingdom: Ashgate Pub Ltd.
- Romanian Government. (2005). *Planul Național de Dezvoltare 2007-2013*. Bucharest.
- Stimson, R., Stough, Roger R., Roberts, Brian H. (2002). *Regional Economic Development: Analysis and Planning Strategy*. Berlin, Heidelberg: Springer.