CLUSTERS IN THE ROMANIAN ECONOMY

Nagy Csaba

Mihai Eminescu University of Timisoara, Tourism, Trade and Services Management Faculty, Timisoara,Aries Str., N. 19, Phone: 0256-466360, 0723-170333, 0766-398166, E-mail: nagycsaba2000@yahoo.com

Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. Clusters arise because they increase the productivity with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions. Cluster development initiatives are an important new direction in economic policy, building on earlier efforts in macroeconomic stabilization, privatization, market opening, and reducing the costs of doing business. In the last two decades the growth of national economies competitiveness was mainly based on regional development and growth of regional clusters competitiveness.

***Key words**: cluster, company, competition, development, competitive advantage*

What is a *cluster*? At a conference of the Barcelona-based International Competitive Institute last year, a large subgroup debated the better part of a morning on the definition of a cluster. My well-circulated definition that follows represents *the type of cluster* that I refer to in this and future articles: " *A cluster is a concentration of firms across several industries that creates quality jobs, exports goods and services, shares common economic foundational needs, and unites the public sectors of economic development, legislatures at all levels, universities, community colleges, the K-12 educational community, workforce development, support foundations, and all community economic stakeholders.*"

A *cluster* is a geographic concentration of competitive firms in related industries that do business with each other. *Each cluster* includes companies selling primarily outside the region, as well as support firms supplying raw materials, components and business services. These groups of companies that compete or interact with each other are more important to the region's well being than any single, isolated firm no matter how strong or influential it may be. *Clusters* provide synergy, and that leads to competitive advantage. *In clusters*, the available pools of experienced workers are larger and more diverse. Suppliers tend to congregate for increased efficiency. A competitive spirit builds, stimulating rapid growth and innovative, energetic strategic alliances form. *Business clusters* fuel the region's economy, and they are the best focus for economic development efforts. Building and strengthening our *existing clusters* and developing or introducing *other clusters* is what will move us profitably ahead in this new century.

The prevalence of *clusters* reveals important insights about the microeconomics of competition and the role of location in competitive advantage. Even as old reasons for *clustering* have diminished in importance with globalization, new *influences of clusters* on competition have taken on growing importance in an increasingly complex, knowledge-based, and dynamic economy. *Clusters* represent a new way of thinking about national, state, and local economies, and they necessitate new roles for companies, government, and other institutions in enhancing competitiveness.

Economic development regions have occurred naturally for centuries. Some examples are the first agricultural villages, naval powers, manufacturing industries of all sorts, and now in our time, the telecom regions. In studying the processes that made them successful, it is clear that the social groups that had the better knowledge and organizational skills played a dominant role. Historians have also often attributed the growth of successful societies to geographical location and proximity to transportation; to short-term economic factors such as gold, copper, oil, or other raw and natural materials; or finally to the availability of capital. The *cluster concept*, however, is provoking new research that challenges these long-held concepts, including the significance of capital formation as being dominant.

Economic geography during an era of global competition involves a paradox. It is widely recognized that changes in technology and competition have diminished many of the traditional roles of location. Yet *clusters*, or geographic concentrations of interconnected companies, are a striking feature of virtually every national, regional, state, and even metropolitan economy, especially in more advanced nations. The prevalence of *clusters* reveals important insights about the microeconomics of competition and the role of location in competitive advantage. Even as old reasons for *clustering* have diminished in importance with globalization, new influences of clusters on competition have taken on growing importance in an increasingly complex, knowledge-based, and dynamic economy. *Clusters* represent a new way of thinking about national, state, and local economies, and they necessitate new roles for companies, government, and other institutions in enhancing competitiveness.

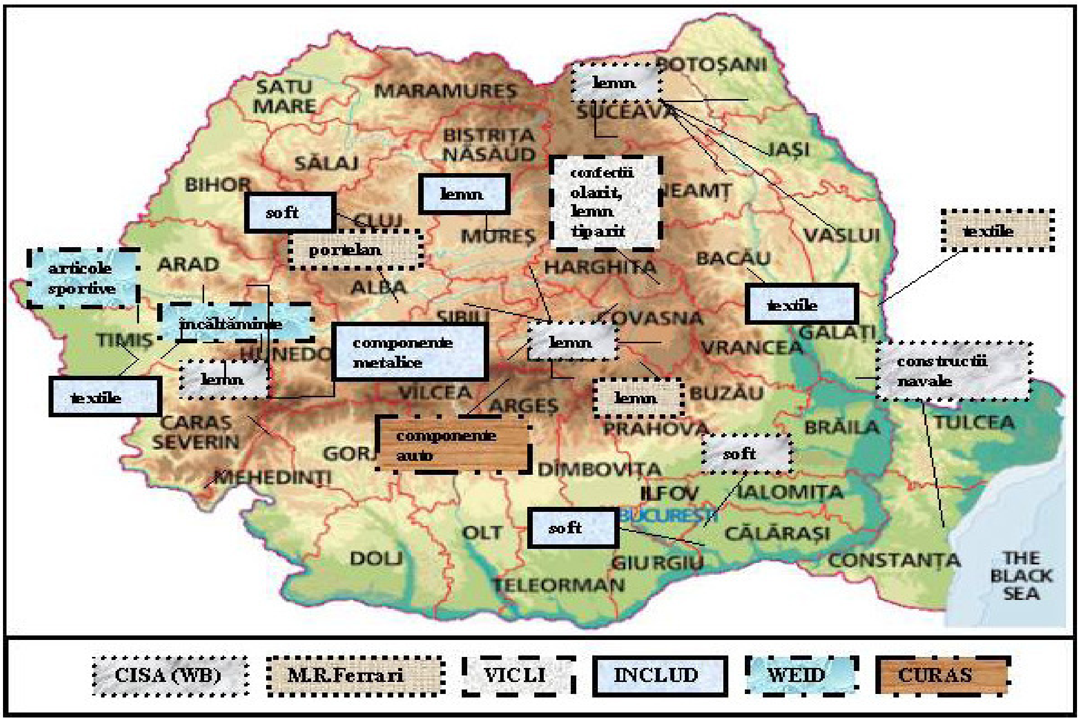
Clusters may work in conjunction with local, state offices, universities and community colleges. *The clusters* need not be focused only on technical industries: for instance, of the clusters in Arizona, three serve the tourism, food and fiber, and senior living industries.Today's *cluster* can be viewed as incorporating in a premeditated structure some of the processes of those formed in a more or less ad hoc manner. The principles are a plan, organizational skills, cooperation of the community stakeholders, the educational system, workforce development at all levels, transportation of the products more efficiently than others, competition in the local region, and the integration and modification of multiple foreign technologies.

Successful economic development is a process of successive upgrading. As nations develop, they progress in terms of their characteristic competitive advantage and modes of competing. Following the Porterian model, we identify *three stages of economic competitiveness*: *factor-driven economy, investment-driven economy* and *innovation-driven economy*. We acknowledge that most of the Romanian economy of today is to a large extent factor-driven. We accept that the best way to increase Romania's economic competitiveness is to enhance innovative activities, while reducing the dependency on factor prices. While we can be relatively certain that the factor-driven model of economic growth will eventually be upgraded, the process is a lengthy one, involving numerous stages and adjustments of the workings of the national economy. In addition, regardless of our ability to create an innovation-driven economy, it is obvious that losing the factor-driven competitiveness is not subject to choice: as real wages go up, the cost of labour in Romania becomes less and less attractive compared with other sites. There is thus a wide scope for improving economic performance through *clustering*, and for Romania, the case can be made that by adopting this approach it can "*burn stages*" on the path to a more sustainable competitive profile. However, we consider that successful *clusters* can only be the result of a push and pull process in which both the entrepreneurs and the state need to change mentality.

In Romania we need to make the distinction between *natural clusters* and *public clusters*. The public clusters (industrial parks, scientific and technological parks) have been established by law, but only few of them are realistically operative. The natural clusters, on the other hand, can be searched by means of statistical analysis and qualitative analysis. In different studies and research projects, several *potential clusters* have been identified in Romania.

The so-called VICLI Report focused on Harghita County, where four *potential clusters* emerged in wood processing, pottery, printing and apparel industry. In other studies some *other clusters* emerged: software (Bucharest, Timisoara, Cluj, Iasi), wood processing industry (Harghita), porcelain (Alba), textiles and apparel (Focsani), furniture (Bucharest). Last but not least, within the INCLUD Interreg project, *potential clusters* have been identified in textiles (North-East Region, especially Bacau County and West Region, especially Timis County), software (Timis, Cluj and Bucharest), wood processing, steel frame construction and metal products (Central Region2). As we can see, Timis County is likely to host in the future even more than one *cluster*, in fields such: as software or textiles. Local clusters can also be located in fields such as "*Leather and footwear industry*", "*Industry of electric equipment and machines*" and "*Industry of TV and radio sets and communication equipments*". Noteworthy, the specificity of the Timis County is also given by the high level of Italian investments in the area, which have brought along the principles of "*industrial districts*", the Italian cluster model.

Figure 1: Identified clusters in România



Reference: "To cluster, or not to cluster? The potential for competitive economic growth through cluster development in Romania", Pislaru D., Aristide O., 2004;

There is, however, one note of caution to be struck when referring to *Romanian clusters*. A distinction needs to be made between spatial agglomerations of companies as such and what the European Commission identifies as 'research system network', the former being largely the case of Romania, the latter being the most advanced form of clustering employing strong institutional and informal linkages between companies, universities, vocational schools and research centres, and public institutions. A research system network is the one most likely to exhibit the kind of external economies that makes the *cluster* produce more value than the sum of its constituent parts. To mention only a few examples of this level of cooperation:

1. through interaction with other companies and institutions this type of clusterprofits from the 'sticky knowledge' that is available locally;
2. by means of the same interaction the enterprises are highly aware of demand conditions and thus highly flexible;
3. companies invest in universities and local professional schools;
4. SME's are likely to join forces when size is an obstacle to receiving and/or completing an order.

In addition, it can be argued that the spatial pooling of suppliers and clients leads to a reinforcement of the reputational mechanism, this being an additional incentive to provide high-quality services and products. The literature refers to the above-described entities as "*overachieving clusters*", while the ones in which companies and institutions co-exist without exploiting the benefits of proximity are called, appropriately, "*underachieving cluste"*.

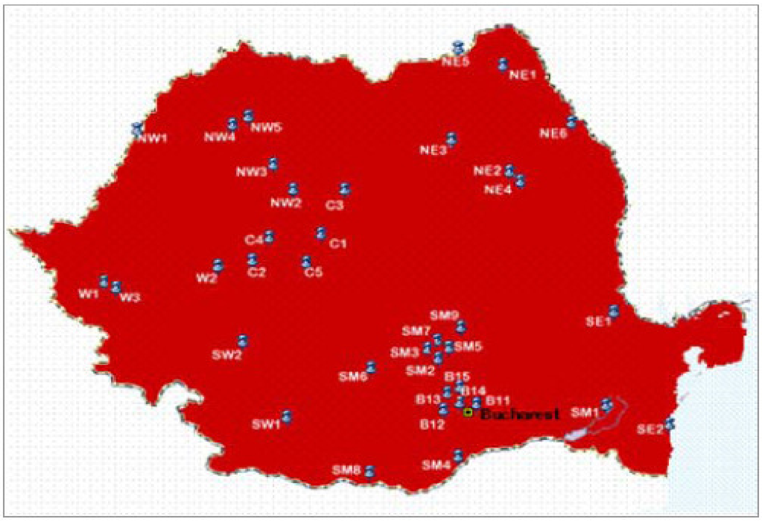
When highlighting these characteristics, one realizes that public institutions can be of great importance in "*activating*" the existing *clusters*. In Romania's case there has to be, however, a major shift in attitudes regarding the role of the state in the economy. The vision has become entrenched that government assistance means subsidies, that a coherent strategy for economic growth involves industrial policy in the sense of structural aid towards sectors that are lagging behind but which employ significant numbers of people. It is symptomatic of both the long-established way of thinking about the national economy and of political short-sightedness. While this ‘picking the winners’-strategy on the dubious criteria of size alleviates or at least does not add to a current problem (unemployment), neither will it help Romania’s economy catch up with the EU countries.

Nor are clusters guaranteed to deliver the missing factors necessary for sustainable economic growth, but it is clear that in the existing areas identified as clusters in Romania, government assistance can contribute to making them more efficient. In the field of inter-company cooperation, for example, the government can provide the necessary institutional infrastructure in order to stimulate communication and cooperation. At a both horizontal and vertical level, bringing together companies, suppliers and clients at round-tables, seminars and creating working-groups can prove to generate the desired outcomes in terms of cooperation. The same needs to be said about interaction between public and private institutions such as universities, vocational schools, research centres and enterprises. Creating technological laboratories that can be used by companies (and universities) that do not have the necessary resources to test and develop new products can both fill an important gap in the prospects for technical innovation of SMEs and to promote cooperation between companies and research centres.

In the cluster literature, emphasis is put on the level of government intervention. For reasons of superior local knowledge and of adaptability to local conditions (as mentioned before, there is no one-size-fits-all *cluster policy*) it is considered of the utmost importance that these efforts be coordinated at a regional level. This is particularly important in a country with a weak state such as Romania. While the *cluster-approach* can be mandated at the level of central government, the measures should be diversified in accordance to the characteristics of the different *clusters* and the local and regional officials should be vested with the necessary authority to deal with the representatives of companies and institutions that are part of the cluster.

The public authority can further stimulate cooperation by eliminating the barriers for SMEs on public procurements and allowing them to participate jointly, by forming associations, at public tenders. Assistance in marketing and subsidizing participation at fairs is also particularly helpful for SMEs, which often do not have the resources to pay the fees. Or, even better, SMEs could have a joint stand at fairs, possibly attracting more attention than by having single stands, which are overshadowed by those of the major companies. Another measure that has proven its viability is the creation of institutions (or assigning this role to the existing trade associations) that are constantly monitoring demand-related changes, for instance, by keeping in very good contact with the retailers and receiving sales figures, thus immediately highlighting incipient trends. One measure that may not seem obvious but that could be important in educating the consumers is creating a very strong consumers’ protection office. It is no secret that satisfying demanding local clients (the government could also play this role) is an exceptional way of preparing for the competition on the world market.

Figure 2: The existing Industrial Parks in România



Reference: Romania Factbook 2004, Investor Services (www.factbook.net)

The above mentioned policy recommendations are all examples of measures that would not interfere with market mechanisms and that would not represent a major burden on the state budget. While these are aspects that have to be taken into consideration in any economy, in Romania the additional issue of enforceability has to be tackled. One significant problem is the distrust that companies, and in particular SMEs have of the state authority. Field research suggests that SMEs would like to be left alone rather than helped through cumbersome and bureaucratic public support. It will be very difficult to convince enterprises to take part in government – organized cooperation schemes, most likely incentives will have to be provided (for example, undertaking feasibility studies that draw attention to the positive results of such programmes) in order to achieve the desired level of cooperation. Also, the network of trust that should exist between private companies runs counter to the prevailing social conditions in Romania.

References

1. Cortright, J., 2006, "Making Sense of Clusters: Regional Competitiveness and Economic Development," The Brookings Institution Metropolitan Policy Program, http://www.brookings.edu/metro/pubs/20060313_clusters.htm
2. Delgado, M., 2005, "Do Clusters Really Matter for Companies' Competitive Strategies? Evidence at the Country Level," Working Paper.
3. INCLUD (2004): Industrial Cluster Development, Interreg III B CADSES Programme (Central Adriatic Danubian South Eastern European Space), Brussels
4. Ketels C. (2004): European Clusters, in Structural Change in Europe. Innovative City and Business Region, Hagbart Publications, Boston
5. Popa H.L., ş.a. (2004/2): The competitiveness development of the SMEs clusters in Timişoara Zone and in Region 5 West from Romania, Clusters of Enterprises and the Internationalisation of SMEs. The Case of the Romanian Region of Timisoara, OECD, LEED, Paris,
6. Sölvel O. ş.a. (2003): The cluster Initiative Greenbook, Broma tryck AB, Stockholm
7. VICLI (2001): Virtual Clustering Identification and Dissemination of Strategic Territorial Planning Best Practices for Certain Countries of Danubian and Southern Europe, INTERREG II C – CADSES, Brusseles
8. Michael E. Porter, "Clusters and the New Economics of Competition" Harvard Business Review, November-December 1998,
9. Michael E. Porter, "Location, Clusters, and Company Strategy" Oxford handbook of Economic Geography,G. Clark, M. Gertler, and M. Feldman, eds, Oxford: Oxford University Press 2000,
10. Michael E. Porter" The Five Competitive Forces That Shape Strategy," Harvard Business Review, January 2008,
11. Michael E. Porter" Clusters and Competition: New Agendas for Companies, Governments, and Institutions," Harvard Business School Working Paper 98-080, 3/25/98.
12. www.isc.hbs.edu/econ-clusters.htm, Harvard Business School - Institute for Strategy and Competitiveness, "Location, Competition and Economic Development: Local Clusters in a Global Economy",
13. www.ptbmagazine.com/May00/ptb500.clusters.html, The Evolution of Structured Clusters,
14. news.pghtech.org/teq/teqstory.cfm?id=551 - 25k, Economic Clusters: Focusing Our Limited Resources,
15. www.eda.gov/Research/ClusterBased.xml - 18k, cluster based economic development
16. www.nga.org/cda/files/AM02CLUSTER.pdf, 531.Cluster Report.4
17. www.co.ozaukee.wi.us/uwex/CommunityDevelopment/AppliedResearch/Info%20Sheet%202-16-04.PDF, Clusters: An Economic Development Strategy
18. www.edrgroup.com/edr1/consulting/consulting_strategy/beyond-clusters.shtml - 15k, Economic Development Research Group: Beyond Clusters,

19. www.oecd.org/dataoecd/36/11/31798594.pdf, Prospects and challenges for cluster development…