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ABSTRACT OF DOCTORAL THESIS

CLUSTERS - SUPPORT FOR INCREASING ECONOMIC COMPETITIVENESS IN DEVELOPING REGIONS OF ROMANIA

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2. KEY WORDS

- innovative cluster;
- competitiveness pole;
- emerging cluster;
- cluster models;
- Markusen model;
- Porter's diamond;
- the new diamond of innovation;
- model "four leaf clover";
- model of innovative cluster with five actors;
- competitiveness clusters;
- qualitative and quantitative evaluation of clusters;
- bronze label;
- SWOT analysis of clusters;
- programs to support clusters;
- clusters in emerging industries;
- empirical study;
- cluster features;
- the impact on the competitive environment;
- cluster development potential;
- South-West Oltenia region;
- tourism cluster models;
- tourism cluster with broker;
- spa tourism cluster.

3. THE MOTIVATION AND IMPORTANCE OF RESEARCH

In a society increasingly apparent trends of globalization, where competition is manifested dynamic, companies seek solutions to obtain competitive advantages. Economic and technological developments that occurred worldwide in the late 20th century and early 21st century have increased the role and importance of partnerships realized by companies to face global competition.

Structures associated with the modern approach to "open innovation," considered by the European Union "engine" of economic development, clusters depend on the interaction between research in universities, entrepreneurship, availability of venture capital from the private sector and a support framework offered by government.

Due to the huge economic potential, clusters have become an efficient instrument of policy development and generated the interest of researchers, economists and policy makers to investigate the field of cluster to macroeconomic and microeconomic level. In the context of defining a European strategy of cluster for economic growth, european policy will develop standards for clusters and financial instruments direct to their activities. The importance attached to the cluster at the international level in the contemporary period, combined with the data supplied by international organizations on economic and social effects of these associations, illustrates the *relevance* of research topic.

The doctoral thesis entitled "*Clusters - support for increasing economic competitiveness in developing regions of Romania*" examines items of interest to the scientific community and for the romanian society, by addressing the trends agglomeration of businesses in clusters, analyze patterns of cluster economy world and national empirical research on clusters in Romania and South-West Oltenia region.

The need to address this issue in our country is obvious, given the competitive advantages gained by companies through clustering. *Novelty* doctoral thesis is to address regional cluster and propose models which exploit the potential of development region analyzed.

The scientific approach is based on the belief that organizations achieve superior performance when acting within competitive-collaborative associations. *Motivation scientific approach* consists of interest by the scientific community for this topic, in the special impact that it has the phenomenon of clustering for the world economy and national level, in recent events in the global economy on the international strategy of the cluster, the desire to deepen research with on clusters of Romania.

Research will be focused on two areas: theoretical and practical. Theoretical research aims delimitation theories about the mechanism explaining the concept and functioning of clusters. Applied research is influenced by the trends in clustering and consists of conducting investigations on the characteristics of clusters in Romania and the potential of South-West Oltenia region for the clusters development. The research hypotheses proposed by researching fundamental economic will be tested in the economic practice.

Based on current discussions about the impact of cluster on economic performance of members and regional, national and international economies, the study will seek to identify and explain the dynamics that induced these changes, to make proposals on addressing the concept in Romania.

4. METHODOLOGY OF SCIENTIFIC RESEARCH

The problem emerges in a context of spectacular changing from environment in which firms operate, in terms of the structural and organizational and the best practice examples in the European Union, when the small and medium companies have joined in clusters, to be competitive and to face competition.

The overall objective of the research on the economic cluster agglomerations in Romania and South-West Oltenia region is to identify characteristics, the main factors influencing the development of clusters in Romania and impact analysis on environmental competition. *Derived objectives* of research aimed: the clarification of the cluster concept; identify the advantages of association in clusters; presentation of models of clusters in the world economy; addressing competitiveness clusters in Romania; identify the main directions, actions and ways to improve the functioning clusters; cluster analysis need to be supported by specific policies and concrete ways of making such claims.

Research is performed using various *methods and techniques*: analysis and synthesis, induction and deduction, comparison, Porter's diamond model, quantitative and qualitative methods, SWOT matrix, methods of descriptive statistics, case study.

To support scientific theoretical research were used papers from economics, regional science, economic geography, national and international literature. In addition to the literature, we used works on the theme of cluster, studies of national and international research institutes, guides and reports made within international projects.

Informational support for empirical research consists of the analyzes, own observations, statistical data provided by the Romanian National Institute of Statistics and the National Trade Register Office, the results of studies carried out in international projects. The method of data collection is *the investigation* and the instrument used is *questionnaire*, which was applied to representatives of clusters formed in Romanian, from various fields. We used methods to collect data based on the location and availability of respondents, respectively email inquiry and the form of interviews, conducted by telephone or cluster location.

Processing, data analysis and interpretation of research results obtained were made using: *SPSS* 20.0 (*Statistical Packages for the Social Sciences*) and *Microsoft Office Excel*, with which we have achieved and accomplished graphic, thematic maps, correlation analyzes. The statistical methods used to analyze data and test research hypotheses were selected and implemented taking into account international empirical research in clusters, their main purpose being to validate clusters in Romania. Quantitative and qualitative methods are used to obtain additional full interpretation by the parametric Pearson correlation, principal component analysis, case study and comparative analysis.

To achieve the research objectives and making relevant assessments regarding the features of economic clusters in Romania, the effects on the business environment, the situation and potential for clusters development in the South-West Oltenia region, we used secondary analysis, as a form of research, data collected by questionnaire and interview, complemented by information from secondary sources: print and online literature, national and international studies. We used as additional data sources, official statistics and cvasioficiale, to finalize the conceptual context in which the making research, providing additional opportunities to test research hypotheses.

5. SYNTHETIC PRESENTATION OF CHAPTERS INCLUDED IN THE THESIS AND THE RESEARCH FINDINGS

The thesis is divided into four chapters, preceded by introduction and followed by conclusions, proposals and subsequent developments, bibliography and appendices. It has four main areas of research that facilitates the understanding of the topic addressed in the four chapters, namely: two chapters of theoretical investigation, a chapter designed to deepen aspects of the competitiveness cluster in the romanian economy and a chapter based on empirical research on the features of romanian clusters, including a study on the development of innovative clusters in the South-West Oltenia region.

Chapter 1. Agglomeration theory and the emergence of economic clusters

The research began by synthesizing information from literature related to milestones in the evolution and cluster development. In this regard, it highlighted how the emergence of clusters has revolutionized business and was highlighted organizations need association to adapt to market conditions. Analysis theories of economic agglomeration was completed with descriptive and explanatory study of the literature on the complex phenomenon of clustering.

Clarifying the concept of cluster by addressing uniform definitions and theories about the cluster was necessary in the context of a variety of terminology. Although the term cluster has been used recently, over time, the concept appeared under different names: industrial district, industrial agglomeration, growth pole or pole of competitiveness. Critical and comparative analysis of the definitions highlighted their common point, namely geographical concentration of companies and institutions that are optimal clustering process, and the key role of exchange relations that occur both within and outside it. The literature review showed that, regardless of the name under which they were conceptualized clusters consist of organizations operating in an industry are located in geographical proximity between them occurring interactions that create competitive advantage and support the development of a region or countries.

We realized conceptual delimitation between cluster, pole of competitiveness, innovative cluster through comparative analysis. This analysis and literature study revealed a tendency to unify the terminology in the concept of innovative cluster, used within policies and strategies used of the European Union.

In a context of insufficient promotion of the concept and advantages of the cluster in Romania, we felt it necessary to suggest some types of innovative cluster in Romania that organizations can consider when they decide to cooperate. The cluster called "four leaf clover", aims to propose a framework partnership for organizations from Romania and to develop and explain the advantages of belonging to the association: access to the flow of information, the power of negotiation joint, increase visibility, economic benefits.

Analysis definitions, theories and presenting the evolution of cluster highlights the research usefulness of the concept, to understanding complex phenomenon of clustering and good anticipation of future changes. The conclusion is that cluster transposition into national and local development policy depends on how it is supported under the economic cooperation between business, higher education and public authorities.

Business models based on cluster represent a combination of several theories applied in practice. Given the current competition, companies are building business models and strategies based on competitive advantages derived from more efficient use of resources, increasing productivity and innovation. Cluster or pole of competitiveness partnership is an important factor to stimulate creativity, research and innovation in the romanian economy. The real cooperation between companies, research institutions and authorities, ensures the product innovation transfer and stimulate economic development based on market needs, through a bottom-up approach.

Chapter 2. Models of clusters in the world and national economy

The research continued with descriptive and explanatory analysis of the main classical models of clusters and presenting successful models in the world economy, which can be used for business development. The scientific approach is important because the implementation of appropriate clusters models, has become a critical success factor in achieving superior performance by the companies. By presenting possible models of clusters and integration benefits analysis in these models, we offer companies in Romania an effective framework for implementing business strategies for competitiveness.

The programmes to support clusters, analyzed on their stage of development, shows the need to support romanian clusters through public policies. The result of the analysis is a useful tool for public authorities and policy makers, in the foundation and elaboration of policies aimed at clusters.

A contribution to the researched field in our country is brought by describing models of successful clusters in the world economy: the model based on regional competitiveness; cluster model based on global competitiveness; cluster model based on local development impact and successful models models for tourism in California and Norway. The presentation of possible models of clusters and the analysis of the potential benefits of integrating organizations in these associations in Romania, offers companies a methodological framework effective business development. The analysis concludes that cluster models in the global economy include the characteristics of the models examined. Cluster patterns classical elements are selected and retrieved in custom designs, taking into account national specificities.

Cluster approach from the perspective of european programs which support the creation and operation of clusters is an important step, because in Romania there is a distinction in providing financing for activities, between emerging and innovative clusters. To clarify two terms, we addressed issues form of regarding: the definition. organization. activities financed from operations S.O.P. I.E.C. 2007-2013, the impact indicators of cluster. The conclusion of the analysis is that the difference between emerging and innovative cluster consist is in the form of organization and collaboration between members, to conduct research, development and innovation. An emerging cluster has the agreement of the its members, usually in the form of concluding a partnership agreement and has no legal personality or business collaboration between companies and institutions supported group. Innovative cluster is a grouping with legal personality, aiming to stimulate innovation by promoting interactions supported between its members, supporting the involvement of SMEs in research, development, innovation, and through effective contribution to these activities, facilitating technology transfer, know-how, expertise, networking and dissemination of information between cluster members.

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Analyzing the typology of clusters revealed that a model of cluster innovation that can be applied in Romania is the model with five players, which includes alongside the four pillars of the cluster, the pillar of five, represented by the financial institutions business angels, business venture and banks that provide financial resources necessary for the functioning clusters. The use of cluster model in the business environment in Romania is useful, because financial institutions do not provide loans clusters because they can not guarantee. Finally, a variant of operation of clusters in Romania is the inclusion in the association of specialized financial institutions, modeled on other European countries.

In Romania it is necessary to implement clustering models that are adapted to the economic and social conditions. Using successful models in E.U. countries is beneficial, but they must take into account the specific business environment and national regulations. Research shows that, compared to the current model, clusters need: a simple and efficient model, a legal tools to support and promote, strengthen links between innovation and entrepreneurship, as examples of good practice in developed economies.

Chapter 3. Cluster - competitive form of organization in the Romanian economy

The third axis of the research was intended for an analysis of the competitiveness clusters aspects in Romania. For this purpose, we identified factors influencing the competitiveness of macroeconomic level (monetary and fiscal policies, human resource development, the effectiveness of political institutions) and micro level (quality of business environment, policy and strategy; the existence and development of clusters). In the analysis, the cluster was positioned between factors influencing the competitiveness of companies and regions.

To explain the impact of cluster on the region was performed the analysis of links between indicators that quantify the strength of a cluster and outcome indicators of competitiveness at regional level. A first step to this end was to identify indicators measuring competitiveness, tiered according to link with the ultimate objective of economic policy and the degree to which they are influenced by economic policy. Next, we identified indicators that quantify the strength of a regional cluster in an industry, and the causal link between clusters and economic performance of a region. The analysis concludes that an innovative clusters is a key factor in the development of the region, since it is an important element of formation of a territorial value, generates economic progress and hence economic value added competitive products on the market. Through innovation component within their clusters is a key factor in the causal relationships between research, development, innovation and competitiveness of the production of goods.

SWOT analysis of clusters of Romania led to the identification of internal factors (strengths and weaknesses) and external factors (opportunities and threats) encountered in the cluster environment, especially the key elements that influence their development. The approach aimed to determine the attractiveness of clustering phenomenon in Romania. Results of the analysis may be useful for organizations that intend to integrate in clusters or for those aiming to take measures to improve the operation. The main conclusion is that there are important opportunities for the creation and development of clusters in Romania. But were identified major threats that can be overcome through a strategic approach, that depends on entrepreneurship, collaboration, innovation, public support.

To assess competitiveness clusters, documentary study of performance evaluation methods for

clusters was carried out, that emerged *the qualitative and quantitative assessment methods* that apply *in Romania, at national and regional level.* Through qualitative analysis identified regional clusters and competitiveness poles in the developing regions of Romania. The distinction between the two concepts was conducted using indicators that distinguish clusters and competitiveness poles. Through quantitative analysis at national level have highlighted the potential clustering branches, using the classification method of "stars".

The analysis of evaluation methodology for clusters at european level, agreed by the European Commission, led to the identification and presentation of romanian clusters, accredited at european level, labeled bronze. Qualifying bronze a few clusters of Romania attest to initiate the process of improving the quality of management and european recognition. In this regard, we appreciate that involvement in projects clusters is a key factor for gaining international recognition. Even if the label is a mark of quality bronze narrowly, obtaining this certification is an important step towards excellence cluster management to obtain silver label.

Study competitiveness clusters in Romania resulted in the identification of competitive clusters at national and regional level, grouped by sector and highlighted the need to support public policies. By submitting funding programs clusters and pole of competitiveness for the financial period 2014-2020, we have highlighted opportunities for creating and developing them generated by european programs. The analysis is useful for clusters managers in taking decisions to finance projects or contractors who may be determined to create clusters.

In the final part of the third chapter they were identified trends of innovative clusters in emerging industries. The result of the research was to present the connections between clusters and emerging industries, using the percentage of the workforce employed in the categories of clusters operating in the ten emerging industries.

Chapter 4. Research on the characteristics of clusters in Romania and the potential for developing innovative clusters in the South-West Oltenia region

In the last chapter we have included empirically contributions and the conclusions of documentary and field research findings. Making an *empirical study on the characteristics of clusters in Romania and the impact on the competitive environment* started to test five hypotheses, which have been validated. *Methodological framework* instruments included: questionnaires, semi-structured interviews with people of clusters, literature studies, studies on projects, examples of best practice from European Union countries.

The conclusions that emerge from empirical research contributes to the development of a reference framework and provision of useful methodological benchmarks for cluster managers.

Following the research we found the dependence of the size, structure, funding sources clusters, on the one hand, and the stage in the life cycle of clusters and public policy support, on the other hand. The investigation showed that in Romania, clusters have a small number of members, compared with associations of developed european states, which can be explained by the fact that most clusters in Romania are in the generation or much in the development phase. As regards the sources of funding clusters, research has shown that the clusters are mainly formed from public funds and that most running european projects. Clusters from Romania are at the beginning of evolution and need public resources for

operation, following the ongoing ability to obtain support from their own or raised funds and public intervention to diminish.

Research has shown that setting up clusters in Romania motivation refers to the availability of grants. The existence of european funding for clusters or for research, development and innovation activities has influenced the formation of clusters. Other factors such as: examples of good practice from abroad or the benefits of clusters, have contributed to a lesser extent the emergence of clusters.

Empirical study highlighted the most important factors influencing the onset and development of clusters, namely: cooperation between members, sharing knowledge and entrepreneurship.

The study led us to identify and confirm a direct correlation between clusters and entrepreneurial environment. Economic clusters support entrepreneurship as it encourages the establishment of new companies. The positive impact of clusters on the business environment in developing regions of Romania was confirmed by the analysis of two correlations. The first proven correlation is between the number of companies newly established in every county, over the year and the number of industrial sectors which specializes county. The second validated correlation is between the number of startups and concentration of economic activity in the industrial sector.

Insufficient promotion of cluster associations or competitiveness pole in Romania is the main factor that determines the ignorance of existing regulations in romanian legislation regarding cluster and the difference between the cluster and pole of competitiveness. The research revealed that only representatives of clusters including regional development agencies know this term settlement in Romanian legislation and the difference between the two concepts. The results of empirical research shows the need to promote cluster policies, which should be made by the regional development agencies and public authorities that support the field where cluster works.

Research has allowed us to find insufficient knowledge of the cluster concept, which is explained by the novelty of relative concept, applied in Romania for about five years and the ambiguity caused by the existence of several concepts that describe similar structures: clusters, competitiveness poles, centers of excellence, business incubators, industrial parks. Lack of knowledge about cluster management is an issue which has a european dimension, because the cluster is a system with a complex structure, which generate business and technology.

The study highlighted the key issues for establishing the association in clusters: building trust and communication among members, and for the development phase, identifying sources of funding cluster. Solutions to improve the functioning clusters are: exchange of best practices; organizing events promoting of the cluster; elaborating joint strategy for development association and obtaining consensus on strategy; providing funding through national and european programs. It is particularly important for developing clusters, awareness of the role that innovation has in realizing competitive products and infrastructure modernization, which can can be financed by european funds.

One of the directions of development of clusters, regardless of the activity that works, is the awareness of the role of management organization in: cluster coordination for ensuring the effective functioning; achieving continuous exchange of information between cluster members; identifying sources of external financing; ensuring the implementation of joint projects; cluster development of relations; ensuring market image of the cluster.

Study regarding the development of innovative clusters in the South-West Oltenia region is a contribution of doctoral thesis to the understanding the impact of clusters on regional development. In order to achieve this objective it was conducted an ample research on clusters in the South-West Oltenia and an analysis of potential areas important for the clusters: entrepreneurship; research, development and innovation; tourism. The study led to the identification and presentation of nine clusters and competitiveness poles in the South-West Oltenia region. Similarly with other development regions of Romania, they are in the early stage of development, and their role is limited primarily to the implementation of activities financed from grants and to achieve projects objectives. Competitiveness is the result of innovation, technology transfer and interaction between universities, research institutes and businesses states only for clusters which implement joint projects. The study analyzed the potential of tourism activities in the South-West Oltenia region. The SWOT model highlights the significant potential of the tourism sector and the low level of competitiveness of SMEs in tourism.

The study concludes that the South-West Oltenia region has potential to develop new clusters. The analysis shows that the openness of the private sector and regional authorities for setting up clusters by harnessing the region potential, support the development of these business models.

The research aims to create an informational foundation and to propose two models of cluster for the development of tourism in the South-West Oltenia region, starting from analysis of region potential. These business models represent a contribution of this thesis to the theoretical and methodological level of research and can be the foundation of strategic decisions on which tourism organizations to streamline their business aims. The scientific approach is important, because creating and implementing appropriate models of clusters in tourism, have become critical success factors in the competitiveness and sustainability of the companies in this sector.

The cluster of tourism with broker applied in the polish system could operate in the region. The role of the broker, essential to achieve the association members in a cluster, is generally performed by a public authority. After achieving the partnership, the broker remains in cluster and offers technical and financial advise. *The second model proposed* for the South-West Oltenia region is spa tourism cluster. The cluster can be around existing treatment facilities in the region's spas (Govora, Băile Olănești, Călimănești-Căciulata, Ocnele Mari, Bala, Săcelu) and may include private medical centers in the region. This partnership model is an appropriate solution for capitalizing the region's territory by integrating spas resources in a program of local tourist potential. The proposed cluster models enable higher harnessing of the South-West Oltenia region's tourism and represent possible business models for tourism development. By clustering of tourism in the region, destination that have natural resources and tradition can become european leaders in the field of health tourism.

Clusters research from Romania enables *new approaches and further developments on the topic*, for deepening problems, due to the complexity of the research domain. For future studies, it may consider multiple perspectives: the creation of cluster management models; *the conduct of research on the fields of clusters*, including a representative number of samples studied to be effective and make suggestions leading to the proposal of *appropriate models in various fields* working clusters; expanding research on mature clusters in E.U. countries to analyze *the economic and social impact* thereof; a study of *the cluster*

impact on regional development; creating *clusters optimization models* based on analysis of performance indicators during evolution.

Further research in specialized clusters is useful for increasing the competitiveness of companies and the development regions in Romania. This thesis is a starting point for economic policymakers, politicians, entrepreneurs, cluster managers, in choosing the business models and strategic decisions concerning the operation and improve performance clusters.

6. SELECTIVE BIBLIOGRAPHY

Books

1. Andersson T., Schwaag-Serger S., Sörvik J. and Hansson E., The Cluster Policies Whitebook, International Organisation for Knowledge Economy and Enterprise Development [IKED], ISBN: 91-85281-03-4, 2004

http://www.iked.org/Publications%20-%20Cluster%20Policies%20Whitebook.html

2.Bergman, E. Feser, E., Industrial and Regional Clusters: Concepts and Comparative Applications, University of West Virginia, Morgantown, WV: WVU Regional Research Institute Web Book, 1999

3. Blien, U., Gunther Maier, G., The Economics of Regional Clusters Networks, Technology and Policy, Studies in Regional Economic Development, ISBN: 978 1 84720 515 5, 2008

4. Buhalis, D., Darcy, S., Accessible Tourism Issues: Inclusion, Disability, Ageing Population and Tourism, Channel View Publications, Bristol, 2011

5. Buhalis, D., Darcy, S., Accessible Tourism: Concepts and Issues. Bristol, UK: Channel View Publications, ISBN: 9781845411602, Eds. 2010

http://www.channelviewpublications.com/display.asp?isb=9781845411602

6. Coșniță D., Baban A., Analiza situației privind clusterele existente și potențiale din România, Clustero, București, 2012

7. Coșniță D., Iorgulescu F., Analiza competitivității clusterelor din România, ISBN:

978-973-0-15864-9, 2013

8. Hołub-Iwan J., Olczak A.B., Cheba K., Benchmarking parków technologicznych w Polsce – edycja 2012, PARP, Seria Innowacje, 2012

9. Jacobs, J., The Economy of Cities. London: Penguin Books, 1969

10. Karlsson, C., Picard, R., Media Clusters Spatial Agglomeration and Content Capabilities, Studies in Regional Economic Development, ISBN: 978 0 85793 268 6, 2011

11. Karlsson, C., Johansson, B., Stough, R., Agglomeration, Clusters and Entrepreneurship, Studies in Regional Economic Development, ISBN: 978 1 84980 926 9, 2014

12. Krugman P., Geography and Trade, Cambridge, The MIT Press, ISBN: 9780262111591, 1991

13. Lundvall, B., National Systems of Innovation: Towards a theory of innovation and interactive learning. London, ISBN: 1-85567-063-1, 1992

14. Marshall, A., Principles of Economics 8th edition, London: Macmillan and Co., Ltd, 1990

15. McCann, P., The Regional and Urban Policy of the European Union. Cohesion, Results-Orientation and Smart Specialisation, Studies in Regional Economic Development, ISBN

978 1 78347 950 4, 2015

16. Nistorescu, T., Strategia întreprinderii și avantajul concurențial, Editura Pro Universitaria, 2013

17. Nordin, S., Tourism Clustering & Innovation– Paths to Economic Growth & Development, European Tourism Research Institute Mid-Sweden University, ISBN: 91-970001-9-1, 2003

18. Popa H.L., Iovescu M., Clustere. Înființare, dezvoltare, competitivitate, Timișoara, Editura CCIAT, ISBN: 978-9730-06715-6, 2009

19. Popa, I., Management general, Editura ASE, ISBN: 9735947242, 2005

20. Porter M., Competitive Strategy, The Free Press, New York, 1998

21. Porter, M., The Competitive Advantage of Nations. London: The MacMillan Press, 1990

22. Porter, M., Competitive Advantage: Creating and Sustaining Superior Performance, The Free Press, New York, 1998

23. Porter, M., On Competition, Updated and Expanded Edition. Boston: Harvard Business School Publishing, 2008

24. Saxenian, A., Regional advantage: Culture and competition in Silicon Valley and Route 128. Massachusetts: Harvard University Press, 1994, ISBN: 9780674753402, 1994

25. Sonobe, T. and Otsuka, K., Cluster-Based Industrial Development: an East Asian Model. UK: Palgrave Macmillan, Retrieved from http://www.palgraveconnect.com, ISBN: 0230280188, 9780230280182, 2011

26. Tanțău A.D., Ghid de bună practică pentru clustere și rețele de firme, Print Group București 2011

27. Thissen, M., van Oort, F., Diodato, D., Ruijs, A., Regional Competitiveness and Smart Specialization in Europe Place-based Development in International Economic Networks, Studies in Regional Economic Development, ISBN: 978 1 78254 515 6, 2013

Articles published in journals and proceedings of scientific meetings.

28. Buhalis, D. Marketing the competitive destination of the future. Tourism Management, 21, 97-116, 2000

29. Cabezas, K.B., María Isabel Hernández Eguibar, Helga Lissette Ochoa Cáceres Zahira Cruz Netro Fernando del Carmen Vera, Luis Miguel Pérez Casillas Pablo Ruiz Cordero, Medical Tourism Emerging Cluster, http://www.sintonia.mx/mm/Medical_Tourism_Cluster.pdf, 2012

30. Capone, F. "Regional Competitiveness in Tourism local Systems", 44° European Congress of the European Regional Science Association, Regions and Fiscal Federalism, Universidad the Porto, 2004

31. Christensen T. A., Lämmer-Gamp T., Meier zu Köcker G., Let's Make A Perfect Cluster Policy And Cluster Programme Smart Recommendations For Policy Makers

http://www.cluster-analysis.org/downloads/Clusters_web_singlepage_06092012.pdf, 2012

32. Cojanu V., Pîslaru D., "How important are agglomeration economies: a case study of Romanian industrial clusters" Review of Economic and Business Studies 4:1, 2011

33. Coșniță, D., Guth, M., Report on the Cluster Mapping Results. Bucharest: Romanian Ministry of Economy and GTZ, 2010

34. Crouch, G., and Ritche, J. "Tourism, Competitiveness, and Societal Prosperity", Journal of Business Research, Vol.44, 1999

35. Delgado M., Porter, M.E. and Stern, S., "Clusters and entrepreneurship", Journal of Economic Geography, 10 (4), 2010

36. Delgado, M., Porter, M.E. and Stern, S., Clusters, Convergence, and Economic Performance, Retrieved from http://www.isc.hbs.edu/pdf/DPS_Clusters_Performance_2011-0311.pdf, 2011

37. Etzkowitz, H. and Leydesdorff, L., Universities in the Global Economy: A Triple Helix of University-Industry-Government Relations London: Cassell Academic, 1997

38. Ferreira M., Serra F.R., Costa B.K., Emerson M. A., Couto H.R., Impact of the Types of Clusters on the Innovation Output and the Appropriation of Rents from Innovation, Journal of Technology

Management & Innovation. 2012, Volume 7, Issue 4, http://www.scielo.cl/pdf/jotmi/v7n4/art06.pdf, 2012

39. Ferreira, M. "Estratégia e Planeamento Regional do Turismo", Investigação em Turismo – Livro de Actas, pp. 67-82, 2003

40. Fundeanu D., The Impact of Regional Innovative Clusters on Competitiveness Procedia- Social and Behavioral Sciences, Volume 124/2014

41. Fundeanu D., Model of health tourism development - SPA tourism cluster in Romania, Management&Marketing, volumul XIII, nr.1/2015, 2015

42. Itoga, H., Lin, G.T.R., Yang, F.C.H., Shyu, J.Z., Dynamics of Industrial Cluster Scenarios. Expert Projects Publishing House, ISSN: 1583-3410, 2014

43. Kachniewska, M. Towards the Definition of a Tourism Cluster, Journal of entrepreneurship, management and innovation JEMI 2013, Vol. 9, Issue , art. 03, 2014

http://ssrn.com/abstract=2410446

44. Ketels C., and Protsiv, S., European Cluster Observatory Report, Center for Strategy and Competitiveness Stockholm School of Economics, 2014

45. Ketels, C., Lindqvist, G., Sölvell, Ö.Strengthening Clusters and Competitiveness in Europe, The Role of Cluster Organisations. The Cluster Observatory, 2012

46. Kim, N., Wicks, B.E. Rethinking Tourism Cluster Development Models for Global Competitiveness, International CHRIE Conference-Refereed Track. Paper 28, 2010

http://scholarworks.umass.edu/refereed/CHRIE_2010/Friday/28

47. Meyer-Stamer, J., Harmes-Liedtke, U. "How to promote clusters?", Mesopartner working papers, 2005, http://www.mesopartner.com/fileadmin/user_files/working_papers/mpwp8_cluster_e.pdf

48. Pencea S., Aglomerările economice de tip cluster,

http://www.iem.ro/rem/index.php/REM/article/viewFile/38/24, 2010

49. Perroux, F., Note sur la notion de pôle de croissance, "Economie Appliquée", nr.8, pp.307-320, 1955

50. Porter, M. E., 'The Economic Performance of Regions', Regional Studies, 37(6-7), 549-578, 2003

51. Small, J., Darcy, S., Packer, T. The embodied tourist experiences of people with vision impairment: Management implications beyond the visual gaze. Tourism Management, 33(4), 941-950, 2012

52. Sölvell, Ö, Ketels, C. and Lindqvist, G., 'The European Cluster Observatory: EU Cluster Map-ping and Strengthening Clusters in Europe', Europe Innova Paper N° 12, Luxembourg: European Commission, 2009 53. Sonderegger P., and Täube F., 'Cluster life cycle and diaspora effects: Evidence from the Indian IT cluster in Bangalore', Journal of International Management, Vol. 16, No. 4, 2010

Studies and reports

54. *** European Cluster Observatory, European Cluster Panorama 2014 REPORT, Christian Ketels and Sergiy Protsiv, 2014

55. *** European Cluster Observatory, Methodology and Findings Report for a Cluster Mapping of Related Sectors Report, Christian Ketels and Sergiy Protsiv, 2014

56. *** European Cluster Observatory; Methodology and Findings Report for Correlation Analysis between Cluster Strength and Competitiveness Indicators Report, Franco and all, 2014

57. *** European Commission, Regional Clusters in Europe, Observatory of European SMEs –Enterprise Publications- 2002/N.3., 2002

58. *** Ghidul pentru implementarea în România a conceptului de cluster inovativ, București, 2009

59. *** Studiu în proiectul "Politici Inteligente pentru Clustere în Sud-Estul Europei"-POLISEE, Raport de

evaluare globală a impactului: analiza politicilor de cluster, Universitatea din Primorska – Slovenia, 2013

60. *** World Economic Forum, The Global Competitiveness Report 2, 2014