

STRUCTURES AND PROGRAMMES FOR THE CLUSTERS COMPETITIVENESS INCREASE IN ROMANIA

Horia Liviu POPA^{*}, Marian Liviu MOCAN^{*}, Liana Rodica PATER^{**}

*"Politehnica" University of Timisoara, Romania **"Tibiscus" University of Timisoara, Romania

Abstract. In the last years the European Union 25 and the new country members Romania and Bulgaria have had negative growing competitiveness gaps comparatively to the USA, North America and Asia-Pacific Zone. The classical political and managerial approaches, the insufficient total radical innovation (integrated in technology, management and policies, competitiveness culture) contributed to the relative decrease of the Romania's and enlarged EU's competitiveness. Romania and moreover the European Union 27 cannot accept in the XXIst century the persistence of the competitiveness gaps (– Δ K), which are unfavourable to them. We analyse and characterize the integrated ways for the competitiveness development of the Romanian clusters and enterprises. We propose new structures and programmes for the sustainable competitiveness increase of the Romanian economy.

Keywords: competitiveness gaps, integrated ways, sustainable competitiveness increase

1. Introduction

The relative involution of the competitiveness has become a great challenge for the European Union 25, and also for Romania and Bulgaria which are the new EU members in 2007, for Croatia, Serbia, Montenegro, Former Yugoslav Republic of Macedonia, Bosnia and Herzegovina, Albania, which are waiting to adhere to the EU.

Romania and moreover the European Union 27 cannot accept in the XXIst century the persistence of the competitiveness gaps (– Δ K), which are unfavourable to them. These gaps are synthetically reflected in 2006 by the classification scores "55 countries" IMD [1], the "125 countries" WEF classification [2] and by the EU indicators [3]. The Europeans have no reason whatsoever to accept the constant competitiveness loss, the economic welfare and jobs, a loss that threatens the lasting development of the European social model and the European environment standards.

A clear conclusion is formed: that the extended European Union and further more Romania, they both need new management creative, radically innovative resources in the XXIst century, within a private-public partnership which is more and more competitive. This private-public partnership must be rapidly extended in all European countries and integrated at the macro, mezzo and micro levels.

The purpose of the paper is to analyse and characterize the integrated ways for the

competitiveness development of the Romanian clusters and enterprises, to propose new structures and programmes for the sustainable competitiveness increase of the Romanian economy.

2. Orientation to competitiveness on a world scale

On the world scale the orientation to competitiveness has accelerated after 1950, together with the evolution of the globalisation process. It is noticeable that in the Western-European countries the gradual orientation to total competitiveness (value), accelerated after 1970, together with entering the "environmental economy" stage [4]. The total competitiveness considers all environments (natural, socio-economical, technological, political-juridicaladministrative, demographical-psycho-linguistic, socio-cultural, and military) and all resources (natural, human, social, material, informational, financial, time).

The IMD "55" and WEF "125" classification from 2006-2007 and past years [1, 2, 8] reflects the performers of this process, amongst which outstand the key-regions in Europe, Asia, South America and USA. Every country and every key-region from the IMD "55" and WEF "125" classification, other countries, has made and still make significant specific efforts in order to be competitive. After 2000 at least 20 countries outstand:

- 10 countries having more than 20 million inhabitants, who have constantly taken the first 10 places of the classification at this category
 - ➢ USA and Canada from the North-American sub-continent,
 - Australia, Taiwan, China, Malaysia, Japan, New Zealand from the Asian Pacific zone,
 - ➢ Germany, England, in European Union,
- 10 countries having less than 20 million inhabitants, which have constantly taken the first 10 places of the classification at this category
 - Singapore, Hong Kong from the Asian Pacific zone,
 - Luxembourg, Denmark, Switzerland, Iceland, Netherlands, Sweden, Austria, Finland from Europe.

Most countries and regions from the IMD "55" classification and WEF "125" classification has developed after 1950 two combined ways of competitiveness growth within their competitiveness strategy:

1) Macro- and mezo- governmental policies which are more and more oriented towards regional and national competitiveness, connected to the policies that foreshadows the world governance [4]. The goal of these competitiveness policies is to create and develop favourable conditions for clusters, companies and organizations competitiveness growth.

2) Elaboration and enforcement of some new methods, structures and programs at all levels, especially at mezzo and micro levels, in order to determine the clusters, companies and organizations competitiveness growth. This is based on powerful public-private partnerships (PPPP) capable to develop clusters and networks of performative organizations on the world market [1, 2, 5, 6, 7, 8 and 9].

After 1990 on the world scale the globalised competition has brought about the need for integration in management, a need that occurred both theoretically, by developing the continuous improvement management [9] and the competitiveness management [4], and practically, by strongly developing the competitiveness clusters [10], of more and more competitiveness institutes and boards, of some global projects [1, 2, and 3].

The evolution of concerns and the results obtained in regional, national and continental competitiveness growth is a positive one. But, its limitation to the socio-economical, technological and military must be remarked. Currently these are still dangerously neglected for the humanity's future [1, 2, 3, 4, 5, and 6]:

- Natural environment and biodiversity protection on planet Earth,
- Solving the poverty, endemic disease, illiteracy problems,
- ♦ Finding on a very long term solutions the energy planetary resources, since in approximately 100 years the fossil energy sources on which our "primitively energetic" civilization is based will be exhausted [4].

3. Ways of lasting competitiveness growth

A systemic analysis [4] highlights the general ways of total competitiveness (value) lasting growth. These ways (Table 1) follow the development and the continuously improved integration of the two ways of national and continental competitiveness growth, which are homologated after 1980:

- Macro- and mezo- governmental integrated policies, more and more oriented towards total regional, national and continental competitiveness (value), which are connected to the politics that foreshadow the world governance,
- Consistent elaboration and enforcement of some new methods, structures and programs at all levels, especially at mezo and micro levels, in order to determine the clusters, companies and organizations competitiveness growth. This is based on powerful public-private partnerships (PPPP) capable to develop clusters and networks of performative organizations on the world market.

For EU 27 and for all European countries the following factors are a priority:

• The firm evolution of EU 27 and of all European countries from economic macro stability policies to total regional, national and continental competitiveness policies (stimulated by national / regional competitiveness councils and centres), in accordance with the world governance policies

Estimated time: 15 years

• Development of the advanced total competitiveness (value) culture, as a basis of lasting welfare

Estimated time: decades

• Development and enforcement within EU 27, of all European countries, of the integrative competitiveness and value management (IKVM) at a micro and mezo level; major necessary actions:

Table 1 Policies, methods, structures and competitiveness programmes at the beginning of the XXI century											
Level		MACRO	Mezzo	micro							
		(continental, national, euro-	(county, zone, local, branch)	(clusters, networks, firms,							
		regional, regional)	Very great complexity	businesses)							
K		Enormous complexity	(7 environments, all resources)	Great complexity							
Growth		(7 environments, all resources)		$(\geq 2 \text{ environments, all resources})$							
	Governmental policies and Organizational policies	 Government economic macro-stability policies classic modern Global macro-stability policies (7 environments & all resources) Economic competitiveness policies (2 environments & all resources) cluster-based Total competitiveness policies (value, in 7 environments & all 	 Government economic mezzo-stability policies classic modern Global mezzo-stability policies (7 environments & all resources) Economic competitiveness policies (2 environments & all resources) cluster-based Total competitiveness policies (value, in 7 environments & all 	 Economic competitiveness policies (2 environments & all resources) cluster-based Total competitiveness policies (value, in 7 environments & all 							
Combined growth ways of the competitiveness K	Methods, structures, programmes	 resources) cluster-based Competitiveness valuation methods Competitiveness Councils and Centres (CK) Organizations Networks to Competitiveness Oriented (ONCO) Govern & Employers & Unions & Public-Private Partnerships (PPP) Federal / Governmental Competitiveness Programmes (FGKP) for: Continent (C) Economic Unions (EU) Countries (N) Euro-regions (ER) Regions (R), MACRO-Branches / Sectors (B / S) Industry Agriculture 	 resources) cluster-based Competitiveness valuation methods Competitiveness Councils and Centres (CK) Organizations Networks to Competitiveness Oriented (ONCO) Administration & Employers & Unions & Public-Private Partnerships (PPP) Governmental Competitiveness Programmes (GKP) for: Counties (J) Zone (Z) Localities (L) Mezzo-Branches / Sectors (B / S) Industry Agriculture Competitiveness culture at county / zone / local / branch level 	 resources) cluster-based Competitiveness valuation methods Integrative Management of the Competitiveness and Value (IMKV) Development Promotion Learning Implementation Competitiveness Centres and Networks (CCK) for IMKV development (R&D) IMKV implementation Competitiveness culture Organizational Competitiveness Programmes (OKP) for: Clusters (C) Firm Networks (FN) Firms (F) Businesses (B) Competitiveness culture at clusters / networks / firms level 							

Table 1 Policies,	methods	structures a	nd com	netitiveness	nrogrammes	at the	heginning	of the XX	Century
Table 11 Officies,	memous,	su uctures a	inu com	Jenniveness	programmes	at the	ocginning	of the AA	i contui y

7 Environments:

M_{nat} - natural environment;

M_{dpl}- demo-psycho-linguistic;

 M_{scu} - socio-cultural; M_{pja} - political-juridical-administrative;

 M_{sec} – socio-economic (business);

 $M_{ino} - innovation;$

M_{mil} - military.

- ~ A thorough knowledge of the competitiveness factors and a pragmatic, rigorous, integrated evaluation of competitiveness at macro levels (continent, country, and region) / mezo level (county, zone, and locality) / micro (cluster, chain companies, firm and business) Estimated time: 5 years
- ~ Financing of major competitiveness growth actions using EU and national programmes Estimated time: permanent
- ~ Development and generalized enforcement of the competitiveness analysis integrated at macro / mezo / micro levels Estimated time: permanent
- Strong evolution from governmental economic mezo-stability policies to total policies competitiveness (for all environments and resources) at all mezo levels.

Estimated time: permanent

~ Development, enforcement and perfectioning of the integrative competitiveness and value management (IKVM) within the companies and clusters, firstly in production and retail companies, as a basis for the organizational competitiveness programs,

Estimated time: permanent

• Development and enforcement of the competitiveness policies and programs carried out by flexible multidimensional networks "European Competitiveness Centres and Networks" (ECCN) for businesses, firms, clusters and chain companies, localities, zones, counties, regions having an unlimited time mission:

a) To develop the *new integrative management – the* competitiveness and value management (IKVM), which is adapted to the national cultures of the European countries – these will be Competitiveness Centres of Research and Development (ECC-R&D),

Estimated time: permanent

b) To contribute to the practice of IKVM in all fields, in order to ensure the position and maintenance of EU as a world leader in competitiveness - these will be Competitiveness Centres of Implementation (ECC-I) based on clusters.

Estimated time: permanent

c) To develop the value and competitiveness culture at approximately 500 million citizens of EU – these will be Centres of Competitiveness and Value Culture Dissemination (ECC-C),

Estimated time: permanent

The European countries and key-regions that are very competitive [1, 2] have partially achieved these evolutions. But, for EU 27 and for all European countries the prime task is to develop competitiveness rapidly, integrated at all levels so that welfare, lasting development of the social European model and European environment standards is fully achieved.

4. Priorities for Romanian cluster's competitiveness growth

In 2004 the Strategy of Romania Lasting Development was elaborated for the period 2004 - 2025 [11], in 2005 was elaborated the National Development Plan 2007-2013 [12], in 2007 was elaborated the Romania's Post-accession Strategy [13], but still there is no National Competitiveness Council in Romania. This diminishes the dynamics and the efficiency of the Economic Development Regional Agencies, the Economic Development County Agencies, and also it temporarily limitates the generalized orientation towards competitiveness.

Romania must develop politics, policies, structures and competitiveness programs, it must cross with strong initiative the important competitiveness growth stages, starting with 2005, in order to be able to approach the world Top 15 until 2040. The stages that are to be crossed will be similar to those of other countries [1, 2, 4, 6, ...]10, 14], having the first possible results in 2008.

Until the National Competitiveness Board in Romania and National Competitiveness Programs are created, it is possible to develop some regional or sectoral decisions having this goal. Some of these initiatives are carried on by the Timisoara Chamber of Commerce, Industry and Agriculture (CCIAT) together with the Management Faculty of "Politehnica" University from Timisoara (UPT – Economic Engineering Research Centre). CCIAT and UPT have created the Timisoara Regional Competitiveness Centre CRKT and the model of a multidimensional network of centres of ECC-R&D type for innovation. ECC-IK for projects and implementation, ECC-CK for developing the competitiveness culture. This network within the public-private partnership of Region 5 will contribute to the elaboration of competitiveness programs, to the lasting growth of clusters and Chain Company's competitiveness from the 5th

Western Region. The acquired experience will be transferred to other Romanian counties and regions.

The main priorities for Romanian cluster's competitiveness growth are the following:

- The development of trust and advanced collaborative spirit, in the framework of o powerful, dynamic and flexible public-private partnerships, initiated, if needed, by a facilitator (regional competitiveness center, regional / county development agency, specialized consulting company, chamber of commerce, industry and agriculture etc.),
- The presence of competition among companies from the geographical concentration (region, West part of Romania, Euroregion DKMT etc.),
- The development of powerful interconnections, cooperation among composing organizations (companies, schools, universities, research and development centers / institutes, competitiveness centers, chambers of commerce, industry and agriculture, business incubators, industrial parks, technological parks, banks etc.) and the public administration which assures and develops the needed infrastructure,
- Competitive strategies and tactics of the cluster initiated and developed by the main company from the network (productive or offering services), having as a target the regional market, the national market, but also the global market,
- The strengthening of cluster approach in existing Romanian regional, enterprise and innovation policies and strategies,
- The development and enforcement within West Region / Romania / DKMT Euroregion, of the integrative competitiveness and value management (IKVM) and total competitiveness culture [4].

5. Conclusions

Romania and moreover the European Union 27 cannot accept in the XXIst century the persistence of the competitiveness gaps (– Δ K), which are unfavourable to them. These gaps are synthetically reflected in 2006 by the classification scores "55 countries" IMD [1], the "125 countries" WEF classification [2] and by the EU indicators [3]. The Europeans have no reason whatsoever to accept the constant competitiveness loss, the economic welfare and jobs, a loss that threatens the lasting development of the European social model and the European environment standards.

After abandoning the communist experiment in 1989 Romania has transitioned relatively slowly and inefficiently back to a functional market economy. All governments, labour mentality and organization management have participated at these results considering the state of accelerated globalised competition. The evolution of the Romanian economy is outstanding after 1998, but in the same times the entrance of Romania in the national competitiveness IMD "55" [1] and WEF "125" [2] classifications is modest.

In Romania we have basically two options ahead of us [4, 15]:

(1) to compete on the European market and globally with China, India, Poland and Bulgaria etc. on the natural resources and labour-intensive product markets,

(2) to devise a sound policy for efficient direct investments, for cluster-based development in all sectors, for prospective integrated (macro & mezo & micro) competitiveness development and competitiveness culture implementation.

In order to improve Romania's / West Region's / Danube-Kris-Mures-Tisza Euroregion's competitiveness, the cluster approach in existing regional, enterprise and innovation policies should be strengthened:

-The development of competitiveness culture to all levels (national / regional / county / zone / local / cluster / network / organisation / individual), with different intensive and flexible methods, is the priority.

-Romania needs to pay more attention to clusters, a more coherence and co-ordinated approach. Compared with the US and EU, Romania has been very late and reluctant to focus on the development of clusters. Without reinforced and tailor-made policies and strategies it will not be possible to realise the full social-economic benefits and competitiveness.

-Favourable framework conditions in Romania are the essence. The market is the engine for clusters' development and growth. Regional policies and strategies should create favourable framework conditions that boost free and open competition.

-Romania / Region cluster policy and strategy needs stakeholder involvement. In order to produce effective and legitimate policies and strategies, it is crucial to involve firms as well as all relevant public and semi-public institutions in cluster initiatives and the learning process.

The extended European Union must dynamically integrate, as optimal as possible, two combined ways of competitiveness growth:

• Macro- and mezo- governmental policies that are strongly oriented to regional and national total

competitiveness, connected to the policies that foreshadow the world governance. These competitiveness policies target the creation and development of favourable conditions for clusters, companies and organizations competitiveness growth,

• Elaboration and practicing some new integrated methods, structures and programs at all levels, especially at mezo and micro levels in order to determine the companies and organizations competitiveness growth, based on powerful public-private partnerships (PPPP) capable to develop clusters and performative organization networks on the global market.

Without developing and generalized practicing some new innovative resource, - "the integrative management of total competitiveness and total competitiveness culture" [4] - the extended European Union has no real chances of becoming on a mediumlong term the world leader in competitiveness, and Romania will not be able to accede on a long term, for a generation (until 2040) towards a position in the world Top 20.

References

- WCY-IMD: IMD World Competitiveness Yearbook 2007. International Institute for Management Development, Lausanne, 2000 / 2001 / 2002 / 2003 / 2004 / 2005 / 2006 / 2007
- GCR-WEF: The Global Competitiveness Report 2006-2007. World Economic Forum, Geneva, 2004/2005 / 2006 / 2007

- 3. EU-ECR: *European Competitiveness Report 2006*. European Commission, SEC(2006)1467/2, COM(2006) 697 final, 14.11.2006, Brussels, Belgium
- 4. Popa, H.L. et al.: *Strategic Management*. Editura Dacia, ISBN 973-35-1524-8, Cluj-Napoca, 2002 (in Romanian)
- Gannon, J. et all.: Global Trends 2015. A Dialogue About the Future with Nongovernments Experts. NIC, Washington, 2000
- LS: Lisbon Strategy. Lisbon European Council: Presidency Conclusions, 23-24 March 2000, Brussels, Press Release Nr. 100/1/00
- RCC: 55 Policy Recommendations for Raising Croatia's Competitiveness. National Competitiveness Council, Zagreb, 2004
- Tuerk, D.G. et all.: *State Competitiveness Report 2006*. Beacon Hill Institute for Public Policy Research at Suffolk University, ISBN 1-866320-29-7, Boston, Massachusetts, USA, 2006
- Harrington, H.J., Harrington, J.S.: Total Improvement Management. ISBN 0-07-026770-7, McGraw-Hill, Inc., New York, USA, 1995
- TGO: 2006 Innobarometer on cluster's role in facilitating innovation in Europe. Analytical Report. The Gallup Organization, Flash EB No 187, Brussels, Belgium, 2006
- 11. SDSR: *The Sustainable Development Strategy of Romania* 2004-2025. The Romanian Presidency, Bucharest, Romania, 2004 (in Romanian)
- 12. NDPRO: *National Development Plan 2007-2013*. Romanian Government, December 2005
- 13. RPAS: *Romania's Post-accesion Strategy*. Romanian Government, Bucharest, May 2007
- Porter, M.E.: *The Competitive Advantage of Nations*. Macmillan, ISBN 978-0684841472, Basingstoke, 1990, (reprint Free Press, New York, USA, 1998)
- 15. PWR: *Romania 2007. Policy warning report.* Romanian Academic Society, Bucharest, 2007