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### **Regional Competitiveness**

# In search of a framework for Greek regions' strategic planning and measurement of competitiveness

G.M. Michailidis<sup>1</sup>, G.A. Georgiadis<sup>2</sup>, N.D. Koutsomarkos<sup>3</sup>

#### **Abstract**

Greek economy, after nominal converging with other western European countries and meeting the accession criteria to the European Monetary Union, sets as a new objective the attainment of "real" convergence. Success in this objective, while operating in a globalized economic environment and the single European market, will be judged on the choice of a development policy focused on competitiveness and regional development.

This paper exactly aims at informing the strategic planning of a regional competitiveness policy. Especially, it intends to set specifications for a regional competitiveness strategy, to define actions at an institutional level for its implementation and to propose a quantification and measurement system of its results.

Based on the definition of competitiveness and its determinant factors for each level (national, branch, enterprise, regional) and how they are intertwined, the necessity for a regional competitiveness strategy is validated by a critical analysis of Greek economy's recent related data and performance. The frame in which Greek regions' competitiveness problems will be addressed is analyzed under the light of the European Union's new regional development policies

Furthermore, the article analyzes the competitiveness strategic planning of Greece and Greek regions in interventions of the current programming period. Namely, it evaluates the extent at which competitiveness is identified and specified in the Community Support Programme, the Competitiveness Operational Programme and the SWOT analyses of the Regional Operational Programmes. Moreover the policies that implement the European regional policy (CSP, OP) and the competitiveness policy (COP) are being evaluated on aspects that include fund allocation, strategy update, regional priorities, implementation progress, efficiency, performance, and synergies, as far as competitiveness and its determinant factors are concerned.

Based on literature review, the paper assesses and analyzes the most renowned benchmark systems of countries' and regions' competitiveness.

This paper results to a coherent set of proposals for regional competitiveness policy strategic planning. Particularly, it defines requests towards the aforementioned policy and identifies important issues for the forthcoming programming period. It proposes the establishment of regional agencies analogous to the National Competitiveness and Development Council, alternative organizational forms and a typical action plan. It defines an index set for Greek regions' competitiveness benchmarking, a synthesis and utilization methodology, and evaluates the documentation of available data.

Keywords: competitiveness, benchmarking, regional policy, strategic planning

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European economy competitiveness constituted form the start an objective of European Union policies. Political, social and organisational changes both at European and international level, led to a re-orientation of the competitiveness term and to a new aiming, in the course of facts such as regional policy, cohesion policy and research and technology policy. The competitiveness — regional development dipole requires an interpretation and inter-relation effort using national and regional spatial levels of the European Union.

Historical retrospective at general level as well as at single member-states highlights and brings out a couple of significant issues that delineate the framework for policy implementation. Starting demarcation points of this framework are the recognition of regional policy implementation necessity in order to reduce regional disparities, awareness of the differentiation in traditions, perceptions, and approaches, in the member-states both at economic and social level as well as the geographical variation of the regions. In the course of time, it was implementation itself that pointed to problems in need of correction moves, or policies revision or not visible conclusions. The question is whether regions do have the potential to develop by themselves in frame of an established European competitive environment, or do they need support in order to achieve balance and homogeneity.

Ultimately, what is needed is policy effectiveness, which clearly differentiates among regions and among states, and at the same time the most important causes and practices vary by region. Organisational and operational flexibility, institutional dysfunction, immediate intervention capacity, state – region dependency rate, geographic variety, different level of economic systems, all constitute issues that bring out special points of the competitiveness and regional development "problem".

#### Competitiveness definition

At firm level, competitiveness can be easily defined: it is the potential (capability) of a firm to survive and grow, taking into account the competition of other firms for the same profits (in the same branch or market). Firms compete for markets and resources (comparative advantages) and therefore it is rather easy to examine, comparatively, their competitive place by measuring either market shares (performance index) or creation and accumulation rate of comparative advantages, like innovative products, processes, etc (input indexes).

At mid-level, a branch or industry of a country consists of a group of firms in which firms compete not only one to another but also as group to equivalent industries of other countries. A country's industry firms can follow similar strategies that render the strategy of a national industry clearly different from the strategy of another national industry. Moreover, industries can differ, aside from historical, institutional and environmental reasons, in their structure, the relations between suppliers and buyers, networking, synergies etc, which can lead to an increasing development process. In this frame a country's sector is competitive, if it has a set of comparative advantages enabling consistent higher added value and higher profits creation.

At macro- or national state level, the notion of competitiveness becomes more obscure. A state is not the same as a firm or an industry. States don't compete one to another like firms. States compete to create the appropriate development conditions for the economic activity. They compete to formulate policies, to implement structural changes consistent with the globalisation process, to treat market dysfunctions and to create an institutional framework that reinforces trust, it produces social capital, and it encourages and favours entrepreneurship, creates the preconditions for more and of better jobs, improves labour force skills, creates more opportunities and supports social cohesion and quality of life. Competitiveness reinforcement contributes to the national goals accomplishment: competitiveness refers to "the ability to sustain and improve the quality of life of the citizens, namely employment and real income increase, unemployment decrease as well as strengths and opportunities support, inside and outside national borders, under globalisation conditions.

The term regional competitiveness is harder to approach. According to the EU definition, competitiveness is: "the ability to produce goods and services that meet world markets

demand, maintaining at the same time high and sustainable income levels, or in general, the ability (of regions) to create relatively high incomes and jobs whilst exposed to international competition." (EC, 1999)

It is deduced that regional competitiveness, as a term, is related to national competitiveness. Thus, in international literature there are references to spatial competitiveness (Huggins, 2003), whereas as context it lies between the three reference levels (micro-, mid- and macro). Specifically:

A region's competitiveness is connected to the competitiveness of its enterprises – it takes a fair number of competitive enterprises. In turn, enterprises' competitiveness depends both on their performance and the direct entrepreneurial environment in which they operate and act. There are some generally acceptable determinative factors (local institutions, structures, local society) in every region that affect globally all the located there enterprises. These constitute the **regional entrepreneurial environment**.

Branches of economic activities can be inter-regionally dispersed in a country; however some regions can possess an **element of specialisation** or business organization or strategy (innovation poles, clusters, industrial or tourist areas etc.). In many occasions an **element of interconnection or interdependence** operates.

The region, as part of a country, is affected by macro-competitiveness:

- Economic policy
- Social condition and institutions
- Broader macro-environment
- Market openness and exposition to competition.

Despite some of the international competitiveness laws, like exchange rate movements and price-wage flexibility, don't work at regional level, there is inter-regional competitiveness and thus inter-regional factor mobility, like labour and capital, that poses a threat to the regions. For this reason the British Department of Industry (DTI, 1998) adds the **element of domestic competition** to the regional competitiveness definition.

As for the clarification of the regional competitiveness definition this article picks out some general conclusions that lead to a synthesis model based on a holistic approach:

- There is no theory for regional competitiveness that can fully cover its complex and multi-dimensional character. Although there are useful approaches that can be examined complementarily, there are at least three systematically differing theories that cannot constitute an organizing framework.
- Regional competitiveness depends on a region's ability to create satisfactory export levels (inter-regional or international) and to maintain an increasing income level guaranteeing total employment for the citizens.
- A determinant factor for this effort is the production factors productivity for locally/regionally produced goods and services.
- Regional competitiveness can be approached using both qualitative terms and factors (like enterprise networks, reliability among social agents and social capital formation, as well as quantitative terms and processes (like inter-enterprise trade, patents, labour force supply), having important consequences to the measurement.
- Regional competitiveness depends not only on the located there enterprises' competitiveness and their strategies but also on the region's entrepreneurship environment (local institution, social capital, public and regional services, social culture).
- Regional competitiveness determinant factors can stem from different levels (macro-, mid-, micro-) and accordingly competitiveness can pertain to every level. It is difficult to set apart a specific level where competitiveness can be examined.
- Summing up, regional competitiveness is affected by a set of factors (a composite factor) rather than by isolated. This has impacts on competitiveness measurement.

### Strategic competitiveness planning in Greece's current Programming Period

The only programming framework where, Greek regions' SWOT identification extent and quality, concerning competitiveness and the international economic environment, can be sought, is the Development Plan and the Community Support Framework 2000-2006.

Firstly, as far as competitiveness issue is concerned, these documents conduct an identification of economic conditions as they were evolved during the previous programming period.

Based on a set of, mainly, macro-economic estimates, common regional priorities were established, including among others:

- support for international competitiveness and economic base of the Regions, appointment of their comparative advantages and productive capacity extroversion boost
- support and specialisation of urban centres' development role
- regional strategy formulation for innovation diffusion, equal access opportunities to research and development, product and services quality improvement, human resources skills modernisation and adjustment
- infrastructure projects co-financing with private sector participation.

The basic disadvantage of the above SWOT analysis is firstly that the CSF, as it specifies the Development Plan 2000-2006, is a tool of limited range, and secondly this "strategic" shortcoming is already reflected in its financing scheme, that directly concerns its sources adequacy vis-à-vis its objectives. Thus, in the Greek CSF, intervention categories designated as "production environment" absorb 22% of the community sources sum, vis-à-vis 30.5% in the Spanish CSF and 48.5% in the Italian (South Italy). The share is remarkably low if the following are considered:

- Greek share includes an (unavoidably large) share of the agricultural sector.
- It is accompanied by a relative small share of "human resources" (19% in Greece to 29% in Eastern Germany, to 27% in Ireland), a category that represents an intrinsic competitiveness factor.
- Other comparable areas in the EU already have special advantages for additional resources inducement (Ireland, Portugal and Spain induce FDIs, Western Germany and southern Italy constitute part of strong and single national financing spaces).
- Comparable areas present Greece's potential main competitors in intra-EU trade.
- Gross Fixed Capital Formation dependency from community sources is very high in Greece (8.1% vis-à-vis 3.2% in Spain and 1.2% in Ireland).
- Investment indicator (GFCF/GDP) in Greece in 1999 was the lowest in all areas except southern Italy.
- Manufacture share in gross added value in Greece is the lowest in all areas.
- Greece sustains a constant trade deficit (opposed to surplus in Ireland and low deficit in other areas).

Therefore, the strategic objective of supporting Greek economy's competitiveness through the CSF is not reflected in its financing scheme to the extent that the above considerations would impose.

Moreover, from the already low percentage of the total community support for the "production environment" only 9.8% is allocated to manufacture, tourism and science and technology sectors (an additional 2% is allocated to energy infrastructures, that according to the CSF are included in competitiveness Priority Axis and almost all are embodied in the Competitiveness Operating Programme). COP itself represents only 10.3% of the CSF total public expense budget and its economic sectors funding is already clearly downgraded in view of Greek economy's competitiveness needs.

It could be proposed that strong interventions in other categories ("infrastructures") induct increased positive effect on competitiveness. However this is difficult to argue taking into account that:

- Community resources in Greece entail general production increase in secondary sector but in an uneven way (1,4% in manufacturing, 10,2% in construction)
- Gross Fixed Capital Formation dependency from community sources is very high in Greece (8,1% vis-à-vis 3,2% in Spain and 1,2% in Ireland).
- Greece faces a strong "leakage" of the community resources induced supply to other member-states and third countries (induced GDP in Greece is only 112% vis-à-vis 158% of induced supply, from that 43% "leaks" to other member-states and 3% to third countries).

In the Regional Operational Programmes 2000-2006 documents there are no explicitly pinpointed strengths-weaknesses-opportunities-threats related to the objective of competitiveness support.

An exhaustive analysis of the generic SWOT analyses, to the point that they are explicitly formulated in or "derived" from their strategy documents brings out a more or less chaotic identification. Thus, it prohibits the afterwards classification in priorities to tackle, and therefore in hierarchical strategic objectives and consequently in special and operational ones.

Focusing in the more commonly (or universally) identified elements it is possible to isolate by priority the following common competitiveness strengths-weaknesses-opportunities-threats, at regional level.

Strengths	Frequency
Wealthy natural and anthropogenic environment	13/13
Existence of generous cultural and tourist resources and the possibility of alternative tourism forms development	10/13
Existence of a traditional rural space and the significant primary sector activity	8/13
Important geographical location of the Region (whether in the national domain or as a gateway to abroad	8/13
Remarkable agglomerations-specialties of economic activity (organizations, bodies, universities, research and technology institutes, industries etc.)	8/13
Weaknesses	
Less-favoured geographic location and isolation from the west-European centres of entrepreneurial and technological development.	7/13
Intra-regional disparities	8/13
Inadequacy of transportation, telecommunication, energy and housing infrastructure and lack of proper inter- and intra- regional connections.	9/13
Deindustrialization, the development problems of the secondary sector and dependency rate on exogenous factors.	8/13
Opportunities	
Restructure and modernization of the production system	5/13
Innovations in organization and production (entrepreneurial networks, information technology) and entrepreneurship promotion through improvement of transport and telematics infrastructure, application of new technologies in ICT sector and quality of life and environment improvement	5/13
Threats	
Intense competition in the frame of gradual abolishment of world trade restrictions and decreased Region attractiveness	4/13

On the contrary, strengths and opportunities that should theoretically characterize all or at least a great number of the Regions are less frequently identified.

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Strengths	Frequency
Significant secondary and tertiary sector activity and high specialization level	2/13

in these sectors		
Proximity to important metropolitan centres favourable of spill-over effects	2/13	
receipt.		
Possibilities for research development and technology application in primary sector	1/13	
National and trans-European corridors passage.	5/13	
Available financial resources and entrepreneurship and investment development in the Region	2/13	
Opportunities		
Strong "external" investment interest	4/13	
Region's function as an inward – outward gate to abroad	2/13	
Enhancement of economic activities in neighbouring countries through trans- European networks development	3/13	

The above analysis leads to the conclusion, that, at least in general, the identification of strengths-weaknesses-opportunities and threats regarding the Regions' economies competitiveness, was carried out "typically" in order to comply to the obligations of the programming procedures, resulting in the inadequacy of the SWOT analysis to guide to clear objectives and strategies

#### Central Guidelines of a Regional Competitiveness Strategy

The fundamental issues that a regional competitiveness and development strategy should address are:

- 1. Outcome, impact and performance (outcome investment relation) assessment of previous programming periods.
  - At what extent previous programming period's efforts and financing in the Region contributed to:
    - Economy extroversion and market integration support
    - Research and technology development, utilisation and diffusion of new technologies and innovation, active involvement of the private sector
    - Present enterprises' effectiveness, creation and development of new competitive and innovative enterprises with high added value
    - Bring out comparative regional and local advantages
    - Adaptation of the educational and vocational training system and access provision to "broad-integrated" knowledge, passive and active employment policies complementarity.
    - Support for intraregional cohesion and rural development in less-developed areas, and reduction of social disparities in employment issues, learning process, social inclusion.

Always, in relation to objectives that are set by the new European Structural Funds Regulation per Priority.

2. Detection of opportunities and threats (from the external, international and national environment) for the Region. Verification of its strengths and weaknesses for tackling opportunities and threats.

At what extent the following events, trends and scenarios are expected to affect the Region and how they can be tackled:

- Late enlargement, international competition and next enlargement of the EU
- Inter- regional competition in Greece
- New Common Agricultural Policy

It is purposeful for the opportunities—threats and strengths—weaknesses to be referred to specific sectors, branches, spatial units, competitor countries and differentiated according to the following schemes:

- Endogenous of the Region versus horizontal, national scale affecting the Region.
- Developmental versus organisational–managerial versus financial.

3. Designation of development gaps in the Region, designation of properties and weighted ranking in the financial and managerial effort.

Comparison of opportunities—threats and strengths—weaknesses of the previous programming periods in order to identify and classify the region's most important developmental needs.

Designation of the Region's developmental priorities and discrimination between:

- Priorities that can and should be addressed at regional level
- Priorities that can be addressed at national (horizontal) level

It can be proposed (in generic scale order) a weighted ranking of the priorities in the financial and managerial effort.

4. Identification of respective good practices in national, European or international level and assessment of their suitability for the Region and the treatment of the development gaps in relation to the proposed priorities.

Proposition of integrated development interventions that already have technical readiness or are assessed as purposeful and feasible. There is no interest in major projects but possibly in:

- Integrated development projects in special spatial units
- Sectors' or branches' integrated development projects
- Intra-regional, inter-regional and international networks.

Every Region ought to formulate a competitiveness strategy according to the following plan:

#### A. The strategy requirements:

- 1. Overall:
  - Establishment and expansion of the regional economic structure productive character:
    - o available comparative advantages utilisation
    - o new competitive advantages emergence
    - "productive union" constitution of economic and social forces
  - Intra- and inter regional connections reinforcement
    - o Services poles formulation of inter-regional scale
    - o Hierarchical urban network constitution.
  - Proximity to transition zones utilisation:
    - o Trans-European networks productive utilisation
    - "Executive" and "platform" role uptake for the economic space expansion to third countries
- 2. Necessity for the constitution of a "regional" cluster of such economic scale as to be capable of:
  - Permitting the sectoral and branch integration of the Region's productive structure, consequently:
    - Offering the possibility to tackle common problems or problems of one Region with the support of factors from other regions.
  - Inducing the emergence of functions and services that will form the ground for: the organisation of an operational network of urban centres and development poles
  - Consisting a "negotiatory advantage" for the regions, consequently: Comprising an incentive for foreign investments and activities inducement.
- 3. Possible common development drivers
- 4. Possible "complementary" competitiveness sources in five levels:
  - Complementary productive processes:
    - Inter-regional raw materials exploitation
    - Inter-regional operation of cooperation and subcontracting networks
  - Complementary economic activities
    - Inter-regional market growth
    - Inter-regional utilisation of new services
    - Inter-regional viability of the industry, energy and entrepreneurial infrastructure

- Complementary human resources: Inter-regional education and vocational training Inter-regional employment allocation
- Complementary possibilities for innovation adoption and adjustment Inter-regional market growth for innovation products and services Inter-regional users' coalitions
- Complementary administration-service Inter-regional entrepreneurship infrastructure networking Inter-regional networking of the development planning

#### B. Strategic objectives

- Framework objectives:
  - o Regional productive structures competitiveness reinforcement
  - Endogenous potential utilisation: available comparative advantages new competitive advantages
  - o Development drivers conception
  - o Broader resources mobilisation inducement of strong capital mass
  - Productive union constitution partnership in international and Greek territory
  - o Long-term aiming
- Strategic objectives:
  - Establishment and expansion of the regional economy's productive character
  - Utilization of trans-European networks passage "tunnel" / "pump" phenomena prevention
  - o Spatial balance improvement economic and social cohesion
  - o Human potential utilisation, as a constant development resource
  - Inter-regional growth of raw material product services innovation executives markets
  - o Interventions with long-term outcome and international interest

The above objectives are classified and specified to long-term and mid-term strategic objectives in order to form the final objectives body.

#### Review of regional competitiveness measurement systems

Regional competitiveness measurement and evaluation systems are mainly used for interregional comparisons in terms of inputs and determinant factors of spatial competitiveness or outputs and income levels, added value and welfare, in general. Significant differences can be also found in this field, concerning as much the approach as well as the measurement of regions. It should be noted, that the OECD and the EU put effort in methods and indexes harmonisation so it can be possible to compare regions at international level.

Benchmarking (of inputs and outputs or of a weighted index) is the basic tool to compare one region with others respectively (neighbouring or comparative). Those reports define basic functions or inputs, they categorise and measure them, and compare a region's performance with the best performer or with other regions of a country, a countries union (EU) or states (USA).

The European Union made a relevant attempt in the Second Report for Economic and Social Cohesion. The report examines the determinant factors of the EU regions competitiveness, yet there was no attempt to create a composite index for competitiveness or development. The report finds that the regions are in different development stages and they are characterised by different socio-economic structures that might classify them in certain categories. Thus, the determinant factors will differ among categories. Nonetheless, the report concludes to a set of basic factors that have universal effect to regions competitiveness:

A benchmarking report by Welsh Development Agency in cooperation with Barkley's Bank PLC compared the Welsh region with 15 competitive regions of the world (including 10 European). Despite of the difficulties in data search and harmonisation, the report used

primary and secondary research to conclude to only a small number of genuine determinant factors.

A respective benchmarking report was carried out by local government of East and West Midlands region in 1997. The report used a multifactor model of 55 indicators divided into input-output indexes. The report showed that regional competitiveness depends on certain factors.

In the USA, Beacon Hill Institute of Suffolk University published in 2001 the "State Competitiveness Report" It was the first attempt to measure inter-state competitiveness differences. This report is considered important as it could act with proper adjustments as a guide for the First Greek Report on regional competitiveness and it is further examined afterwards.

Comparative analysis of the aforementioned efforts, led to the following table, summing up the commonly or universally identified regional competitiveness determinant factors. This classification is later on assessed to act potentially as a basis to formulate a benchmarking system for Greek regions.

REGIONAL COMPETITIVENESS DETERMINANT FACTORS			
ACCESS TO INFRASTRUCTURE	HUMAN RESOURCES	PRODUCTION ENVIRONMENT	
<ul><li>Basic infrastructures</li><li>Road network</li></ul>	<ul><li>Demographic trends</li><li>Labour immigration (skilled labour)</li></ul>	<ul> <li>Entrepreneurship Culture</li> <li>Low entry barriers(entrepreneurshi</li> </ul>	
<ul><li>Railroad network</li><li>Airports</li><li>Property (real estate)</li></ul>	Population age	<ul><li>p activity start-up)</li><li>Society's and potential entrepreneurs' attitude</li></ul>	
Technology infrastructures  ICT	<ul> <li>Skilled work force</li> <li>Presence of skilled work force, especially in Information Society</li> </ul>	favouring risk uptake  Branch concentration  Balances / dependence	
<ul> <li>Networking (internet, telematics)</li> <li>Information Society infrastructures</li> </ul>	information Society	<ul> <li>Labour concentration</li> <li>High added value production branches</li> </ul>	
Knowledge infrastructures (education - training)		Internationalization  Exports / international	
<ul><li>Educational infrastructure</li><li>Vocational training</li></ul>		<ul><li>shares</li><li>Investments (FDI)</li></ul>	
<ul><li>Quality of life</li><li>Construction – real estate development</li></ul>		Entrepreneurship culture and extroversion     Innovation	
<ul><li>Natural environment</li><li>Social environment</li></ul>			
<ul><li>Cultural environment</li><li>Security</li><li>Other quality of life factors</li></ul>		<ul> <li>Patents</li> <li>R&amp;D levels</li> <li>Research centres, institutes and universities</li> </ul>	
		institutes and universities	

 Synergies among enterprises, research centres and universities

Local government Institutions
Regional specialisation
Competition's nature

Beacon Hill Institute report uses two main indexes. First, State Competitiveness Indicators Index, is used to respond to "how much competitive" a state is. It results from 9 categories of tens of "objective" indicators, namely indicators based on quantitative data. Subsequently the 50 States are being ranked according to their performance on the index, from most competitive (rank 1) to the least competitive (rank 50). The second index responds to a subjective competitiveness question for one region and compares it with seven more. The variation between "subjective" and "objective" competitiveness is of value.

The report's 9 subcategories are described as follows:

- Government and fiscal policy. A soft fiscal policy and high tax rates render State less attractive to enterprises.
- Institutions and security. A State will be more attractive to enterprises if the
  institutional framework is favourable, if there is confidence to the public servants, if
  the regulatory burden is low and if there is low crime rate.
- Infrastructures. It measures communication convenience, including telephone network, internet access, roads, trains and other transportation infrastructure.
- Human resources. It includes unemployment rate, educational level, labour force skills, labour cost, education and training opportunities and population health level.
- Technology. It examines technology creation and application, research funding, patents, scientists and engineers' percentage, cooperation between universities, research centres and enterprises, knowledge intensive firms.
- Funding. Funding opportunities for entrepreneurial activities and potential entrepreneurs by the financial system.
- Market openness extroversion. Exposure to competition functions as leverage for enterprises to improve their productivity.
- Domestic competition. Entry to and exit from economic activity opportunities. High entry rates denote the existence of a competitive environment.
- Environmental policy. Environmental protection and improvement consists a competitiveness precondition, especially for the transition process towards knowledge economy and alternative, sustainable activities creation. However there should be a balance between environmental standards and enterprise's constraints.

Thereafter, the State Competitiveness Indicators index is calculated as the simple mean of the 9 aforementioned sub-indexes. The normalised criteria value (mean value 5, min 0, max 10, standard deviation 1) is the basic classification tool. As a first step qualitative and quantitative variable data are collected from every State (opinion survey). The second step is the normalised value calculation based on available data for every criterion, and the sub-indexes compilation and finally the aggregate index construction.

## Basic Characteristics of Greek Regional Competitiveness Benchmarking System

Selection of Greek National System for regional competitiveness measurement should be based on the following principles:

- It should be equivalent to other attempts and it should possibly allow for comparisons with other competitive regions internationally.
- It should have a theoretical background and a straightforward structure

- It should qualify for its informational capability and also its composition with those indexes that map Greek regions special features.
- It should qualify for calculation simplicity / taking into account constraints during data collection and harmonisation
- It should ensure its annual repetition
- It should be useful as a policy evaluation tool.

This article proposes a factors monitoring and measurement scheme, based on comparative analysis of other analogous benchmarking systems, on examination of the regional competitiveness context and identification of regional competitiveness fundamentally determinant factors, on requirements of a regional competitiveness and development strategy policy and evaluation.

#### A. Competitiveness determinant factors

A.1. Micro-economic environment

As it was mentioned before, an economy's competitiveness connects to its enterprises' competitiveness, which, in their turn, depends on their own performance and the micro-economic environment they operate in. Six indicators sub-categories are proposed for micro-economic environment evaluation.

- A.1.1. Inputs
- A.1.2. Resources investments
- A.1.3. Institutions competition
- A.1.4. Productivity
- A.1.5. Entrepreneurship
- A.1.6. Research and innovation

#### A.2. Social Cohesion

Competitiveness potential lies in great extents upon social cohesion. The meaning of social cohesion includes demographic refreshment, expanded equal opportunities in knowledge society, education, training and human resources skills development, infrastructure development and in broad terms regional and local development. Five indicators sub-categories are proposed for social cohesion evaluation:

- A.2.1. Education and Skills
- A.2.2. Transport infrastructures
- A.2.3. Information Society
- A.2.4. Population
- A.2.5. Social cohesion

#### B. Competitive performance: Total performance indicators

A region's competitive place improvement has as objective and long-term intention the achievement of a higher standard of living. Gross Product is considered to be the best measure of a region's economy performance. Positive growth rates reflect higher wages, more profits, higher employment and entrepreneurship opportunities expansion. At the extents that a region's welfare reflects its prior economic performance, product increase implies regional competitiveness improvement. Of course other welfare indicators are also used, like employment and gender employment rates, cost of living, which is a substantial determinant factor of quality of life and standard of living of the region's citizens. Those indicators could be elaborated in order to construct a composite total indicator.

#### Conclusions

This article has shown the inadequacy of Greek current Programming Period planning to address in a coherent and strategic way, to date foremost development driver that is competitiveness support. Success in this objective, while operating in a globalized economic environment and the single European market, will be judged on the choice of a development policy focused on regional competitiveness and regional development. Thus the article attempts to define competitiveness at regional level and highlight its inter-connections and inter-dependencies with other spatial levels and factors that affect its strategic planning.

Both in CSF and COP and ROP documents the identification of strengths-weaknessesopportunities and threats, as far as competitiveness was concerned, was carried out rather typically and not having competitiveness in mind.

Lack of competitiveness strategy formulation, especially at regional level, led to downgraded funding of "production environement" intervention category; it represented only 22% of the community financing support. Moreover, if manufacturing, tourism and S&T are isolated, they account to 9.8% of the resources. In view of the Greek macroeconomic performance and structural environment, these remarks imply an even more unbalanced fund allocation.

The article proposes a methodology of a sound strategic programming for competitiveness and development support in order to mitigate current programming period deficiencies. It provides a framework of requirements, under the light of the European Union's new regional development policies and an action plan to inform objectives' prioritirization and accordingly generic fund allocation.

However, policy effectiveness remains a fundamental question. Whatever competitiveness strategy and policy mix will be chosen and formulated it should be evaluated in the basis of competitiveness determinant factors. Thus, a measurement system is needed to compare Greek regions not only in national but as well as international context. The article proposes a measurement scheme and its basic features after a comparative analysis of analogous attempts presented in international literature.

Προσδιορίστηκε η έννοια της περιφερειακής ανταγωνιστικότητας. Αντικειμενικός στόχος είναι η βελτίωση της ευημερίας των πολιτών μιας περιφέρειας (αποτέλεσμα της ανταγωνιστικότητας) σε όρους εισοδήματος, απασχόλησης και άσκησης της επιχειρηματικής δραστηριότητας, δυνατότητας αξιοποίησης ευκαιριών και ποιότητας ζωής. Ως εκ τούτου ανταγωνιστικότητα είναι η ικανότητα μιας περιφέρειας να δημιουργήσει ή και να διατηρήσει (διαδικασία της ανταγωνιστικότητας) ένα ελκυστικό μικρο-περιβάλλον για την ανάπτυξη οικονομικο-κοινωνικών δραστηριοτήτων, υπό συνθήκες ανταγωνισμού (εγχωρίου και διεθνούς). Ως εκ τούτου οι περιφέρειες ανταγωνίζονται για:

- ο Την προσέλκυση επενδύσεων (εγχωρίων και ξένων) και πόρων από την κυβέρνηση.
- ο Για ανθρώπινο κεφάλαιο. Εργατικό δυναμικό (συμπεριλαμβανομένων των μεταναστών), ιδιαίτερα ειδικευμένο εργατικό δυναμικό, εν δυνάμει επιχειρηματίες και δημιουργικούς αυτοαπασχολούμενους, δημιουργώντας ένα περιβάλλον φιλικό για την ανάπτυξη του ανθρώπινου κεφαλαίου.
- ο Για τεχνολογία και τεχνολογικά προηγμένες επιχειρηματικές δραστηριότητες ως πόλοι καινοτομίας.

Αναλύθηκαν σημαντικότερα συστήματα μέτρησης περιφερειακής τα ανταγωνιστικότητας. Τα συστήματα αυτά χρησιμοποιούνται κυρίως για διαπεριφερειακές συγκρίσεις σε όρους εισροών - προσδιοριστικών παραγόντων της ανταγωνιστικότητας - και εκροών - επιπέδων εισοδήματος, προστιθέμενης αξίας ή γενικότερα Οι περισσότερες μελέτες αναφέρονται σε ένα δείκτη (συνολικής ευημερίας. ανταγωνιστικότητας) και σε υποδείκτες (ομαδοποιήσεις δεικτών). Το σύστημα που ξεχωρίζει και αξίζει να επαναληφθεί και για την περίπτωση της Ελλάδας είναι το State Competitiveness Report του Beacon Hill Institute του Πανεπιστημίου Suffolk, των ΗΠΑ.

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\*Documentation also includes the programming and evaluation documents of the 13 Greek Regional Operational Programmes.