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Regions' Size and Regional Competitiveness in the 4th EU Programming Period, 2007-2013. Regional Units in Greece

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Regional size and regional competitiveness in the 4th Programming Period, 2007-2013. - Regional Units in Greece.

G.M. Michailidis¹, G.A. Georgiadis², N.D. Koutsomarkos³

Abstract

Does size matter? Is regional competitiveness affected by the region's size? Are regional problems in Greece the same or differentiated among regions? Could an administrative reform create better development preconditions? The designation of the 13 Regions in the 80's in Greece basically stemmed from the need to create development units for programming and managing the development planning. Nonetheless, the designation of regions under the effect of historical factors and political expediency led to uneven area as well as population sizes. Moreover, up to today, Greece has put its major developmental effort in the infrastructures sector, while the new 4th programming period 2007-2013 imposes competitiveness objectives and an integration of the Lisbon Strategy in the Coherence policy that constitute an innovation for the Greek reality. Thus, the question occurs whether the Greek Regions are capable to formulate and implement corresponding strategies and programmes. This paper discusses the performance of the 13 Greek regions against other comparable EU regions and presents indexes reflecting the relative progress of the Greek regions, through critical review of statistical data concerning development level and regional competitiveness. At the same time the paper considers how a restructure of resources, competences, and geographical boundaries will enable:

- Concentration of managerial effort.
- Better control of programme implementation.
- Better utilization of the limited available personnel.
- More economical use of equipment and facilities.

And finally programme operation monitoring at the regional level through the formation of larger and more powerful regional entities, vis-à-vis the central Administration. To this purpose administrative decentralization schemes of various EU Countries are reviewed.

The paper proposes a restructuring as follows: All the competences concerning decision-making and management of the programming are concentrated to "Regional Unions". The Regions retain only proposal functions, as centers of local bodies' consensus and local initiatives' mobilization. The paper also elaborates on a generalized administrative scheme for the Unions and the Regions. Summing up the discussion highlights the necessity to form larger and more powerful regional units in Greece, where one's strategic disadvantages will be compensated by the advantages of the other and through them many local economies altogether will build a scale capable to integrate their productive structure, to cause the emergence of new functions and to constitute their negotiatory advantage for FDI and activities attraction.

Keywords: regional competitiveness, regional development, Programme management, structural programmes,

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Does the Greek Regions Compete?

There is a wide discussion, mainly supported by empirical evidence concerning the regional size with elements of economic and social development. In most of cases the size of labour force and the size of the market are regarded as critical parameters for the development potentials (Stirböck) mainly expressed by Attractivity (Angelo Rossi 1998 after Richardson 1969). It is also well known (Thisse 2000) that when the drawing of regional borders endows some entities with large economic agglomerations (such as metropolises or urban networks), the corresponding regions are likely to grow faster than others, thus providing a possible explanation why contiguous regions may exhibit different patterns of development. But does the regional size matters in effectiveness and efficiency of regional planning? This question detained the Greek planning authorities (Ministry of National Economy), in order to prepare the regional development policy of the upcoming 4th Programming Period. The main scope of this project was to determine the main factors and limitations that will have to be considered for the formations of more functional regional units in Greece. The aim is to form regional entities that will be more competitive in the European and international economic system, by improving of the development managerial abilities, concentrate the development factors, connect spatial and economic development and determine the conditions that will allow the optimisation of benefits.

The European development aid interventions in Greece through the past decades (from MIP to CSF) had linked regional development aspects to the creation of basic infrastructures and more specifically towards to the development of transport infrastructures⁴. Despite the positive results described in a wide variety of surveys and literature⁵ there is a doubt if this model of regional development can still produce same impacts in national growth and development for the future (Brabley 2005). In the upcoming 4th Programming Period 2007-2013 a new strategic orientation must be adopted. The needs of Greek Regions⁶ and the European priorities detected by EU policy (Bachtler & Wislade 2004) orientate a frame that has to connect the meaning of Regional Development with the upgrade of Regional Competitiveness and to promote strong relations and balance between Lisbon agenda and Cohesion Policy that is crucial if Greek regions want to continue the actual convergence and development. The balance and synergies between cohesion and Lisbon agenda cannot be done automatically. As mentioned by the thematic Evaluation of the SF contribution to the Lisbon Strategy (DTI, 2005) the main priority of Lisbon Agenda is a higher rate of aggregate economic growth in the EU, while the overriding concern of the SF is cohesion and a reduction of the regional economic disparities within the Union. This means that a shift in regional policy has to be made in order to satisfy both needs.

⁴ In the 3rd CFS actions and measures in the field of "product environment" had consumed the 22% of the overall community resources. The analog proportion for Spain was 30.5% and for Southern Italy was 48.5%. (Beutel J., 2002, *The economic impact of objective 1 interventions for the period 2000-2006*, European Commission D.G. REGIO).

⁵ Mainly expressed by terms of GDP growth rate (3rd Cohesion Report, 2004), productivity (European Competitiveness report, 2004) etc

⁶ As described in the 1st and 2nd Working Papers for the preparation of NSRF 2007-2013

The new frame is consisting an «innovation» in Greek planning reality and eventually raises the question if Greek regions have the current capability to plan and to implement such strategies and programmes? Especially, at today's coincidence, that many Greek regions face the change of their Objectives status, which will not only mean limitation of funding but also significant change at the eligibility in favour of Lisbon agenda interventions. Those facts are brings out as an absolute priority the need to increase the development results and to optimise the interventions benefits. As the International economic environment and the European policies are driving to the adaptation of development strategies that will have to work under competitive circumstances, regional policies has to develop competitive advantages (Michailidis 2003). The ability of Greek Regions to face this challenge is in doubt (BCS 2005), due to factors such as:

1. Greece Regions have a disproportionate population and terrestrial size according to the criteria of Regulation (EC) 1059/2003. 11 out of 13 Regions are confederate at declension to the statistical unit of NUTS II, 7 of them has less population than the $\frac{3}{4}$ of the minimum defined level, 5 of the has less than the $\frac{1}{2}$. In Member states the mean population size is balancing between 0.9 and 2.3 million people and in similar to Greece countries the number of regions is smaller (7 in Portugal, 11 in Belgium).
2. The overall economic size (measured as GDP, data Eurostat) doesn't encourage the formation of competitiveness advantages that will develop regional export systems, attract external partners or FDI. Empirical surveys in SE Europe have show that FDI inflows tend to go disproportionately to the economically stronger regions both within and across countries (Kokkinou, Psycharis 2005). Eventually according to Eurostat data the economic size of each region (except form Attica, Central Macedonia and Sterea Ellada) doesn't represent more than the 0,1% of the European Economic activity. Comparing with other member states the average economic size of Greek regions is smaller than the similar economic size of Hungary or Slovak Republic, the $\frac{1}{4}$ of French or German or Italian, the $\frac{1}{3}$ of Spanish, Irish Dutch or British the $\frac{1}{2}$ of Austrian, Finnish, Portuguese or Swedish. Furthermore the mean Greek region straining investment effort (as the Aggregate total of gross fixed capital formation) is equal to the $\frac{1}{5}$ of the mean French, German or Irish and slightly bigger than Hungarians or Czechs.
3. The overall economic activity is extremely concentrated: 50% of Gross Added Value is produced in Attica and Central Macedonia (data: Ministry of National Economy). The two Regions attract the 50% of all investments and the 75% of the entrepreneurship. The disparity is even larger in terms of income, where 12 out of 13 Regions has less than the national average value.
4. Regional GDP does not reflect the real development potentials and weaknesses. National Statistical Agency record contributions of economic activities in GDP on the installation's location but when it has to calculate per capita division of GDP (in PPP) does not take account inter-regional transfers. As a result there is a contortion of the statistical data at list in two Regions (Sterea Ellada – Peloponissos) because of the sprawl of Attika industry and in Western Macedonia because of the Electrical power production. Alternative

calculations (Petraikos, 2000) show that the actual economical and development position of those Regions is high overestimated. This contortion has major consequences in the development perspectives of those Regions. For example Sterea Ellada has turned to a “phasing in” to Regional Competitiveness Objective according to pcGDP, while the actual development level provided by other indexes shows a rather below the national average level region.

5. Almost in every index that can be used to describe issues such as innovation, R&D (personnel, expenditures, patterns per million people) is extremely low, comparing to the average EU values (ESPON).
6. 7 out of 13 Regions don't have a large or medium size urban centre with population more than 70 000 people. Therefore they lack social, technical and urban infrastructures that will increase the potentials of economic and technological excellence that large cities are providing (Bart, Clarysse 2001).

The above remarks show that in order to face the upcoming challenges it is necessary to reform wider and stronger regional entities, where the crucial disadvantages of an existing Region will be capped from advantages of another Region. Simultaneously the join of local economic systems will provide the necessary size that will allow the integration of productive structure, bring the formation of new functions and consist a new bargaining advantage in order to attract external investments and activities. The group of spatial units that will include a metropolitan pole (of European or National significance), is also needed in order to support development.

The making of effective Regions

The current Regional division had developed after a long-term period that historical, social and political factors took part (BCS 2005). The statistical regions, the formation of “territorial” Ministries (Firstly Ministry of Northern Greece and later Ministry of Aegean), the administrative borders of junta regions, the programming regions of the ex-ministry of Co-ordination where the Regional Development Agencies was developed, the target areas of MIP, led in the formation of the 13 existing Regions in 1986. Finally current Regions where formed with the Law 1622/86 with no provision of their programming needs, or any consideration of the European integration. Furthermore, many of the provisions that could help Regional administration to organize and facilitate the local potentials and perspectives under the frame of the specific law, were never activated.

Through the periods of 1st and 2nd CFS had been proved that the un-centralized managing system couldn't work effective with the excited regional organisations. Thus in 2000 a new administrative framework for the management, monitoring and implementation of the O.P. was made. The new developments were made by the foundation of O.P.'s Managing Authorities (MA). The MAs are working under the authority of the Regional General Secretary but they do not consist a part of the Regional administrative organization. This gives them the advantage to work more flexible and with out having the disadvantages of Public administrations.

Taking account the main conclusion of the mid-term evaluations of 2000-2006 O.P.'s, this managerial system has proved more orthological, but still not satisfactorily in terms of effectiveness and efficiency. The flow and the amount of managerial functions become extremely heavy and trend to rise bureaucracy in sizes that exceed the human resources capacity, the administration capability and most significant the political responsibility of Regional authorities. Especially in smaller regions where two parallel systems seems to exist. The first (managing authorities) has developed first-rate capacity in terms of capabilities, technological equipment, and responsibilities and has practically undertaken the planning responsibility. The second is forming from the Regional administrated authorities (such as The Regional Development Funds, the Directories of Environment, Planning, Agriculture ect) that lack trained human resources and capabilities, which theoretically holds the planning authority but in very little cases exercise it. The overall effect is unorganized planning, not clear distinction between planning and management authorities, lack (in terms of quality) of final holders, delays and gaps in the preparation of actions. Therefore, one more reason for the Regional re-form is the concentration of the managerial effort in order to provide better control and the better use of the limited capable human resources, equipment and installations.

Taking account the above, the main scope of the consultation that was conducted was the construction of a new regional division that will have determined authorities in the parts of planning and implementation of regional programming. The main features of the model are:

- The consecration in Major-Regions (NUTS II in Eurostat terms) of all the decision-making, programming and planning functions. This measure will allow better managerial effectiveness, monitoring, better use of the human resources and better adjustments of the relations between centre and periphery.
- The conservation of the current regional division as instruments of policymaking, public consultation and organisation of the public services.

In the administrative level:

- The Major-regions will be small, flexible and work as executive boards
- The current regions will sustain the represent and democratic character.

The reform criteria

For the reformation of the major-regions a logic framework of functions and limitations was formed, in which the bellow criteria where used:

1. The new regions have to be orientating towards the closer source of opportunities or threats. Those sources are at North the next enlargement in Balkan Countries, the problematic west Balkans; the question mark of Turkish ability to access European Union at the East; the economic relations with the middle east and north Africa countries at the south; and the connectivity with Italy and the "old" Member States at the West
2. The number of the new major-regions should be from 5 to maximum 7 (including Attica), in order to form entities with significant economical size and

to avoid the formation of administration units with size or functions similar (or in competition) to Central State.

3. The size of each Major-region should allow the most effective use of administration's resources of public and private sector and the most efficient synergies amongst them. The size should be also comparable in order not to have significant differences in terms of population, space and economical size.
4. The new regional borders should not disturb the current geographical, economical, social and political order and relations between the existing Regions.
5. Every new Major-Region should have at least one significant economic and supportive - administrative centre that will guarantee better than current situations in management, organizational form, human resources quality and services. Such cities are Athens, Thessaloniki, Patra, Iraklio and Larissa.
6. The new Regional entities should be compatible with the planning considering the development of Trans-European Transport and Energy Networks (Egnatia Odos, Ionian Odos, PATE (TEN-10), Western rail axis)
7. The new borders should not divide or revise other administrative divisions (such as nomoi) and to include the full extent of an existing region, in order not to disturb the political, economic and social relations
8. The Major-regions should provide better economic performance and index valuation than the present ones
9. For simpler, more efficient and effective application of ROP's, and use of the financial resources (as the Major-regions will be proposed in accordance with NUTS II classification), the new borders should be in a manner to cause the minimum possible changes of eligibility to the territorial Targets of 4th programming period.

Selected Scenario

3 scenarios were examined. After testing them with the above criteria, the scenario that best fits concludes to a proposition of the 5 major-Region that follow:

- Northern Greece: formed from 3 existing regions: Eastern Macedonia – Thrace, Central and Western Macedonia

The North Greece Region is orientating against the challenges of the next enlargements and the growth of the Balkan countries. The new Region is spread as a buffer to Egnatia Odos and transport and the energy corridor from black sea to the Adriatic. The major metropolitan pole of Thessaloniki is the supportive centre but also a strategic target in order to take a metropolitan role in NE Europe.

- Western Greece: Ionian Islands, Western Greece and Peloponnesus
The western arc characterised as the sea gate with proximity to the “old” European Member States and as an influence buffer of Ionian road and West

Greece (Ten-T) train Axes. The Urban Centre of Patra as an inter-modal transport centre.

- Eastern Greece (Aegean Islands): North & South Aegean, Crete
The Aegean Island Region, which has a major development of tourism sector. The Region stands against the challenges and opportunities from a possible Turkey accession to the Union and as a sea corridor to markets of Asia and Africa. The major urban centre of the Region is the port city of Heraclion in Crete. Major disadvantage is the connectivity and the internal connection of the New Region (between Vorio Aigaio and Crete)
- Central Greece: Thessaly, Sterea ellada, Epirus
The central part of the country, that includes the main rural area, spreading between the two supra-national metropolitan centres of Athens and Thessaloniki and as a buffer to PATHE Trans-European network. The spatial pattern can be organised through a network of medium and dynamic urban Centres such as Larissa (main), Volos, Lamia, Chalkida, Ioannina and the port of Igoumenitsa
- Attica

Characterised by the metropolitan area of Athens, as the capital city of Greece and the main metropolitan development pole.

The selected scenario was evaluated by 4 major factors and by examining the main advantages and disadvantages of the scenarios.

1. The first has to deal with the ability of every new region to face challenges rising from the international environment (globalisation effect, production and trade patterns,) and the opportunities or threats rising from the European development and cohesion policy (Lisbon agenda, 4th programming period guidelines, sectoral policies).
2. The Second factor refer to the advantages and disadvantages in the managerial capacity and therefore the necessary measures to optimised the managerial performance
3. The third is referring to the impacts in the current administration system
4. The fourth is examine the feasibility of the solution under technical and social factors

Table 1. Selected scenario: evaluation of the best solution

Factor	Facing challenges – Creation of competitive regional economies	Managerial capacity	Impacts in administration	Political, geographical and historical, and social factors
Strong Points	<ul style="list-style-type: none"> • Strong response to the new challenges • Better configuration, satisfactory values of socio-economic indexes • Connection of spatial planning with Transeuropean networks 	<ul style="list-style-type: none"> • Ability to form stronger and capable structures • Availability of European or national metropolitan centres 	<ul style="list-style-type: none"> • Clear distinction between planning and implementation authorities 	<ul style="list-style-type: none"> • Big political weight
Weak Points		<ul style="list-style-type: none"> • Necessity to provide connectivity (networks) • Necessity to unify structures and staff 	<ul style="list-style-type: none"> • Possible difficulty to de-centralise authorities from the state level to “strong” regional entities 	<ul style="list-style-type: none"> • Problems in the Geographical connectivity in 2 new regions. (Between Crete and North Aegean, Sterea Ellada and Epirus)

Conclusions.

This project has shown that the challenge of regional competitiveness is limited under the current Greek regional division. Factors such as: the absence of cities, divided (under different administration jurisdiction) structures, economic and social bases, limited attraction or weak development potentials have negative impact at the efforts towards regional development. At programming level the small regional size is affecting the quality of management and raises the managerial effort, does not allow forming wider regional policies, raise the costs in order to provide (and support) integrated development structures and decrease productivity and efficiency of the development funds.

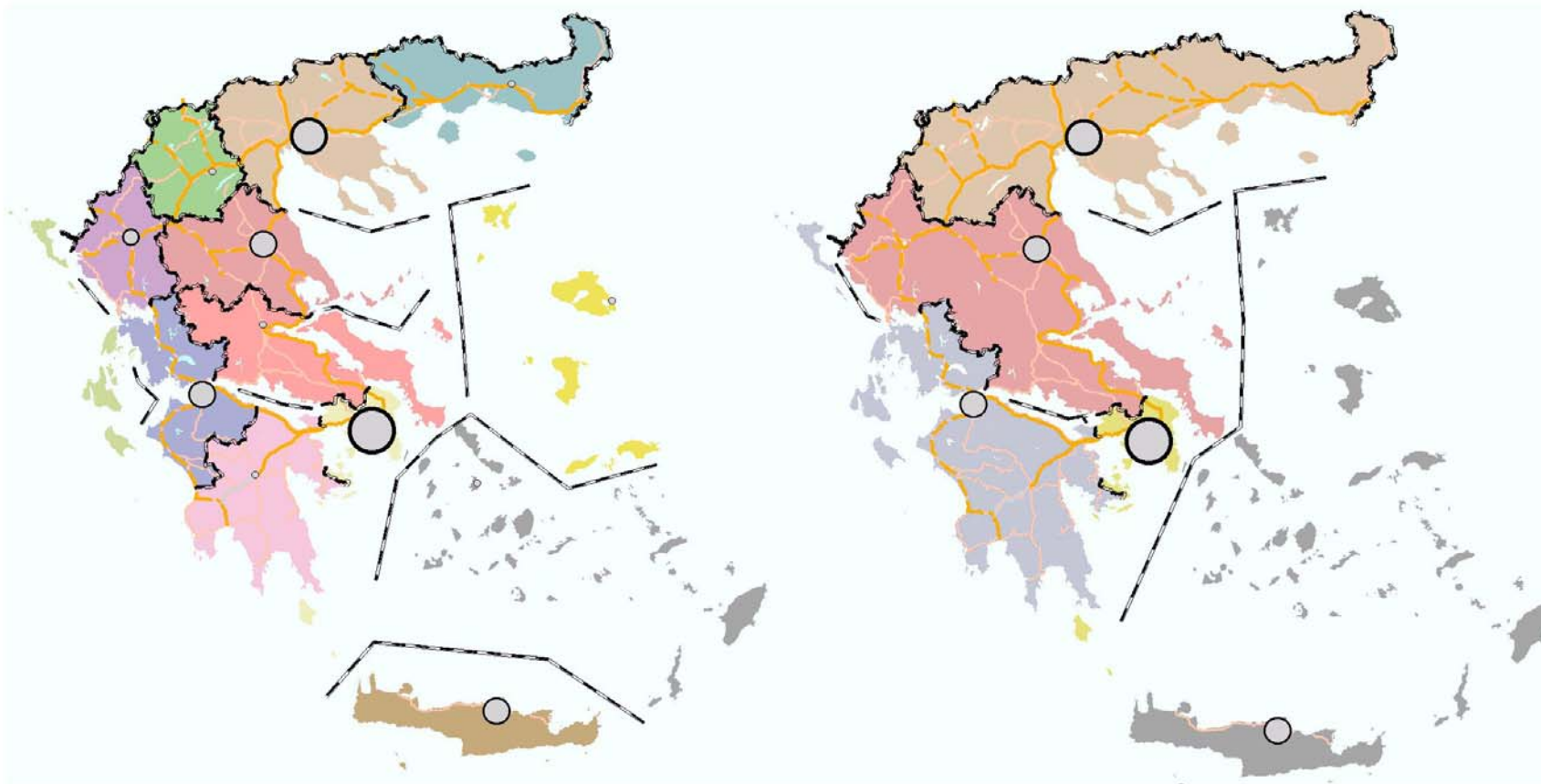
The reform and the constitution of major regions is aiming to the construction of competitive economic entities able to answer main opportunities and treats, not antagonistic with national level, at size facilitating more efficient utilization of resources and personnel and provide compatibility among Regions - to prevent the appearance of large differences. The main advantages of the reform are:

- regional economies better armed to achieve competitiveness
- regional strategies easily adjustable to the opportunities and threats
- compatibility with the major Cross European Network Axes
- stronger and more adequately manned administrative bodies
- a metropolitan center of European or national scope within each Region
- more comparable regional geographical – population – economic sizes
- considerable savings of human resources and operative costs





The reform of the regions was carried out by taking account several limitations. As shown on the evaluation the most restricted is the conservation of the existing limits. This limitation is providing a serious problem of co-ordination and management of two major-regions (Central Greece and East Greece) where geographical parameters are providing disadvantages in terms of connectivity and intra-regional cohesion. As a result the final proposition was the conservation of the existing division for serving functions of regional governance, citizen affairs and public administration and the creation of major Regions as executive broads that will uptake the design, management, monitoring, control and evaluation of development – planning responsibilities.

REGIONS	MAJOR REGIONS
Functions related with Development procedures	
Project implementation Financial support management Project and intervention proposal Proposal for the orientation of the Regional Policy	Development Planning and Design Management of the development program Distribution of financial resources (Structural Funds (NSRF) or Public Investment Program (new National Support Framework))

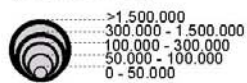
Management	
<p>General Secretary Supervision authorities: Ministry of Internal Affairs & Public Adm. (M.I.A.P.A.) Regional Council</p>	<p>Governor Supervision authorities: M.I.A.P.A. & M.N.EC. Regional Development Council: Governor, General Secretaries and delegates of regional councils</p>
Basic structure and services	
<p>Regional authorities: sectoral project implementation and monitoring Managing Authorities: implementation, monitoring functions – project / intervention relegated</p>	<p>Managing Authorities: planning, management, monitoring and evaluation functions – program related.</p>



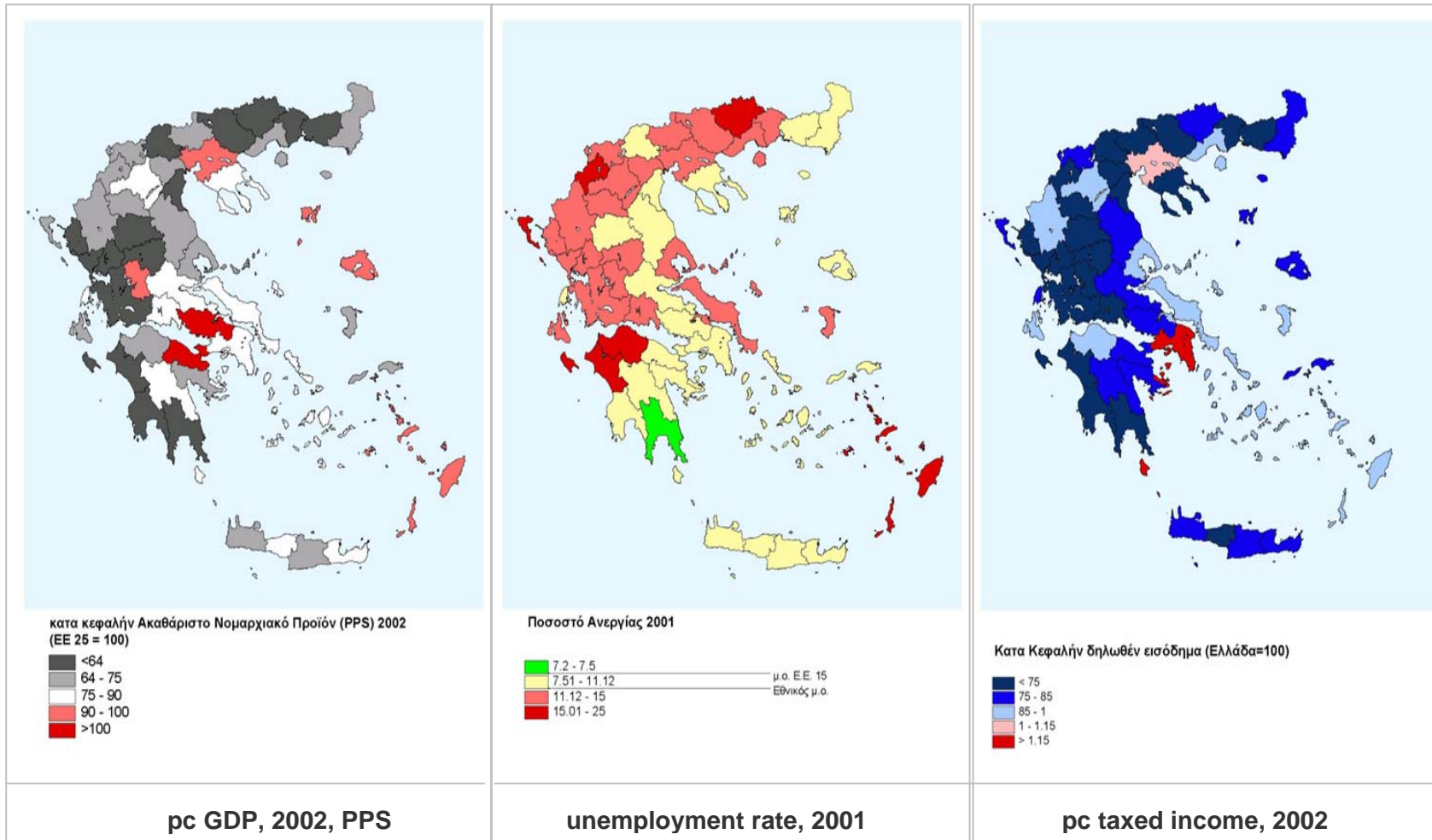
Regions in Greece

-  Regions' boundaries
-  Trans-european road networks and vertical axes
-  (under construction)
-  national primary network

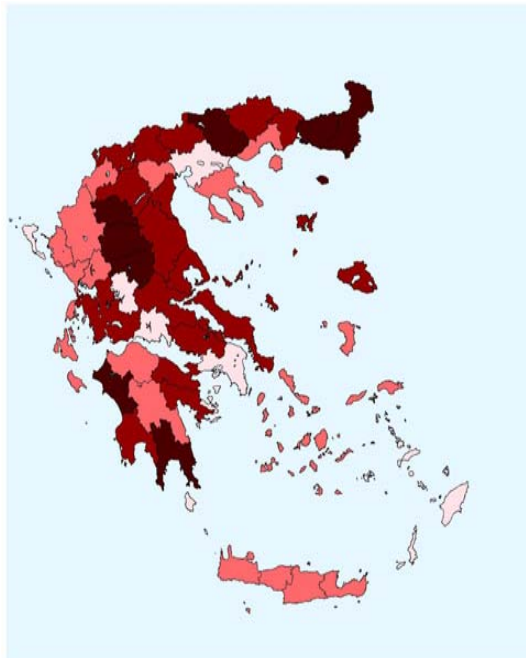
**Hierarchy of major urban centres
(population size)**



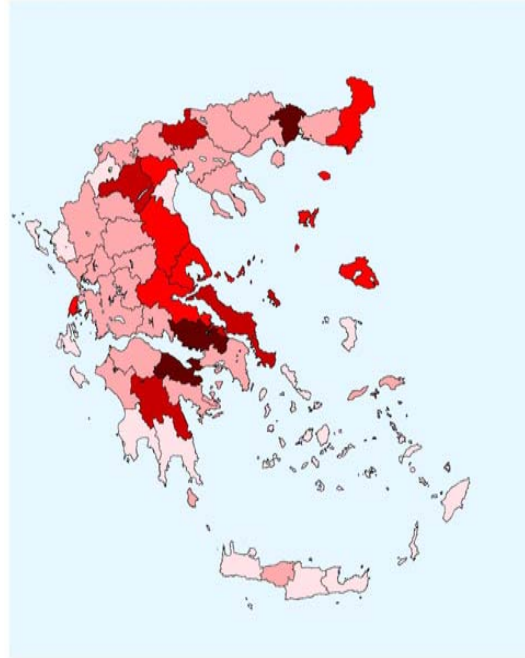
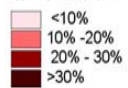
INTRA-REGIONAL DISPARITIES (1/2)



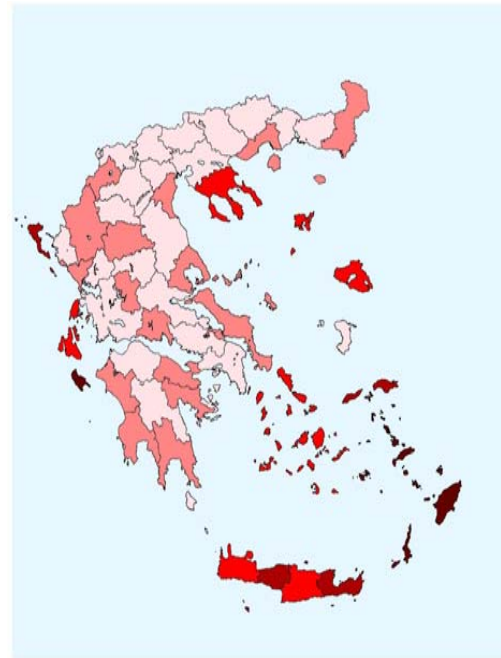
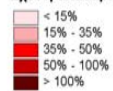
INTRA-REGIONAL DISPARITIES (2/2)



Οικονομική Διάρθρωση νομών:
Σχέση ακαθάριστου προϊόντος πρωτογενή προς τριτογενή τομέα



Οικονομική Διάρθρωση νομών:
Σχέση ακαθάριστου προϊόντος δευτερογενή προς τριτογενή τομέα



Ενταση τουριστικής ανάπτυξης
Διανυκτερεύσεις σε τουριστικά καταλύματα ανα μόνιμο κάτοικο

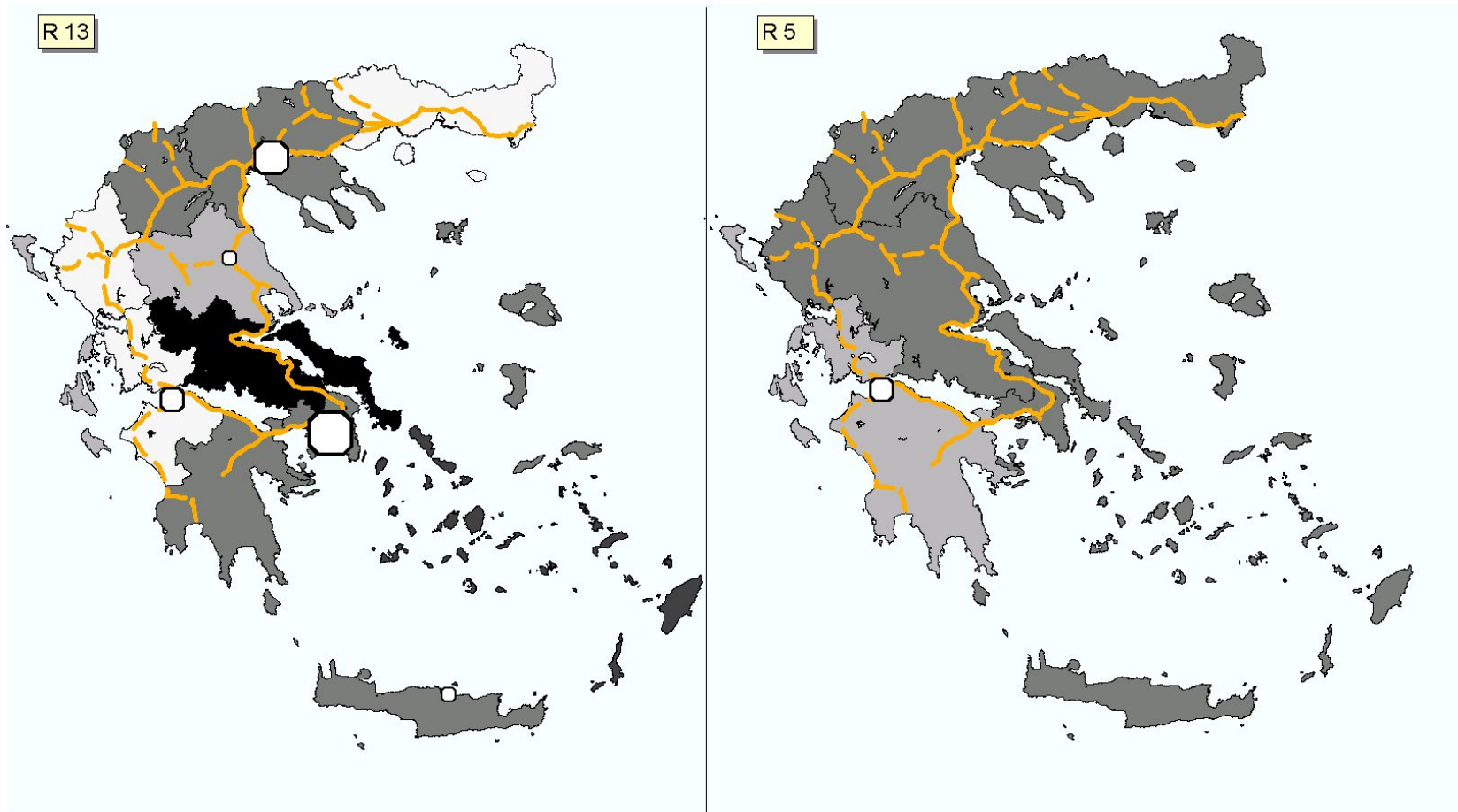


GDP, primary / GDP, tertiary

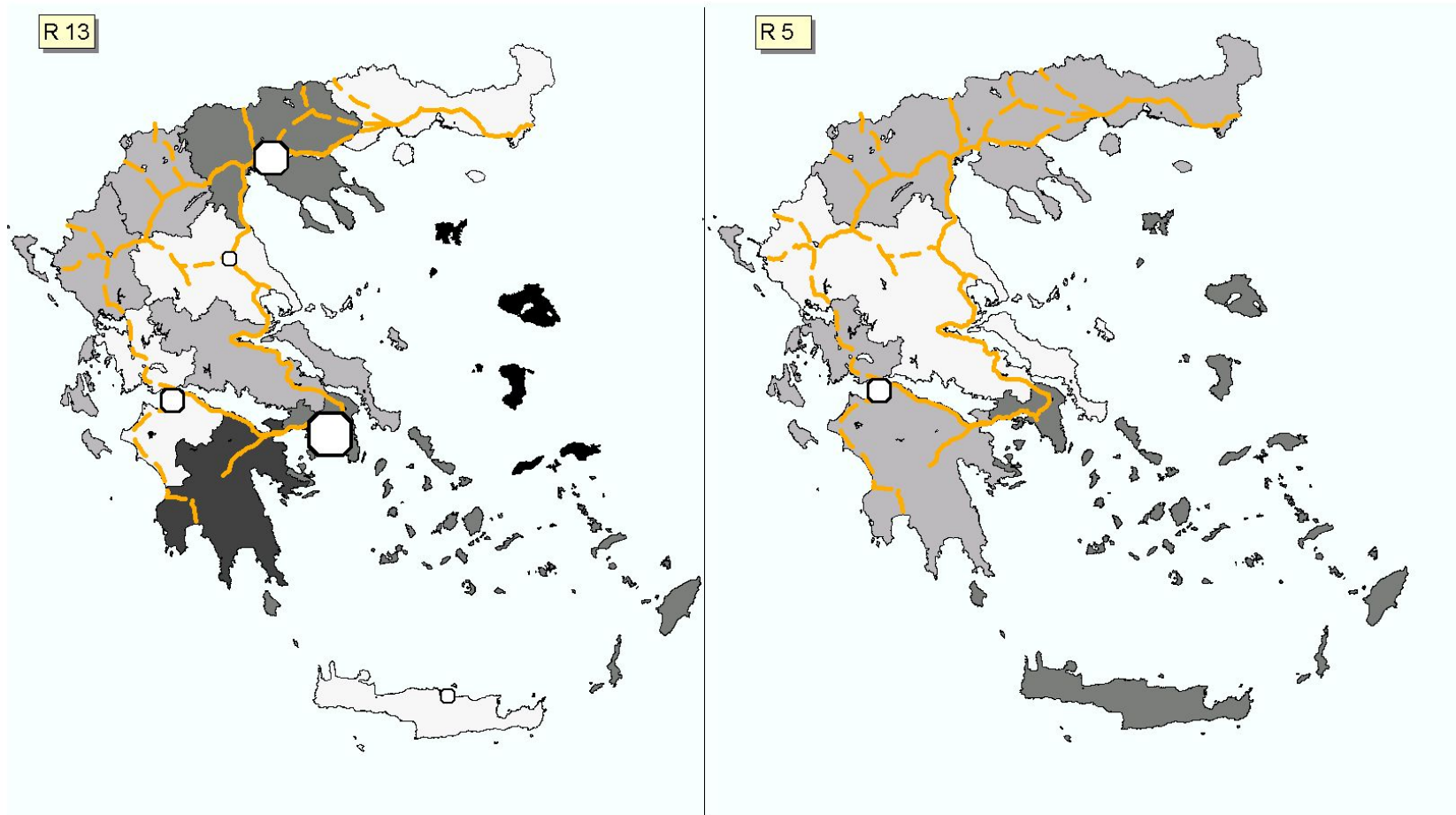
GDP, secondary / GDP, tertiary

tourism: overnights per capita

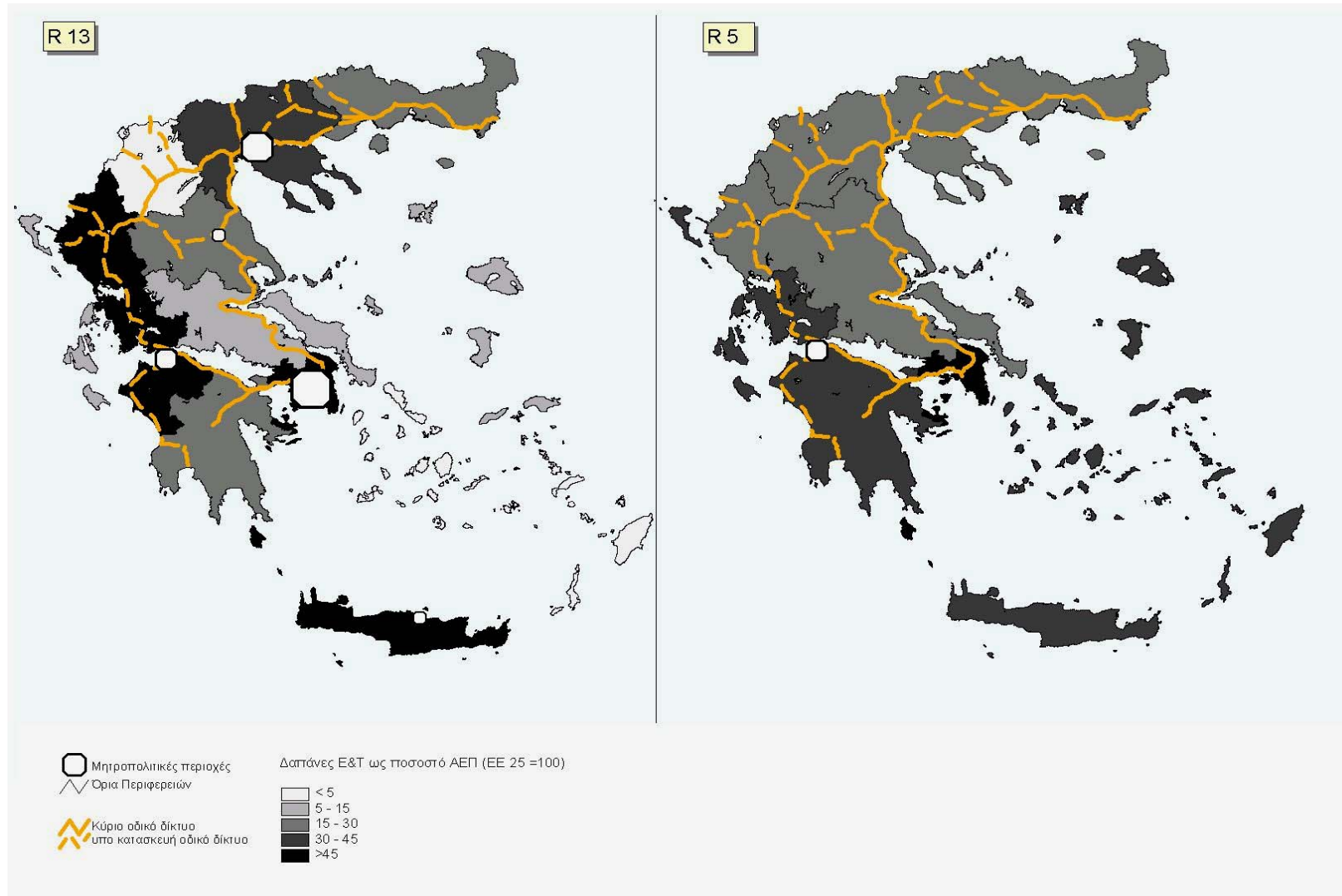
INDICATOR COMPARISONS REGIONS – MAJOR REGIONS: pcGDP(PPS), EU=100



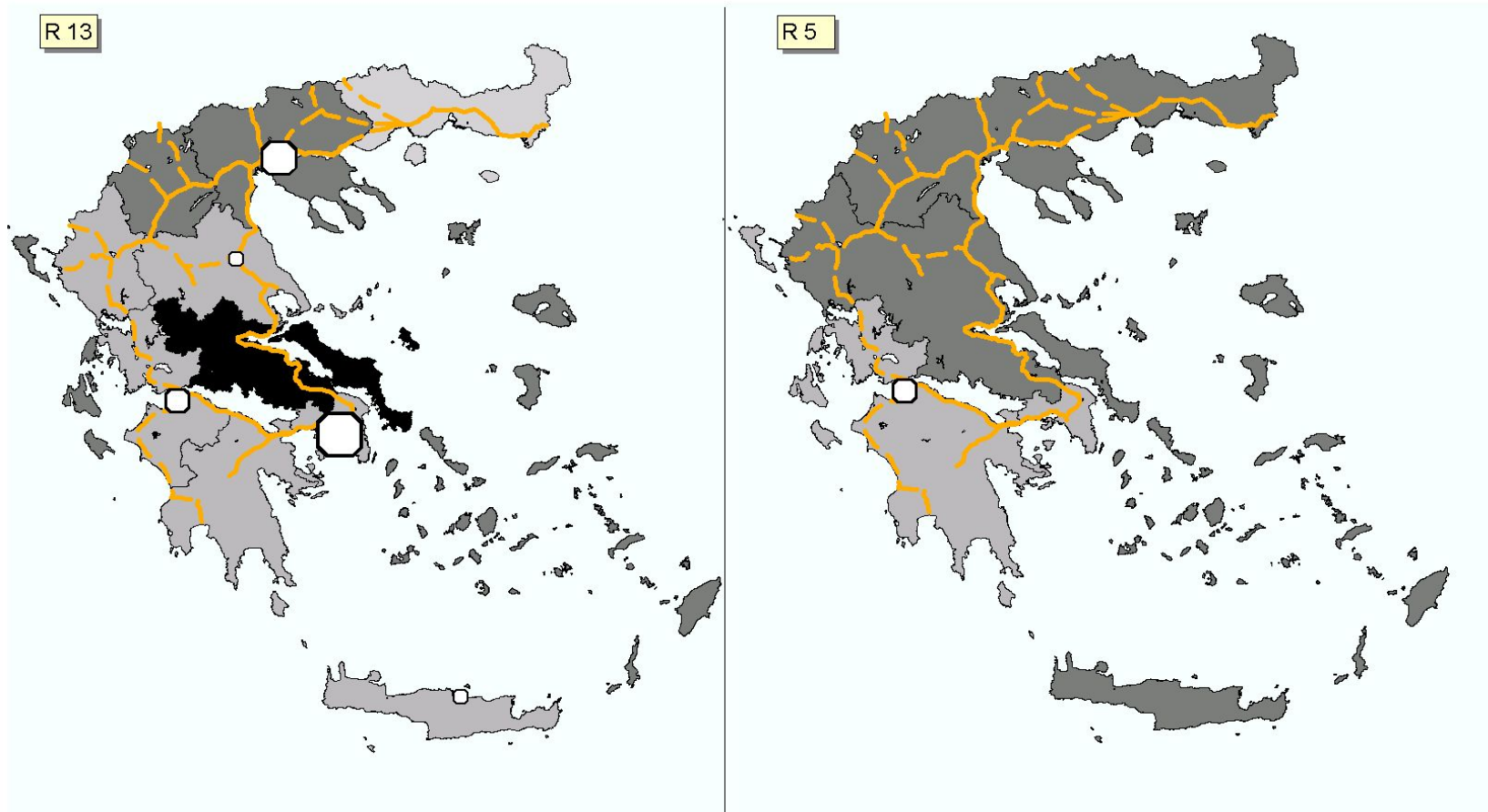
INDICATOR COMPARISONS REGIONS – MAJOR REGIONS: ANNUAL GROWTH RATE 2000-2003, EU=100







INDICATOR COMPARISONS REGIONS – MAJOR REGIONS: R&D EXPENDITURES AS % OF GDP, EU=100








INDICATOR COMPARISONS REGIONS – MAJOR REGIONS: AVERAGE PRODUCTIVITY, EU=100



 Μητροπολιτικές περιοχές
 Όρια Περιφερειών
 Κύρια οδικά δίκτυα
 υπο κατασκευή οδικά δίκτυα

Μέση παραγωγικότητα, 2002 (ΕΕ 25 =100)

	<50
	50 - 65
	65 - 80
	80 - 95
	>95

REFERENCES

- Bradley J., (2005) Has EU regional policy been effective? The debate on Structural Funds, 45th Congress of ERSA, Amsterdam 23-27 August 2005
- BCS, 2005, Programming Greek Regions borders definition, in accordance with the Legislation (EC) 1059/2003, Ministry of National Economy (in greek)
- Bachtler J and Wislade F (2004), Searching for Consensus: The Debate on Reforming EU Cohesion Policy, European Policies Research Paper Number 55
- Beutel J., 2002, The economic impact of objective 1 interventions for the period 2000-2006, European Commission D.G. REGIO
- Cambridge Econometrics, "A Study on the Factors of Regional Competitiveness", European Commission: DG Regional Policy, 2003
- Clarysse B, Muldur U (2001) Regional cohesion in Europe? An analysis of how EU public RTD support influences the techno-economic regional landscape, _ . Research Policy 30 2001 275–296
- Danish Technological Institute, 2005, Thematic Evaluation of the structural Fund's contribution to Lisbon Strategy" EC DG Regional Policy
- European Commission, 2004 European Competitiveness Report, 2003.
- European Commission, 2004 Third Report on Economic and Social Cohesion
- Kokkinou, Psycharis J (2005) Foreign Direct Investment and Regional Attractiveness in South-eastern European countries, Paper submitted for the 45th European Congress of the Regional Science Association, Aug. 23 - 27, 2005, Amsterdam
- Michailidis G, (2003) Planning the Development: methodology and practice of planning, evaluation and management, Paratiritis publishing (in greek)
- Ministry Of National Economy 2004, 2005 1st & 2nd Working Papers for the preparation of NSRF 2007-2013
- Petrakos G, Psycharis J,(2003) The Regional Inequities in Greece: A Alternative calculation method, University of Thessaly, Dept. of Planning and Regional Development, Discussion Paper Series 9(28) 621-644
- Rossi Angelo, 1998, Micro-regions and macro-regions: the issue of the adequate institutional setting in the recent debate on Swiss regional policy, 28th European Congress of the Regional Science Association, Vienna
- Stirböck C, Relative Specialisation of EU Regions: An Econometric Analysis of Sectoral Gross Fixed Capital Formation, Discussion Paper No. 02-36, Centre for European Economic Research
- Thisse J, 2000, "Agglomeration and regional imbalance: Why and is it bad", Investment Bank Papers Vol.5,2, 47-67

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