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HOW SUCCESSFUL IS LISBON AND TAGUS VALLEY
FORMER PERIPHERAL EUROPEAN REGION?

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HOW SUCCESSFUL IS LISBON AND TAGUS VALLEY. FORMER PERIPHERAL EUROPEAN REGION?*

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1. INTRODUCTION

The recent transformations in the Portuguese regional economies are undoubtedly shaped by the EU integration. During the early 1980's, Portuguese economy suffered a strong crisis, which gave place to high unemployment rates and a pick on inflation rate. In 1986, Portugal joined the EU and benefited from high amounts of EU financial aids as all Portuguese regions had Objective 1 status. At the same time, Portugal became a feasible location for TNC subsidiaries, because of low labour costs, grant and other types of incentives and political stability. Since then, Portuguese economy grew faster than EU economy, except during two years in the beginning of the 1990's, inflation is under control, unemployment is below EU average, consumption increased and finally Portugal became a member of the EMU.

The capital region Lisbon and Tagus Valley has been the driving force of the Portuguese economy and where changes are more visible, especially if we consider labour market structure, productivity, technology development, R&D resources and production infrastructures. Although the region itself was already the most developed one in Portugal before EU integration, there are evidences showing a slow reduction of the gap between LVT and other Portuguese regions. In fact in 1996, LVT region GDP *per capita* PPS was 89% of EU GDP *per capita* average (at NUTS III level, Great Lisbon registered a GDP *per capita* around 96%).

The objective of this article is to discuss the features and causes of regional development success of LVT in the context of European spatial development. The regional inequalities at European level are a major concern in the European regional policy and ERDF (European Regional Development Fund) has been used as a powerful financial resource to reduce regional disparities in the EU. In the first section of the paper, we look at the evolution of spatial inequalities in the EU, outlining the economic performance of Southern peripheral

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countries (Spain, Portugal and Greece). In the next section, we analyse the trends in the regional inequalities in Portugal at NUTS III level since the beginning of the 1990s. We compare economic performance of LVT region with other Portuguese regions and we discuss the causes of these results. In the third section, we examine the competitive advantages of LVT and we point out some structural problems of the region confronting with most competitive Spanish rival regions. Moreover, we review in a critical way the regional policy goals to LVT region for the next Community Support Framework (CSF) and their consequences to regional inequalities trends in Portugal.

2. SPATIAL DEVELOPMENT INEQUALITIES AT EUROPEAN LEVEL: THE SOUTHERN COHESION COUNTRIES

The EU has around 370 million inhabitants covering an area of 3.2 million Km² and with an annual GDP of 6.8 trillion ECU. With a GDP *per capita* of 19.000 ECU (PPS) in 1997, the EU is one of the most economic and social strongest region in the world.

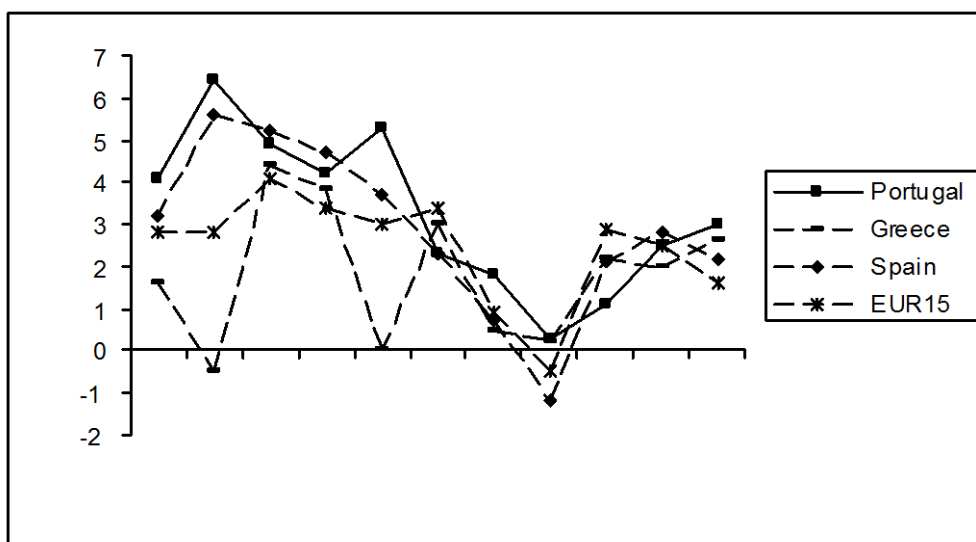
However, EU is divided in several nation-states with very different demographic, economic and social status. Thus, spatial inequalities in the EU are very strong, revealing distinctive regional resource endowments, productive structures and economic capacities (Dunford, 1994). In the top of EU hierarchy we find Luxembourg, Denmark, Belgium, Austria, The Netherlands, Germany and France with a GDP *per capita* (PPS) above the EU average in 1997. In the bottom of EU hierarchy lie Spain, Portugal and Greece, which are peripheral member states.

At regional level, there are strong economic disparities (Dunford, 1994). The European core area comprehends large metropolitan areas of London, Paris, Hamburg, Munich and Milan. The Southern (Portugal, Spain, Southern Italy and Greece) and Northern (north of Finland and north of UK) peripheries of Europe have a lower GDP *per capita* level like the new Länder in Germany.

The European regional policy has hardly overcome the territorial unbalances in the EU, in spite of the large amounts of financial aid that have been channelled to the least developed regions. ERDF and Cohesion Fund are the most important instruments of regional policy in the EU. The Southern Cohesion countries of Europe registered in general a GDP annual growth rate slightly above EU average between 1986 and 1996 (figure 1). In 1986, the year of integration in the EU of Spain and Portugal, the four Cohesion countries increased from a GDP *per capita* of 65% of the EU average to 75% in 1996; moreover, the GDP *per capita* in

the 10 poorest regions went up from 41% of the EU average to 50% and in the 25 poorest regions it rose from 52% to 59% in the same period (European Commission, 1999). In a 10 years period, the peripheral regions of EU maintained a moderate pace of convergence, supported by Structural Funds. Nevertheless, significant disparities remain between core and peripheral regions and also amongst peripheral regions. The economic recession of the early 1990s affected the Southern Cohesion countries of EU and thus the catching up process was interrupted, however since 1995 there were a recovery of these countries and the gap started to narrow again.

Figure 1 - GDP Annual Growth in Southern Cohesion Countries of EU, 1986-1996



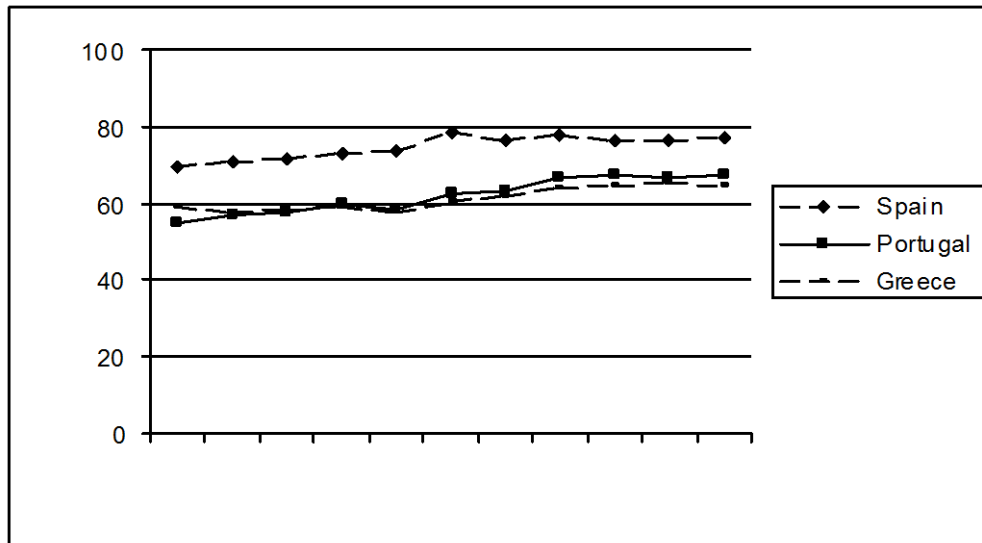
Source: Eurostat

Spain continues to register a higher GDP *per capita* in 1996 among Southern Cohesion countries and some regions, like Comunidad de Madrid and Cataluña, do not have the Objective 1 status. The other Iberian country also registered a positive economic performance and overcame Greece economic development level measured in GDP *per capita* (EUR=100) (figure 2).

In Spain, economic growth in Madrid and Cataluña regions has been very important as in Southern regions of the country, although these regions have a less developed economy. The Northern regions of Spain, near or in the coast, performed less well in result of a long industrial restructuring process that limited economic convergence (European Commission, 1999). Economic growth in Madrid region has been driven by the advanced service sector and in Cataluña by the dynamic industrial activity and inward investment. Although the economic

base in the Southern regions is very dependent on agriculture activity, recent supply side improvements allowed for a catching up of GDP *per capita*.

Figure 2 - GDP *per capita* (EUR=100) in Southern Countries of EU, 1986-1996



Source: Eurostat

Greece is the poorest Member State of the EU and economic convergence has been achieved at a very slow pace, namely because of economic fluctuations, poor export base and high dependency on domestic demand. Recent economic growth has affected regional disparities, as Athens concentrated the most important service and industrial activities as it is the urban area with a better maritime and air accessibility's to the rest of the EU countries.

Comparing with Spain and Greece, Portugal GDP *per capita* catching up has been more evident (only Ireland achieved a stronger economic growth amongst the Cohesion countries). In the beginning of the 1990s, however, economic recovery was delayed whereas the inward investment decreased and specialisation in traditional sectors like textiles and clothing faced strong competition. The regional inequalities in Portugal are quite evident, since more developed areas are concentrated in a very narrow coastal strip, roughly between Lisbon and Oporto metropolitan areas (LMA and OMA). Nevertheless poor regions of the interior are catching up, but strong differences remain. Alentejo, Centro and Norte are amongst the 25 poorest regions in the EU. Only Lisbon and Tagus Valley region has a GDP *per capita* above national average (89% of the EU average).

A major problem of the EU is the high unemployment rates, which observed a peak in 1994. The rise of unemployment affected in a very different way the regions of the EU. According to the European Commission (1999), the 25 least-affected regions in the EU have

an unemployment rate of 3-4%, but in the 25 most-affected regions, it stands at between 20 and 35%. Unemployment also hits specific social groups, namely women and younger population. Although employment increased around 5 million over the period 1987 to 1997, it was not enough to compensate working age population entering in the labour market. There is a close relation between economic growth and net job creation since in the periods of stronger economic growth employment also increased in the EU.

The unemployment issue is not just a problem of poor labour demand compared with higher labour supply as in some segments of the labour market demand exceed labour supply and the contrary happens in other labour market segments. There is a structural problem of adjustment between labour supply and demand, which puts in evidence the lack of skills and education of workers required in the labour market. Thus, in periods of economic growth it is easier to reduce non-structural unemployment than structural employment, and this is basically the reason that explains why in periods of economic prosperity unemployment rate stood higher than it was expected.

The spatial pattern of unemployment in the EU reveals sharp differences between regions. The critical regions were to be found in Spain and Southern Italy and in addition in Finland, Eastern Germany and North-Eastern part of France (and also French DOMs). Portugal and Greece have an unemployment rate below the EU average in spite of a low level of regional output, however it started to increase in Greece due to industrial restructuring process.

The economic modernisation and industrial restructuring in Spain generated high levels of unemployment, however long-term unemployment is just slightly above EU average. The recent economic growth allowed for a strong job creation process and unemployment decreased rapidly, which indicates that economic reforms are showing good results. Therefore, economic growth alone may reduce clearly unemployment (European Commission, 1999). On the contrary, Portugal may face severe unemployment problems in the future. Higher and a better balance of employment and less rigidity of wages and contracts, on the one hand, and Structural Funds impacts, on the other, explain the reduced unemployment rate in Portugal. However, a higher proportion of employment in agriculture evidences a slow pace of economic restructuring comparing with Spain. Therefore, it seems that economic modernisation process is less advanced and unemployment may increase in the future (European Commission, 1999). The similar situation occurred in Greece but economic base is weaker and economic growth is lower as well as there are large proportions of unused labour,

especially female labour. In these circumstances, unemployment is expected to growth with an increasing gap between urban and rural regions in Greece.

3. RECENT EVOLUTION OF REGIONAL INEQUALITIES IN PORTUGAL

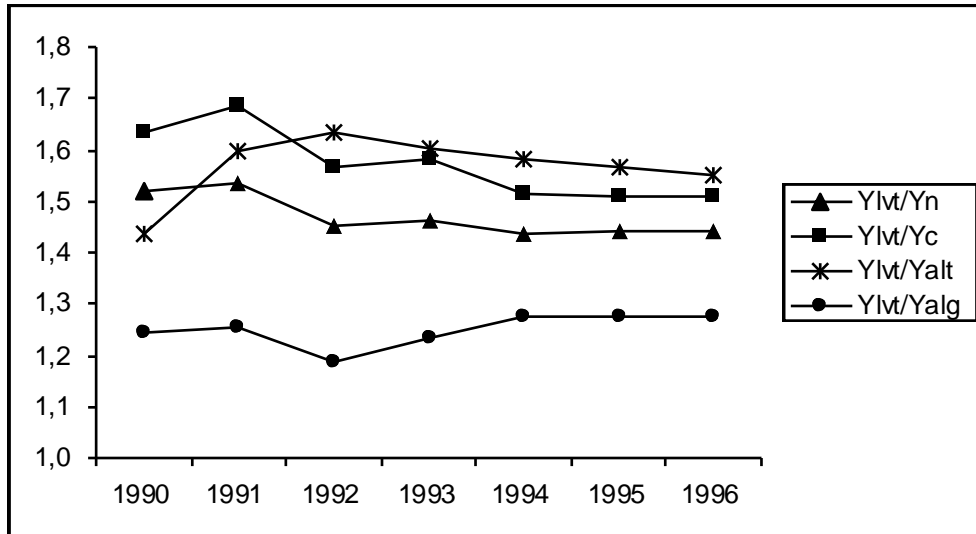
Regional inequalities in Portugal have been since the 1950s very strong, opposing a narrow coastal strip roughly between Oporto and Lisbon metropolitan areas and the interior and South of Portugal (Ferrão and Jensen-Butler, 1984; Gaspar, 1990; Gaspar and Jensen-Butler, 1992). However, some medium-sized cities of the interior became more competitive and reinforced their economy base through polarisation of surrounding rural areas, accessibility improvements and public investments in equipments (technology, education, health and leisure) and therefore the map of regional inequalities in Portugal is changing. According to a report prepared by CEDRU (1996), there are 4 emerging trends in the Portuguese urban system: (1) demographic stability and social and functional reorganisation of Lisbon and Oporto metropolitan areas, (2) demographic growth of medium-sized cities of the interior (absorbing nearby rural population) and of the coastal strip (formation of small conurbations), (3) diffuse urbanisation in the coastal strip and (4) unbalanced growth of urban areas and demographic growth. Besides, social polarisation in large urban areas - particularly in LMA - turned to be a critical problem, generated especially by labour market segmentation and precarious employment situations (Gaspar *et al.*, 1998). The economic, demographic and social changes in the contemporary Portugal influenced the pace of regional inequalities and give rise to a different urban network.

The GDP *per capita* is higher in the NUTS II region Lisbon and Tagus Valley that includes LMA. In figure 3 there is the relation between GDP *per capita* of this region and other NUTS II region in Portugal (mainland)¹. The regional convergence is very evident since GDP *per capita* growth of North and Centre regions was stronger. Even in Alentejo since 1992, the catching up of this region is evident and only Algarve, the second richest region in the country, seemed to enter in a divergence growth phase.

The evolution of productivity in Portugal, by region, also evidences the trend of convergence. Lisbon and Tagus Valley have the highest productivity level in the country; however, the growth of productivity was slower than in the other Portuguese NUTS II regions (table 1). The catching up of GDP *per capita* is also accompanied by the productivity convergence at NUTS II level. The restructuring and modernisation of economic activities,

supported partially by Structural Funds, helped lagging regions to increase the *GDP per capita* in a higher pace than Lisbon and Tagus Valley.

Figure 3 - Evolution of *GDP per capita* in Lisbon and Tagus Valley in Relation to Other NUTS II regions, 1990-1996



Source: INE

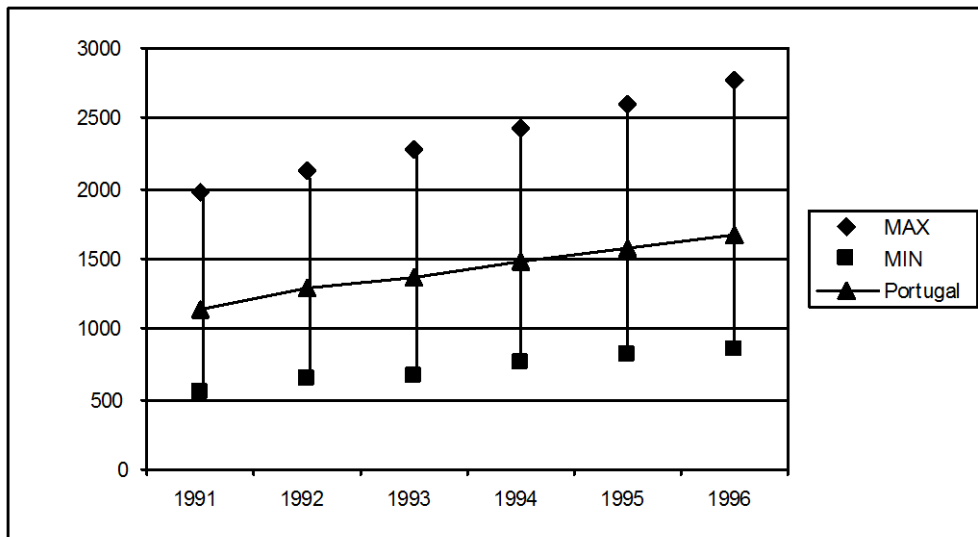
Table 1 - Productivity Evolution of Lisbon and Tagus Valley and Portugal, 1991-1994

	GVA/Employment (10^3 PTE)			
	1991	1992	1993	1994
Lisbon & Tagus Valley (1)	2846	3094	3364	3630
Portugal (2)	2259	2567	2786	3028
LTV/Portugal (1/2)	1,26	1,21	1,21	1,20

Source: INE

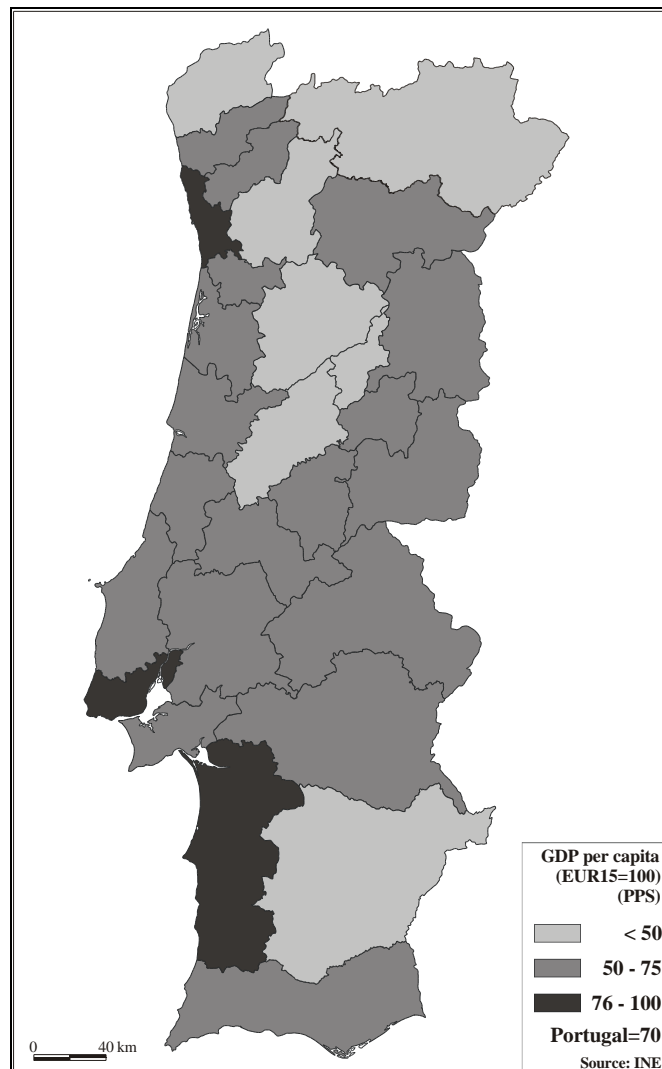
In 1991, the *GDP per capita* of Great Lisbon - the more advanced NUTS III region in Portugal - was 3.6 times higher than the poorest NUTS III region in Portugal and by the end of 1996, this figure decreased to 3.2 (figure 4). The population of Great Lisbon is around 19.4% of total population and net GDP amounts to 31.7% of total GDP in Portugal (mainland). These figures clearly show the relevance of this region in the Portuguese economy. The *GDP per capita* in Great Oporto is also above national average as it is also in the Alentejo Litoral where productive investments (oil and chemicals) in the Sines growth pole generate high income levels (figure 5).

Figure 4 - GDP *per capita* in the Richest and Poorest NUTS III regions of Portugal, 1991-1996



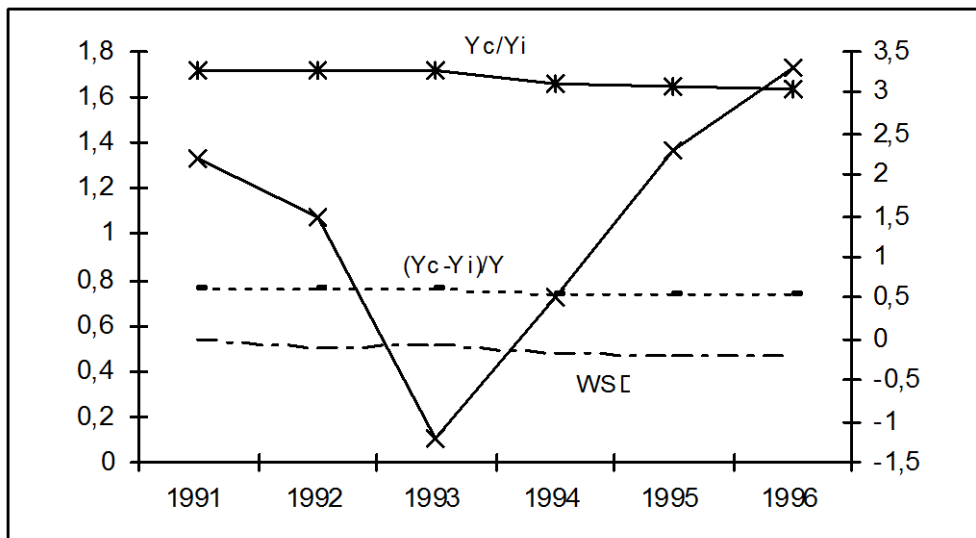
Source: INE

Figure 5 - GDP *per capita* in the NUTS III regions of Portugal, 1996



During the 1990s, regional inequalities decreased, especially after 1993, when GDP growth was again slightly above GDP growth average in the EU. The indicator WSD^2 confirm the regional convergence trend in Portugal in the 1990s (figure 6). These years of convergence were years of moderate economic growth, which provided resources (national and European) to finance the development of lagging regions in Portugal. The public support to rural and interior areas created the necessary conditions to improve regional development process. Economic growth rates declined in the first years of the 1990s and regional inequalities stabilised in Portugal. After 1993, regional inequalities decreased due to an increase of GDP growth. Apparently, economic growth and the reduction of regional inequalities are correlated in Portugal during the 1990s. Moreover, after 1994 Portugal had access to Cohesion Fund, which boost public investment in lagging regions and thus contributed to reduce regional disparities.

Figure 6 - Evolution of Regional Inequalities in Portugal (NUTS III regional level), 1991-1996



The convergence of regional economies in Portugal - measured at NUTS III level - needs to be complemented with another geographical scale analysis that catches in a more sensitive way coastal and interior development. The regional concentration indicators that measure differences between coastal and interior areas of Portugal are expressed by Y_c/Y_i and $(Y_c - Y_i)/Y_i$ ³. The coastal and interior convergence is also evident although the regional disparities indexes decreased more slowly than NUTS III regional disparities indicator. The coastal strip net GDP was 3.55 times of the interior regions in 1991, however this ratio decreased to 3.49 in 1996, that is a very modest reduction of long established regional disparities in Portugal.

Nevertheless, the population of the coastal strip was 2.06 times of the interior regions in 1991 and increased to 2.13 in 1996.

The evolution of the net GDP and population regional disparities during the 1990s show the persistence of the gap between coast and interior, however, the GDP convergence and the population divergence may indicate that Structural Funds support have been helping the economic restructuring process in the interior, which is characterised by an urban-rural shift accompanied by the modernisation of agriculture activity.

In the coastal strip, the medium-sized urban centres of Braga, Coimbra and Pombal had a very good economic and demographic performances between 1991 and 1996. On the contrary, the economic performance of OMA and particularly LMA were in comparative terms less dynamic and allowed for a catching up of other coastal strip areas in relation to both metropolitan areas.

4.LISBON METROPOLITAN AREA: DEVELOPMENT TRENDS AND FUTURE CHALLENGES

The Lisbon and Tagus Valley NUTS II level is the most developed region in Portugal. Situated within it, is LMA, the largest urban area in the country. This capital city region has a very differentiate labour market, concentrates important manufacturing and services activities and have a strong R&D system in the context of Portugal. As negative aspects of LMA, unemployment and urban social exclusion are more critical than elsewhere (only Alentejo has a higher unemployment rate). The public investments on infrastructure and equipments in the last 10 years solved many problems of labour mobility, accessibility and technology development.

Many authors stressed the difficult restructuring process in the period of late 1970s and first half of 1980s in LMA (Baptista, 1989; Fonseca, 1994; Gaspar, 1997 and Vale, 1998). The manufacturing crisis of heavy industries in the south bank of LMA opened up the way for a large restructuring process in the region strongly supported by national and European funding. Production change went along with job loss in the LMA, but productive investments (national and foreigner) helped the region to increase the productivity level and thus became more competitive in the national and European markets. Industrial restructuring was characterised by rationalisation of manufacturing firms relying on obsolete technologies and gave place to the relocation of some activities while keeping their headquarters in the LMA. Nevertheless, social problems have been difficult to overcome especially unemployment, social exclusion and ethnic segregation.

The role of Structural Funds on the economic recovery process of LMA has been very substantial. In first place, the economic restructuring of south bank of LMA was largely financed by Structural Funds. Secondly, Structural Funds supported large investments on infrastructures and equipments in LMA, creating an efficient and stimulating economic environment in the region. Thirdly, Structural Funds supported job training actions and thus improve labour market skills in the LMA. Finally, European funding allocated to the firms has been crucial to improve competitiveness and face increasing competition in the European market. At the same time, the region witnessed a strong growth of inward investment in very distinctive sectors such as FIRE, manufacturing (Autoeuropa network), intensive knowledge services and tourism activities. All these changes contribute to a strong growth of GDP *per capita*.

At first glance, LMA is a very successful region in the EU context. The economic agents have been reacting well to stronger competition and there is a good use of Structural Funds and Cohesion Fund. According to the European Commission (1999), the EU transfers during the two programming periods (1989-1993 and 1994-1999) increased GDP growth by an average of 0.9 and 1 percentage points a year respectively in the two periods in Portugal. The annual transfers of Structural Funds were equivalent to 3.2% of GDP in Portugal. It is quite clear that Structural Funds supported economic growth in the country (demand effect) and allowed for a GDP *per capita* convergence.

The low GDP *per capita* in the Portuguese regions reflect the low productivity as unemployment is below EU average. Thus, the main concern of regional policy should be in the third programming to improve productivity at regional level and try to maintain the high employment content of economic growth. In the LMA, productivity is closer to EU average than in other Portuguese regions and the same happens to unemployment. These may indicate that economic restructuring is more advanced in the LMA than in the rest of the country. Nevertheless, the gap with EU is quite evident as it is with other Objective 1 regions, especially from Spain. In this country, the low level of GDP *per capita* is more a reflection of a relatively small number of people of working age having a job and an income than a productivity problem. In the next programming LMA will loose the Objective 1 status and thus Structural Funds support will be reduced. This may give place to a slowdown in the economic growth as the economic restructuring process is not yet completed and productivity stills below EU average.

For the third programming, LMA challenges have to be more focused in national public investment as well as private one. In order to maintain or reduce the gap with most favoured Spanish regions (Madrid and Barcelona metropolitan areas) the regional policy in the LMA needs to act upon productivity, accessibility, and labour market domains.

The productivity increase in the LMA needs a continuous support to change the economic base and to improve technology development, which requires a close cooperation between regional and national authorities and the firms. Inward investment may help to achieve this goal but there should be a more firm focus action of R&D facilities in the LMA, which are by far the most important in the country. Accessibility continues to be critical and needs to be improved to reduce the effects of a peripheral location in the context of Europe. The region must access Trans-European Networks in the areas of transport, telecommunications and energy infrastructures. Other crucial issue rely on the logistic chances of LMA as the European Atlantic gateway or at least the Iberian or even Southern Europe Atlantic gateway. A new international airport and the port and rail modernisation will contribute to achieve this ambitious goal. Finally, labour market actions demand a more focused intervention on the skills improvement. Generally, entrepreneurs complain themselves about the poor skills of new comers in the labour market and thus they supported most part of training costs. To improve general education system and to design new job training initiatives seem to be necessary to overcome traditional problems of Portuguese labour force.

5. CONCLUSIONS

In this paper, we sought to discuss the trends of regional disparities in the European Union and in Portugal. Spatial development trends in the EU were briefly identified and particularly attention was paid to the Southern Cohesion countries of the EU. The convergence of GDP *per capita* was quite evident during the 1990s and thus we concluded that Structural Funds and Cohesion Fund supported the modernisation of economic activity and created a better environment to the firms. Portugal performed relatively well when compared with Spain and Greece, however, productivity is quite below in the Portuguese regions than in Spain, even if unemployment is below EU average. These results indicate that economic modernisation has a long way to go in Portugal and unemployment probably will increase since agriculture activity still occupies a large number of persons.

The regional disparities continued to decrease during the 1990s, although there is a clear gap between coastal strip and interior regions. Structural Funds and Cohesion Fund provided

the conditions to reduce regional inequalities. Moreover, GDP *per capita* catching up was more rapid in periods of strong economic growth, that is in periods in which growth was higher than EU average. In the coastal strip, the more dynamic areas have been the medium-sized cities that are catching up the metropolitan areas of Lisbon and Oporto. Besides, there is also productivity convergence; in spite of LMA has better productivity level.

The capital city region of LMA has a very differentiate labour market, concentrates important manufacturing and services activities and have a strong R&D system in the context of Portugal. As negative aspects of LMA, unemployment and urban social exclusion are more critical than elsewhere (only Alentejo has a higher unemployment rate). Economic restructuring is more advanced in the LMA than in the rest of the country. In the next programming LMA will loose the Objective 1 status and thus Structural Funds support will be reduced. This may give place to a slowdown in the economic growth, because economic restructuring process is not yet completed and productivity stills below EU average. We argued that regional and national authorities should focus on productivity, accessibility and labour market domains. As this paper is part of ongoing work on regional disparities and on policy responses required to improve productivity and competitiveness in Portugal, we seek to further deepen the comparative analysis with Spanish regions, notably between LMA and Madrid and Barcelona metropolitan areas. These regions do not possess Objective 1 status; nevertheless, both are by far more competitive than other assisted Spanish regions. We argue there is a lesson to learn from Madrid and Barcelona that will help LMA to find the more appropriate policy responses in the future. Hence, LMA may become a stronger metropolitan area in the Iberian urban network, even if there is a substantial reduction of European funding.

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¹ The indicators express the relation between net GDP of Lisbon and Tagus Valley and all the other regions taken separately.

Where:

- Y - net GDP of region *i*
- n - North (Norte) region
- c - Centre (Centro) region
- lvt - Lisbon and Tagus Valley (Lisboa e Vale do Tejo) region
- alt - Alentejo region
- alg - Algarve region

² The indicator used to measure regional inequalities is centred on the standard deviation of GDP per capita weighted by the population of each region, since region units are very different in size.

WSD (weighted standard deviation of GDP per capita):

$$WSD = [\sqrt{\sum (y_i - y)^2 p_i / \sum p_i}] / y$$

Where:

- y_i is the GDP per capita of region *i*
- y is GDP per capita average
- p_i is the population of region *I*

³ The indicators used to measured regional differentiation between coastal strip and interior were the following ones:

$$y_c / y_i$$

$$(y_c - y_i) / y$$

Where:

- y_c is the GDP per capita of coastal strip
- y_i is the GDP per capita of the interior regions
- y is GDP per capita average

The NUTS III level regions considered in the category of coastal strip are Cávado, Ave, Grande Porto, Entre Douro e Vouga, Baixo Vouga, Baixo Mondego, Pinhal Litoral, Oeste, Grande Lisboa, Península de Setúbal and Algarve. The remaining 17 NUTS III level regions were classified as interior regions.