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Regional Policy and Convergence in Europe: The Case of Backward Regions

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Abstract

This paper analyzes the performance of regions whose development is lagging behind since the institutionalization of the EU regional policy, (1989). Results from a panel data model with fixed effects prove that backward regions have been catching up with the EU average income since the launching of the first programming period, the so called Delors'I package, 1989-1993

1. Introduction

Following a decade of rather limited initiatives, in 1986, within the context of the Single Market project, the European Community (now European Union) assumed the task of a common regional policy. The main aim of this policy was to support the development of the weakest regions, which, in addition to Ireland and the Mezzogiorno, included the new entrants, Greece, Spain and Portugal. Articles 158-162 (formerly 130a-e) of the Single European Act, firmly established EC regional policy and the objectives of economic and social cohesion as corner-stones of the Community´s constitutional framework. The main reasoning behind the creation of EU regional policy was the potential threat of problems arising from the economic restructuring of the weaker, peripheral parts of the Community, linked to 1992 project. In order to speed up the restructuring process, and to improve the conditions for economic development, Community financial assistance was deemed necessary. There are other additional reasons that make European Union regional policy necessary: a) There is no natural tendency towards a spatial balance in the development of the EU regions, b) concentration of population and economic activities is a well-established feature of EU territory -London, Paris, Milan, Munich and Hamburg together form a pentagonal area that represents 20% of the total area and contains 40% of the EU citizens who produce about 50% of the EU´s total GDP- and c) unconditional convergence in per capita GDP levels is not a natural tendency also. If there exists a certain level of convergence it would appear to be a very long term process and spontaneous speeds of catching up are too low. With the institutionalisation of regional policy and the Delors I and II packages and the Agenda 2000 EU peripheral economies have received substantial financial support which aimed to accelerate growth in those areas. However, still nowadays, the problem of unequal distribution of income among EU regions continues to be an important theoretical and practical issue. A series of studies attempting to evaluate tendencies of convergence or divergence between European Union regions appeared (see Button and Pentecost 1994, Neven and Gouyette 1995, Canova and Marcet 1995, Molle and Boeckhout 1995, Faiña and Lopez-Rodriguez 2001, 2004, Fingleton et al. 1996, Fingleton 1997, Quah 1996, Tondl 1997, 1999). The conclusions of most studies is that there is a significant reduction in the level of inequalities within the European Union. However other authors debate this trend (see Armstrong 1995, Dunford 1994, Rodriguez-Pose 1998, 1999, Fingleton et al. 1999, Magrini 1999, Boldrin and Canova 2001, Rodriguez-Pose and Fratesi, 2004). Certain studies refer to selective tendencies, convergence clubs and asymmetric shocks in various economies, which lead to spatial inequalities within the European Union (see Baumol 1986, Chatterji and Dewhurst 1996, Fagerberg and Verspagen 1996, Funke 1995, Giannetti 2002).

In this paper we analyse the performance of the EU regions whose development is lagging behind (technically speaking *objective 1 regions* until 2006 and from 2007 onwards *convergence objective regions*) and the impact that European Union regional policy has had on them since 1989. We prove that the former EU objective 1 regions have had a fairly good performance in terms of growth rates and have ever been catching up with EU average income since the institutionalisation of the EU regional policy.

The remaining part of the paper is structured as follows: In section 2 we briefly survey the main steps in the institutionalisation of the EU regional policy. It is worth remark the increases in the real value of funds allocated to structural interventions, both in terms of total amounts and in terms of annual averages figures through the three programming periods from 1989 to 2006. In section 3 we estimate a panel data model with fixed effects to check the dynamics of the catching-up process of the former EU objective 1 regions with the EU average income. We prove that former objective 1 regions have ever been catching-up with the EU average income since the launching of the first programming period and this process

has been more intense during the first programming period than during the second. Finally, section 4 contains the main conclusions.

2. Economic and Social Cohesion: New European Union Regional Policy and its programming periods

According to the Treaty, the Community must act "*to promote overall harmonious development*" and "to *reduce disparities between the levels of development of the various regions and the backwardness of the least favoured regions*" (Art 158). The Single European Act (SEA)(1987) was conceived with the aim of fostering the integration process in the European Community. Integration was to be characterized by the twin dynamic of monetary union and regional expansion. The former process came about through the unification of European markets and the bases for monetary union which were set out in the EU Treaty, Maastricht (1992), and had the effect of intensifying integration and giving rise to economic and monetary union (EMU). The latter process, that of regional expansion resulted in a EU made up of 15 member countries and a population more than 370 million people.

The deepening of economic integration was followed by a wide-scale reform in Regional Policy. Present Regional Policy has been shaped by the introduction of the Economic and Social Cohesion principle in the EEC Treaty by the Single European Act (SEA) in 1987. It was reinforced after the ratification of the EU Treaty and the creation of the new Cohesion Fund.

The provisions of the SEA foresaw Economic and Social Cohesion as the back bone of European Union Regional Policy (old Article 130a EEC Treaty). The objective of strengthening Economic and Social Cohesion implies the promotion of an overall harmonious development of the EU by reducing regional disparities and, in particular, the backwardness of least-favoured regions. The European Regional Development Fund (ERDF) along with the other structural funds operating within a coordination framework are intended to help redress the main regional imbalances in the EU by participating in the development and structural adjustment of less developed regions and in the conversion of declining industrial regions and other areas with structural and/or employment problems.

After these changes in the Primary Community Law, both reforms of the Regional Policy were implemented. In 1988 legislative tasks were completed and the funding for the new programming period 1989-1993 was approved (European Commission, 1989). Both, the general procedures and the financial amounts assigned to European Regional Policy were reformed   providing it with its contemporary structure. With respect to general procedures, a new scheme of planning and programming via negotiation throughout the various strata public authorities was set up by means of the "Community Support Frameworks" (CSF). The reform affecting financial amounts, involved doubling the real value of funding allocated to Regional Policy in this first programming period 1989-1993 (Delors I package).

After the EU Treaty, (Maastricht 1992), the coordination and programming of structural funds were reinforced and their funding was again doubled in terms of real value. Legislative reform was completed during the year 1993 and the new programming period 1994-1999 (Delors II package) was on the point of coming into effect (European Commission, 1994a).

At present, the EU is facing some important challenges. On the one hand, the European Union must foster growth and competitiveness and find its way in a global economy while meeting the requirements of the World Trade Organization (WTO). On the other, the consolidation of European Monetary Union (EMU) and the enlargement process towards Central and Eastern European Countries (CEEC) are fundamental aims of the EU. The strategic framework for meeting these challenges was put forward by the European Commission in the "Agenda 2000", where the financial guidelines for the programming period 2000-2006 were also drawn up (European Council, 1999a, 1999b, 1999c, 1999d).

These guidelines for the medium-term implementation and funding of the main EU policies were agreed to at the Berlin Summit (European Council 1999a), where a coherent framework designed to link expenditure commitments and foreseen resources was set out by the European Council. European Union expenditure must respect the imperative of budgetary discipline needed to maintain EMU stability whilst simultaneously ensuring the orderly development of EU policies and coping effectively with the process of enlargement.

The figures given in the following table show the main structural features of the European Regional Policy through its three programming periods from 1989 to 2006. The table reflects the increases in the real value of funds allocated to structural interventions, both in terms of total amounts and in terms of annual averages.

Table I: Economic and Social Cohesion: Regional Policy Figures

PROGRAMMING PERIODS STRUCTURAL OPERATIONS Billions Ecus 1999		1989-93		1994-99			2000-06	
		Total	Annual Average	Total	Annual Average	Year 1999	Total	Annual Average
Structural Funds		74.821	14.964	166.911	27.818	32.119	195.000	27.857
O B J 1	Amount	48.046	9.609	103.061	17.177	19.818	135.900	19.414
	% Objectives	69,6%	---	68.0%	---	---	74.5%	---
	% Total Stral. Funds	64.2%	---	61.7%	---	---	69.7%[a]	---
Cohesion Funds		1.746[b]	---	17.364	2.894	2.894	18.000	2.571
Future Acceding and New Member Sates		---	----	---	---	---	47.780[c]	8.254
Total Funding		76.567	15.313	184.275	30.712	35.013	260.780	38.682

[a] Only 1993, [b] 65,4% without transitional support , [c] New MS increasing amounts starting from 2002
Source: Annual Reports on Structural Funds (European Commission) and Conclusions of the Presidency from the Berlin European Council (March 1999).

In accordance with the Economic and Social Cohesion principle, a concentration process with respect to structural funds in the neediest areas and particularly in those regions whose development is lagging behind, the main thrust of EU development, that is, the objective 1 regions, is already underway. The concentration process in the structural funds is implemented by means of a reduction in the total percentage of population receiving assistance, with the exception of the objective 1 regions. It should be remembered however, that the amount of the population receiving assistance according to the different objectives, is not, and must not be independent of the distribution of developmental disparities and structural imbalances throughout the European Union.

This concentration principle has meant that in the period 2000-2006 the percentage of the structural funds assigned to objective 1 regions has increased up to a figure of 65.4 (69,7% if the regions with transitional assistance are included). By this means, sufficient support has been maintained for the objective 1 regions, while creating enough financial space to facilitate the enlargement process both for the pre-accession, financial instrument and PHARE program as well as for structural interventions in the new member States.

Concentrating support within the neediest areas is at the core of the arrangements drawn up by the European Council at the Berlin Summit in order to address the problems of financial stability, assistance to those regions with structural problems and the process of enlargement to Central and Eastern European countries.

3. The Catching-up process of objective 1 regions towards the European Union average: Results from a panel data model

In this section we explore the dynamics that shape the convergence process, that is, the mechanisms that allow the former objective 1 regions to catch up with the European Union benchmark average and have been doing so since 1989. To this end we divide the entire period of analysis into four sub periods. First, we assess the trajectory of the objective 1 regions prior to the implementation of the two regional development programmes, that is before the so-called Community Support Framework Programmes (CSF). Second, we analyse how this catching-up process evolves during the first Community Support Framework (CSF I, 1989-1993), third we repeat this procedure for the second Community Support Framework (CSF II, 1994-1999) and finally we carried out the regressions for the period (1995-1999) using the new data (ESA95).

Using the temporal divisions of our periods of analysis we attempt to ascertain whether or not the former objective 1 regions have been catching-up with the rest of the EU regions since the launching of the first Community Support Framework or whether this tendency began prior to it.

The methodology adopted in order to achieve our goals, involved the estimation of a panel data model with fixed effects by pooled least squares.

The model took the following form:

$$x_{i,t} = a_i + bt + u_{i,t} \qquad (1)$$

$x_{i,t} = \dfrac{GDPpc_{i,t}}{GDPpc_{t,UE}}$ represents the gap between the per capita income of the i-objective 1

region and the average per capita income of the European Union in t . t is the trend variable and $u_{i,t}$ represents a random disturbance.

A positive and statistically significant value for b for a particular period suggests that, in the period in question, the objective 1 regions did indeed catch-up towards the average European Union income. In other words there is a convergence process under way which involves the objective 1 regions closing the gap between themselves and the rest of the European Union regions.

Equation (1) was estimated for different sub samples of objective 1 regions, and covers the programming periods, in which them had the status of objective 1 regions. First, we estimated equation (1) for those regions that were objective 1 in the first programming period (1989-1993). The results of the estimation are shown in table 2

Table II: Catching-up objective 1 regions

$x_{i,t}$	(1)	(2)	(3)	(4)
Period	(1983-1988)	(1989-1993)	(1994-1997)	(1995-1999)
b	0.002	0.011	0.003	0.006
Std. Error	0.001	0.001	0.001	0.00
t-Statistic	1.63	10.71	3.75	6.70
Estimation	**PLS**	**PLS**	**PLS**	**PLS**
R-squared	0.93	0.97	0.98	0.97
F-statistic	71.50	136.37	244.20	184.04
Prob(F-statistic)	0.000	0.000	0.000	0.000

The results of the estimation show that the gap between the objective 1 regions and the EU begins to close only after the regional development programmes got underway. The positive value of the parameter b in the first column (1) does not diverge statistically from zero (see t-statistic value). However, from 1989 onwards the objective 1 regions began to move towards the European Union income average and this is reflected in the value of the b parameter –see columns (2), (3) and (4)-. Moreover, the catching-up process was faster during the first programming period –column (2)-. On comparing the different values estimated for the parameter we find that b (b (1989-1993)= 0.011 and b (1994-1997)= 0.003).

We also estimated equation (1) for the objective 1 regions in the period 1995-1999 using the figures provided by the new European accounting system (ESA95)- column (4). The results show that the catching-up process is faster than that which took place in the period 1994-1997. This acceleration in terms of convergence was due principally to the positive performance of the objective 1 regions in 1998 and 1999.

Finally, equation (1) has been estimated for the regions that were objective 1, either in the first programming period or in the second. The results of these estimations are shown in table 3.

Table III: Catching-up objective 1 regions

$x_{i,t}$	(1)	(2)	(3)	(4)
Period	(1983-1988)	(1989-1993)	(1994-1997)	(1995-1999)
b	0.001525	0.013668	0.005929	0.003517
Std. Error	0.001198	0.001352	0.001070	0.000899
t-Statistic	1.27	10.11	5.54	3.91
Estimation	**PLS**	**PLS**	**PLS**	**PLS**
R-squared	0.93	0.96	0.98	0.97
F-statistic	70.43	87.56	168.53	152.90
Prob(F-statistic)	0.000	0.000	0.000	0.000

If we pool together the regions that were objective 1 either in the first or in the second Community Support Framework, the trend does not differ when we only take into account those regions that were objective 1 during CSF I. We can state quite categorically that these regions were not "catching up" in terms of average European Union Per Capita GDP prior to the implementation of the EU regional policy. Moreover the catching-up process is faster during the period 1989-1993 than during 1994-1997.

On Comparing the values for the *b* parameter estimated for the two samples of objective 1 regions (regions that were objective 1 during CSF I and regions that were objective 1 during CSF I or CSF II), it may be observed that in 1989-1993 the *b* values are very close to each other (0.011 and 0.013), but in 1994-1997, the *b* value for the sample that takes in the objective 1 regions for both periods is over 1.5 times greater (0.003 versus 0.005). The reason for this result is basically due to the exceptional performance experienced by the German objective 1 regions, particularly during the period 1994-1996.

A Re-estimation of equation (1) using EUROSTAT (ESA95) data, provides a *b* value of 0.003 which, compared with the value obtained in table 2 (0.006), indicates that the same German regions that were out performers in 1994-1996, were under performers in 1997-1999.

4. Conclusions

In this paper we analysed the catching-up process of the European Union former objective 1 regions since 1989. We split the whole period of analysis into two subperiods 1989-1993 and 1995-1999 as a way of making them to coincide with the years in which the Community Support Frameworks I and II have been operational. The estimations of the model show that the catching-up process of the objective 1 regions did not start until the implementation of the EU regional policy. Once the catching-up process started, it was faster during the first Community Support Framework 1989-1993 than during the second 1994-1999. These findings shed new light into the effectiveness of the EU regional policy in fomenting the growth of the objective 1 regions.

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