

# SPATIAL AND ORGANIZATIONAL DYNAMICS

DISCUSSION PAPERS

**Economics and Public Policies**

Nº 6

**March 2011**

The Portuguese Economic Divergence with European Union:  
a call for Corporate Strategy in light of New Economic Geography principles  
A Divergência Económica de Portugal com a União Europeia:  
Um Apelo ao Contributo da Estratégia Empresarial, à Luz dos Princípios da Nova Geografia Económica  
*José António Porfírio*

Spatial Strategic Interaction on Public Expenditures of the Northern Portuguese Local Governments  
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The Impacts of Public Policies for Regional Development in Portugal  
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The Contribution of "Empreender Project" to the Development of Micro and Small Enterprises' Networks  
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*Cristiane Scholz Faísca Cardoso*

**DISCUSSION PAPERS N° 6:**  
**SPATIAL AND ORGANIZATIONAL DYNAMICS**  
**Economics and Public Policies**

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# THE PORTUGUESE ECONOMIC DIVERGENCE WITH EUROPEAN UNION: A CALL FOR CORPORATE STRATEGY IN LIGHT OF NEW ECONOMIC GEOGRAPHY PRINCIPLES

## A DIVERGÊNCIA ECONÓMICA DE PORTUGAL COM A UNIÃO EUROPEIA: UM APELO AO CONTRIBUTO DA ESTRATÉGIA EMPRESARIAL, À LUZ DOS PRINCÍPIOS DA NOVA GEOGRAFIA ECONÓMICA

*José António Porfírio*

### ABSTRACT

New Economic Geography (NEG), a new branch of Spatial Economics that was developed at the beginning of the 90s, supports that “peripheral” European Union’s economies (like Portugal, Greece, Ireland or even Spain) are predestined to diverge from the developed European “centers” like France or Germany. This new field of Economics seems to be supporting the incapacity of European structural policies to battle against this divergence trend, and ultimately an inevitable catastrophe of the Single European Currency, and thus, of the European integration project as a whole.

The recent evolution of the main EU’s peripheral economies (e.g. Greece, Portugal and Ireland) confirming their divergence trend from the developed core EU’s countries, seems to support these NEG forecasts.

However, in our paper we support that, taking into consideration some identified pitfalls of NEG’s principles, and on the other hand, considering the potentialities that may arise from the capacity of enterprises to put in place effective Corporate Strategies (which its related with the need to develop their strategic capabilities), peripheral countries/regions may be able to overcome this apparent fatalness. Thus, more important than just funding is the aptitude of these peripheral economies – through their economic agents’ capabilities – to use these funding and profit from them adequately.

This will lead us to support, not just the continuation of the European structural funds’ policies, with the positive impacts arising from the inherent redistribution effects, but also to conclude on the urgent need to develop strategic capabilities of main economic agents of these regions. Using an empirical survey, performed during the transition period of the introduction of the Euro (1999-2001), to companies operating in Portugal, we conclude by demonstrating that the lack of corporate strategic capabilities may well be an important explanation for the present difficult economic situation, explaining most of the existing problems of Portugal and that, only through a real change in the prevailing paradigm, regarding the action of these companies, we may be able in a near future to sustainably overcome the present difficulties.

Keywords: Economic Development; New Economic Geography, Corporate Strategy; European Union; Peripheral Territories.

### RESUMO

A Nova Geografia Económica (NGE), um novo ramo da Economia Espacial, desenvolvido no início dos anos 90, defende que as economias periféricas da União Europeia (como



Portugal, a Grécia, a Irlanda ou a Espanha) estão predestinadas a divergir dos centros mais desenvolvidos da Europa, como a França, ou a Alemanha.

Este novo campo da Economia parece, assim, demonstrar a incapacidade das políticas estruturais europeias para contrariar a tendência divergente destas economias e, assim, predizerem a catástrofe eminente do euro e, em última instância, do próprio projeto de integração europeia, como um todo.

A evolução recente das principais economias periféricas europeias (os casos da Grécia, de Portugal e da Irlanda), confirmando a sua divergência face à Europa, parece vir dar razão a estas previsões da NGE.

Todavia, no nosso paper, defendemos que, tendo em consideração algumas debilidades teóricas que poderemos identificar nos princípios da NGE e, por outro lado, considerando a capacidade das empresas colocarem em prática adequadas estratégias corporativas (o que está relacionado com a necessidade de desenvolvimento das competências estratégicas empresariais), os países ou regiões periféricas poderão mostrar capacidades efetivas de ultrapassar esta aparente fatalidade. Assim, mais importante que apenas injetar fundos nestas regiões/países, será a aptidão que for demonstrada pelos seus principais agentes – através do respetivo desenvolvimento de competências – para usar estes fundos da maneira mais adequada e proveitosa possível.

Esta constatação conduz-nos a defender, não apenas a continuidade das políticas estruturais europeias, com o reforço dos seus meios e os consequentes benefícios que poderão advir dos inerentes efeitos redistributivos a eles associados, mas principalmente a concluir pela necessidade urgente de potenciação das competências estratégicas dos principais agentes destas regiões.

Na base de um estudo empírico, desenvolvido durante o período de transição para o euro (1999-2001) a empresas que operavam em Portugal, concluímos que, efetivamente, se verificava uma debilidade ao nível das competências estratégicas das mesmas, o que pode claramente, como demonstrado, ser considerada como uma forte explicação da complicada situação económica atualmente vivida em Portugal. Assim, apenas através de uma mudança efetiva do atual paradigma, onde se efetiva a atuação destas empresas, poderemos ser capazes de encarar o futuro de forma mais sustentável e ultrapassar as dificuldades vividas atualmente.

Palavras-chave: Desenvolvimento Económico; Nova Geografia Económica; Estratégia Empresarial; União Europeia; Territórios Periféricos.

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## 1. INTRODUCTION

Inequality among world countries it's a difficult question to accept raising ethical and political questions and problems difficult to explain in light of the development efforts that are being made by all countries, and the world goals to diminish these differences (e.g. the UN Millennium Development Goals).

One of the ways that countries found to support their development strategies is through the set up and development of economic integration processes. In fact, deeper or lighter integration processes have been and still are observed around the world, shaping a new dynamics on globalization and including the big majority of world countries. Competition

turns out to be, not just between countries but mainly between economic blocks and particularly between the most important companies of each block, hiding important regional differences inside each particular integration block.

European Economic Community was created in 1957 with only six out of the 27 countries that nowadays belong to the European Union (EU). From its inception it was foreseen the creation of a Single European Market (which was just formalized in 1987), that should have been supported by a Single European Currency (that appeared, fully in 2002, after the ECU experience from 1979 to 1999 and a transition period occurred between 1999 and 2001).

The European integration whose origins could be traced back after the World War II, when Europeans discovered that they have lost their traditional hegemony and leadership in the new world, is a very interesting case study in this domain.

In Economics, one of the conditions for the success of a Currency Union, besides the crucial coordination of national economic policies, is the existence of a certain homogeneity and/or convergence among the economies of the countries involved in the union (see Mundell's (1961) Optimum Currency Areas' theory – OCA). Thus, according to the OCA's theory, if EU does not show the ability to promote convergence among their economies, the single currency – the euro – will be questioned by the fundamentals of the economies threatening all the integration process.

This is precisely what NEG is questioning, by proving theoretically the “chronicle and inevitable divergence” of EU peripheral countries/regions. Unfortunately this seems to be the evidence nowadays with the divergence patterns of the generality of these peripheral economies with a particular emphasis to the so-called PIIGS (Portugal, Italy, Ireland, Greece and Spain).

In spite of this apparent reasonability of the theory, one may question if the observed situation is real inevitability (as putted by NEG) or, defiantly, consider it as a mere historical accident, or just the consequence of a certain path dependency, that reasonability and adequate policies would be able to challenge, changing it by creating the conditions to break with this apparent vicious cycle of development.

In our paper we advocate this view, based in two main issues: firstly, showing that NEG present some pitfalls that, dully considered in the economic models used to arrive to its conclusions, could change its final results.

On the second section of our paper, we will flyover NEG, characterizing it. After showing our view concerning the closed link that exists between development, economics and strategy, in the third section, we will present what are, from our point of view, the pitfalls of NEG to explain growth and development. Before our conclusions and the future research clues, we will, in the fifth session present the results of an empirical analysis conducted in Portugal, during the transition phase to the Euro, were we analysed the strategic capabilities of companies operation in Portugal. We will demonstrate how the lack of strategic capabilities of Portuguese companies can be one of the weakest factors that are mining the capacity of the Portuguese economy for growth and convergence.

## **2. NEG IN BRIEF**

The origins of New Economic Geography (NEG) may be traced back to the beginning of the 90s of the 20<sup>th</sup> century, basically on two seminal papers by Krugman and Venables (1990) and Krugman (1991b).

This recent “body of knowledge” in Economics – as it was called by their main authors – brings space to Economics, profiting from the pioneer works of the 19<sup>th</sup> century in the field of Urban Economics who's first main author was von Thünen (1826). In parallel, we

assisted to the development of the so-called Regional Science (Fujita et al., 1999) divided into two main branches (Krugman, 1995 [2002]): i) one more dedicated to the localization of industries (Weber, 1909); ii) another one derived from Christaller's (1933) and Lösch's (1940) Central Place Theory. More recently, it deserves to mention the works on this field presented by Harris (1954) and Pred (1966).

During the mid-20<sup>th</sup> century, the works on Urban Economics were "updated" with the contributions on "Commuters and central Business Districts" from Alonso (1964), as well as Hoover (1937; 1948), Henderson (1974; 1980; and 1988), and Mills (1967). Regional Science have also seen its revival mainly through the works of W. Isard (1956; 1960).

Another important domain in Economics developed specially between the 40s and 50s of the 20<sup>th</sup> century was the field of Development Economics, lately criticised by Krugman, but that, from our point of view, introduced critical concepts to NEG like the concept of "circular causation"; "virtuous or vicious cycles of development"; or even "historical accidents", mainly introduced by Myrdal (1957 [1972]). Besides Myrdal, important contributions in the field of Development Economics were made by Rosenstein-Rodan (1943); and Hirschman (1958), latter revived by Murphy, Schleifer and Vishny (1989).

It is important to refer that, from our point of view, NEG imported this crucial concepts first studied by Development Economics, having treated them mathematically in the framework of its models.

Besides Krugman and Venables, other important NEG's works deserve reference, in particular those conducted by Ottaviano and Thisse (2004); Glaeser and Kohkhase (2003); Head and Mayer (2004); Fujita and Mory (2005); or Fujita, Krugman and Venables (1999 [2001]).

NEG may also be considered in close connection with its "older sister" Geographic Economics (the Economics sub-field of geography).

It seems clear that "the re-emergence of geographic economics" can be argued as being due to the increasing economic significance of sub-national regions and supra-national regions, relative to the nation state" (Clark et al., 2000), with interesting developments during the 80s, especially through the works of Scott (2000); Clark et al (2000); Sheppard (2000); Sunley (1996); Ron Martin (1999, 2001 and 2003); Meardon (2001); and Bralman et al. (1999).

Curiously, the introduction of NEG to the academy was done in a Krugman and Venables' paper of 1990 that analysed from a theoretical point of view the effects on Europe post-1992, that is, after the creation of the Single Market. This analysis was done with a particular emphasis on the Single Market Implications for southern European peripheral countries like Portugal, Greece and Spain.

It is possible to state that NEG broke with the static theoretical economic analysis of development to use the idea of a Europe of regions with different peripheral levels having, at the same time, Brussels' region as Europe great centre. And NEG abandoned the scenario of perfect competition and considered the inter-action between increasing returns to scale and transportation costs, as well as its effects in terms of the emergence of a determined geographical production structure in a specific region (Krugman, 2000). This appears as the result of a region's economic agents' decisions, modelled on the basis of their microeconomic behaviour.

According to NEG, this interaction between economic agents is what originates agglomeration effects that will end by shaping the spatial dimension of EU between peripheral and centre regions. Agglomeration effects are the consequence of the interplay between some centripetal and centrifugal forces that will respectively attract or repulse the more important industries that work as catalysers for regional development.

All these features are finally treated in general multiple equilibrium dynamic mathematically based models that use several technical “tricks” like the Dixit-Stiglitz Model (Dixit-Stiglitz, 1977), the concept of iceberg transportation costs (Samuelson, 1952) and the indispensable use of the computer to work all this (Fujita et al., 1999).

It seems clear that, at least in theory, NEG uses mainly the so-called second nature items of Geography – mainly related with the interaction between different economic agents and basically focusing in short-term relations – that occur mainly in a given territory, while Economic Geography is mainly related with the first-nature features of Geography like the oceans, rivers, mountains or natural resources (Crafts and Venables, 2001; Ottaviano and Thisse, 2004).

In summary, according to Krugman and Venables (1990), the main distinctive characteristics of NEG are the following:

1. Framework of Imperfect Monopolistic Competition (a la Dixit-Stiglitz);
2. The result of it being the division of the space between a core and a periphery;
3. The consideration of manufacturing firms spatial mobility but immobility for factors of production (especially labour);
4. The consideration of Transportation Costs that represent barriers to trade and give NEG models the necessary spatial dimension and operability;
5. Economies of scale considered at the level of each firm (differing from Marshallian externalities);
6. Use of General Equilibrium Models to model spatial economies;
7. The consideration of the so-called phenomena of “circular causation”, which supports the time and spatial dimension of the general equilibrium models.

NEG models allow us to work out the dynamics usually presented by countries that made them to become endogenously organized in an industrialized developed “core” and peripheral, usually “agricultural” dependent, territories, as a result of the location decisions of its companies, and their correspondent actions to explore scale economies and minimize transport/transaction costs (Krugman, 1991b).

The NEG “centres” are the wealthier regions that show the more important industries and have a major share of population thus allowing the exploitation of the “home market effect” which reinforces forward as well as backward linkages and influences decisively the decisions of companies to locate there.

By contrast, peripheral regions are backward regions, where the majority of companies present a constant returns to scale production pattern, not having the due potential to generate externalities, which hinders their capacity for development and hence, the capacity for the region to develop.

The NEG theory shows, for example, how a country can endogenously become organised in an industrialized “core” and an agricultural “periphery” due to the action of firms to explore the potential of scale economies, while minimizing transportation costs and so, manufacturing firms will choose to locate near the regions with big markets (both in terms of consumer as well as intermediate goods) (Krugman, 1991b).

There is no doubt that New Economic Geography represents a big advance in economic theory since it breaks with the traditional vision of perfect competition and its models consider imperfect monopolistic competition from a Dixit-Stiglitz (1997) perspective allowing the forecasts that they made.

According to NEG predictions, the future of Europe will be a territory divided in a few centres, surrounded by peripheral countries, where Portugal, Spain or Greece are included.

There is no doubt that reality seems to give reason to NEG conclusions. However, what it needs to be proved is that the present situation is inevitability, as NEG theory seems to

state or, on the contrary, it is just a consequence of a simple lack of conditions for growth that these “peripheral” countries present by themselves.

Our arguments in favour of this last line of thought are presented in the following sections of our paper.

### **3. DEVELOPMENT, ECONOMICS AND CORPORATE STRATEGY**

In today’s globalized world it is hard to think of any sector that develops its activities in a perfectly competitive market framework. Moreover, in imperfect markets, strategy is what leads the way to competitiveness and success, independently of we are talking about companies, territories, regions, or nations or economic blocks.

We advocate that corporate strategy is an issue linked directly to Economics. The increased importance of the geographical scale of economic activity and the induced geographical allocation of economic resources, are increasingly open questions of corporate strategy (Clark et al., 2000). This becomes even clearer if we think that, in Strategy, like in Economics, one of the main targets of economic agents is the capacity to generate economic rents (Foss, 2002).

In corporate strategy, this search for rent is directly related with a company’s capacity to generate more value than its main competitors, which is obtained through the development of sustainable competitive advantages, as a result of the exploitation and development of unique resources (financial, technical, human or organizational). These resources exist (and their efficacy is crucially influenced) within a micro environment, which is something related both with the territory/region and also with the institutions.

Companies exist and develop their activities in specific places/territories and a nation can be considered as a group of spaces/territories where these market games are developed.

In spite of this apparent simple vision of the relationship between economics and strategy and hence, strategy and competitiveness of territories, economic policies’ conception usually disregard strategic capabilities of economic agents as a condition for their success and space and territories (their characteristics) usually are considered far away from the essentials of national policies since governments tend to consider economy as whole (Porter, 1999). This makes policies rather abstract, usually reducing their efficacy, at least to fight against some natural development discontinuities and prepare the territories for the normal adversities of competition.

Economics has evolved in terms of the factors that were considered crucial for the development of countries or regions. Right before the “new” development theories of the 90s, we have had the “endogenous growth models” that emphasized precisely the importance of the endogenous conditions for growth.

“New growth models” changed the framework of analysis and claimed the consideration of microeconomic foundations for development. By its turn, NEG claimed the opening of the company’s “black box” regarding corporate management and its influence on corporate strategies with the necessary implications for the set up of development policies. However, we argue that the consideration of corporate strategy principles will allow a broader view of development factors, since, for instance, it must include dynamic agglomeration factors like Research and Development (R&D), which represents and advance towards the static agglomeration economies (Porter, 2000) just considered by NEG.

Paradigmatically, there are some authors that support that “a country is not a company” (Krugman, 1996), on a clear allusion to the fact that there exists a clear distinction between a country’s competitiveness and the competitiveness of any company. Also according to

Martin (2003), there are clear differences between the concept of competitiveness of a country/region and that of a company.

However, from our point of view, these possible differences do not mean that we should consider that the competitiveness of a country/region is independent from the competitiveness of its companies.

Thinking about a country's competitiveness is to think on the microeconomic fundamentals of competitiveness, which could be found in two intertwined features (Porter, 2000):

- i) The quality of the microeconomic environment;
- ii) The sophistication of companies' operations and strategy.

Some authors (e.g. Porter and IMD) estimate that the microeconomic fundamentals of productivity may account for about 83% of GDP's changes between countries. The quality of the microeconomic environment assumes here a crucial role, in the sense that it is determinant for the success of any strategy.

Theoretically, one may have a situation whether there are strategic capabilities to conceive and implement good strategies within each company, but the microeconomic environmental conditions do not allow the capitalization of any results of these strategies for the territory as a whole, which will end by killing those strategic initiatives.

Among the most important determinants of the microeconomic environment there are: the hard infrastructures (like transports, communications and technologies); and the soft infrastructures, like the level of Human Resources of the country/region; or its institutions like the legal system. It is important to retain that usually, the territories where there exist low salary levels, usually do not have the necessary quality infrastructures, not even near suppliers, or equipment maintenance capacities. Even for those territories it is known that there may be chances to overcome difficulties. One of the ways these territories usually find to overcome this situation is through clustering, which represent an important form of organization that develops both static and dynamic agglomeration economies.

Regarding the sophistication of companies' operations and strategy, that is related with both the operational efficiency of each company by itself (production, technology and management techniques) as well as the type of strategies that are followed. Here it is possible to find more primitive forms of strategy (usually based on the cost of inputs) or more advanced types of strategies, based on differentiation and the conquer of unique competitive positions towards its main competitors (Porter, 2000).

To consider first-nature features of Geography, or even historic determinism, as determinants for the future of any country or region it constitutes a poor vision of what development is and what capabilities really can do for it.

We argue that strategy – corporate strategy – may really be what can make the difference for the development of a country/region. Around the world there are several examples to support this assumption, that is, countries that, in spite their geographical disadvantages and peripheral situation, were able to succeed (e.g. the case of Japan, Switzerland and many others).

Our assumptions are based on the fact that the concept of competitiveness is a very broad and complex issue that must consider both the role of enterprises, institutions and the economic as well as other public policies. Competitiveness, as a true operational concept, should be rooted on competences and it is related with the way nations as well as companies manage their competences to prosper and obtain profits (IMD, 2005). That is to say, it could not be seen only from the point of view of the static assumptions of agglomeration but must depart from it, to consider the dynamic features of these agglomeration economies.

If it is true that companies, like any other economic agents, behave accordingly to a pre-determined socio-historical context, limited by the first nature features of Geography and the

existent framework of rules and institutions within a given economic system, it is also true that it will be this socio-economic system that will compensate or, by the contrary, penalize, companies, according to the performance they obtain, as the result of their management's capacities (Castells, 1996 [2000]).

We argue that there is a kind of "forced" symbiosis between corporate strategy and development. This is clear, for instance, in the case of investments in technology. Every theory recognizes the importance of technology investment and its relationship with development. However, no company will acquire the last hit on technology merely for the promotion of R&D development in its (or any other) country or region. Any acquisition of technology is made according to the companies' own perspective of profits and should be made in line with a given strategy. Moreover, a purchase of the last technology hit usually has, as a consequence, the development of the territory where these companies are installed; since they normally are associated with increased value added, after all, the last aim of any strategy.

For countries/regions, like for companies, strategy may be either deliberated or occasional. However, we argue that corporate strategy (and we could include here strategies implicit in any type of national policies) could be the factor that is able to challenge a certain historical-geographical determinism usually associated with the "natural" processes of development of territories.

#### 4. PITFALLS OF NEG THEORY

The corollary of our thought for the Portuguese economy is that it is crucial to develop an effective and solid entrepreneurial spirit, capable of putting in place true development dynamics able to challenge the usual development trajectory of our country. This must be done on the basis of the development of our strategic capabilities, rooted on a real policy for the endogenous resources development and within the adequate framework of economic policies.

Just by doing this will Portugal show the capacity to fully explore the new opportunities brought by the EU integration (i.e. the deepening of the integration process), and also to capitalize these opportunities and explore new markets, opened by the globalization process.

One should expect that this capacity to explore new opportunities in international markets being, at the same time, stronger in national markets, will tend to imply the rationalization in the use of resources which will conduct to increase general economic efficiency of the country, allowing it to specialize in those activities where it is particularly productive or for which it possesses abundant resources (Krugman, 1987, in Jacquemin and Sapir, 1989).

The sustainability and success of these processes, however, will only happen if companies are able to present and develop the necessary strategic capabilities.

Specialization is not usually a pre-determined phenomenon. Specialization is usually the result of a systemic search for competitive advantages by enterprises, having at its origin some kind of comparative advantages. So, we may argue that usually it is the specialization – that many times occurs just for historical reasons or simply by accident – that puts in motion an accumulation process, and that will end by reinforcing itself fixing a certain pattern of specialization for the country/region where it occurs, and giving origin to the levels of productivity that assure the desired competitiveness of territories (Adda, 1996 [1997]).

Ultimately, specialization is always the result of corporate strategies, and it is possible to observe a certain historical influence (usually called *path dependence*) on its pattern as well as on the sectors where it is rooted.

We argue that these ideas are crucial for the analysis of strategic capabilities on Portuguese companies. The ultimate goal of any strategy is success. If companies are rational, the way to succeed should be rooted in increased productivity levels, and that means to invest at least in human resources and technology.

However, when this success is not obtained on the basis of productivity and true competitive strategies, but is based on informalities or economic tricks (like exchange rate devaluations, market protections or government funds), the success of entrepreneurs will only be limited in time and scope. Besides strategic capabilities, and derived from them, long term sustainable success is obtained through investments on intangibles like human resources, technology, R&D, or any other intangible feature of competitiveness like design, marketing, distribution, image, etc...).

We argue that one of the main problems of the Portuguese economy is the incapacity of Portuguese entrepreneurs and managers in these domains, in particular due to a lack of strategic capabilities.

Finally, strategy is what brings rationality and long term vision to companies. A real strategy means:

*“Whatever their collective strength, the corporate strategist’s goal is to find a position in the industry where [the company] can best defend itself against these forces or can influence them in its favour. The collective strength of the forces may be painfully apparent to all the antagonists; but to cope with them, the strategist must delve below the surface and analyze the sources of each”. (Porter, 1979, citado em Mintzberg et al, 1995: 72).*

The passivity inherent to NEG models appears to go against this pro-activity that should be inherent to any strategic actuation. To act strategically is to anticipate threats and take advantage of market opportunities; it is not even just reacting to them.

It is possible to think on anticipation movements whose ultimate goal is the development of centripetal forces in favor of the less favored region, and that are able to oppose to the centripetal forces of the centers. This actions may be originated by a certain logic of promotion of territorial competitiveness, linking corporate competitiveness to regional competitiveness (Martin, 2003), and this can have by objective to maintain or to attract structuring economic activities that, sometimes, may even have international impact.

## **5. EMPIRICAL ANALYSIS OF NATIONAL CORPORATE STRATEGIC CAPABILITIES DURING THE EURO INTRODUCTION**

In order to support our conclusions a survey to the Portuguese companies was developed during the transition phase to the euro, i.e., between 1999 and 2001. This moment, we believe, should have been very rich for strategy analysis, since the changes in the underlying market competition were about to happen radically, with the disappearance of one of the last barriers to the Single Market – the different currencies among the majority of EU countries – but also, especially in the case of Portugal and other southern European countries with weaker currencies, the opportunity given to companies to operate with a strong international currency, less volatile, and that could be used without restrictions or too many costs in international operations.

The competitiveness of any country should be rooted in informed entrepreneurs, managers and workers that must present the necessary capabilities to permanently innovate and improve their performance thus building international competitive companies (Porter, 1994). Also, we must think that companies’ competitiveness is not just related with their



capacity to conceive a good strategy but also with the capacity evidenced by these companies to implement the defined strategies (Wheelen and Hunger, 1995).

For this, we argue that it is wise to admit that an effective strategic action from Portuguese companies would have been capable of minimizing the pernicious effects that have been happening as a consequence of the European integration process.

Clearly this did not occur, and Portugal is usually ranked in the worst EU places regarding management capabilities (see, for instance, the ranks of Portugal in the Business Competitive Index of the Global competitiveness Report from the World Economic Forum or the correspondent IMD's indicator on the World Competitiveness Report).

Porfirio's (2005) survey intended to evaluate the corporate strategic readiness of companies operating in Portugal, that will allow them to face the challenges of the single currency introduction and the European integration process.

This survey, consisting on a joint PhD research and a Caixa Geral de Depósitos – EuroInfoCentre study, was conducted between 1999 and 2001, and was made through the elaboration of a direct inquiry. A first wave of inquiries were included in the EuroInfoCentre information magazine of July 2000 (with a distribution of about 7.500 exemplars). Later, on July 2001, given the reduced number of answers to the first call (only 15), we decided to deliver it by mail, with RSF envelopes, directly to the companies of our survey.

To do this survey, and faced with the impossibility to access the universe of about 350.000 companies operating in Portugal, we decided to use randomly three different Data Bases (CENEGE-ISEG; EuroInfoCentre – CGD, and CEGOC-TEA). These databases have been purged from redundant registries, having been sent about 2.325 letters with the inquiry, to companies operating in Continental Portugal and Madeira.

The inquiry (see Annex I) was divided between more operational and more strategic questions, presenting as its main goal, our capacity to answer to the following question:

“Being Portugal a peripheral EU country, are strategic capabilities of companies operating in Portugal capable to contrary the negative effects of the European integration process, as stated by NEG principles?”

Our work hypotheses, applied to the companies operating in Portugal, were the following:

1. The great majority of companies operating in Portugal is not managed by strategic principles/guidelines;
2. There are significant differences, in terms of the strategic potential, of the companies analyzed, that are rooted in features like companies' dimension, family management features, the relationship between capital and management, the organizations' structure, etc...;
3. The lack of knowledge and incapacity to use basic strategic tools like management control, analytic accountancy; or even to perform regular markets' analysis is usually translated into a certain incapacity to implement conceived strategies;
4. In the case of enterprises that are able to conceive strategies, these strategies are mainly based on the product-market feature, relegating to second chance the strategies involving internationalization, vertical integration, etc.;
5. Usually, companies follow cost strategies compared to differentiation strategies;
6. Internationalization is not seen as a priority, even by companies already involved in international markets;
7. Euro is considered by most companies an operational rather than a true strategic issue.

We have obtained a sample of about 215 enterprises, of which we derived an operative sample of about 185 companies. From the results obtained it was possible to conclude for the confirmation of hypotheses number 1, 3, 4, 6 and 7 and the refusal of hypotheses 5. Hypothesis 2, surprisingly, was just partially corroborated by our results since up to a certain

phase of our study, nor dimension, nor familiar management nor even the dependency between capital and management were seen as contingency factors for strategy conception and implementation.

What we have observed is that when we began to tighten our filters, these features, especially family, dimension and also the organizational structure, started to become active contingency factors regarding evidenced strategic capabilities.

In summary, we may conclude that it does not seem that the euro was faced as a question of strategic relevance for the majority of the companies analyzed. It was more considered as just an operational issue.

It seems that for the big majority of companies studied it does not exist a consistency between the strategic and the operational planning once the majority of them (97 out of 185) does not present basic strategic infrastructures (e.g. a responsible for strategy) or even has showed to have an explicit strategy.

Regarding evidenced management capacity, for the 88 companies that presented minimum strategic infrastructures, the results told us that 45 out of this total did not use a management control system, nor an analytical account system or even did not perform regular market analysis to support their decisions. This lead us to conclude that only 43, out of the initial 185 companies studied, presented the minimum requisites to talk about some evidence of the presence of strategic capabilities.

In this scenario, we support our idea that one of the major problems for the long term growth of the Portuguese economy is precisely the lack of strategic capabilities from our companies, which not just hinders our position within the EU, but also may explain the divergence trend that we have assisted during the last years without giving too much hope for the near future.

## **6. CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS**

International financial markets usually do not tolerate corporate failures of any kind, from the so-called developed world. Also, economic convergence and homogeneity between countries/regions seems to prevail as a condition for the success of the European integration process.

Some European peripheral countries – like it is the case of Portugal – have shown serious difficulties to succeed in this new integrated and globalized international environment as well as on the new era of a single currency.

Economics as been able to develop a branch that not just occupies one domain that was far from being dully considered – space and territory – but that also have showed to be capable to present a good explanation for what is happening to peripheral European countries.

However, in the present paper we challenged this “black or white” world’s vision which somehow does not left many room for policy action and hope for the less developed peripheral regions/countries. Albeit we recognize the important theoretical advances brought by NEG, our main assumptions for this challenge were the following:

1. The consideration of a clear link between economics and strategy that from our point of view was not adequately explored by NEG and that can make all the difference regarding the success of peripheral territories;
2. The assumption that the advances obtained with NEG considering microeconomics and imperfect markets (e.g. monopolistic competition) were not dully translated to the NEG models’ mechanisms, haven given priority to the short term and static features of growth and development in detriment of the long term endogenous

features;

3. The apparent reduction of strategic corporate decisions, within NEG models, to decisions about location;
4. The consideration that growth, besides expectations, is almost exclusively determined by economic factors and decisions based on economic rationality;
5. The simplifying assumptions of NEG models, that consider the existence of some sectors of activity (e.g. agricultural) that work in a framework of perfectly competitive markets and with constant returns to scale systems of production, something that hinders, significantly, the capacity for growth and development of specific regions/countries.

The consideration of the influence of the economic agents' actions (including not just enterprises but also institutions and public policies) should mean the inclusion of rationality that will allow these economic agents to proactively act (or at least to react) in order to face market imperfections and economic adversities originated by market forces.

However, our thesis will only be valid if we were able to demonstrate that at least one of these divergence processes could confirm our ideas about the lack of long term development factors (or at least one of them that could be determinant).

We depart from strategy, and we believe to have showed that corporate strategy (and related strategic capabilities of companies), are crucial for the development and growth of territories, since due to its characteristics, it represents the long term capacity for sustainable success and it is the features that will bring rationality to any regional growth/development process.

Moreover, given the intrinsic characteristics related with strategic capabilities, especially those inherent to the idea of sustainable competitive advantage, we support that these are long-term growth conditions and, even if they may not be considered a sufficient condition, they remain as a necessary condition to register long term growth.

We then used the results of an empirical study conducted during the transition phase to the Euro (1999-2001) that analyzed the strategic potential of companies operating in Portugal during this period, to conclude that, as advanced, the Portuguese companies analyzed do not have understood the total implications (in strategic terms) of the Euro and, at the same time, did not evidenced the capacity to conceive and to implement effective business strategies. In general, this could very well explain the convergence of the beginning of the 90s and during the transition phase, as well as the collapse that followed this period (especially after 2003/2004), confirmed nowadays with the clear divergence trend of the Portuguese economy, and the loss of several ranking positions in terms of development, confirming a certain incapacity of the Portuguese companies to compete in international markets without the exchange rate mechanisms and with more transparent rules, due to the disappearance of the "currency shadow".

These results were even more surprisingly, taken into consideration that the majority of enterprises analyzed were considered medium or big size companies, a feature that theoretically would make them more advised in terms of strategic capacities.

We concluded that, if scientifically it is not possible yet to state that the reason for divergence is due to this lack of strategic capabilities, our findings can at least challenge NEG results. By doing this we believe to increase the hope for peripheral economies of EU (including Portugal and the other Southern European countries) as well as the hope for the European integration process as a whole. Moreover, our conclusions left open room for the continuation of the European framework programs and the structural funds associated with them, in spite of questioning their operative as well as their results, should they continue to be delivered the same way as until today.

Our conclusions, if taken into consideration, may redirect economic policies conception from sectors' structural changes to capacity building.

Our future research in these domains will be developed, especially in two main areas:

- To demonstrate mathematically the relationship between strategic capabilities of countries and long term development and growth;
- To devise what could be the implications for NEG conclusions, deriving from the considerations of the changes in the underlying, in line with what was advanced in our paper and try to see the policy implications of these new findings.

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# SPATIAL STRATEGIC INTERACTION ON PUBLIC EXPENDITURES OF THE NORTHERN PORTUGUESE LOCAL GOVERNMENTS

## INTERACÇÃO ESTRATÉGICA ESPACIAL NAS DESPESAS PÚBLICAS DOS GOVERNOS LOCAIS DA REGIÃO NORTE DE PORTUGAL

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### ABSTRACT

The existence of spatial strategic interaction between neighbouring local governments is often referred in literature and identified in empirical applications for several countries. The spatial interaction in local government expenditure finds support on three theoretical explanations: spillover effects, Tiebout competition or mimicking behaviour. Identify the adequate explanation for the local government interaction is not an easy task since the reduced form of the estimated model can generate indistinguishable pattern in spatial interactions. This paper seeks to identify between those theoretical explanations what is the underlying reason for spatial interaction in public expenditures among local governments for the case of a particular sub-area of Portugal. Using differentiated model configurations and the local government expenditures of the municipalities composing the Northern Portuguese mainland, between 1998 and 2008, the paper identifies the structural model that generates the observed spatial auto-correlation in local public expenditures. Among the various theoretical reasons, only the existence of spillovers effects finds support.

Keywords: “local public expenditures”, “horizontal spatial interaction”, “spatial econometrics”.

### RESUMO

A existência de interação estratégica espacial entre governos locais vizinhos é muitas vezes referida na literatura e identificada nas aplicações empíricas relativas a diversos países. A interação espacial na despesa pública local encontra suporte em três explicações teóricas: efeitos externos, concorrência à Tiebout ou imitação no comportamento. Identificar a explicação adequada para a interação entre governos locais não é uma tarefa fácil, já que a forma reduzida do modelo estimado pode gerar padrões indistinguíveis nas interações espaciais. Este artigo procura identificar de entre as explicações teóricas qual a razão subjacente à interação espacial nas despesas dos governos locais no caso de uma determinada subárea de Portugal. Usando diferenciadas configurações do modelo e as despesas dos governos locais dos municípios que compõem a região Norte do Continente Português, entre 1998 e 2008, o artigo identifica o modelo estrutural que gera a observada autocorrelação espacial na despesa pública local. De entre as diversas razões teóricas apontadas, apenas a existência de efeitos externos encontra sustentação.

Palavras-chave: Despesa pública municipal; Interação espacial entre municípios; Econometria espacial

JEL Classification: C33, C36, H72, H73.



## 1. INTRODUCTION

International observation often identifies governments establishing relations that can have either a vertical or horizontal nature. Understand how these relations influence the local governmental decisions is the major goal of this paper. The focus is on horizontal interactions among local governments implying that the behaviour of neighbouring governments exercise reciprocal influences. The driven idea of the paper is to contribute for the discussion on how a process of spatial strategic interaction among neighbouring jurisdictions influences local governments' decisions regarding public expenditures. The intuition behind strategic interaction is that politicians do not make their decisions in isolation, reacting often to decisions made by other politicians in the neighbouring jurisdictions. In this sense proximity plays a crucial role. The nearer are local governments from each other the higher is their reciprocal expected influence.

Public finance literature<sup>1</sup> recognizes the spatial dimension importance<sup>2</sup>. However, only recent advances in spatial data analysis have allowed an accurate consideration of space in the specification of models. The spatial dimension is usually introduced in the models by allowing a spatially lagged dependent variable or a spatially error term<sup>3</sup> which rises some econometric problems like simultaneity due the endogeneity problem of the former and the violation of the basic OLS estimation assumption of uncorrelated errors of the latter. In this paper spatially lagged models are estimated since the goal is to identify the reason why local governments interact.

There are three main theoretical approaches that explain the reasoning for spatial interaction among local governments: spillover effects, Tiebout (1956) competition or mimicking behaviour<sup>4</sup>. Briefly, the main driving forces are, respectively, the existence of unconditional grants from the central government used to support expenditures whose effects spread to neighbouring jurisdictions; an attempt to increase the tax base by attracting residents from a neighbouring jurisdiction and, an information spread about neighbouring incumbents' performance that facilitates comparisons.

Sometimes distinguish between those underlying reasons is a demanding task, especially when analysis only consider a specific year. The reasoning for that is the usually estimated reduced form of the spatial reaction function which is unable to identify the true reason for strategic interaction among local governments.<sup>5</sup> To overcome those limitations an analysis using several years is required. Although, the panel data approach is not also conventional since the estimated equation have to deal with spatial correlation.

Being aware of such difficulties the paper proposes to answer the question of what would be the reasoning behind local government expenditures pattern which appears to be related with neighbours' behaviour. The empirical application is on the public expenditures of the Northern Portuguese local governments (municipalities). There are papers in the field that test strategic interaction among governments looking at local governments receipts. However, Portuguese municipalities have little influence on local government receipts, almost entirely defined by central government, benefiting, in contrast, from a relative freedom to set expenditures.

Using data from the 86 municipalities composing the Northern region of Portugal mainland, between 1998 and 2008, I test differentiated model configurations, using panel data estimations to answer the following questions: 1) Do the municipalities of the Northern region of Portugal establish a spatially strategic interaction? 2) If true, what is the main driven force?

<sup>1</sup> Rosen (2008) is a reference book on the subject and is widely used in undergraduate classes.

<sup>2</sup> Gérard-Vared et al. (1997) discuss the importance of space for fiscal federalism theory.

<sup>3</sup> For an introduction of spatial error and spatial lag models see Anselin and Hudak (1992).

<sup>4</sup> For an introduction to this kind of public finance problems see Hillman (2003).

<sup>5</sup> For an extended discussion on this issue see Revelli (2005).

The paper is organised as follows. Section 2 presents the theoretical explanations underlying the strategic interaction behaviour among local governments. Section 3 introduces the motivation for the paper. Section 4 systematises the main empirical questions and hypotheses to be tested. Empirical results are shown in Section 5. Section 6 concludes and identifies some resulting political implications.

## 2. THEORETICAL FRAMEWORK

Literature on spatial interaction identifies three explanations for a similar behaviour among local governments that are spatially close: spillover effects, Tiebout competition or mimicking behaviour. Reviews of the state of the art of horizontal strategic interaction can be found in Brueckner (2003) and Epple and Nechyba (2004).

The spillover effect occurs because some local government expenditures push (negative spillover) or constrain (positive spillover) the local public expenditures of the neighbours. The spillover effect can be due to a grant from central or European government to local governments that can be used to build a facility, a street for example, which crosses more than one jurisdiction. As a result, public expenditure will increase in more than one local government. In this case, providing local goods present complementary characteristics. If local goods evidence competing characteristics, however, for example the decrease in the quality of health care services, can make more attractive the services of a neighbouring jurisdiction, putting a pressure on the budget of local governments that offer better services, derived from the non-residents demand. The jurisdiction that reduced services quality, perceiving that individuals prefer the neighbouring service can decide to put the saved money with that service on other functions.

When local governments correctly explore neighbouring synergies and work together in order to use public expenditures accurately, local public intervention enhances efficiency gains. Although competition among local governments being described as an advantage of fiscal federalism, it could also cause a negative effect<sup>6</sup> in the case where competition leads to inefficient public goods provision. Local governments behaving as cooperators or as competitors depend crucially on ideology alignment among neighbouring governments. A more cooperative framework between neighbouring local governments tends to be identified when incumbency belongs to the same political party or is from the same ideology orientation.

Under Tiebout competition, local governments interact in the attempt of attracting residents from a neighbouring jurisdiction, with the goal of improving the tax base. This local government behaviour is analogous to a fiscal competition, like the Tiebout mechanism, where people look at the advantageous emerging from public goods provided in several jurisdictions and select the better nearest option. By choosing with “their feet”, individuals opt for the jurisdiction that offers the public tax-expenditure bundle most adequate to their preferences. In this case, the number of new residents is the key for interactions that occur among local governments. The attraction of households improves building houses, thus leading to an increase in the number of residences. This kind of competition can be seen as welfare competition mechanism à Wildasin (1988).

Spatial interaction can also be due to information spillover, which leads to a mimicking or copycat behaviour. The copycat behaviour is an application of the political yardstick competition hypothesis, introduced by Salmon (1987) and further developed by Besley and Case (1995), stated for tax settings, in which one jurisdiction interacts with fiscal policy in neighbouring jurisdictions. The reasoning for copying is that individuals get information about neighbouring incumbents’ performance. By comparing how local governments

<sup>6</sup> If neighbouring local governments take competitive behaviour too seriously, a phenomenon referred to in the literature as race to the bottom might be found (Brueckner, 2000; Saavedra, 2000).

expend their budget, voters perceive the quality of their own local government, rewarding or punishing them in the election contest, according to the percept gap between incumbency activities. The likelihood of the local incumbents to be reappointed has also a meaning in the mimicking behaviour. A heavier copycat phenomenon faces a reasoning to exist as more fragile incumbency is. Majorities imply lower dependency from neighbours' public budget management choices.

### 3. MOTIVATION

Portugal is known as a unitary state in which local governments have a reduced degree of freedom to set taxes. However, Portuguese municipalities benefit, in contrast, from a relative freedom to set expenditures. The main sources of local governments' financing are property taxes or unconditional transfers from central government. Thus, the paper is concerned with the way local public expenditures decisions are influenced by neighbouring municipalities.

Although widely studied in other countries, both on receipts and expenditures sides of local government budgets, the far as I know, Portuguese strategic interaction phenomena on public expenditures was only slightly analysed for the case of the municipalities composing the Algarve region, a small region with only 16 municipalities and the Southern part of Portugal, in Barreira (2010). Using differentiated model configurations of a spatial lagged model and a transformation referred by Debarsy and Ertur (2010) for estimating a fixed effects model, the paper identifies the structural model that generates the observed spatial auto-correlation in local public expenditures. The driven force identified for the existence of spatial strategic interaction among municipalities was the existence of spillover effects generated by grants from central government. Given the small scale of the previous analysis, this paper attempts to evaluate if the reason underlying spatial interaction among municipalities of the Algarve region can be generalized to the rest of the country or if each region, facing different realities, spatially interact by different reasons.

The Northern region of Portugal is a very fractioned territory, as Table 1 shows. The region is composed of 8 sub-areas with differentiated characteristics as data indicates. Given the diversity of this region compared with the Algarve region, the paper evaluates if the predominant effect found for the Southern region of Portugal also finds support on the Northern region.

Table 1 – Characteristics of the Northern region of Portugal

	Number of Municipalities	Average Area	Average Inhabitants	Municipalities <10000 Inhabitants	Number of Inhabitants in the Smallest Municipality
Minho-Lima	10	221,8	25095	2	8 686
Cávado	6	207,7	68799	1	7 506
Ave	8	155,7	65574	0	14 077
Grande Porto	9	90,5	142605	0	29 481
Tâmega	15	174,6	37385	1	7 049
Entre Douro e Vouga	5	172,1	57680	0	21 762
Douro	19	216,2	11054	14	3 286
Alto Trás-os-Montes	14	583,7	15319	6	4 857
<b>NORTH</b>	<b>86</b>	<b>247,5</b>	<b>43552</b>	<b>24</b>	

Source: Portuguese National Statistics (I.N.E.) and own calculus

The spatial interaction estimation implies the definition of a neighbouring relationship which is represented by a matrix that measures connectivity among municipalities through a weighting attribution. Barreira (2010) considered a symmetric weighting matrix, implying a fixed number of neighbouring municipalities. When a differentiated number of neighbours are considered for each municipality, the estimation approach has to be reconsidered. The existence of a great interference of central government through unconditional transfers to local governments that generates a spillover effect was the main reason identified for the Southern part of the country to engage into spatial interaction. The question here is to evaluate if considering the referred differences for the North, the main reason for a spatial strategic interaction remains. Under these circumstances a different estimation procedure, namely an instrumental variable estimation, should be applied which can lead to different results regarding the reason underlying spatial strategic interaction. The estimations presented in section 5 answers to these questions.

As international examples of the spatial strategic interaction study on local public expenditures, can be mentioned Case *et al.* (1993), Figlio *et al.* (1999) and Fredriksson and Millimet (2002) for U.S.; Schaltegger and Kuttel (2002) for Swiss; Solé-Ollé (2006) for Spain; Borck *et al.* (2007) for German; Foucault *et al.* (2008) and Elhorst and Fréret (2009) for France; and St'astná (2009) for Czech Republic.

Tiebout competition finds support in local governments from Germany and from the Czech Republic. In the former case, the financing of the local governments is sustained, in a relevant proportion, by mobile taxes, relying namely on enterprise activity. In this sense, more public expenditures means more public goods provided, making a jurisdiction more attractive for enterprises, since local governments offer them better conditions for their economic activity. In the latter case, Tiebout competition is found in the environmental expenditures with the goal of increasing the number of residents and consequently the tax base. Figlio *et al.* (1999), regarding the U.S. states, find that decentralized welfare benefit setting exacerbates inter-state competition that might induce states to respond to changes in their neighbour' policies asymmetrically.

The behaviour underlying municipal governments in France, in contrast, is imitation. France is usually considered a unitary country, meaning that decentralization processes are related to lower number of competencies attached to lower government levels, compared with Germany for example. In the case of Swiss cantons, mimicking effects in public expenditures is also found. The mimicking behaviour is also identified on part of US states by Fredriksson and Milimet (2002) in environmental policymaking.

Spillover effects are found in Spanish local governments, meaning that local interactions elapse from an upper-level orientation: regional government. The same reasoning is identified by Case *et al.* (1993) for the U.S. case, in which expenditures on local public services potentially can cause beneficial or detrimental effects on nearby jurisdictions.

## **4. EMPIRICAL QUESTIONS**

### **4.1. Empirical framework**

The empirical application tests the existence of strategic interaction among local governments of Northern region of Portugal and intends to identify among the alternative theoretical explanations what is the underlying reason for that behaviour. The analyses consider the 86 municipalities composing the region and an observation period comprehended between 1998 and 2008. The spatial lag models estimated consider, as such, panel data. According to Hsiao (1986) and Baltagi (2005), panel data give more informative data, more variability, less collinearity among the variables, more degrees of freedom, and more efficiency. Panel

data also allows the specification of more complicated behavioural hypothesis, including effects that cannot be addressed using pure cross-sectional or time-series data. In the spatial models allow to identify the underlying reason behind spatial strategic interaction, which would be not possible under a cross-section framework.

For the weighting matrix definition all municipalities bordering each municipality were considered, implying an asymmetric matrix which allows a differentiated number of neighbours. In fact, the region has municipalities comprehending from 2 to 9 neighbouring municipalities. According to Anselin *et al.* (2006) weights choice is typically driven by geographic criteria, such as contiguity or distance, including nearest neighbour distance. The weighting matrix is row-normalized, meaning that sums one.

The cost of ignoring spatial dependence in the dependent variable is relatively high since the econometrics literature has pointed out that if one or more relevant explanatory variables are omitted from a regression equation, the estimator of the coefficients for the remaining variables is biased and inconsistent (Greene, 2005). In contrast, ignoring spatial dependence in the disturbances, if present, which leads to spatial error model estimation, approach discarded here, will only cause a loss of efficiency.

Spatial models rely on the asymptotics in the cross-sectional dimension to obtain consistency and asymptotic normality of estimators. Models with controls for fixed effects utilize the time-series component of the data, whereas models without controls for spatial fixed effects utilize the cross-sectional component of the data. Some studies argue that models that control for spatial fixed effects tend to give short-term estimates and models without controls for spatial fixed effects tend to give long-term estimates (Baltagi, 2005, Paltridge, 2005).

Consistent estimation of the individual fixed effects is not possible when  $N$  tends to infinity, due to the incidental parameter problem (Anselin, 2001). The incidental parameters problem is independent of the extension to spatial error autocorrelation or to the inclusion of a spatially lagged dependent variable since it also occurs without these two extensions. The spatial fixed effects can only be estimated consistently when  $T$  is sufficient large (Elhorst, 2010a). Nevertheless, it has been argued that when the interest it is primarily in obtaining consistent estimates for the coefficient of the dependent variables, the use of demeaned spatial regression models may be appropriate using the standard maximum likelihood (ML) estimation approach (Elhorst, 2003).

As an alternative to reliance on an often unrealistic assumption of normality and to avoid some of the computational problems associated with the Jacobian term in ML estimation, Instrumental Variables (IV) and General Method Moments (GMM) methods has been suggested for single cross-section spatial regression models (Anselin, 1988 and 1990, Kelejian and Prucha, 1998 and 1999). According to Anselin *et al.* (2006) these results can be extended to the panel data setting. The endogeneity of the spatially lagged dependent variable suggests a straightforward instrumental variables strategy in which the spatially lagged (exogenous) explanatory variables are used as instruments (Kelejian and Prucha, 1998 and Lee, 2003).

Under the presence of spatially lagged dependent variable, the pool OLS (POLS) estimated parameters lose its property of unbiasedness and consistency. The seemingly unrelated regression (SUR) is applicable when  $T$  is large and  $N$  is small, which is not the case here. As an alternative, Elhorst (2001) suggests the IV estimation by Two Stage Least Squares (2SLS), but this method does not take account of the restrictions on the coefficients within the coefficients matrices. The advantage of this method is that they do not rely on the assumption of normality of the disturbances and ignores the Jacobian term (Elhorst, 2010b). The author also states that the IV estimation assumes that the disturbances terms are independently and identically distributed for all  $i$  and  $t$  with zero mean and variance

sigma square (Elhorst, 2010a). Moreover, IV estimation has the benefit of providing consistent estimates of the parameters even in the presence of spatially correlated error terms (Saavedra, 2000). One disadvantage of IV estimators is the possibility of ending up with a coefficient estimate of the spatial lag coefficient outside its parameter space by the fact of ignoring the Jacobian term.

Fingleton and Le Gallo (2007, 2008) show that IV estimators are extremely useful in those cases where linear spatial dependence models contain one or more endogenous explanatory variables that need to be instrumented. Models including a spatial lag and additional endogenous variables can be straightforwardly estimated by 2SLS. Franzese and Hays (2004) states that spatial 2SLS-IV, which instruments for spatial lags of dependent variables with spatial lags of independent variables, yields unbiased and reasonably efficient estimates of both common-stimuli and diffusion effects, when its conditions hold: large samples and fully exogenous instruments. If the instruments are indeed perfectly exogenous, their covariances with errors is exactly zero, then IV estimators will be consistent and asymptotic efficient (Franzese and Hays, 2007).

Given that the cross-section dimension largely exceeds the time dimension and in order to avoid the incidental problem referred above, spatial lagged models without controls for spatial fixed effects are estimated. Estimations rely on the 2SLS using as instruments the lagged common dependent variables.

#### 4.2. Empirical hypothesis

The dependent variable is per capita public expenditure (*pubexp*). The independent variables are, beside neighbouring per capita public expenditures (*Wpubexp*) – the spatial lagged variable, two economic variables, namely, the percentage of property taxes on receipts (*proptax*) and medium value for residence (*valueres*).

The observations are converted into natural logarithmic, allowing the reading of the ro-coefficient, associated to the neighbour effects, as elasticity. Seeking for simplicity, I dropped the indices *i* for each of the 86 municipalities and *t* for each of 11 years included in the panel data estimations.

The basic model follows a spatial lag specification and can be defined as:

$$pub\ exp = c + \rho(Wpub\ exp) + \beta X + \varepsilon$$

The identification of the reason underlying a statistical significant ro-coefficient, the spatial autoregressive coefficient, implies the configuration of three hypotheses to be tested related to each one of the possible explanation for strategic interaction among local governments typified above.

##### **H1: Strategic interaction is a spillover effect overcome**

If the hypothesis is correct when central government grants as well as ideology alignment with neighbouring local governments are considered, the statistical significance of ro-coefficient should decrease.

The basic model is extended to check this hypothesis including two more independent variables: grants from central government (*transfac*) and ideology alignment with neighbouring jurisdictions (*ideolalig*).

$$pub\ exp = c + \rho_1(Wpub\ exp) + \beta X + \delta Z + \varepsilon$$

**H2: Strategic interaction is a result of Tiebout competition**

Under this hypothesis the relevant variable that explains why local governments are tempted to get into strategic interaction is the number of residences available in each jurisdiction, being the goal of each local government to increase houses, thus attracting tax contributors to own jurisdiction. The inclusion of a variable that captures this effect should produce a decrease on the statistical significance of the ro-coefficient.

In this case the basic model is changed to accomplish one more independent variable – number of houses for residence (*house*) and becomes as:

$$pub\ exp = c + \rho_2(Wpub\ exp) + \beta X + \phi Y + \varepsilon$$

**H3: Mimicking behaviour is the reasoning for strategic competition**

Political circumstances play a crucial role when this hypothesis is tested. In fact copycat behaviour is more heavily expected by local governments facing reappointment problems. As such, an electoral year is determinant for this behaviour because comparisons between local incumbents can become with a cost: electoral defeat. Moreover, making public expenditure choices under majority or minority political frameworks determine the temptation for mimicking. If local governments have majorities are less constrained by neighbours' public expenditures choices.

In order to accommodate this explanation the basic model is extended with three dummy variables: Chamber Majority (*chambmaj*), Municipal Assembly Majority (*assebmaj*) and election year (*electiony*), which occurred in 2001 and 2005. The resulting estimated model is defined as:

$$pub\ exp = c + \rho_3(Wpub\ exp) + \beta X + \psi Q + \varepsilon$$

Table 2 summarises the main statistics for the independent variable, the lagged independent variable, the dependent variables and the lagged dependent variables used as instruments.

**5. EMPIRICAL RESULTS**

I started with a non-spatial linear regression model and then tested whether or not the model needs to be extended with spatial interaction effects, as suggested by Elhorst (2010b). The POLS estimates accuracy improves significantly with the inclusion of the spatially lagged variable. Since under the presence of spatially lagged dependent variable, the pool OLS (POLS) estimated parameters lose its property of unbiasedness and consistency, I consider the estimation of 2SLS models using as instruments the lagged dependent variables common to all estimates. I also confirmed that the covariances between lagged dependent variables considered as instruments and the errors of the estimations are approximately equal to zero.

**Table 2 – Descriptive statistics of the dependent variable, independent variables and instruments**

	Mean	Standard deviation	Maximum	Minimum
pubexp	650	359	2668	70
Wpubexp	543	265	1630	105
valueres	36.961	27.109	218.776	3.876
proptax	11,34	9,21	51,04	0,00
transfac	48,79	16,49	86,94	3,69
ideolalig	0,44	0,28	1,00	0,00
house	346	604	5903	3
chambmaj	0,95	0,22	1,00	0,00
assebmaj	0,70	0,46	1,00	0,00
electy	0,18	0,39	1,00	0,00

wproptax	13,20	8,93	79,85	1,19
wvalueres	35.945	23.127	149.500	4.213

Source: Portuguese National Statistics (I.N.E.) and own calculus

Table 3 shows the main empirical results. The basic model identifies the presence of strategic interaction among neighbouring municipalities, since  $\rho$ -coefficient is statistical significant. When the model is extended to accommodate the three hypotheses tested, only the hypothesis 1 is relevant.

For the Northern region of Portugal, spatial strategic interaction among neighbouring municipalities emerges as a result of spillover effects. For this effect the relevant variable is the alignment of ideology among neighbouring municipalities. In fact, neighbouring municipalities that share the same ideology tend to spend more, meaning that bordering municipalities with incumbency of the same party are more prone to engage into cooperation that leads to an increase on public expenditures. The example of a street that crosses more than one municipality can be seen as a good example. In this case, a rehabilitation intervention by one municipality of inter-jurisdictional street forces to a rehabilitation of the part located in the neighbouring municipalities and this effect is improved when incumbencies share the same ideology.

The existence of central government grants to local governments, although forcing an increase on public expenditures, has a smaller relevance than the ideology alignment among neighbouring municipalities. This result is somehow unexpected since the former study for the southern part of Portugal identified as the major reason for spillover effects the existence of such transfers.

The second hypothesis does not find support. Although the variable number of new houses is statistically relevant has a negative sign, contrarily to the initial expectation. This could be explained by the fact that in the Northern region there is 24 very small municipalities with less than 10 000 inhabitants. Moreover, 42 municipalities (almost fifty percent of the considered municipalities) are facing shrinking phenomena during the last decade, thus do not being economically attractive municipalities. As consequence, the number of new houses built has been decreasing when public expenditure per capita increases due the reduction of inhabitants.



Table 3: Estimation 2SLS of public expenditures with intercept and common lagged dependent variables as instruments

	Basic Model		Model testing H1		Model testing H2		Model testing H3		Extended Model	
		t-stat	Model testing H1	t-stat	Model testing H2	t-stat	Model testing H3	t-stat	Extended Model	t-stat
wpubexp	0.509958	13,871230	0.479971	12,651230	0.464798	12,695850	0.511668	13,637170	0.432379	11,165980
valueres	0.223745	5,939986	0.248952	6,549076	0.237017	6,457521	0.216729	5,621920	0.248220	6,521214
proptax	-0.475474	-13,293600	-0.468731	-12,211350	-0.369991	-9,401485	-0.460944	-12,638730	-0.346168	-8,126450
transfac			0.074428	1,500497					0.063970	1,317392
ideolalig			0.184747	3,345563					0.166179	3,031219
house					-0.095997	-5,729445			-0.098597	-5,850474
chambmaj							0.079310	1,001022	0.088255	1,141604
assembmaj							0.057699	1,517742	0.046941	1,259011
electy							-0.021657	-0,21807	0.058286	0,600609
Robustness Tests		p-value		p-value		p-value		p-value		p-value
Wald test (p=0)	192,411	0.0000	160,054	0.0000	161,185	0.0000	185,973	0.0000	124,679	0.0000

T-values: \* 1% statistical significant; \*\*5% statistical significant; \*\*\* 10% statistical significant. Intercept value is not reported.

Moreover, it seems that local governments increase per capita public expenditures in an attempt to refrain the abandon of the municipalities. In these circumstances, spatial strategic interaction is not an outcome of a Tiebout competition phenomenon.

Municipalities also can spatially interact as a Tiebout competition mechanism not for inhabitants directly but for economic activity – enterprises. However, when the number of enterprises is considered instead of number of new houses, the effect is reinforced.<sup>7</sup> In fact, the decreasing number of enterprises in a municipality forces local government to engage into more spending, trying probably to avoid the abandon of inhabitants. Consequently, local governments act replacing the place taken by enterprises, namely substituting them as a major employer. In this framework, it seems that equity concerns overcome the efficiency questions.

The third hypothesis tested of a mimicking behaviour underlying strategic interaction among municipalities did not also find support. The fair of being compared with neighbouring municipalities performance prior elections seems not explain incumbents engaging in spatially strategic interaction. This result is confirmed when specific public expenditure categories are considered, namely environmental management and protection or cultural and sportive expenditures.<sup>8</sup> Although mimicking behaviour would be more easily observed, according to the literature, when particular public expenditures are considered, the estimates do not sustain this prior expected result.

When spending on environmental management and protection is considered as independent variable the spatially strategic interaction becomes less intense. Spatially strategic interaction in this kind of public expenditure result also from a spillover effect which emerges by neighbouring local governments engage into a cooperative behaviour when incumbency have the same ideology orientation. The increasing dependency from central government grants reveals influence negatively public expenditures on environmental management and protection, which is in contrast with the expectations. Tiebout competition also does not find support when this category of public expenditure is taken as independent variable. Although not shown, municipalities with few enterprises tend to spend more on environment.

Similar results are found when the analysis considers cultural and sportive expenditures. The major difference relies on Tiebout competition which sums to the spillover effect. In this case, the increasing of new residences influences positively this kind of public expenditures, reinforcing the spatially strategic interaction. This result means that local governments use this category of public expenditures to attract new residents to their municipalities. The economic activity seems do not play a relevant role for the decision of this type of expenditures.

The estimates indicate that per capita public expenditure increases with the value of houses, meaning that differences in fiscal attractiveness tend to be capitalised into house prices, and decrease with the proportion of property taxes on public budget, as theory predicts since the higher the voters contributions the more accountable the incumbents become. These results are irrespective of being considered as independent variable particular categories or overall public expenditures.

## **6. CONCLUSIONS AND POLICY IMPLICATIONS**

Using differentiated model configurations and the local government expenditures of the municipalities composing the Northern region of Portugal, between 1998 and 2008, the paper

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<sup>7</sup> The estimative considering the number of enterprises are not shown here but are available upon request.

<sup>8</sup> The Appendix presents the descriptive statistics relative to these variables as well as the estimations outputs when they are considered as dependent variables.

identifies the structural model that generates the observed spatial auto-correlation in local public expenditures. Strategic interaction among municipalities is an outcome of spillover effects stimulated by neighbouring local governments with similar political orientation. The confirmed spillover effect hypothesis reinforces the idea that public expenditure in a municipality induces more expenditure in neighbouring municipalities. For this part of the country is not reasonable to state that public expenditure increase by a copycat incentive or as a strategy to competitively attract more residents, increasing, as such, tax base.

In Portugal, municipalities have a large spectrum of competences irrespectively of their dimension. Given the delegation by central government of too many public functions to be fulfilled, municipalities tend to replicate the same local public goods in each municipality, thus do not exploiting scale economies and leading to a replication of public goods or an overwhelming provision. This public expenditure increase due spillover effects is not an outcome of a copycat behaviour but a result of the same range of competences delegation to all municipalities, irrespectively of their budgetary capacity. Good examples are roads intervention or education investment on better schools to improve educational quality.

These results deserve some reflexion. Being local governments influenced by central government, incumbents are pushed to offer to own population a wide set of public goods, covering a huge number of economic and social functions. Moreover, the reliance on intergovernmental grants for financing local governments' activity has a pervasive effect, since it destroys the right incentive for responsible local decisions and compromises autonomy, thereby allowing the intrusion, although indirectly, of the central government into local decisions.

Given the necessity of accomplishing the competences attached to municipalities, public provision tend to be homogenous making irrelevant the "vote with the feet" mechanism promoted by Tiebout. Similarly, if all municipalities offer the same public goods set the inter-jurisdictional comparison of the incumbency performance loses its reasoning. If we sum also the fact that local governments have a very slight margin to set taxes, constrained to a small gap for defining the tax rate of local taxes, no mechanism enhancing efficiency gains that would limit public expenditure can be found.

Since local governments are not free to chose what set of competences should be fulfilled, municipalities are not allowed to specialize on certain public functions or exploit scale agglomeration gains. As such, local governments are not compelled to give voice to their constituents, meaning that specific local preferences for public goods are not fully considered, leading, by one hand, to market imperfections and, by the other hand, to an inefficient public provision with implications on local and regional development.

Given the small dimension of too many municipalities in the Northern region of Portugal, the number of municipalities should be evaluated, as it was recently in other countries like Finland or Greece, leading to the possibility of merging municipalities, thus avoiding unnecessary public expenditures, exploiting the gains from agglomeration and reducing the cost of facilities replication.

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APPENDIX:

Table A1 – Descriptive statistics of environmental management and protection and cultural and sportive expenditures considered as alternative dependent variables

	Mean	Standard deviation	Maximum	Minimum
envprotxp	44	29	234	0
wenvprotxp	42	24	354	3
cultsprtxp	80	65	458	0
wcultsprtxp	75	39	315	14

Source: Portuguese National Statistics (I.N.E.) and own calculus

Table A2: Estimation 2SLS of environmental management and protection expenditures with intercept and common lagged dependent variables as instruments

	Basic Model	t-stat	Model testing H1	t-stat	Model testing H2	t-stat	Model testing H3	t-stat	Extended Model	t-stat
wenvprotxp	0.384498	5,405356	0.381554	5,361853	0.384349	5,400273	0.377009	5,196101	0.377896	5,199600
valores	0.398817	5,686558	0.416842	5,879677	0.398521	5,677498	0.407217	5,629655	0.424525	5,785613
proptax	-0.397895	-6,291818	-0.505363	-7,093799	-0.404009	-5,371437	-0.395813	-6,076586	-0.499131	-6,009486
transfac			-0.275714	-3,026095					-0.266505	-2,889354
ideolalig			0.250995	2,417360	0.004756	0,150321			0.240412	2,264848
house									-0.003069	-0,095840
chambmaj							-0.114399	-0,765507	-0.113093	-0,750625
assembmaj							0.118754	1,653584	0.081399	1,119173
electy							0.011075	0,059630	0.015678	0,084116
Robustness Tests										
Wald test (p=0)	29,2179	0.0000	28,7495	0.0000	29,1630	0.0000	26,9995	0.0000	27,0358	0.0000

T-values: \* 1% statistical significant; \*\* 5% statistical significant; \*\*\* 10% statistical significant. Intercept value is not reported.

Table A3: Estimation 2SLS of cultural and sportive expenditures with intercept and common lagged dependent variables as instruments

	Basic Model	t-stat	Model testing H1	t-stat	Model testing H2	t-stat	Model testing H3	t-stat	Extended Model	t-stat
wcultprtxp	0.441477	7,703455	0.434165	7,390549	0.469332	7,842567	0.435779	7,577527	0.455827	7,411477
valueres	0.385746	5,842513	0.410094	6,076384	0.372775	5,585274	0.373735	5,526261	0.387711	5,546003
proptax	-0.434687	-7,205798	-0.500405	-7,571460	-0.487781	-7,154993	-0.415488	-6,716710	-0.528313	-7,039850
transfac			-0.148591	-1,789811					-0.139340	-1,659328
ideolalig			0.256897	2,718254					0.233735	2,418696
house					0.050432	1,698048			0.043181	1,436908
chambmaj							0.129261	0,965551	0.105007	0,773543
assembmaj							0.061695	0,958728	0.030837	0,470336
electy							0.020483	0,123955	-0.001027	-0,006146
Robustness Tests										
Wald test (p=0)	59,3432	0.0000	54,6202	0.0000	61,5059	0.0000	57,4189	0.0000	54,9300	0.0000

T-values: \*1% statistical significant; \*\*5% statistical significant; \*\*\*10% statistical significant. Intercept value is not reported.

# THE IMPACTS OF PUBLIC POLICIES FOR REGIONAL DEVELOPMENT IN PORTUGAL

## OS EFEITOS DAS POLÍTICAS PÚBLICAS PARA O DESENVOLVIMENTO REGIONAL EM PORTUGAL

*Teresa de Noronha*

### ABSTRACT

The major goal of this work is to evaluate the level of effectiveness of those efforts made by the European Commission towards the socio-economic cohesion in Europe by using the single case-study of Portugal.

This paper presents the long lasting efforts for regional development in the country by using some data that reports the received aids and their use from 1990 up to 2006. The analysis focuses on the desegregation of such data to regional level.

At the same time it is emphasised that, at a time when cohesion is no more the sole goal of European policy, Portugal faces the paradox of trying to raise regional capacities for global competition (without having yet defined what regional strategies are) and, at the same time, wishing to increase its potential scientific and technological capacity, mainly located in the very circumscribed areas of Lisbon and Porto. In order to illustrate such a situation, the exemplar case of the Programme PRIME was presented.

This is one of the best examples of the recent support a system, indirectly financed by European funds; PRIME was fully structured as a Portuguese policy instrument to support the modernization of the entrepreneurial tissue at national level. The provided data demonstrates how discussable the level of success of such programme is.

Our general conclusions will drive to a dual discussion: the asymmetric use of the financing systems provided by the E.C. and the north/south endemic dichotomy existing in the country generates a path dependency that does not reduce and a trend that should concern Portuguese policy makers deeper then it does.

**Keywords:** public policy, regional development, regional asymmetries, Portugal

### RESUMO

O principal objectivo deste trabalho é avaliar o nível de eficácia dos esforços feitos pela União Europeia para a coesão socioeconómica da Europa, utilizando o caso de estudo de Portugal.

A investigação apresenta os esforços de longo prazo para o Desenvolvimento regional do país observando dados que reportam as ajudas recebidas pelo país entre 1990 e 2006. A análise enfatiza a desagregação desses dados a nível regional.

Simultaneamente, num momento em que a política de coesão já não é prioritária na política Europeia, Portugal enfrenta o paradoxo de ter de tentar aumentar a capacidade competitiva das suas regiões ao mesmo tempo que tem de ser capaz de melhorar o seu potencial científico e tecnológico (quase centrado nas regiões de Lisboa e Porto). O caso exemplar do programa PRIME é apresentado para ilustrar esta situação.

Este programa é um dos melhores exemplos do sistema de incentivos, indirectamente financiados pelos fundos Comunitários; o PRIME foi totalmente estruturado como um



instrumento de política de apoio à modernização do tecido empresarial a nível nacional. Os dados demonstram o quão discutível é o sucesso deste programa.

A nossa conclusão promove uma discussão dual: a utilização assimétrica dos sistemas de financiamento disponibilizados pela C. E., bem assim como a dicotomia endémica norte/sul existente no país, geradora de tendências de longo prazo que deveriam preocupar mais os políticos Portugueses do que preocupam.

Palavras-chave: política pública, desenvolvimento regional, assimetrias regionais, Portugal, financiamento Europeu.

JEL Classification: R12, R52, R58

## PREAMBLE

In 1988, soon after the first reform of the structural funds (ESF, ERDF), four major orientations draw the future actions for regional development across Europe:

- Concentration in specific regions and particular actions;
- Partnership at different governance levels (local, regional, national);
- Application on strategic planning basis;
- Possibility of additional financing at the different levels.

The application of these four major orientation principles advanced towards the flexibility of the European regional policy by type of regions and adequate instruments: Objective-regions and correspondent different proposals for regional strategic development have been identified - a first step of EC towards the implementation of a serious policy for regional development.

Over time, and in spite of significant efforts for growth and development, still certain peripheral regions keep gapping showing local inefficiencies in the use of the multiple European aid systems. General bottlenecks have been recognized: restricted entrepreneurial capacity, lack of agglomeration economies, weak accessibilities, and need for networking systems either to communicate or cooperate.

Most of such areas locate in the rural world where, besides the various regional policy measures, also the CAP might have had a fundamental impact on the use of agricultural prices to push further development roots. However, CAP protectionism did not serve this proposal exactly. In the context of the *Cork Declaration (1996)*, the *Agenda 2000* took years to integrated effectively regional and rural development policies. Indeed, only in 2003, with the new CAP reform, some fine-tuning was expected in order to take advantage of the specific regional attributes.

Finally, and in our view, inseparable from the goals for the development of European regions, the prospects on rural development have been traced (2006/144/EC) by the EC for the period 2007-2013 as following: "... *The strategic orientations must reflect the multifunctional role that agriculture accomplishes in the wealth and diversification of landscape, in the food production, in the cultural and natural heritage of the whole European Community*".

But cohesion has not been the sole goal of European policy and its decision makers: *Lisbon Agenda*, in March 2000, defined the goal of making EU the strongest and most competitive economy by 2010. Thus, it can be understood that the need to increase regional capacities for global competition has defined a clear European wish to increase its potential scientific and technological capacity. This overwhelming goal, challenging the recent European

development trends, may hide a major paradox between the scientific-technological push and the regional-social cohesion.

In fact, the application of the R & D policy brings to Europe the preference to those regions able to produce high-tech industries; Also, as the cohesion goals have led to a considerable aid to scientific research, the correlations between the resulting technological advances and the expected regional development for peripheries are still to be investigated. Frequently public policies for regional development, implemented to increase the competitiveness of regional skills, come across targets for technological modernization, at national level, that may strongly prejudice regional policy results at local level.

So that, one may ask:

How can public policy provide those factors necessary to speed development, particularly in European periphery? Hindrances such as locational disadvantages, lack of structural adjustments, need for political coherency at different governance levels should be clarified;

Or, how far are the real outcomes for locals and regions from the very initial European intentions? An analysis of the effective cooperation capacity within the governance system should be investigated;

Or, even, how effective is the European regional policy when crossed with other European policies (exp: European innovation policy) at both national and regional levels? A list of possible negative externalities resulting from the difficult cooperation among the different political goals;

## **1. PORTUGAL AS A CASE STUDY**

The previous discussion has deeply marked most of the effective regional development of many European regions, since the early nineties. In Portugal and after more than 20 years exercise in the application of a complete package-scheme of European supports, the country may well serve as an example to evaluate the level of success of the European funds to national and regional development proposes. In fact, most of the results are asymmetric by sector and region and some best practices are detected. But also, some bottlenecks and non-operational results were identified.

At present, Portugal – small yet a diverse country, with weak growth and limited public spending capacity – is marked by a long tradition of centralised governance and no elected regional level. Still, it may be considered a credible case study to illustrate the paradigm shift in regional policy:

- From subsidies targeting the reduction of regional disparities into investment supporting regional opportunities, in order to enhance territorial competitiveness;
- From different sectors approaches to multi-sector place-based approaches;
- From a dominant role of certain levels of government to multi-level governance involving co-ordination of national, regional and local with different stakeholders.

This paper provides an overview on the country's most recent efforts for regional development in comparison to its growth trends. Then, the discussion follows towards a microscopic view on the of the very specific aid programmes: PRIME – support to firm development, directly promoted by national entities using the structural and national funds.

## **2. THE TERRITORIAL AND INSTITUTIONAL FRAMEWORK OF PORTUGAL**

Historically born from the implementation of the EU Structural Funds, Portuguese regional policy is currently going through a complex transformation process. Based upon the EU's so-called renewed *Lisbon Agenda*, it faces new political challenges to achieve competitiveness

objectives such as understanding innovation in a broader sense than scientific and technological innovation: No doubt that there is an emerging need for place-based policies to ease the production and diffusion of knowledge in different specific regions.

The country population is of 10.6 million people (2006) from which 50% is living in PUR regions, 24% is living in IR and 26% is living in PRR.

There is a centralised government with no formal regional level of governance composed by a Ministry for Environment, Spatial Planning and Regional Development, in charge of regional policy. He has authority over the Financial Institute for Regional Development (IFDR), which was previously named the Directorate General for Regional Development (DGDR) and represented at regional level by Co-ordination and Development (CCDR). Notwithstanding, the country has no formal regional level, except for two autonomous regions in the islands of Azores and Madeira.

The territory is divided into:

- 5 mainland regions: Norte, Centro, Lisboa, Alentejo, Algarve;
- 2 autonomous regions;
- 18 mainland districts, endowed with operational competences in security and civil protection.

It should also be added that the local level in Portugal has little to do with the environment of regional policy: 308 municipalities, with a municipal assembly, a mayor and an executive council elected every four years. Their main responsibilities are related to the management of collective equipment and basic infrastructure.

### **3. WHERE DOES PORTUGAL STAND TODAY AND WHERE DID IT COME FROM?**

As shown below in Tables 1 and 2, between 1994 and 2006, Portugal has received a total of about 38 b € from the EU, twice phased: between 1994-1998, 16.3 € and between 2000-2006, 19.7 €. Lisbon and North, those regions where the two main Portuguese towns are located, received by far most of the European aids.

#### **The period 1989-1999 – a brief approach**

From 1988 to 1993, the level of convergence of GDP<sub>pc</sub> increased significantly from 53% to 73%. It is estimated that 40% of this increase was a result from the investments occurred from the structural European funds. In Table 3, macro-economic data is provided to show that significant increases in convergence may be detected for most of the significant variables. Still, public sector debts, trade balance, openness of the economy to the exterior kept almost unchanged or aggravated during the period.

In spite of being featured by a positive macroeconomic evolution the situation of the Portuguese economy during the period comprehended by the previous Community Support Framework (1988/1999) continued to suffer from an insufficient pace of productivity convergence, caused mainly by the persistence of a specialization pattern with a predominance of low technological intensity products and processes, defective organizational capacities and slightly high levels of human resources qualifications.

In a first period of observation, from 1988 to 1993, the analysis of the macroeconomic indicators disaggregated for the 5 Portuguese regions (Annexe A) indicates very slight alterations in the deviations of the regional GAVs and GDPs concerning the national average.

**Table 1**  
Executed Public Expenses by Fund (1994-1998)

Unit: 1000 PTE

≈ 10 <sup>9</sup> €	Norte	Centro	Lisboa e Vale do Tejo	Alentejo	Algarve
ERDF	504.943.005 (84%)	297.977.663 (82%)	748.513.280 (93%)	95.827.635 (65%)	57.254.995 (67%)
FEOGA	91.978.506 (15%)	56.956.948 (16%)	49.384.329 (6%)	51.576.797 (35%)	22.203.404 (26%)
IFOP	5.527.275 (1%)	5.954.396 (2%)	6.365.714 (1%)	625.411 (0%)	6.014.943 (7%)
<b>Total</b>	<b>602.448.786</b> <b>(100%)</b>	<b>360.889.007</b> <b>(100%)</b>	<b>804.263.323</b> <b>(100%)</b>	<b>148.029.843</b> <b>(100%)</b>	<b>85.473.342</b> <b>(100%)</b>
Reg.dist.	30%	18%	40%	7%	4%

Source: European Framework Program 2000/06

**Table 2**  
Executed Public Expenses by Fund, 2000-2006

Unit: €

≈ 12 <sup>9</sup> €	Norte	Centro	Lisboa e Vale do Tejo	Alentejo	Algarve
ERDF	3.300.220.973 (76%)	2.060.754.277 (77%)	1.641.505.884 (65%)	1.199.854.441 (69%)	571.720.000 (81%)
ESF	721.228.294 (17%)	335.567.277 (13%)	694.689.008 (28%)	183.221.184 (10%)	76.469.000 (11%)
FEOGA	303.604.383 (7%)	294.893.956 (10%)	173.786.859 (7%)	367.545.485 (21%)	56.532.000 (8%)
IFOP	2.242.350 (0%)	2.096.490 (0%)	0 (0%)	750.890 (0%)	2.394.000 (0%)
<b>Total</b>	<b>4.327.296.000</b> <b>(100%)</b>	<b>2.693.312.000</b> <b>(100%)</b>	<b>2.509.981.751</b> <b>(100%)</b>	<b>1.751.372.000</b> <b>(100%)</b>	<b>707.115.000</b> <b>(100%)</b>
Reg.dist.	36%	22%	21%	15%	6%

Source: European Framework Program 2000/06

**Table 3**  
Economic Development in Portugal (1994-1999)

Annual average rate (%)	EUR 15	Portugal
GDP pm (ii)	2.3	3.1
Private Consumption	2.1	3.1
Productivity (i)	1.5	2.1
Employment	0.7	0.8
Salaries after deflection	0.6	1.3

(i) per employed person; (ii) Deflection with the implicit GDP

Source: European Framework Program 1994/98

We can start by observing that the Alentejo region decreased sharply its relative participation in the national GAV and this contribute increase in the Algarve was minimum. The North presents a reinforcement of its situation of growth, the Centre being a region that shows the most important nearing. As to the GDP, the situation is next to the previous one. This indicator reflects still more clearly than the previous one the deviations of Alentejo from development objectives, during the analysed period. The Algarve goes on presenting an out of common situation resulting from a regional GDP higher than the national average, accompanied by a GAV much lower than the same. The situation clearly results from the existence of a tourism sector, the only support of the region's economy.

Another important analysis indicator is the population density that during this observed period drops in the Centre and in Alentejo, this one having a growing unemployment rate. This situation makes the meaning of that value become worse, once it leads the region to a clear tendency to a regional exodus.

In the second observed period (from 1993 to 1998), a rally of the Centre as well as a larger nearing (represented by a decline in the previous values) on the average of Lisboa e Vale do Tejo. As can be seem, Alentejo approaches and Algarve deviates still more from the national average values for the GAV. The contrasting values in the relation GDP and GAV in the North and Algarve have to be highlighted; these regions show two completely different options for the growth. In this period the population indexes show a level-off and also here the situation concerning the Central region appears to be positive.

The spatial distribution of investments concentrated in the country's North Centre and littoral and in terms of scientific and technological infrastructures the region of Lisbon concentrated around 60% of the expenditures in R&D; Also the industrialization pattern, especially out of Lisbon's region is still based on work – intensive, full of non-skilled workmanship, with a focus on the textile, shoe and furniture areas; In general, the investments have shown a high percentage of innovation material factors, focused as they were on the organizational behaviour in a quick profitability of the investments.

### **The period 2000-06 – major impacts**

Portugal received a total of 19.7 b Euros from the Structural Funds for the period, against a total of 16.3 b Euros received in the previous period (1994-99), which represents an increase of about 20.6%. This total budget was spread by the 4 existing funds: FEDER, FSE, FEOGA(Guarantee section) and IFOP. The six Portuguese regions North, Centre, Alentejo, Algarve, Madeira and Azores remained eligible in the Objective 1 statute, for the period 2000-06. The region of Lisbon and Vale do Tejo, which had been eligible in this statute during the previous period, lost this eligibility on 1st January 2000, because it reached a value of GDP pc higher than 75% of the Community's average. However, this region was qualified for a transitory assistance until 2005 and part of it went on being aided until 2006.

The results presented by Beutel (2002) indicate clearly the dependence of the Portuguese economy on the Community's funds. In a situation of a lack of these aids the growth of the Portuguese economy would fall from 3.4% to 1.1% in the year 2000 and from the forecast 3% to just 0.2% in 2006. The following table illustrates that dependence:

**Table 4**  
**Impact of the Objective 1 interventions in Portugal**

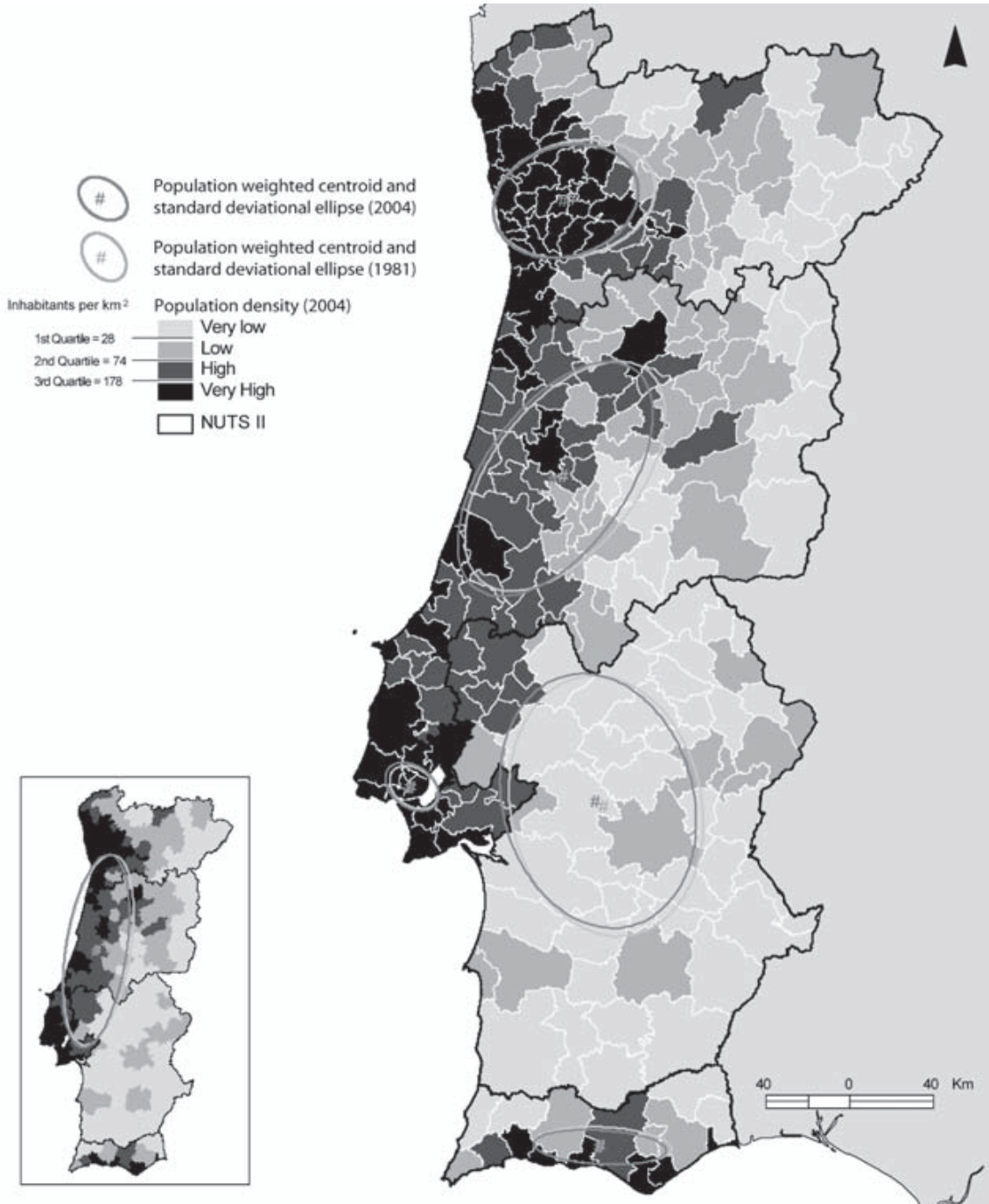
	<b>GDP</b>	<b>GDP without the total of interventions</b>	<b>GDP without the public interventions</b>	<b>GDP without the Community's interventions</b>
	<b>Growth rate in %</b>			
2000	3.4	-6.2	-3.4	-1.1
2001	1.7	-7.3	-4.8	-2.5
2002	1.5	-7.2	-4.8	-2.5
2003	2.3	-6.0	-3.7	-1.5
2004	2.8	-3.6	-1.7	0.0
2005	3.0	-3.4	-1.5	0.1
2006	3.0	-3.1	-1.2	0.2
	<b>Average growth rate in %</b>			
2000-2006	2.5	1.6	1.9	2.1

Source: adapted from Beutel (2002)

### **Regional disparities**

Regional disparities in Portugal have long been perceived as a vertical dichotomy between a dense and dynamic urban coast, and a desert and declining rural interior. Between 1995 and 2006, population density increased markedly in urban regions and in the intermediate regions located next to the urban regions. The Portuguese population share living in predominantly urban regions increased by 2 percentage points between 1991 and 2004. In contrast, the Portuguese population share living in predominantly rural regions decreased by 2 percentage points during the same period.

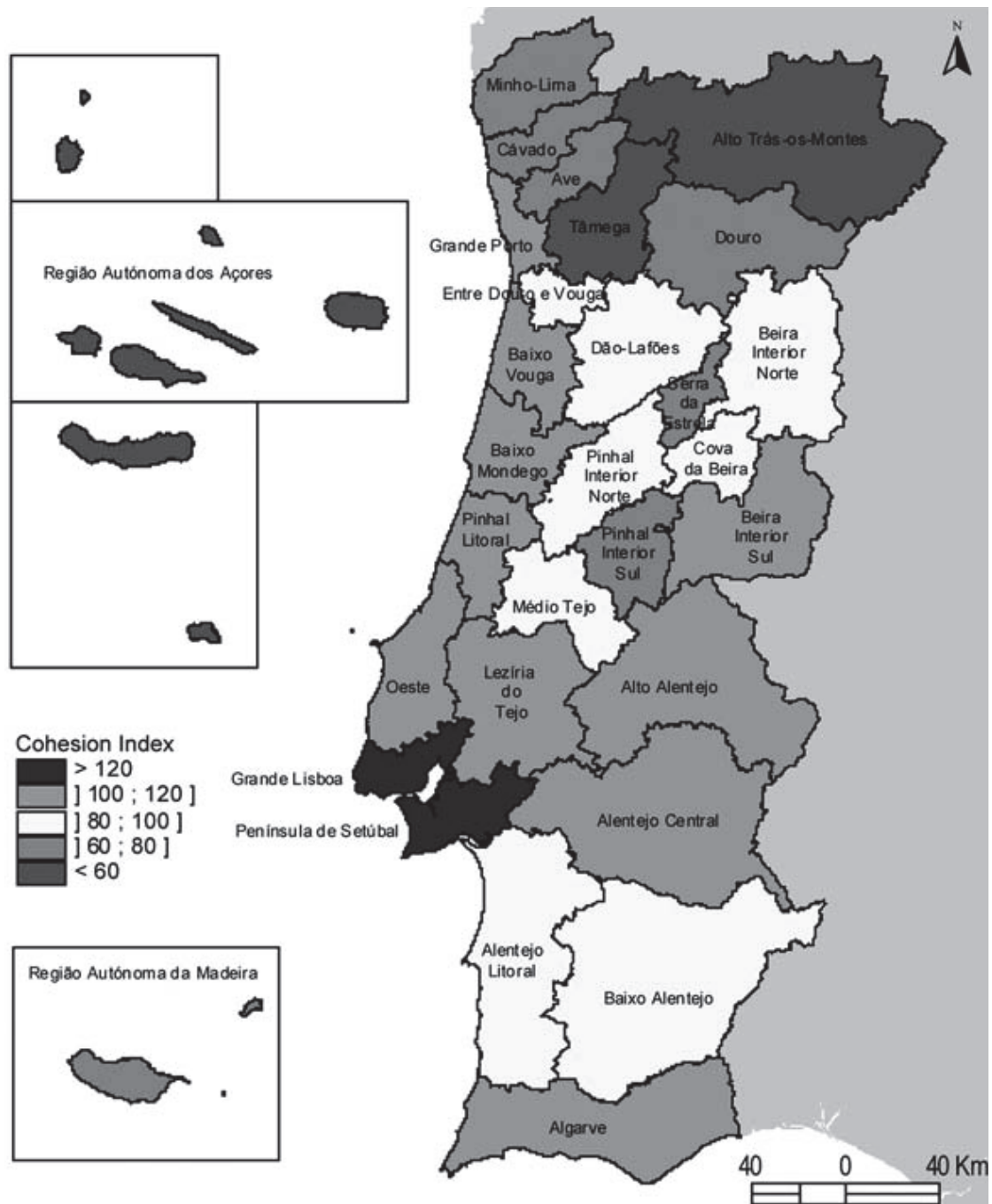
Figure 1  
Population density in Portugal, 2004



Source: OECD Territorial Reviews, 2008

Regional disparities in GDP per capita in Portugal seem linked to the economic cycle. During years of robust economic growth (1995-2000), the regional dispersion increased, when the economy slowed down, regional disparities also decreased. Due to the large contribution of Lisbon to national output, regional disparities and national growth rates are both highly sensitive to Lisbon's economic performance.

Figure 2  
Map of Portuguese regions classified according to the “Cohesion” index



Source: OECD Territorial Reviews, 2008

Portugal displays the fourth highest level of regional disparities in terms of GDP in the OECD (Gini index indicating disparities in GDP between all Portuguese regions is significantly higher (0.57) than the OECD average (0.48)). The two largest urban areas in Portugal, Grande Lisboa and Grande Porto, generate alone slightly less than half (43%) of national GDP. Regional disparities in GDP are in turn closely linked with the pattern of regional specialisation. Not surprisingly, Portuguese urban regions devote a higher share of their total employment to service activities than rural and intermediate regions.



### Portugal's National Strategic Reference Framework (NSRF 2007-2013)

After the European Council decided in spring 2005 to focus on re-launching the Lisbon Strategy, Community Strategic Guidelines for Cohesion (CSG) were adopted in 2006 and require future cohesion policy to target resources on three priorities: improving the attractiveness of member states, regions and cities; encouraging innovation, entrepreneurship, and the growth of the knowledge economy; and creating more and better jobs.

Table 5  
Examples of sector policies related with regional development in Portugal

		EU funds	National public funds	TOTAL public funds (EU + national)	TOTAL including private funds
<b>Mainland</b>	<b>Human Potential</b>	<b>6147 (69.3%)</b>	<b>2636 (29.7%)</b>	<b>8783 (99.0%)</b>	<b>8868 (100%)</b>
	Thematic OP for Human Potential	6147 (69.3%)	2636 (29.7%)	8783 (99.0%)	8868 (100%)
	<b>Factors of Competitiveness</b>	<b>6008 (55.7%)</b>	<b>1437 (13.3%)</b>	<b>7445 (69.1%)</b>	<b>10780 (100%)</b>
	Thematic OP for Factors of Competitiveness	3104 (54.8%)	686 (12.1%)	3789 (66.9%)	5661 (100%)
	Regional OP (mainland)	2905 (56.7%)	751 (14.7%)	3656 (71.4%)	5120 (100%)
	<b>Territorial Enhancement</b>	<b>7518 (34.0%)</b>	<b>3163 (14.3%)</b>	<b>10681 (48.2%)</b>	<b>22144 (100%)</b>
	ERDF	4458 (64.0%)	1852 (26.6%)	6310 (90.5%)	6969 (100%)
	Thematic OP for Territorial Enhancement	1599 (65.0%)	660 (26.8%)	2259 (91.9%)	2459 (100%)
	Regional OP (mainland)	2859 (63.4%)	1192 (26.4%)	4051 (89.8%)	4510 (100%)
	Cohesion Fund <sup>1</sup>	3060 (20.2%)	1311 (8.6%)	4371 (28.8%)	15176 (100%)
<b>Autonomous Regions</b>	<b>Regional OP (autonomous regions)</b>	<b>1602 (70.1%)</b>	<b>444 (19.4%)</b>	<b>2046 (89.5%)</b>	<b>2285 (100%)</b>
<b>National</b>	<b>Technical Assistance</b>	<b>137 (85.1%)</b>	<b>24 (14.9%)</b>	<b>161 (100.0%)</b>	<b>161 (100%)</b>
	<b>Territorial Cooperation</b>	<b>99 (72.8%)</b>	<b>37 (27.2%)</b>	<b>136 (100.0%)</b>	<b>136 (100%)</b>
	<b>TOTAL</b>	<b>21511 (48.5%)</b>	<b>7741 (17.4%)</b>	<b>29253 (65.9%)</b>	<b>44374 (100%)</b>

1. Including 170 million EUR of Cohesion Fund for the two autonomous regions

Source: NSRF 2007-2013

In response, all member states have been preparing a National Strategic Reference Framework (NSRF), which describes how each country proposes to implement these priorities on its own territory. The European Commission approved Portugal's NSRF on 2 July 2007. Portugal will receive 21.5 billion EUR of EU cohesion funding over the 2007- 2013 programming period. In accordance with EU rules, at least 60% of the funding available for the "Convergence" objective and 75% of the "Regional Competitiveness and Employment" objective were earmarked for Lisbon related investments (even going beyond the minimum threshold, since effective earmarked expenditures amount to 83% and 78% respectively). The Portuguese NSRF proposes five national strategic priorities: to improve the population's skills; to promote sustainable growth; to guarantee social cohesion; to ensure the development of the territory and the cities; and to improve governance efficiency. Five structural principles of investment will apply: concentration; selectiveness; economic viability and financial sustainability; territorial cohesion; and strategic monitoring. The five national strategic priorities will be implemented through a set of Operational Programmes, as presented in Table 5.

#### 4. THE MICROSCOPIC VIEW: PRIME

PRIME - Incentives Programme for the Modernisation of Economic Activities was instituted by the Resolution of the Portuguese Council of Ministers no. 101/2003, after its formal approval by the EC, in 2003. The program integrated a set of medium term economic policy instruments for the period 2000-2006 which have been applied to different economic activity sectors in Portugal.

The instrument was developed exclusively for the Industry, Energy, Building Industry, Transport, Tourism, and Trade and Services sectors. The Programme integrated in Area 2 of the Regional Development Plan – *Adjusting the Production Profile towards the Activities of the Future*, and was designed to foster productivity and competitiveness of Portuguese firms, thereby promoting new development capabilities under the following goals: to ensure a generally sound competition environment, which may contribute to revitalise business structure, and to steam in firms research and development on new products and processes; to simplify procedures and stimulate de-regulation; to encourage the qualification of human resources by enhancing technical and scientific training thereby fostering productivity growth, through more motivating and rewarding tasks.

As such, PRIME was promoted along the following priority areas of strategic actions: Area 1 – Enterprise Stimulation; Area 2 – Qualification of Human Resources; Area 3 – Stimulation of the Business Environment. The two first Areas are dedicated to a direct intervention at firm level, and the third, of a more crosscutting nature, aims at stimulating business environment. The 29 support measures and incentives schemes at which the programme is structured are presented in the Annex I.

The financial supports corresponding to PRIME Programme were non refundable incentive types and each support measure or incentive scheme aimed to generate new economic activities and to introduce a new competitive and innovative context to the Portuguese economy. The financial support approach of this Programme also included a risk capital fund and achievement bonus incentives.

PRIME was a public policy instrument driven to the promotion of economic activity in the Portuguese territory specially focused, but not exclusively, on small and medium size enterprises. Some of Programme support measures and incentives included as beneficiaries non profit organisations, municipalities, technological schools, business associative structures and technology-based incubator centres and parks. As it was supporting a wide range of economic activity sectors the instrument was neither sector nor regional focused.

In order to evaluate the immediate results from the use of such type of supports, mainly oriented by national policy goals, we have created a database contained 15307 records reported to 2007. After a filter application based on NUTII clear identification, 14910 enterprises receiving PRIME incentives, during the period 2000-2006, were investigated by using a K-means cluster analysis combined a correspondence analysis to describe the relationships between the three identified clusters and each nominal variable (Galindo and Vaz, 2009).

The results of this study supplied several conclusions that are important to emphasize in this article. The first one is related to the asymmetric use of the incentives: The use of PRIME (as a public policy instrument for indirect distribution of European funds upon the entrepreneurial tissue), generated a clear geographic concentration of financial help in the northern part of the country. This region accumulated 41.4 per cent of the supports for firm stimulation, 39.0 per cent for stimulation of business environment and 49.4 per cent for human resources qualification. Certainly, the fact that other regions like Algarve, Azores and Madeira could only profit from this program in insignificant amounts (respectively 3.4, 1.9 and 1.5 per cent from the total available funds) is of great concern, suggesting the

following question: Is there no entrepreneurial activity in such regions? Or, rather, location determined less use of supports by the existing companies? Is it possible that they could have been unable to follow the requirements for PRIME program calls?

A further observation of results shows that, by district, the concentration of PRIME supports goes clearly to Porto, a metropolitan area that absorbed respectively 12.8, 21.3 and 21.3 per cent of total available amounts. More surprising is the fact that Lisbon, the Portuguese capital, received 26.3 per cent help for stimulation of business environment, mainly driven for associative initiatives and other, not classified categories in the CAE (Classification of Economic Activities). If Lisbon, as cosmopolitan area, needs such a huge support how to classify than those conditions of less favoured Portuguese regions?

From the perspective of the sectors, there are difficulties to analyse a significant part of supports' destiny. Indeed, 48.1 per cent of the financed amounts were canalized to sectors, not specified by the CEA. As far as the remaining is concerned, the associative sector as well as commercial and trade activities had also good shares in the use of PRIME. The activities for which funds have been mostly used are related to: infrastructure building (for associations) and commercial urbanism, and small business initiatives – not specified, but for improvement of business environment in general. A main question to this issue is: how did PRIME support the industrial and agricultural activities, and by means of which effects for the local, regional or national consumption trends?

A time-series observation can also be quite helpful for a better perception on how PRIME acted to promote activities in general. Rather than starting by shaping human resources and strengthening firm environment followed by firm financing activities, as suggested by the theory of endogenous growth, PRIME used the support system exactly on the inverse order. Our analyses points out the following: Those supports for Area 1, centred in firm stimulation, were attributed at the very start of the program - year 2000 and for a two years period. From 2002 to 2004, the stimulation of business environment was promoted, without integrated re-qualification of human resources; indeed, help for such projects arrived much later as it was the last PRIME target, due in 2005 and 2006. How is it possible to expect that companies can be duly stimulated by a support system without the convenient adequacy of their human resources at the very beginning?

In fact, PRIME system started up with a restricted investment in the area of enterprise stimulation (8539 projects with an average investment of 130279.7€). It was followed by few, but expensive, business environment actions mainly related to building of commercial infrastructures - about 900 projects were associated, now with a much higher average investment, 771208.3€. Finally, in the last execution period, a great amount was allocated to human resources qualification. In this case, 5645 projects have received an average investment of 2602544.23€; and despite these large amounts, the southern part of the country stayed almost away from any action. As proved in this paper, the total amount of the analysed investments was primarily absorbed to speed the growth process of companies located in the northern and central regions of the country. In such regions, and because investments were concentrating mainly in few commercial activities, the system probably served also to aggravate the Portuguese trade balance. Still, some few indirect positive effects for the primary and secondary sectors should be expected – such results are now very difficult to evaluate in a struggle against the strong international financial crises.

## 5. CONCLUSIONS

There is much to approve in the way how Portugal has used the European Funds developing from a very narrow bases. Most of all, policy makers should provide a more accurate capacity to integrate the different funds for the crossed goals of sustainable development.

Doubtless, PRIME served to accentuated asymmetries in Portugal while a huge effort to regional cohesion had been prepared much ahead. Is the PRIME programme a unique case? Doubtless, it is not.

By anticipating scenarios policy makers could avoid reducing the ineffectiveness of large European investments.

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# THE CONTRIBUTION OF “EMPREENDER PROJECT” TO THE DEVELOPMENT OF MICRO AND SMALL ENTERPRISES’ NETWORKS AT SANTA CATARINA STATE (BRAZIL)

## A CONTRIBUIÇÃO DO PROJETO EMPREENDER PARA FORMAÇÃO DE REDES DE MICRO E PEQUENAS EMPRESAS NO ESTADO DE SANTA CATARINA (BRASIL): ESTUDO DO CASO AETUR

*Cristiane Scholz Faísca Cardoso*

### ABSTRACT

In a globalized and increasingly competitive market, the organization of micro and small enterprises in network structures warrants the survival and competitiveness of companies and consequent development of the regions where they act. The “Empreender Project” has been a key factor for the recent development of the entrepreneurial network in Santa Catarina State, Brazil. This article searches for the followed mechanisms and instruments for cooperation in the particular case study of AETUR.

Keyword: “networks”, “enterprises”, “SME”, “entrepreneurship”.

### RESUMO

Em um mercado globalizado e cada vez mais competitivo, a organização de micro e pequenas empresas em uma estrutura de rede garante a sobrevivência e competitividade dessas empresas e o desenvolvimento da região em que atuam. O Projeto Empreender tem sido um fator-chave para o desenvolvimento das redes de empresas no Estado de Santa Catarina. Este artigo analisa os mecanismos e instrumentos para cooperação no estudo do caso AETUR.

Palavras-chave: “redes”, “empresas”, “PME”, “empreendedorismo”.

JEL Classification: L26.

## 1. ENTERPRISES NETWORK

Along with the development of a globalized and more competitive market appears the image of the new consumer and, thereby, of the new enterprise.

Mainly the micro and small enterprises<sup>1</sup> (MSE) have been facing new challenges by being forced to compete in their own regions with products/companies across the world at both, quality and price levels.

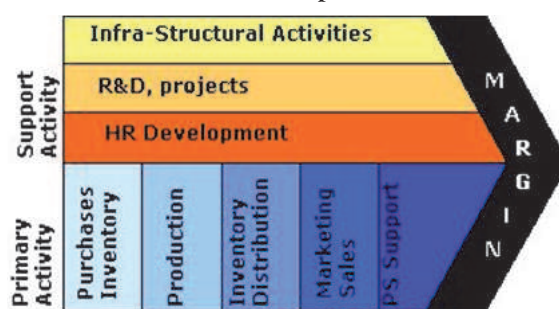
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<sup>1</sup> In Brazil, micro and small enterprises are classified accordingly to their yearly revenues, as established by the Decree 5,028/2004 (micro = up to € 162 thousand; small = from € 162 thousand to € 799 thousand, considering the exchange rate of BRL 2.6715/€). In Portugal, the enterprises size classification is defined at Recommendation 2003/361/CE of European Commission, in force from January 1st, 2005 on (micro ≤ € 2 million and small ≤ € 10 million).

Comparative data shows the relevance of such an entrepreneurial tissue: In Brazil, micro and small enterprises represent a total of 97% of the companies while in Portugal, the number of small and medium enterprises (SME) revolves around 99.6% of the companies in the country. Although this similar rates, their contribution for employment is very different: In Brazil they are responsible for 48%<sup>2</sup> of the employed personnel, and in Portugal for 75%. In spite of that fact, the Brazilian MSE mortality rate in their first year of life is close to 50%.

With a great need for survival in the permanently changing market, micro and small companies have been working in cooperative way supported by the concept of “flexible networks”, aiming to find out competitive advantages in combined performance and other functions able to add value to their products (Porter, 1986). Activities that include such possibilities are: R&D; acquisition logistics; production; technology management; distribution logistics; and marketing, as illustrated in the following Picture 1.

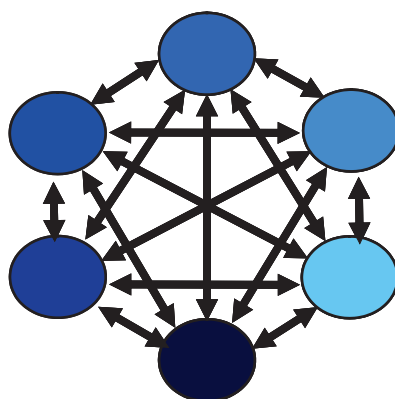
Picture 1 – Porter’s Simplified Value Chain



Source – Casarotto and Pires, 1999

Both Casarotto and Pires (1999) define “flexible network” as “the one formed by small and medium enterprises that act symmetrically, combining the performance of big enterprises with the flexibility and agility in taking decisions of small and medium enterprises”.

Picture 2 – Flexible Network



Source – Casarotto and Pires, 1999

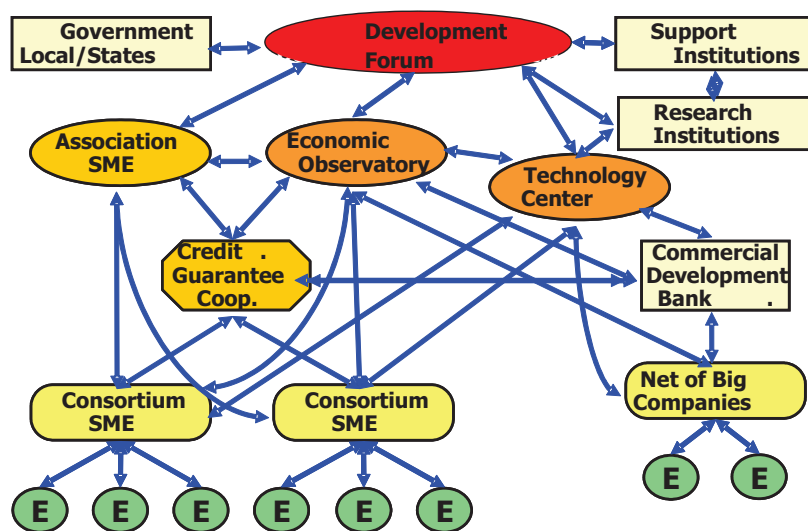
The concept of Flexible Networks is possible due to the flexible specialization, an attribute that according to Melo and Casarotto (2000), is able “to satisfy demand variations and also quality variations quickly”, obtained in small enterprises, “through the agglomeration and reinforced labour division that firms can accomplish among themselves when in presence

<sup>2</sup> In Brazil it shall be considered the informal economy, which was not considered in this paper, representing 50% or more than the formal economy.

of common interests”. **Export consortia**, **sector clusters**, horizontal or vertical networks, cooperatives, associations, among others, are examples of companies which act in network.

In this context, the improvement of companies competitiveness calls for the existence of integrated actions in institutions such as: commercial and industrial associations, cooperatives of credit guarantee, technology catalyzing centers (universities, research centers, etc) and economic observatories. Only the cooperative work between such agents seems to allow sustained local development. Next Picture 3 illustrates an example on such a cooperation.

Picture 3 – Network General Model for Development of a Local Economic System



Source – Casarotto and Pires, 1999

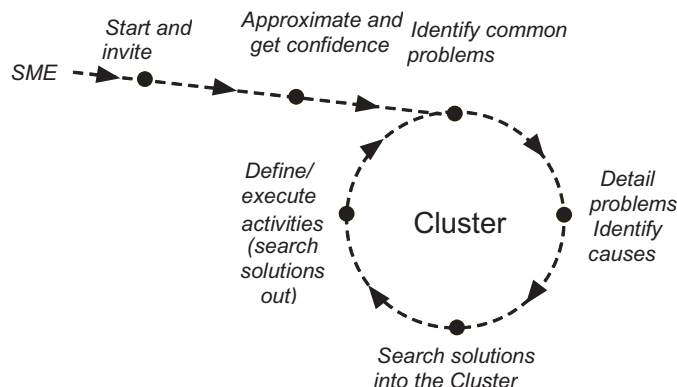
There are several well succeed experiences of company networks in countries such as Italy, Germany, the United States and Spain. In Brazil, particularly in Santa Catarina State, there are several cases of company networks derived from the “Empreender Project” methodology application, which is presented in this case study.

## 2. THE “EMPREENDER PROJECT”

The “Empreender Project” arose from a partnership between Brazilian Service of Micro and Small Enterprises Support (SEBRAE) and Federation of Commercial and Industrial Associations of Santa Catarina State (FACISC) and receives support from the Empreender Foundation, from the Chamber of Arts and Services of Munich and High Baviera HWK (Germany), being implemented through a large platform of commercial and industrial associations.

The program was created in order to facilitate the strengthening of micro and small enterprises, which, united in Sector Clusters, contribute to the social-economic development of the region where they act, mainly through jobs and income generation. Sector Clusters are workgroups belonging to the several commercial and industrial associations, formed by entrepreneurs that act in the same activity branch, with similar problems, also searching for similar solutions, advised by a consultant-facilitator of “Empreender Project”. Thus, the isolation of both the micro and small enterprises are reduced, promoting not only the associations and development of the member companies, but also of the sector and the economy as a whole.

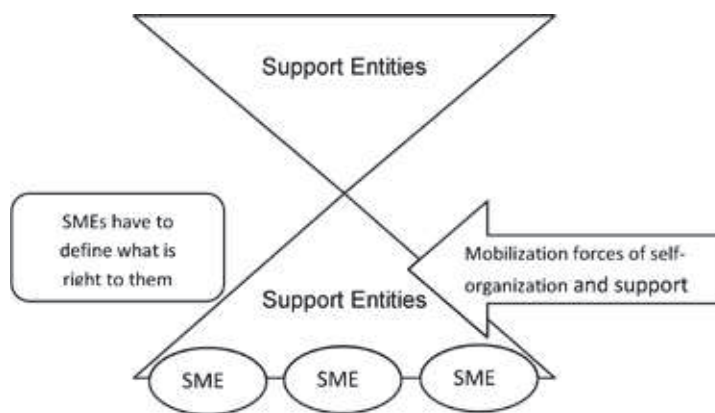
Picture 4 –Sector Cluster



Source- Empreender Foundation, 2000

In the Sector Clusters, the participants’ problems and needs are identified with exchange of information and the decisions about training and consulting are taken as a result of negotiations between suppliers and clients, so that the best solutions are sought in group. The praxis for strategic development and cooperation may be synthesized in the next Picture 4. One of the other advantages the “Empreender Project” made clear is the promotion of further contacts with other Clusters by: joint activities of sale and purchase, manufacturing products, services rendering and the exchange of experience with companies of other cities, financial agents, professional training institutions, research centers and information agencies.

Picture 5 – Proposed Solution by “Empreender Project”



Source – SEBRAE National, 2000

### 3. THE AETUR CASE

#### 3.1 Brief History

The year of 1995 was marked by the diffusion into Brazilian market of imported vehicles - mostly from Asia – with the capacity of transporting up to 16 passengers. The aforementioned vehicles became popularly known as *vans*, which came to supply a market niche of transportation for people that was shared by the Volkswagen Kombis and minibuses, which supported higher number of passengers, and there was no other option that would offer the passengers more comfort.

The *vans*’ characteristics, which combined versatility, comfort and safety, allied to the competitive final price gave the *vans* a positive acceptance in the national market, and even



more so in the city of Florianópolis (capital of the Santa Catarina State, located in the South Region of Brazil), due to its strong touristic potential, as well as its geological aspect, with rough topography and urbanization that presents narrow streets and long distance between the several points of touristic interest.

The ease of purchasing the vehicle, combined with a decrease in the number of employments and processes of voluntary dismissal that occurred inside certain companies of the region, caused the branch of touristic transport using *vans*, which first showed to be a promising one, to present another face by the first months of 1997.

A disorderly proliferation happened regarding the offering of this sort of service, with consequent degradation of prices and closing of several micro-enterprises and informal agents who worked in the sector.

Facing such scenario, some of the companies that were better structured by then, sought to gather and discuss problems they had in common, in order to seek for solutions that would ensure their survival.

Through an Announcement published in a local newspaper, agents who work with the transport of passengers with touristic purposes by using van-type vehicles were summoned.

A group of about 20 micro-entrepreneurs, members of tourist transport companies and travel agencies with personal vehicle fleets, had a few meetings in a meeting room owned by Banestado Bank, in Florianópolis' downtown. As a result of these meetings, AETUR - Association of Enterprises of Receptive and Executive Tourism of Florianópolis Metropolitan Region<sup>3</sup> - was born, on October 21<sup>st</sup>, 1997.

After the Direction has been elected, a place to become the Association's Headquarters was sought. With that, the Association began operating in a rented room at Av. Jorge Lacerda, No. 1,257, Costeira do Pirajubaé, in Florianópolis.

### **3.2 First Steps**

After the Association being created, the first step taken was to survey the needs and hardships shared by the associated companies. It was concluded that the inhibition of the activity of illegal vehicles and seek an approach to the responsible agents by activity regulation and control, namely, Brazilian Company of Tourism (EMBRATUR), Department of Transport and Terminals of Santa Catarina State (DETER) and Florianópolis City Hall, would be the first items to be implemented by AETUR.

In order for such to happen, correspondences containing complaints regarding illegal vehicle activity were sent to the proper agents. Also, a media campaign to increase the awareness of users towards the use of legalized vehicles was conveyed, and a meeting was promoted with representatives of EMBRATUR, DETER and Cluster of Transport of Florianópolis City Hall, in order to present AETUR and to exchange information.

In July 1998, the AETUR members were invited by a consultant of "Empreender Project" to form a Sector Cluster inside Business Association of Florianópolis Metropolitan Region (AEMFLO), to where the facilities were transferred in the same month.

### **3.3 Expansion**

This step was essential to make the continuation and expansion of associational activity among the micro-enterprises of touristic transport become possible, because in addition to having AEMFLO's infrastructure available, including space for meetings; medical and dental care for members, employees and family; legal, accounting and marketing advisory; higher representatively, the now Sector Cluster of Touristic Transport began to rely on their

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<sup>3</sup> Florianópolis Metropolitan Region is one of the several micro regions within the Santa Catarina state, which comprises the following cities, in alphabetical order: Antônio Carlos, Biguaçu, Florianópolis, Governador Celso Ramos, Palhoça, Paulo Lopes, Santo Amaro da Imperatriz, São José and São Pedro de Alcântara.

fortnightly meetings with the participation of a consultant-facilitator of the “Empreender Project”, who organizes and monitors the meetings so that they are objective and effective.

The Cluster counted, by then, with approximately 40 affiliated companies, and a new survey about needs and problems shared by these companies was performed, using the METAPLAN methodology, where each component of the group writes keywords in small pieces of paper, which then are posted on a bulletin board. All papers that contain the same problem but one are removed, and the subjects are chosen by priority, after which the group begins working on its resolution.

### **3.4 Needs**

Among the problems and needs identified by the associated companies, the following were noteworthy:

- unpreparedness of the military police, who is responsible for controlling the vehicle traffic, handling the vans used to transport tourists, both to curb the illegal vehicles work, as well as recognizing the parking rights of the legalized vans in places suited for tourism vehicles;
- shortage of suitable parking lots for tourism vehicles in Florianópolis;
- conflicting or nonexistent laws related to touristic transport;
- lack of control of touristic transport activity by the regulator agents (EMBRATUR DETER and Cluster of Transport of Florianópolis City Hall);
- the necessity for disclosure of the work proposed by the Sector Cluster of Touristic Transport;
- advantages on the combined purchase of products and services;
- degradation of services prices (prices charged for services and products fall and costs rise = auctioning of the prices);
- constant improvement in quality and the standardization of services;
- illegal vehicles working;
- the interest and activity of big companies in the sector (economic power);
- lack of adequate funding lines for micro-enterprises to purchase new vehicles;
- seasonality in the demand for touristic transport.

### **3.5 Searching for the Solution**

Having the diagnosis being performed, the Cluster searched for solutions through the implementation of the following actions:

- both the Cluster and AEMFLO sent correspondence to the Military Police Command, exposing the problems that had occurred, requesting providences as well;
- meetings with the integrants of Cluster of Transport of Florianópolis City Hall were promoted, searching a planning of touristic transport of Florianópolis, including routes and parking places. A project was elaborated and sent to Institute of Urban Planning of Florianópolis (IPUF) being based on the new legislation that regulates the city’s touristic transport. The aforementioned project was developed in a partnership with Touristic Transport Cluster;
- a legal consultant was hired to perform a research on every proper legislation regarding surface touristic transport at federal, State and municipal levels. A visitation was paid to Balneário Camboriú’s (a city located at a 100 (one hundred) kilometers distance from Florianópolis, and also has an extremely high touristic potential) Secretary of Tourism, in order to observe the successful work regarding touristic transport

performed in that city. Being in possession of such information, a Law draft was elaborated and sent to the Transports Cluster of Florianópolis City Hall, which then, with some modifications, became a Municipal Decree that regulated the touristic transport in Florianópolis. It consists of placing a stamp on the vehicles, conceded after companies are registered, and the vehicle(s) being scrutinized, which makes the inspection. A stamp with the “visitor” label is conceded for the vehicles that come from other cities bringing tourists. This measure aims to restrain the acting of illegal vehicles in Florianópolis, specially during the summer season, which causes a major loss to the city, citizens that make use of this service and to legalized companies;

- the decree that deals with surface touristic transport in Florianópolis regulates and preconizes operational and financial conditions so that the inspection performed by the Transports Cluster of Florianópolis City Hall is made possible. The intercity control is under DETER's jurisdiction. Each of the Cluster's associates are, by themselves, fiscals, denouncing and proving wrongdoings committed by illegal vehicles. In the 1999/2000 season, several photo shots and video recordings of illegal vehicles at work were made, and then delivered to the legal consultant, who then went after the proper legal procedures. Blitzes were requested to the Transports Cluster of Florianópolis City Hall, and a positive result came out of those, with several bookings being charged to the illegal vehicles;
- a folder of Touristic Transport Cluster was elaborated and delivered to the Hotels Union, tourism agencies and agencies that relate to tourism, for distribution;
- a stamp of the Touristic Transport Cluster was created and affixed on the legalized vehicles;
- a detailed financial spreadsheet was elaborated and distributed among the associated companies;
- tachographs were purchased in lot, in order to fulfill the national traffic code's requirement. It was possible to split the payment of the mandatory insurance for vehicles into 4 (four) installments, and the pricing stipulated on the Passengers Personnel Accident Insurance (APP) required by DETER- was reduced. Advantages in the purchase of tires, auto parts, bodywork repair and paint services, along with other common needs which companies that were part of the Cluster had;
- lectures were given, aiming to offer qualification for the Cluster integrants in the fields of fiscal, financial, accounting, laboral, as well as English, Spanish, Defensive Conduct, Tourism, How to Entice the Client, Total Quality, among others, all of those being free of charge. In addition to the previously cited courses, SEBRAE courses were systematically offered, at lowered prices;
- the broadcasting of news about the Cluster's work and about the rising of users' awareness with the help of AEMFLO press staff, on newspapers (Gazeta Mercantil, Diário Catarinense, A N Capital, O Estado, Alô São José and AEMFLO Informative Bulletin), on TV (RBS and Barriga Verde) and on CBN Diário radio station;
- courses and qualification for the credit related to the Brazil Entrepreneur program were performed;
- the Cluster had great influence on inclusion of touristic transport micro-companies at SIMPLE State tax, since transport companies were excluded from this benefit. The Cluster also acted on differential collecting for the obtainment of the Inspection Stamp from Transports Cluster of Florianópolis City Hall.
- due to the need of mustering and performing touristic transport work in groups, mostly events, the Cluster members decided to create a 24-hour Touristic Call Center,

and in order for that to happen, on December 8<sup>th</sup>, 1999, everyone joined AETUR and proceeded to change the Bylaws;

- on November 9<sup>th</sup>, 2000, AETUR president was invited for the inauguration of FIAT vehicles factory in Sete Lagoas city, Minas Gerais, with the presence of President of the Republic, who received a document which contained claims of the category’s interests;
- on January 8<sup>th</sup>, 2001, the Cluster earned a seat in the Transports Municipal Council of Florianópolis City Hall, (with the indications of Mrs. Cristiane Scholz Faísca Cardoso (titular) and Mr. José Antônio Novak (substitute)) where the laws that guide sea and land transport and in the city are approved, as well as where the defense processes against notifications (fines) issued by City Hall inspectors are judged;
- on October 30<sup>th</sup>, 2001, AETUR was one the successful cases of Entrepreneur Talents Award of 2001, at Services category, for the Capital/Highland region;
- on April 3<sup>rd</sup>, 2002, contact was made with the School Transports Union at AETUR headquarters, aiming to search solutions for the problems both categories had in common, including the prohibition of performing interstate travels;
- on May 2002 the associates received the writ which permitted that interstate travels were still allowed to be performed, after the emission of Administrative Rule No. 417/01 from Terrestrial Transports National Agency (ANTT), which only permits bus-type vehicles to perform such service. AETUR was the first Brazilian entity to obtain this writ;
- on May 17<sup>th</sup>, 2002, correspondence was mailed to the Transport Cluster of Florianópolis City Hall, focused on controlling the admittance of new touristic transport companies;
- on August 2<sup>nd</sup>, 2002, AETUR President conceded an interview to TVCOM, and on August 6<sup>th</sup>, 2002 the associate Cristiane Cardoso took part in a debate that happened in the TV program “Conversas Cruzadas”;
- on September 2003, the Cluster integrants had a meeting with the “Empreender Project” consultant, representatives from tourism agencies, hotel networks and universities, so as to implant information and touristic businesses central, together with tourism vehicles pools that would depart on a daily basis towards several destinies. This project was not concluded.

### **3.6 The Research**

By the end of 2002, a questionnaire was applied to all the 30 companies that were part of the Cluster, and another questionnaire, similar to the first one, was applied to other 30 companies that were not part of it but that were located in the cities of Florianópolis and São José, and also took part in the touristic transport branch.

The results of this research, in percentage terms, are presented on Tables 1 and 2, below.

Both tables were adapted from the questionnaire applied by “Empreender Foundation” named “Research of Empreender Methodology Impact in companies that belong to Clusters in Commercial and Industrial Associations”.

The variables researched were chosen among those that showed to be the more critical for the SME, already pointed by SEBRAE and “Empreender Foundation”, also corroborated by the Cluster being a fruit of METAPLAN methodology application.

**Table 1: Research of impact of the “Empreender” methodology in member companies of AEMFLO’s Cluster of Touristic Transport (1998 – 2002)**

1. ACI: Business Association of Florianópolis Metropolitan Region
2. Sector Cluster: Sector Cluster of Touristic Transport
3. Company Name: 30 companies that integrate the Cluster (Group 1)
4. Activity branch: services of touristic transport
5. Foundation year: varying from 1995 to 2001
6. Name and position of the responsible for completing the survey:
7. Schooling: ( ) 1 <sup>st</sup> degree (50%) 2 <sup>nd</sup> degree (40%) graduate (10%) postgraduate
8. Professional experience before starting the company: ( ) none (15) years average
9. Previous work: (20%) unemployed (10%) self-employed ( ) 1 <sup>st</sup> job (10%) retired (10%) public servant (50%) employed in a private company
10. What motivated you to work by yourself? (20%) I was unsatisfied with my job and seeking new alternatives (20%) I was unemployed and needed to reassure subsistence (54%) I always desired to become an entrepreneur ( 6%) I took charge of my family’s company (heritage, purchase, others) ( ) I was invited by another entrepreneur to become one of the company’s business partner
11. How many people work at your company and have: 85 occupied people (5%) 1 <sup>st</sup> degree (70%) 2 <sup>nd</sup> degree (20%) graduate (5%) postgraduate
12. How many people work in your company and their monthly income: ( ) up to BRL 240 (50%) from BRL 241 and BRL 720 (40%) from BRL 721 to BRL 1,200 (10%) above BRL 1,201
13. What was your company’s revenue in 2001 (in kBRL)? (90%) up to kBRL 120 ( ) from kBRL 121 to kBRL 300 (10%) from kBRL 301 to kBRL 1,200 ( ) above kBRL 1,201
14. In which year did you join the Cluster? (40%) 1998 (10%) between 1999 and 2000 (50%) between 2001 and 2002
15. What attracted you to the Cluster? (60%) invitation from another entrepreneur that also take part (30%) ACI invitation (10%) own initiative ( ) others
16. What motivated you to become part of the Cluster? (10%) I was having problems in my company (60%) I was satisfied with the company but wanted to improve it (20%) I wanted to get away from isolation (10%) Other motivations
17. What is your evaluation about the performance of the Cluster in which you participate: (70%) great (20%) good (10%) fair ( ) poor
18. How important is the Cluster for you and for the company’s development: (90%) it has always been significance (10%) losing the significance ( ) it was never important ( )
19. How did you see the other entrepreneurs of the same industry and how do you see them today? Before: (80%) competitors (20%) indifferently ( ) colleagues who have the same problems Today: (10%) competitors ( ) indifferently (90%) colleagues who have the same problems

20. Analysis of the changes that took place into the companies since the beginning of their participation in the Cluster:

Item		Excellent	Good	Average	Bad	Terrible
a) Productivity	Before	-	30%	60%	10%	-
	Today	10%	70%	20%	-	-
b) Company’s layout	Before	-	20%	40%	35%	5%
	Today	10%	70%	10%	10%	-
c) New technologies	Before	-	30%	60%	10%	-
	Today	10%	70%	20%	-	-
d) Work environment	Before	15%	25%	50%	9%	1%
	Today	20%	60%	20%	-	-
e) Re-work	Before	5%	30%	50%	15%	-
	Today	10%	55%	30%	5%	-
f) Services quality	Before	10%	45%	40%	5%	-
	Today	40%	55%	5%	-	-
g) Cost calculations	Before	1%	28%	50%	20%	1%
	Today	15%	60%	24%	1%	-
h) Budget management	Before	-	10%	50%	30%	10%
	Today	25%	50%	25%	-	-
i) Sales and billing	Before	1%	24%	59%	15%	1%
	Today	15%	50%	30%	5%	-
j) Profit margin	Before	5%	35%	49%	10%	1%
	Today	15%	50%	30%	5%	-
k) Number of clients	Before	1%	24%	59%	15%	1%
	Today	15%	50%	30%	5%	-
l) Clients relationship	Before	10%	10%	40%	40%	-
	Today	15%	70%	15%	-	-
m) Suppliers relationship	Before	9%	40%	40%	10%	1%
	Today	20%	70%	10%	-	-
n) Entrepreneur leadership capacity	Before	5%	35%	50%	10%	-
	Today	24%	60%	15%	1%	-
o) Staff training	Before	1%	20%	50%	28%	1%
	Today	20%	50%	30%	-	-
p) Company future perspective	Before	5%	40%	45%	10%	-
	Today	40%	55%	5%	-	-
q) Entrepreneur network	Before	5%	25%	50%	10%	-
	Today	30%	55%	15%	-	-
r) Confidence regarding agents of local public administration	Before	5%	30%	55%	10%	-
	Today	20%	45%	30%	5%	-

**Table 2: Research of changes that took place in companies non-members of Sector Cluster of “Empreender Project” in four years (1998-2002)**

1. Company Name: 30 companies that do not participate of “Empreender Project” (Group 2)
2. Activity branch: rendering of touristic transport services
3. Year of foundation: varying from 1995 to 2001
4. Name and position of the person responsible by completing the questionnaire:
5. Schooling: (1%) 1 <sup>st</sup> degree (54%) 2 <sup>nd</sup> degree (40%) academic (5%) postgraduate
6. Professional experience before starting the company: ( ) none (15) years in average
7. Activity developed: (15%) unemployed (12%) self-employed (10%) 1 <sup>st</sup> job (5%) retired (8%) public employee (50%) employee of a private company
8. What did motivate you to work by yourself? (20%) I was unsatisfied with my job and searcher for new alternatives (15%) I was unemployed and needed to assure subsistence (51%) I always desired to become an entrepreneur (10%) I took on my family’s company (heritage, purchase, others) ( 4%) I was invited by other entrepreneur to be partner of the company
9. How many people work at your company and have: 65 occupied people (15%) 1 <sup>st</sup> degree (69%) 2 <sup>nd</sup> degree (15%) academic (1%) postgraduate
10. How many people work in your company and receive: (15%) up to BRL 240 (60%) from BRL 241 to BRL 720 (24%) from BRL 721 to BRL 1,200 (1%) above BRL 1,201
11. What was your company’s revenue in 2001 in kBRL? (90%) up to kBRL 120 (5%) from kBRL 121 and kBRL 300 (5%) from kBRL 301 and kBRL 1,200 ( ) above kBRL 1,201
12. How do you see the other entrepreneurs of the same industry? (90%) competitors (10%) indifferently ( ) colleagues who have the same problems

13. Analysis of changes that took place into the companies from 1998 to 2002:

Item		Excellent	Good	Average	Bad	Terrible
a) Productivity	1998	-	30%	60%	10%	-
	2002	-	40%	50%	10%-	-
b) Company’s layout	1998	-	20%	40%	35%	5%
	2002	-	20%	45%	30%	5%
c) New technologies	1998	-	30%	60%	10%	-
	2002	-	40%	45%	10%-	5%
d) Work environment	1998	15%	25%	50%	9%	1%
	2002	10%	30%	43%	15%-	2%
e) Re-work	1998	5%	30%	50%	15%	-
	2002	3%	30%	45%	15%	7%-
f) Services quality	1998	10%	45%	40%	5%	-
	2002	8%	40%	40%	10%	2%
g) Cost calculations	1998	1%	28%	50%	20%	1%
	2002	-	25%	55%	20%	-
h) Cash management	1998	-	10%	50%	30%	10%
	2002	-	15%	55%	25%	5%
i) Sales and billing	1998	1%	24%	59%	15%	1%
	2002	-	20%	50%	25%	5%
j) Profit margin	1998	5%	35%	49%	10%	1%
	2002	-	30%	40%	25%	5%
k) Number of clients	1998	1%	24%	59%	15%	1%
	2002	-	20%	40%	35%	5%
l) Clients relationship	1998	10%	10%	40%	40%	-
	2002	1%	10%	34%	45%	10%
m) Suppliers relationship	1998	9%	40%	40%	10%	1%
	2002	5%	40%	40%	15%-	-
n) Entrepreneur leadership capacity	1998	5%	35%	50%	10%	-
	2002	3%	40%	50%	7%	-
o) Employees training	1998	1%	20%	50%	28%	1%
	2002	1%	20%	40%	38%	1%-
p) Company future perspective	1998	5%	40%	45%	10%	-
	2002	-	30%	45%	10%	10%
q) Entrepreneur network	1998	-	45%	45%	10%	-
	2002	-	40%	45%	10%	5%
r) Confidence about local agents of public administration	1998	5%	30%	55%	10%	-
	2002	1%	30%	55%	10%	4%

Firstly, resistance was shown by part of the entrepreneurs, mostly from those who did not take part in the Cluster (Group 2) when asked to answer the research. A certain hostility coming from some of them was also worthy of note.

This trouble was partially circumvented, after the research’s goal was explained with details and guarantee of discretion regarding the names of companies researched was assured.



The average profile of the surveyed entrepreneurs (Group 1 and Group 2), is the profile of people with previous professional experience in other activities other than the ones developed at the current SME, with good schooling (0.5% with 1<sup>st</sup> grade, 52% with 2<sup>nd</sup> grade, 40% with graduation level and 7.5% with post-graduation), that also aimed to have their own business.

Before the company begins operating, the Groups average demonstrated that 17.5% were unemployed, 11% were self-employed, 5% were beginning their professional career, 7.5% were retired, 9% were public servants and 50% were working at private companies.

The average school level of people occupied in the companies is also good, being 10% with 1<sup>st</sup> grade, 70% with 2<sup>nd</sup> grade, 17% with graduation and 3% with post-graduation.

Regarding wages, 7.5% were receiving up to BRL 240 (€ 89); 55% were receiving between BRL 241 (€ 89) and BRL 720 (€ 267); 32,5% receiving between BRL 721 (€ 267) and BRL 1,200 (€ 444); 5% receiving more than BRL 1,201 (€ 444).

In relation to companies' revenues in the year of 2001, 90% achieved profits of up to BRL 120,000 (€ 44,444); 2.5% between BRL 121,000 (€ 44,444) and BRL 300,000 (€ 111,111); 7.5% between BRL 301,000 (€ 111,111) and BRL 1,200,000 (€ 444,444).

Up to this point, the answers of both Groups 1 and 2 were highly similar. Such similarity came to a halt in the other items, where significant variations occurred.

It was asked to the companies of Group 1 what made them join the Cluster, and 60% answered that they were invited by other entrepreneurs who were already part of it, 30% were invited by ACI and 10% adhered through their own initiative.

In the same Group, 70% stated that the Cluster's performance was great, whereas 20% stated that it was good, and the remaining 10% stated that it was regular.

An expressive fact was that 90% of Group 1 entrepreneurs stated that the Cluster was always important for the development of their company, while only 10% stated that the Cluster was losing its importance.

Regarding these 10%, it was perceived that they hailed from bigger-sized companies. They also were not very active in the Cluster's works, and with the vision that many of the achievements were resulted from their individual efforts instead of the Cluster's collective work.

When asked about their points of view on other entrepreneurs of the same branch, the integrants of Group 1 stated that, before becoming part of the Cluster, 80% of them used to see the other entrepreneurs as competition, and looked at the remaining 20% indifferently. After attaining membership in the Cluster, 90% began seeing other entrepreneurs as colleagues that have the same problems, while only 10% remained with the vision that other entrepreneurs are competitors.

The entrepreneurs of Group 2 presented similar answers to those of Group 1 entrepreneurs before becoming part of the Cluster, where 90% see other entrepreneurs as competitors and the remaining 10% indifferently.

In relation to the changes that occurred in the companies before and after the participation in the Cluster (Group 1) and since 1998 until 2002 (Group 2), it was verified that companies from Group 1 presented improvement in every researched item (production, management, commercialization, finances), while participants of Group 2 presented results worse to their prior situation.

A tendency was perceived in both groups, with an emphasis on Group 2, which consisted of always locating the problems always outside of the company, consequently making the entrepreneurs become impotent to solve said problems, being at the Government's, economy, clients, market, competitors, and other entities that he did not know how to classify mercies.

In Group 1, most of entrepreneurs also perceived external threats. However, they were able to classify said threats. Sometimes they were able, as well, to quantify the aforementioned threats, and also felt capable to manage the problems individually, or through Cluster action.

### **3.7 AETUR – Touristic Call Center**

As the Touristic Transport Cluster of AEMFLO figured out that implanting a 24-hour Touristic Call Center was necessary, it was realized that, for the best of the Cluster’s interests’ sake, that AETUR should be used as this activity’s operational agent from December 8<sup>th</sup>, 1999.

The 24-hour Touristic Call Center was set in a room inside AEMFLO headquarters, where all vehicles work under “rotating line” rules, sorted by type; bus, microbus and vans, in a total number of 30 vehicles.

In order to cover the Call Center installation expenses, an association admission tax was set amounting BRL 390 (€ 144), paid in three installments of BRL 130 (€ 48). The operational expenses were covered by a monthly apportionment. To sum it up, the Call Center received a 5% commission over the services passed to the associates.

The prerequisites that the companies were supposed to possess in order to participate in the Call Center were: being a tourism agency with its own vehicle fleet or touristic transporter; have its headquarters located in the Florianópolis metropolitan region; being legalized under activity regulation agents (EMBRATUR, DETER, City Hall and others); being associated to AEMFLO; and lastly, the company should have been approved at a Cluster meeting.

A free phone number (0800 480037) was made available, in order to facilitate the clients communication with the Central, and a folder that includes the services’ prices table was elaborated, distributed and widely disclosed towards potential clients and agents responsible by the tourism.

The AETUR logo and a stamp were created, and the stamp was attached to vehicles. The logo has a sun stamped, meaning that the *sun rises for everyone*.

Picture 6 – Logo of AETUR



Source: AETUR, 2000

Targeted visits were made to customers, explaining the work of AETUR and a strong post-sales work with customers, in order to figure the level of satisfaction and correct any failure.

AETUR was added to Florianópolis Convention Center home page and an own home page was designed.

Due to its configuration, AETUR worked successfully in several events, and included within those events are: Habitat, Governing 2000, Pathology Congress, Dentistry Congress, Expo-Woman, among others.

Besides the events, which were the Association's strongest point, once the networking of associated companies offers to the market a unique company with the largest number of vehicles available, AETUR distributed other services of touristic transport and charter in general to its associates.

The scale increase through the agglutination of production capacity of the participant companies is neatly perceived.

This way, the income generated by AETUR is demonstrated in Table 3.

**Table 3 – Distribution of the revenue produced by AETUR (in Euros)**

Year	AETUR	Associates	Third-parties	Total
2000	11,316	31,859	11,607	54,782
2001	8,282	38,070	11,479	57,833
2002	13,275	19,965	26,296	59,536
Total	32,876	89,894	49,382	172,151

Source: elaborated by the author

The number of associates oscillated as demonstrated in Table 4.

**Table 4 – Evolution of AETUR number of associates**

Year	No. of associates in January	Admittance	Leave	No. of associates in December
2000	30	1	9	22
2001	22	4	2	24
2002	24	9	8	25

Source: elaborated by the author

Among the reasons that took the associates leave AETUR during the period observed are: the difficulty of some entrepreneurs to accept the decisions taken by the majority of the group when those were contrary to their opinion; the lack of an “associative thinking” coming specially from the entrepreneurs that did not have an assiduity in attending to the meetings or lacked compromise with the Association works and, in a smaller scale, the sale of the company or its moving to another State.

Once the members of the previous Direction have been leading of the Association since its creation, having fulfilled the mandate time span allowed by the Bylaws, the presence of at least one member from Fiscal Counselor at Directory meetings from June, 2002 and on, in order to form new leaderships, so that the transition would occur in a peaceful manner and without continuity solution for AETUR.

On December 3<sup>rd</sup>, 2002, election for the Directory and Fiscal Board of AETUR took place, for the 2003/2004 biennium.

The new Direction took over on January 2<sup>nd</sup>, 2003.

In 2004, the manager Mrs. Scheila Sá, left her activities, and in less than six-month the activities of AETUR Call Center ceased to function.

The documentation transference to the Touristic Transport Cluster at AEMFLO happened, where there was the intention of maintaining the institutional character activities. However, with the leaving of consultant Ênio Borba from “Empreender Project” in October 2004, the Cluster activities were also ceased.

The ex-integrants of the Cluster and AETUR attribute the entrepreneurs’ disconnection mainly to the fact that, given the lack of political willingness, the non-conclusion of the project of information and touristic businesses center, which would bring together a pool of tourism vehicles that would daily depart to several destinations.

The project was depending on liberation from the Transport Cluster of Florianópolis City Hall, in an area of municipal bus station that was deactivated, located in the center of the city, and also counted with the support of universities and other entities linked to the touristic trade.

The main idea of the center was to promote the specialization of tourist reception services to the tourists that arrive in Florianópolis, income generation during the whole year for the legalized SME and the offer of a differentiated touristic product.

Despite the fact that AETUR activities and AEMFLO Touristic Transport Cluster came to an end, the SME of touristic transport kept wishing for an integration and support forum.

Thus, AEMFLO Touristic Transport Cluster was reactivated in 2007, this time under the management of advisor Adriano Bridi and 25 member companies, some of them having already having made part of AETUR and the Cluster previously.

The main accomplishments of the reactivated Cluster are:

- establishment of Santa Catarina Touristic Transport Companies Association (AETTUSC);
- development of a stamp that identifies the participant companies;
- performing the 1<sup>st</sup> Meeting with sector authorities, debating about the difficulties faced by companies of the area, and searching for improvement together with supervisory agents;
- hiring juridical advisory for the purpose of analyzing the laws for the Florianópolis metropolitan region;
- performing itinerant meetings throughout the State.

#### **4. CONCLUSION**

Given the list of achievements that assured the survival and strengthening of the companies that took part of the Tourist Transport Cluster of AEMFLO, it should be emphasized that the major one was the change of entrepreneurs’ vision of the sector, who don’t see each other as competitors nor enemies anymore, but as associates and collaborators instead, with experiences and information to exchange, and much to build together.

It should be emphasized, as well, the primordial role performed by the “Empreender Project” facilitator, as much in the Sector Cluster implantation phase, as in the subsequent works follow-up. The facilitator is the responsible for mediating conflicts, orienting the meetings, delegating tasks and coordinating the implementation of actions derived from agreements settled by the participants.

In 1998, “Empreender Project” had created 38 Sector Clusters in Santa Catarina, in the cities of Criciúma, Florianópolis, São José, Tijucas, Rio do Sul, Caçador, Joaçaba, Chapecó and Xanxerê, comprising 414 member companies, in the branches of iron casting, clothing, construction material, furniture, tourism, bakery, mechanical-metal, restaurant, hairdressing, needlework, electrician, environment, supermarket, photographic lab, drugstore, agriculture, woodwork, and also Clusters of young entrepreneurs and women entrepreneurs.

In 1999, there were already 46 Sector Clusters in Santa Catarina, which also covered the counties of Palhoça, Santo Amaro, São João Batista, Bombinhas and Canoinhas, with 682 participant companies, acting in the branches of IT, swimming pools, visual communication,

decoration, education, marble quarry, car-washing, shoemaking, handcrafting, ceramics, hotels and companies comprised of small commercial buildings.

In 2004, there were 2,888 Sector Clusters spread throughout Brazil, covering 40 thousand companies, and until 2010 the “Empreender Project” has transcended the national borders, being implanted in other countries like Mozambique, Chile, Colombia and Mexico.

These pieces of data reaffirm the important role of “Empreender Project” as encourager of micro and small companies’ network organization, and they also give an idea of the importance that this organization has for the socio-economic development of the Santa Catarina State.

## ACKNOWLEDGEMENTS

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To format reference list use size 11, regular, left aligned.

Ideally, the names of all authors should be provided, but the usage of *et al.* in long authors list will also be accepted.

Ex: Pierzynski, G. *et al.* (1994). *Soils and environmental quality*. Lewis Publishers. Florida.

**Scientific article:**

Last name of the author, First initial. (Publication year). Article title. *Title of the Journal or Review*.

**Volume(Issue):** first page-last page.

Ex: Sadiq, M. e Alam, I. (1997). Lead contamination of groundwater in an industrial complex. *Water, Air and Soil Pollution*. **98(2)**: 167-177.

**Book:**

Last name of the author, First initial. (Publication year). *Book title*. Adicional information. Edition number, Publishing house. Publishing place.

Ex: Costa, J. (1995). *Caracterização e constituição do Solo*. 5<sup>th</sup> edition, Fundation Calouste Gulbenkian. Lisbon.

**Book chapter:**

Ex: Silko, L.M. (1991). The man to send rain clouds. In: W. Brown and A. Ling (eds.), *Imagining America: Stories from the promised land*. Persea. New York.

**Online document:**

Last name of the author, First initial. (Publication year). *Document title*. Accessed in: day, month, year, in: URL.

Ex: Chou, L., McClintock, R., Moretti, F. e Nix, D.H. (1993). *Technology and education: New wine in new bottles – Choosing pasts and imagining educational futures*. Accessed in 24<sup>th</sup> of August 2000, on the Web site of: Columbia University, Institute for Learning Technologies: <http://www.ilt.columbia.edu/publications/papers/newwine1.html>.

**Dissertation:**

Ex: Tingle, C.C.D. (1985). *Biological control of the glasshouse mealybug using parasitic hymenoptera*. Ph.D. Thesis. Department of Biological Sciences, Wye College, University of London. 375 pp.

**Tables, Figures, Graphics and Boards:**

All tables, figures, graphics and boards are to be numbered using Arabic numerals and should have a title explaining its components above the body, using size 9, bold, centred.

The source and year of the information given in tables, figures, graphics and boards should be included beneath its body, centred, size 8, regular. For tables and boards contents use size 8.

Figures and graphics must be in JPEG format (image).

## CIEO

### Centro de Investigação sobre o Espaço e as Organizações

Research Centre for Spatial and Organizational Dynamics

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FINANCIAMENTO

