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*Portugal in the EU:
the Perspective of
Convergence*

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General Introduction

Much changed in Europe from the seventies to the late nineties, not only for the European Regional Block that faced several enlargements but also for a small open economy like Portugal that became one of its state-members in 1986, a Portuguese path that I propose to analyse more in detail.

So, the problematic is define, measure and test convergence, as well as realise the nature of the changes associated with the Portuguese regional integration. According to this defined objective what my project proposes a retrospective between 1970 and 1997 with a study of the hypothesis of convergence. The study includes a technical analysis (measures and tests) with some own estimations, possible real and nominal convergence with the examination of squares and the confrontation of the macro and micro perspectives of convergence for the introduction of trade and its theoretical presentation relating trade, growth and investment, the question of localisation/ distance (because Portugal is a peripheral country), as well as own estimations over a gravitational model and some indicators for trade, all this to better understand the Portuguese economic integration in the today's European Union.

I've chosen this project because there aren't many papers on the subject. It's especially interesting since Portugal is facing a new step in the European regional integration (the Euro project). It's important to observe if the country is ready to face this new challenge.

For being an academic project, this project gives particular importance to the technical presentation of the subject, the main reason why decided to begin each part under a more theoretical context.

The first part is concerned with the idea of convergence, with its specific concepts, measures and implications, giving a particular relevance to the tests of β -convergence and σ -convergence; these are distinguished before being linked and criticized. Afterwards, the tests are distinguished according to their different procedures, since there are tests of convergence in panel, convergence of series' distribution over time and convergence of chronological series.

Following the theoretical presentation, my project presents econometric estimations using panel data. The selected test is the one of Hénin and Le Pen (1995), the considered most efficient and adequate, for giving all the needed information to accomplish the objectives. The tested variable is the current GDP per capita of each of the fifteen countries of the today's EU.

Given the possible markets' transformations, my project distinguishes nominal from real convergence. To check nominal convergence, this paper studies the criteria of the Stability Pact for the European Monetary Integration, in other

words the discipline of the public finances, the monetary and exchange stability. To realise if Portugal is verifying real convergence, my project observes the growth rates of the GDP in constant prices (1990), as well as the PPP GDP (purchasing power parity) and the unemployment rates. After considering the inter-relationship between these types of convergence, the objective is see if nominal convergence is confirmed, if real convergence is checked, if nominal convergence led or not to real convergence. Thus, critical research questions if Portugal benefit from integration.

The second part begins distinguishing convergence under a macro and micro context because this project starts dealing with the evolution of trade and trade implies dealing with the behaviour of firms and industries as well as with the behaviour of the economy as a whole.

Since questioning about a possible Portuguese convergence means dealing with the country's entrance in a regional block, this project thought that the idea of regional integration should be introduced and related with trade, beginning by studying the reasons for welfare evolution in an open economy. Afterwards, maintaining the idea of Macro/ Micro differentiation, Regional Economic Integration is confronted with the characteristics of Business Enterprise Integration. In this context the case of Portugal is mentioned.

In a context of Regional Integration, trade is related with growth and investment. The first part of this project studies the real convergence and the growth of the GDP, so makes sense that the second part relates growth with the commercial fluxes.

The trade perspective starts with a theoretical study of Growth effects over Regional Integration, with a modelling presentation of the works of Dixit and Norman (1980) and Helpman and Krugman (1985), including the Tobin's q (1969), before realizing the advantages of localization and the model of Krugman (1980).

The question now is centred on the relevance of localisation and geographic distance, the right context for the following presentation of the gravitational models, the main objective of the following personal estimations. Realizing the possible relevance of a curious variable like distance, the estimations will work with a gravitational model using as dependent variable the bilateral exportations and as independent variables the GDP, the GDP per capita, the real exchange rate, the geographic distance and a dummy variable considering the countries with mutual frontier with Portugal (which is only Spain), all this for better understand the geographic importance for a country like Portugal that is not situated in the centre of Europe.

At this point comes a detailed analysis over the evolution of the Portuguese trade, interpreting the composition of its trade patterns and volumes by using indicators like the Index of the balance on goods over the GDP for country, the Herfindahl index, the Hirshman Index and the Grugel-Lloyd Index for countries and

chains. This paper will try to understand and see if Portugal is expanding its industry and, if so, gaining or not more significant market shares in the regional block; if or not in the same traditional sectors as before and if trade flows are in the last years more significant in higher technology sectors.

Consequently my work will seek, by introducing several points of views about convergence concepts, an explanation for the Portuguese relative convergence/ divergence towards the other state-members. If Portugal benefit from integration or if continues with its relative isolation inside the group of the poorest countries of the EU, if productivity augmented or not. Since Portugal is geographically peripheral towards the other state-members, if geographic distance is still a determinant constraint; if, in the case of growing convergence between countries, they became structurally closer to each other and increased the intra-industry trade; If, facing the different living standards and the evolution of the GNP per capita possibly because of trade intensification and productivity growth, the Portuguese path may be concluded positive or even very promising; or, for the contrary, a disillusion.

My project brings of new the application of the test of Hénin and Le Pen (1995) to the evolution of the current GDP per capita, the particular importance given to the gravitational models under an analysis of the Portuguese relations with the other state-members and the confrontation between the macro and the micro perspectives.

To reach the previous objectives, I used the bibliography that was selected according to its pertinent relation with the subject. The data sources for the two parts are the EUROSTAT statistics and the CHELEM CEP II. The econometric estimations are made using the programme E-Views.