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A Comparison of Agricultural Productivity Among European Regions

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Abstract: At present, European agriculture must face new situations derived from future enlargement, the globalization of the economy or the requirements of consumers. These changes are not only going to affect the agricultural markets but will have special relevancy in the economies of the rural zones of the European Union, because the evolution of the agricultural sector is closely linked to the balanced development of the rural territory that represents 80% of the territory in the Union and more than 50% of the population. Turned into the second pillar of the CAP, the new rural development policy, as an essential part of the European agricultural model, proposes to establish a coherent and sustainable frame that guarantees the future of the rural zones and contributes to the maintenance and creation of employment. The new proposals postulate converting the CAP into a rural development policy. Nevertheless, there are few analyses that have deeply studied the effects of the CAP in terms of convergence in the European regional territory. This is, therefore, the objective that is pursued with this report.

Keywords: Productivity, Convergence, CAP, Rural Development, and European Regions.

1. Introduction

In the Midterms review of the Common Agricultural Policy (CAP) in the Agenda 2000, it was stated that a fundamental axis is to move funds from market policy to the second pillar (rural development), since it is assumed that the second policy has more positive effects for cohesion and convergence in the most disadvantaged zones. Nevertheless, the majority of studies have approached the analysis of the convergence in European regions from an aggregated perspective of the regional economy. However, quantitative analyses have not been made on the true impact of the CAP in the territorial level, therefore, indicating a negative impact in the disadvantaged areas.

Although the European Union regions have been the object of unusual interest throughout the last decade, giving rise to numerous reports that have tried to analyze the evolution and dynamics of the regional inequalities in the European context from diverse perspectives, most of these studies have approached the analysis of the convergence from an aggregated perspective of the regional economy, leaving out the aspects derived from the consideration of the economies' sectorial characteristics. In this sense, the treatment of the sectorial convergence in the literature has been scarce [1], [2], [3], [4], [5], [6], [7], [8], [9], [10]. In the same way, there has been no unanimity regarding the obtained conclusions, i.e., in some cases, one speaks of absolute convergence, in others they consider that the convergence tends to shift towards different stationary states, and finally there are opinions against the reduction of the regional disparities that defend a divergence situation [11].

Therefore, the aim of this report is to try to contribute to the process from a different approach. It includes the question of the regional convergence from the sectorial point of view, concentrating on the agricultural sector, since the main European policies, the CAP and the

regional policy, directly affect this dimension. More specifically, it will refer to the agricultural sector from the perspective of the productivity measured through the GVA (Gross Value Added) factor cost by employment. The importance of such a question derives from the fact that the regional policy depends on the presence or absence of market forces that cause processes of convergence among countries or regions, so that before market processes that by themselves lead to a convergent situation, the regional policy will have little to solve.

In the European Union, the necessity of this justification is very relevant nowadays. The volume of funds assigned to the regional policy, including those that finance the CAP (EAGGF-Guarantee), have experienced a considerable growth from 1988 with the reform of the structural funds. Thus, when analyzing the GVA by employment, the effects of the public performance through the regional transferences via exploitation subsidies, can be inferred.

2. Methodology and Theoretical Approach

The aim of this report is to analyze thoroughly the effects of the CAP at the regional territorial level of the European Union, especially if the change improves the perspective of interterritorial equity in the rural areas.

Our convergence reference unit to analyze the evolution of agricultural inequality between the European regions during the period of time that goes from 1985 to 1997, is the productivity per employee. The election of this variable derives from the fact that the income explained factors could be broken down in two: one refers to the difference in productivity and the other to the employment evolution. As the influence of this last factor has been less explanatory with reference to the differences in income, the analysis will concentrate on the study of agricultural productivity.

The theoretical approach that will allow us to study the convergence in productivity is regression analysis using the seminal methodology of Barro and Sala-i Martín [12]. It is a question of contrasting whether regions with low productivity tend to grow more quickly than regions with greater rates of productivity. In this case the regions belong to the same relatively homogeneous geographic area, with a mandatory common policy. For that reason, data are automatically conditioned to the interterritorial convergence, limited to groups with similar economies. We refer to the concept of beta convergence, which has been used profusely in the literature.

As for the territorial reference unit, although a single division does not exist in the regional studies on the European Union, most of the research uses a combination of different territorial levels of regions, following the Nomenclature of Territorial Units for Statistics (NUTS) defined by Eurostat, with the purpose of obtaining greater homogeneity. In this sense, it is also important that the most developed regions do not appear overvalued in the set of data employed. This could happen if the information for NUTS 2 is limited. Therefore, considering both aspects, 104 territorial units were selected: Belgium (2), Denmark, Germany (11), Greece (13), Spain (17), France (22), Ireland, Italy (20), Luxembourg, the Netherlands (4), Portugal, Austria and the United Kingdom (10).

The data were obtained from the Regional Statistical Yearbooks (data base of Eurostat, New Cronos GD REGIO), as well as from the diverse Agriculture Annual Reports (European Commission) and the Second Cohesion Report [13]. The lack of data on a regional scale for the last years and the modification of the administrative regional division of the United Kingdom in 1997, has allowed the time interval under study to include a period of 12 years from 1985.