NOTA ECONÓMICAS

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OPTIMUM CURRENCY AREAS, REAL AND NOMINAL CONVERGENCE IN THE EUROPEAN UNION

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PERCEÇÕES DOS CONSUMIDORES DOMÉSTICOS ACERCA DAS FACTURAS DE ÁGUA
It is well known and widely accepted by economists that the characteristics of the countries of the European Monetary Union (EMU) created in 1999 did not match the requirements of an Optimum Currency Area (OCA). The only criteria for membership of the EMU were nominal. A strict level of convergence in inflation and interest rates was imposed. In addition to the nominal convergence, a process of convergence of nominal and real incomes in the new monetary area was expected to be generated with the monetary integration. After summarizing the criteria for a successful currency area in the context of the OCA theory, we study the real and nominal convergence process for an older group of countries (11) to establish whether or not these countries satisfy the conditions of an OCA. We apply ADF tests, together with the Schmidt-Phillips tests, and we estimate the fractional differential process to overcome the disadvantages of the traditional tests, to test for nominal and real convergence. We conclude that a process of real divergence and nominal convergence does exist, and suggest this is a source of genuine imbalance in the European integration process that can destroy the harmonious development of the European Monetary Union.

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1. Introduction

In 1961, Robert Mundell published his famous paper entitled “A Theory of Optimum Currency Areas”, in which he presented the idea of an optimal monetary area.

Nearly four decades later, in 1999, the European Union (EU) created its monetary area with a common currency: the Euro. Initially, the European single currency was used purely as bank money, but in 2002, the Euro was introduced as coins and banknotes and since then it has been used as a means of payment in the EU.

For centuries before, the situation in Europe, and indeed worldwide, was that each country had its own currency (Baldwin and Wyplosz, 2009), and that in extreme circumstances, some cities in certain regions differentiated their currencies. National symbols were displayed on coins and banknotes and in earlier times feudal lords had their faces stamped on gold and silver coins.

Apart from indicating national and regional boundaries, a currency is also useful because it enables and stimulates real, commercial and financial activity reducing transaction costs. The more people accept a currency, the more useful it is as a currency. In that sense, a continent of many countries and states, as for example, Europe, can be expected to benefit from having the same currency (Rose, 2004; Frankel and Rose, 2002; Baldwin and Wyplosz, 2009; Eicher and Henn, 2009) acceptable anywhere in the region, and which allows for global trade without incurring costly transactions.

This is one of the main reasons underpinning the Optimum Currency Area (OCA) theory, and it is this that we discuss in this paper. We analyze whether the European Union (Eurozone) is indeed an Optimum Currency Area, investigating the existence of real and nominal convergence in a geographical zone in which a restricted group of countries could share the same currency since 1 January, 1999.

In fact, since the beginning of the Euro, there have been many discussions on the issue of whether the Eurozone could actually be classified as an OCA, and of the wisdom of the decision to adopt one common currency. More recently, in the current financial crisis, the skepticism concerning this decision has intensified (Furrutter, 2012), and it is appropriate to re-appraise the EU-OCA discussion to examine the rationale for the creation of a common currency area and its criteria for membership.

Our contribution to the debate focuses on the study of the depth of European integration under the two perspectives of real and nominal convergence. For this purpose, we explore the processes of real convergence and nominal convergence based on spectral analysis, Hurts indicator, Augmented Dickey-Fuller (ADF) and Schmidt-Phillips unit root tests, and fractionally-integrated processes.

The paper is structured in five sections. In section 2 we summarize Robert Mundell’s theory concerning OCAs by briefly reviewing the well-known economic and political criteria for a successful currency area. In section 3, from Mundell’s OCA-theory we address the question of whether the European Union (Eurozone) really is an OCA. In section 4, we answer this question by assessing the integration process of the older EU 12 (-1) member countries. Finally, in section 5, we present some concluding remarks based on empirical evidence.

2. Optimum Currency Area Theory

The notion of an Optimum Currency Area was pioneered by the economist Robert Mundell (Mundell, 1961). However, whilst credit often goes to this author as the architect of the idea, some scholars (e.g., Scitovsky, 1984) point to earlier studies on the same subject, namely Abba Lerner (Lerner, 1944, 1947).