

INFLATION DYNAMICS AND THE CROSS-SECTIONAL DISTRIBUTION OF PRICES  
IN THE E.U. PERIPHERY  
(In progress)

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## **Extended Abstract**

We study the connection between inflation dynamics and the higher-order moments from the cross-sectional distribution of prices for three of the peripheral countries of the European Union (E.U.): Greece, Portugal and Spain. Our sample spans a period of about 30 years and essentially covers all of the pre and post E.U. accession events, as well as the introduction of the common currency. Using a detailed dataset, we employ a micro-founded model of inflation determination along the lines of the hybrid New Keynesian Phillips curve and extensively document the relative importance and some of the peculiarities of these three economies in the context of the E.U. and the efforts for inflation harmonization and economic integration.

Evidence of a significant statistical relationship between inflation and the higher cross-sectional moments (variance and skewness) of the distribution of prices is amply available in the literature. Based on Vining's and Elwertowski's (1976) seminal paper, different lines of research have examined both the existence of this relationship and its origins. Most attention has been concentrated towards the study of the relationship between inflation and its second higher moment, although the exploration of the relationship between inflation and its third higher moment has gained momentum. Ball and Mankiw (1995) and Balke and Wynne (2000) have built on previous work by Batchelor (1981), Blejer (1983), and Mizon, Safford, and Thomas (1990) to study the nature of this relationship. Although the existence of this empirical regularity has been reported under a variety of circumstances for a number of different countries [Vining and Elwertowski (1976), Ball and Mankiw (1995), and Balke and Wynne (2000) for the United States; Dopke and Pierdzioch (2003) for Germany; Amano and Macklem (1997) for Canada; De Abreu Lourenco and Gruen (1995) for Australia], its categorization as a macroeconomic stylized fact has been questioned by the work of Bryan and Cecchetti (1999a) and, in some measure, by Verbrugge (1999.) These authors attribute to small-sample bias the reason for the detected correlation between inflation and its higher-order moments. This debate, on purely statistical grounds, have been continued by the works of Ball and Mankiw (1999) and Bryan and Cecchetti (1999b), although Balke and Wynne (2000) also offer an alternative economic view on the issue. Simultaneously, the question of the origin of this correlation is also open to debate. The most frequently cited Neo-Keynesian argument, invoking the existence of menu costs to justify the apparent sluggishness of the relative price adjustment processes, has only recently been

questioned by Balke and Wynne (2000.) These authors argue that technology shocks are, instead of menu costs, responsible for this empirical regularity.

In this paper we build on the analysis developed by Ball and Mankiw (1995) to study the relationship between aggregate inflation and the cross-sectional distribution of relative-price changes in the context of contemporary Greece, Portugal and Spain, while addressing the relevant points raised by Bryan and Cecchetti (1999a) and contesting the real-business-cycle interpretation of this phenomenon given by Balke and Wynne (2000.)

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