



JOURNAL OF Economic Dynamics & Control

Journal of Economic Dynamics & Control 32 (2008) 848-874

www.elsevier.com/locate/jedc

## Competition and inflation differentials in EMU

Javier Andrés<sup>a,b,\*</sup>, Eva Ortega<sup>b</sup>, Javier Vallés<sup>c</sup>

<sup>a</sup>Departamento de Análisis Económico, Facultad de Economía, University of Valencia, Spain

<sup>b</sup>Bank of Spain, Spain

<sup>c</sup>Office of the President of the Spanish Government, Spain

Received 7 December 2004; accepted 19 March 2007 Available online 19 April 2007

#### Abstract

In a monetary union, inflation rate differentials may be substantial over the business cycle. This paper parameterizes a monetary union with cross-country structural differences in (i) the elasticity of demand in the goods markets, (ii) the degree of price inertia and (iii) the preference for foreign goods in consumption. The model, calibrated to reproduce two large EMU countries, is able to generate non-negligible inflation differentials in response to symmetric shocks. The mechanism of price discrimination is the most important one, but moderate differences in the degree of openness have sizeable effects on the dispersion of inflation rates if idiosyncratic shocks predominate.

© 2007 Elsevier B.V. All rights reserved.

JEL classification: E31; E52; F41

Keywords: Price discrimination; Inflation differentials; Monetary union; Nominal and real rigidities

*E-mail address:* Javier.Andres@uv.es (J. Andrés). *URL:* http://iei.uv.es/javierandres/ (J. Andrés).

<sup>\*</sup>Corresponding author. Departamento de Análisis Económico, Facultad de Economía, University of Valencia, Avda. dels Tarongers s/n, Edifici Oriental, 46022 Valencia, Spain. Tel.: +34963828260; fax: +34963828249.

#### 1. Introduction

Changes in relative prices in a monetary union, i.e. inflation differentials, may not disappear despite the fixed exchange rate. In March 2006, the difference between the maximum and minimum HICP annual inflation rate between the Euro area countries was 2.8 percentage points. Indeed, the dispersion measured as the standard deviation of the inflation rates across Euro area countries is around 1% and has remained very persistent since the beginning of the EMU in spite of the changes in the level of inflation. Fig. 1 shows how this affects all sectors of the economy. Inflation dispersion in the non-energy industrial sector is as persistent and about as high as for the whole economy.

Observed inflation differentials can be due to the convergence processes enhanced by economic integration that vanish in the long run, such as convergence in price levels associated with productivity catching-up – the Balassa–Samuelson effect (Balassa, 1964; Samuelson, 1964) – and income levels convergence. Nevertheless, empirical evidence (see Rogers, 2002) shows that factors other than price convergence explain most of the cross-country inflation differences in Europe during the nineties.<sup>1</sup>

In the present paper, we analyze potential sources of inflation differentials among members of a monetary union beyond those associated with income and price convergence. Differences in economic structures, such as the degree of competition, openness or the intensity of nominal inertia, may also generate cross-country inflation differentials even in response to common shocks. We explore this alternative explanation to account for the EMU evidence. Our aim is to explain inflation differentials that are relevant at business cycle frequencies and, therefore, we focus on the differential of the short-run response of inflation to shocks across countries.

It is well known that in the case of the EMU the different behavior of the sectors closed to foreign competition, i.e. non-traded goods, is largely responsible for both the persistent and the short-run inflation differentials. Fig. 1 shows that the traded sector also displays persistent inflation differentials, while it is often assumed to have only negligible ones in a monetary union. Our study focuses on differences in the economic across countries that may explain these differences. The fact that structural differences play a role in the unequal response of inflation rates to shocks across European economies is widely acknowledged and there are serious legal efforts aimed to reducing them. However, few studies have examined the business cycle implications of such differences. Since we focus on just a limited set of causes behind inflation differentials, our paper can be viewed as aiming to explain a lower bound for these that would prevail even in economies in which other important factors in

<sup>&</sup>lt;sup>1</sup>Country case studies (see Estrada and López-Salido, 2004, for Spain) and Euro area comparisons for the largest economies (Ortega, 2003) also show that during the years prior to EMU convergence processes such as the Balassa–Samuelson hypothesis have not necessarily been the major factor behind the changes in relative prices across countries.

### Download English Version:

# https://daneshyari.com/en/article/5099416

Download Persian Version:

https://daneshyari.com/article/5099416

<u>Daneshyari.com</u>