Available online at www.sciencedirect.com
ScienceDirect
Journal of International Money and Finance 27 (2008) 209–226
Journal of International Money and Finance
www.elsevier.com/locate/jimf

Optimal monetary policy in the euro area in the presence of heterogeneity

Sophocles N. Brissimis [a,b], Ifigeneia Skotida [a,c,*]

[a] *Economic Research Department, Bank of Greece, 21 E. Venizelos Avenue, Athens 10250, Greece*
[b] *Department of Economics, University of Piraeus, 80 Karaoli and Dimitriou Street, Piraeus 18534, Greece*
[c] *Department of International and European Economic Studies, Athens University of Economics and Business, 76 Patission Street, Athens 10434, Greece*

Abstract

This paper examines the optimal design of monetary policy in the European monetary union in the presence of structural asymmetries across union member countries. It derives analytically an optimal interest rate rule under commitment and studies the dependence of its coefficients on the parameters of the structural model of each economy, the central bank's preferences for inflation and output stabilization as shown in its loss function, and the relative size of each country. Based on a two-country, forward-looking, general equilibrium model, which is estimated for two euro area countries (Germany and France), we show that there are gains to be achieved by the ECB taking into account the heterogeneity of economic structures. This finding appears to be robust under alternative weights given by the central bank to the stabilization of the target variables. Although the implementation of the proposed rule involves difficulties relating to data and estimation constraints as well as risks of accommodating structural divergences, it is important that the ECB takes into consideration national characteristics in formulating its monetary policy, especially in view of more countries joining the European monetary union in the future. However, as monetary and financial integration advances, the welfare benefits of monetary policy responding to individual countries' variables may become less significant.
© 2007 Elsevier Ltd. All rights reserved.

JEL classification: E52; E58

Keywords: Monetary policy rules; Heterogeneous monetary union

* Corresponding author. Economic Research Department, Bank of Greece, 21 E. Venizelos Avenue, Athens 10250, Greece. Tel.: +30 210 3202585; fax: +30 210 3233025.
E-mail address: iskotida@bankofgreece.gr (I. Skotida).

0261-5606/$ - see front matter © 2007 Elsevier Ltd. All rights reserved.
doi:10.1016/j.jimonfin.2007.12.007

1. Introduction

On 1st January 1999, the European monetary union was established, initially with 11 member countries, followed by Greece from 1st January 2001 and Slovenia from 1st January 2007. Member countries are subject to a centralized monetary policy conducted by the European Central Bank (ECB) and a common currency. According to the mandate of the ECB, as defined in the Maastricht Treaty (article 105 (1)), the primary objective of monetary policy is to maintain price stability over the medium term in the euro area; without prejudice to this objective, the ECB shall support the general economic policies in the Community, which include sustainable and non-inflationary growth. The focus of the ECB is on price stability in the euro area *as a whole*. Questions of individual country performance do not enter policy decision-making (ECB, 2005).

Research on the monetary policy strategy of the ECB has increased in recent years. Most researchers focus on the specification of the appropriate monetary policy rule and the welfare improvement that can be achieved by using this rule. Little attention, however, has been given to the issue of data aggregation and the importance of national differences for the success of the common monetary policy. Although the dispersion of economic developments across member countries is considered a normal feature of any monetary union related to the convergence process, in the European monetary union it is also, at least to some extent, attributed to diverging national policies and long-lasting structural inefficiencies, such as nominal and real rigidities in product and factor markets. In view of the enlargement of the European monetary union, national differentials are expected to become even larger with potential costs in terms of the union's economic performance.

Even though the objectives of the ECB are expressed exclusively in union-wide terms, the fact that the economies of the euro area are characterized by structural differences and may be hit by asymmetric shocks can make neglecting national developments very costly. Therefore, it is interesting to examine the benefits for the effectiveness of monetary policy in the euro area from incorporating national information into interest rate decisions, as opposed to reacting solely to aggregate union-wide variables. In order to investigate this claim, we extend the analysis of the studies presented in Section 2 and analytically derive an optimal interest rate reaction function of the monetary union's central bank by minimizing its loss function subject to a multi-country structural model. The paper contributes to the literature on the optimal design of monetary policy in the European monetary union in the presence of structural asymmetries across union member countries by studying the dependence of the coefficients of the interest rate rule on the parameters of the structural model of each economy, the central bank's preferences for inflation and output stabilization, as shown in its loss function, and the relative size of each country. Furthermore, recognizing the advantages of New-Keynesian models in describing the economy, our analysis adopts a forward-looking perspective in the spirit of Clarida et al. (1999). As an extension to Benigno (2004) and Lombardo (2002), we allow for more than one type of asymmetry. We evaluate the optimal weights that each country's economic variables should be assigned by the central bank in its interest rate reaction function using the parameters of the multi-country structural model and we assess the welfare improvement that would be achieved by the implementation of such a rule compared to a rule that focuses only on union-wide variables. The results of our paper suggest that an optimal monetary policy rule should take into consideration not only the relative size of the countries as at present (relative output or population), but also the structural characteristics of the economies.

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
✓ امکان دانلود نسخه ترجمه شده مقالات
✓ پذیرش سفارش ترجمه تخصصی
✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
✓ دانلود فوری مقاله پس از پرداخت آنلاین
✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات