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Transparency and inflation: What is the effect on the Brazilian economy?

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ABSTRACT

This paper presents empirical evidence concerning the effect of central bank transparency on inflation considering the Brazilian case after the adoption of inflation targeting. Two indices for measuring transparency, based on forward-looking and backwardlooking views, are developed. Furthermore, empirical evidence is divided into three steps: (i) analysis of simple correlation through scatterplot diagrams; (ii) use of VAR models; and (iii) estimation of different specifications of the Phillips curve using OLS and GMM based on the structural model used by the Central Bank of Brazil (CBB). The findings allow one to conjecture that inflation expectations are well coordinated by the CBB. In short, the transparency of information by the CBB is a very important tool for guiding public expectations and thus contributes to maintain inflation under control.

1. Introduction

Nowadays it is recognized that one of the main sources of uncertainty which puts the control over inflation at risk is the lack of public perception in relation to the objectives of monetary policy in the long run. In an attempt of attenuating this type of uncertainty, several countries have adopted inflation targeting since the 1990s. This monetary regime represents a nominal anchor and works as a guide to inflation expectations. As a consequence, central bank transparency is an important tool for the success of an inflation targeting regime.

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The literature on central bank transparency in inflation targeting highlights that transparency is important because it improves the public's perception of the central bank's actions and also improves the delegation framework in democratic societies (Bernanke, 2004; Svensson, 1999). In a theoretical view, transparency helps to reduce the inflation bias in monetary policy because it reduces the asymmetric information between the central bank and the public (Walsh, 2003). As a consequence, there is an increase in central bank commitment to achieve the inflation target.

In short, as stated by Siklos and Ábel (2002), Woodford (2005), and de Haan et al. (2007), central bank transparency is a key instrument in monetary policy-making in recent years. Nevertheless, the use of this tool in emerging economies is not easy. In a general way, these economies have weak institutions and have experienced hyperinflations. Therefore, the analysis of the effect caused by central bank transparency on inflation is particularly relevant for emerging economies.

This study contributes to the literature on central bank transparency in emerging economies through the development of transparency indices based on forward-looking and backward-looking views that are applied in an empirical analysis for the Brazilian case after the adoption of inflation targeting. It is important to highlight that the traditional indices, as those elaborated by Eijffinger and Geraats (2006), are based on information disclosure by the central bank or current practice and are subject to the researcher's subjectivity; they are not enough to study one country taking into account time series data.

In order to show the effect of central bank transparency on inflation in Brazil, the empirical evidence for the effect of transparency on inflation is divided into three steps: (i) straightforward correlation based on scatterplot diagrams; (ii) use of vector autoregression models (VAR); and (iii), estimation of different specifications of the Phillips curve with OLS and GMM models based on the structural model adopted by the Central Bank of Brazil (CBB).

The remainder of this paper is organized as follows: the next section presents a brief overview of the literature regarding transparency and inflation; Section 3 illustrates the main points that characterize Central Bank of Brazil transparency; Section 4 presents the empirical evidence of the effect of central bank transparency on inflation; and the last section concludes.

2. Central bank transparency and inflation

The analysis of central bank transparency is part of the rules versus discretion debate. Since central bank transparency can be understood as the absence of asymmetric information between the policymaker and the public, it works as a tool for increasing the commitment of central banks in the achievement of its targets (de Mendonça and Simão Filho, 2008). As pointed out by Geraats (2002), transparency is a result of the quality of the information and not only its disclosure. This observation matters because in the case of the public not being able to interpret the information that is disclosed correctly, inflation expectations make inflation more volatile (Geraats, 2006).

Geraats (2002) highlights two effects which can be mitigated due to an increase in central bank transparency: the uncertainty effect and the incentive effect. The uncertainty effect is a consequence of asymmetric information which, in turn, allows policymakers to surprise the public. The second effect is the result of the possibility of economic agents which have private information influencing the behavior of others through the disclosure of information. It is important to note that, as identified by Walsh (2003), the adoption of inflation targeting would be an adequate framework as a way of avoiding these effects because it promotes an increase in central bank transparency.

The theoretical analysis regarding the effects caused by transparency is focused on the central bank's preference or the uncertainty concerning shocks on the economy. Faust and Svensson (2001) observed that the transparency regarding the central bank's preference makes credibility and reputation more sensitive to the conduction of monetary policy. Hence, high central bank transparency (the public estimates the central bank's preference on inflation and output correctly) implies a cost to the central bank if it deviates from the inflation target. In this sense, central bank transparency can be a remedy against inflation bias in monetary policy.

Most studies of the empirical literature on central bank transparency and inflation show a beneficial effect of transparency on inflation. For example, Chortareas et al. (2002) built a transparency