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Discretionary fiscal policy and disagreement in expectations about fiscal variables empirical evidence from Brazil

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ABSTRACT

The present paper provides evidence in support of the hypothesis that the use of discretionary fiscal policy creates disagreements in expectations about both public debt and budget balance. The analysis considers the Brazilian case. Brazil is an interesting case study once it presents serious problems of public accounts deterioration, and in addition it had the president of the republic removed from its position since she was condemned on the charge of having committed crimes of fiscal responsibility. The estimates are made through ordinary least squares, one-step generalized method of moments and two-step generalized method of moments. In order to give robustness to the results, the study also provides estimates through an autoregressive distributed lag modeling approach (ARDL). Besides, in order to dynamically analyze the relationships between discretionary fiscal policy and disagreements in expectations about fiscal variables, we present an impulse response analysis based on vector autoregressive (VAR) estimates. The results indicate that the adoption of discretionary fiscal policies increases the disagreement in expectations about fiscal variables, and thus creates uncertainties about the future behavior of both the public debt and the budget balance.

1. Introduction

Based on the existing evidence that discretionary fiscal policy generates bad fiscal outcomes (e.g., Fatás and Mihov, 2003a, 2003b and 2009; Tsuri, 2005; Ciro and de Mendonça, 2016), and considering the work of Cavallari and Romano (2017) which provides evidence that the effects of fiscal policy depend on expectations about future policy actions, we investigate the effect of discretionary fiscal policy on the process of expectations formation related to fiscal variables. In particular, the paper analyzes whether discretionary fiscal policy affects the disagreements in expectations about both public debt and budget balance. Therefore, since we investigate whether discretionary fiscal policy represents a source of uncertainties related to fiscal variables, as a novelty, we bring to the same empirical analysis two literature that have never been exploited together: (i) the literature on discretionary fiscal policy, and (ii) the literature on disagreement in expectations.

Due to the fact that expectations play a key role in decision making process, studies addressing the process of expectations formation seek to understand the determinants and consequences of disagreement in expectations, and the relation between disagreement in expectations and uncertainties (e.g., Bomberger, 1996; Boero et al., 2008; Mankiw et al., 2003; Söderlind, 2011; Dovern et al., 2012; Pfajfar and Santoro, 2013; Oliveira and Curi, 2016; Montes et al., 2016; Rico et al., 2016; Montes and Curi, 2017). Mankiw et al. (2003) point out that, in the process of expectations formation, agents may present divergences in their expectations and, therefore, disagree about the future behavior of different economic variables. They also stress that the disagreement in expectations may be substantial and vary over time according to the evolution of uncertainties surrounding the behavior of certain economic variables.

The literature that analyzes the disagreement in expectations seeks to understand the sources of disagreement, its consequences, how to measure disagreement, and how to link the disagreement in expectations with macroeconomic uncertainties (e.g., Patton and Timmermann, 2010; Söderlind, 2011; Dovern et al., 2012; Andrade et al., 2014; Acedański,

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2017). Based on the idea that the disagreement in expectations about a certain variable reflects the uncertainties of economic agents about the future behavior of this variable, studies make use of the disagreement in expectations about a certain variable as a proxy for the uncertainty about this variable (e.g., Bomberger, 1996; Boero et al., 2008; Söderlind, 2011; Montes and Curi, 2017).

An unexplored field in the literature on disagreement in expectations is that one related to the disagreement in expectations about fiscal variables. A reason for the scarcity of studies addressing the disagreement in expectations about fiscal variables is the lack of available data of expectations for these variables. There are few countries – such as Brazil – that provide database of expectations formed for different macroeconomic variables, including among them, expectations about fiscal variables. Making use of this Brazilian database of expectations provided by the Central Bank of Brazil (CBB), the work of Montes and Curi (2017) analyzed whether the disagreement in expectations about public debt affects the inflation risk premium in Brazil. The authors find that when uncertainties related to the behavior of public debt in the future increase, the inflation risk premium also increases and inflation expectations deteriorate.

The present paper is part of the literature that seeks to identify the causes of disagreement in expectations. Since there is evidence that the disagreement in expectations about public debt in Brazil affects the inflation expectations formation process and therefore the inflation risk premium (e.g., Montes and Curi, 2017), it is important to understand what creates uncertainties on the expectations formation process for both the public debt and the budget balance. Thus, this study is closely related to the work of Montes and Curi (2017), once it addresses the disagreements in expectations about fiscal variables in Brazil. More precisely, the study investigates whether these disagreements are affected by the adoption of discretionary fiscal policy originated from the expenditure side, which is captured by discretion in government spending through the indicator of fiscal impulse.[1]

Since the fiscal impulse captures the discretionary behavior of the government in relation to fiscal policy, it reveals the changes in fiscal policy resulting from intentional actions of the policymaker which are not due to the economic cycle, but in fact are due to new political preferences (Blanchard, 1990; Alesina and Perotti, 1995).[2] In general, the literature points out that fiscal policy is more sustainable, more disciplined and more effective, the lower the fiscal impulse is (i.e., the lower the possibility of the government to act in a discretion way). For instance, according to Fatás and Mihov (2003a, 2003b and 2009), Tsuri (2005) and Ciro and de Mendonça (2016), the discretionary fiscal policy generates excessive deficits, increases public debt and eliminates the effectiveness of automatic stabilizers. Therefore, greater discretion in fiscal policy can lead to higher public debt and larger budget imbalances, resulting in increases of the disagreements in expectations about both public debt and budget balance. In this sense, once the disagreements in expectations about both public debt and budget balance reflect the uncertainties related to the behavior of these variables, the idea of the present study is to verify whether these uncertainties are amplified by discretionary fiscal policy (i.e., by the fiscal impulse). Our study is the first to empirically address the relation between discretionary fiscal policy (measured by the fiscal impulse) and the disagreements in expectations about fiscal variables. There exist few studies addressing the determinants of the disagreements in expectations about macroeconomic variables in Brazil (e.g., Oliveira and Curi, 2016; Montes et al., 2016), however, to our knowledge, there are no studies addressing the determinants of the disagreements in expectations about fiscal variables.

The analysis considers the Brazilian case. Besides the availability of data, Brazil is an interesting case study once it presents serious problems of public accounts deterioration, and in addition it had the President of the Republic removed from its position since she was condemned on the charge of having committed crimes of fiscal responsibility (in August 2016). The analysis covers the period from February 2003 to December 2016,[3] and the estimates are made through ordinary least squares (OLS), one-step generalized method of moments (GMM) and two-step generalized method of moments (GMM-2). In order to give robustness to the results and aiming at identifying long-run relations, the study also provides estimates through an autoregressive distributed lag modeling approach (ARDL). Besides, in order to dynamically analyze the relationships between discretionary fiscal policy and disagreements in expectations about fiscal variables, the paper presents an impulse response analysis based on vector autoregressive (VAR) estimates.

The results suggest the adoption of discretionary fiscal policies produces greater disagreement in expectations about public debt, and the effect of fiscal impulse on the uncertainty concerning future budget balance cannot be neglected. Therefore, the study contributes to the literature that addresses the effects of discretionary fiscal policy on the economy, since the findings bring new perspectives on the effects of fiscal policy on the process of expectations formation. In addition, the results point to the following policy recommendation: the use of discretionary fiscal policies should be avoided by the government, once it increases the disagreement in expectations about both public debt and budget balance, and therefore it increases uncertainties concerning these variables, creating an unstable economic environment.

Since we are interested in the effects of discretionary fiscal policy on the disagreements in expectations about fiscal variables, the next section briefly reviews the literature on the effects of discretionary fiscal policy. Section 3 presents the data and methodology. Section 4 shows the results. The robustness analysis is presented in section 5, and section 6 brings the conclusions.

2. A brief review of the literature on the effects of discretionary fiscal policies

Hebous (2011) presents a survey of theoretical and empirical studies related to the effects of fiscal policy shocks on macroeconomic aggregates. The author argues that the literature addressing the effects of fiscal policy on the economy is broad, and it goes through a series of issues whose conclusions are both controversial and far from definitive – such as, Ricardian equivalence, fiscal multipliers, automatic stabilizers, fiscal policy sustainability and discretionary fiscal policy effects.

With regard to discretionary fiscal policy, the literature is divided in different approaches. There are studies, for example, concerned with the development of measures able to capture the discretionary fiscal policy (e.g., Agnello et al., 2013; Attinasi and Klemm, 2016). There are studies seeking to understand the determinants (or the causes) of discretionary fiscal policy and, as a consequence, seeking to develop mechanisms to mitigate such discretionary policies (e.g., Buti and Noord, 2004; Agnello and Souza, 2014; Ciro and de Mendonça, 2016). On the other hand, there are studies addressing the effects of discretionary fiscal policy on the economy (e.g., Fatás and Mihov, 2003b; Attinasi and Klemm, 2016).

In a seminal paper on the dynamic effects of shocks in government spending and taxes on US activity in the postwar period, Blanchard and Perotti (2002) find that positive government spending shocks have a positive effect on output, and positive tax shocks have a negative effect. However, in the case of positive spending shocks, there are opposite effects on the different components of the output: while private consumption increases after positive spending shocks and private investment is greatly expanded, exports and imports fall. The authors also find evidence that increases in both government spending and taxes have a

[1] The indicators of fiscal impulse (FI and FI_2) are constructed following Fatás and Mihov (2003a and 2003b), Afonso et al. (2010) and Ciro and de Mendonça (2016).

[2] For more details about the determinants of discretionary fiscal policy, see, for instance, Arsic et al. (2017).

[3] The period is defined based on the availability of the data.