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Basic interest rate, bank competition and bank spread in personal credit operations in Brazil: A theoretical and empirical analysis

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Abstract

The debate on the strategy of banking spread reduction in Brazil has been extended for a long time and was fundamentally concentrated in macroeconomics aspects. This paper has the goal of evaluate the new policy of banking spread reduction implemented by the federal government, which has added microeconomic aspects to this tendency. In order to do so, a mathematical model was presented that combines microeconomics aspects, such as was developed by Nakane (2001), with macroeconomics aspects, originally presented by Ho and Saunders (1981). This model was tested for the 25 largest banks in the period of March 2009 to March 2013, using the Panel Data Methodology. The GMM System model was the one that best fitted the data gathered and the results showed that both aspects are relevant in explaining the banking spread in Brazil, and should not be analyzed separately, as is frequently made in the literature, considering the econometric problems related to the omission bias of relevant variables.

JEL classification: C33; D43; E43

Keywords: Banking spread; Basic interest rate; Competition; Panel data; Brazil

Resumo

O debate acerca da estratégia de redução do *spread* bancário no Brasil estendeu-se por um longo período e concentrava-se fundamentalmente em aspectos macroeconômicos. Este artigo tem por objetivo avaliar a nova política de redução do *spread* bancário implementada pelo governo federal, a qual adicionou os aspectos microeconômicos. Para atingir este objetivo, foi apresentado um modelo matemático que combina aspectos microeconômicos, desenvolvido por Nakane (2001), com aspectos macroeconômicos, originalmente apresentados por Ho & Saunders (1981). Este modelo foi testado para os 25 maiores bancos no período de março de 2009 a março de 2013, utilizando a metodologia de Dados em Painel. O Modelo *GMM System* foi o que mais se adequou aos dados analisados e seus resultados mostraram que ambos aspectos são relevantes para explicar o *spread* bancário no Brasil e

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não devem ser analisados separadamente, como é frequentemente realizado pela literatura, em função dos problemas econométricos relacionados ao viés de omissão de variáveis relevantes.

Palavras-chave: Spread Bancário; Taxa Básica de Juros; Competição; Dados em Painel; Brasil

1. Introduction

The theory of the banking firm has undergone several changes in its evolution. In its early days, it was dominated by neoclassical thought. In this perspective, the commercial banks were regarded as mere financial intermediaries and unable to influence real economic variables such as employment and output. In its evolution, were presented diverse perspectives on the determinants of banking spread and, currently, the literature recognizes the importance not only of macroeconomic aspects, but also of the microeconomic ones.

Banking spread in Brazil has been for long at high levels and, although with a downward trend in recent years, it still remains at a relatively higher level when compared to the values observed in the rest of the world. A commonly used explanation is that high levels of basic interest rate cause the high levels of banking spread in the country. However, an important current of thought – pioneered by Bresnahan (1982) and Lau (1982) – considers that the microeconomic factors play a fundamental role in understanding the banking spread. This consideration gains more relevance when observing the measures recently adopted by the government of Dilma Rousseff in Brazil, which sought to promote greater competition between banks by using public banks as boosters of private banks.

The measures adopted by the Brazilian government are still in the evaluation process and it is hoped that this strategy is effective in reducing the level of banking spread. Thus, understanding the behavior of banking spreads can allow the government to perfect their strategies for reducing spread signaling, for example, whether these measures can further reduce the spread in the country, if additional measures are necessary or whether new measures should be implemented to present best results.

This study aims to empirically analyze the current strategy to reduce the spread in Brazil in a perspective still little explored in the literature, which are considered both the micro and macroeconomic determinants of the variable. These results may help the government to identify the most effective strategies for reducing the banking spread in the country. Evidently, the decisions taken by the Brazilian government to reduce the variable into consideration leaves room to extensive discussions which are not limited to the theoretical realm, spreading to discussions of a political and even social nature.

This work is dedicated to analyze the possible determinants of the Brazilian banking spread and observe the relevance of their impacts in this variable, by observing the effects of lower interest rates and increased competition stimulated by public banks. It is intended to test the hypothesis that both factors – microeconomic and macroeconomic – are capable of affecting the banking spread, using the methodology of panel data for 25 commercial banks from the period that goes from the first quarter of 2009 to the first quarter of 2013. For this, we estimated the following models: GMM Difference and GMM System.

To achieve the objectives and test the hypothesis of the paper, in addition to this introduction, the paper is structured in four sections. Section 2 presents the theoretical and empirical research about the determinants of banking spread as well as the mathematical model to substantiate the analysis. In sequence, the discussion turns to the methodology to be employed. In Section 4, the empirical analysis of the determinants of banking spread in the Brazilian economy will be conducted. Finally, we present the concluding remarks.

2. An exposition of the main theoretical and empirical determinants of banking spreads

The theoretical discussion about the banking firm has been predominantly presented by neoclassical intellectuals, and its origin refers to what Tobin (1963) conventionally called the “old vision” of the banking firm, where banks were seen as “a monopolistic entity and ‘quasi-technical’ currency creators” (Paula, 1999, p. 5), able to create money without limit, although this process is restricted by the legal reserve requirements imposed by the monetary authorities. In the “new vision”, the role of financial intermediaries becomes the simultaneous satisfaction of the portfolio preferences