

The stability–concentration relationship in the Brazilian banking system

E.J. Chang, S.M. Guerra, E.J.A. Lima, B.M. Tabak*

*Research Department, Banco Central do Brasil, SBS Quadra 3,
Bloco B, Ed. Sede 9 andar, 70074-900 Brasília, DF, Brazil*

Received 23 May 2006; accepted 18 April 2007

Available online 3 May 2007

Abstract

In this article, the relation between non-performing loans (NPL) of the Brazilian banking system and macroeconomic factors, systemic risk, and banking concentration is empirically tested. In evaluating this relation, we use a dynamic specification with fixed effects, while using a panel data approach. The empirical results suggest that the banking concentration has a statistically significant impact on NPL, suggesting that more concentrated banking systems may improve financial stability. These results are important for the design of banking regulation policies.

© 2007 Elsevier B.V. All rights reserved.

JEL classification: G15; G21; O54

Keywords: Financial fragility; Systemic risk; Banking system

1. Introduction

The global reorganization process in the banking industry has caused an important debate on the impact that consolidation has on financial stability. The relation between the fragility of the banking system and competitiveness/concentration has been widely studied (Koskela and Stenbacka, 2000; Allen and Gale, 2004; Beck et al., 2006; Boyd and De Nicoló, 2005). In spite of the theory that defends the idea of a trade-off between competition and stability of the banking sector, there is a lack of consensus regarding the direction of the relation, given its complexity.

Despite the great number of theoretical and empirical contributions to this area of study, the evaluation of the impact of the increase in competition, which is caused by the global reorganiza-

* Corresponding author. Tel.: +5561 3414 2045; fax: +5561 3414 3913.

E-mail address: benjamin.tabak@bcb.gov.br (B.M. Tabak).

tion process of the financial systems and incentives and government programs, on the risks taken by the banks and on the banks' stability continues to be of great importance. Many aspects of this evaluation remain unexplored, and this relationship is complex because of the existence of various idiosyncratic factors such as limited liability associated with debt contracts and the nature of asymmetric information between lenders and borrowers.

This study is motivated by the lack of empirical studies that focus on the relation between concentration and stability. We also considered the relevance of that kind of research for the macro-prudential analysis of the banking sector, not to mention the relative importance of the Brazilian banking market for Latin America. The study looks to empirically test the relation between NPL of the banking system (which can be seen as a measure of financial fragility) and banking concentration, while controlling results for the effects of systemic risk (measured by the country risk and exchange rate risk) and of macroeconomic indicators, which are fairly relevant variables for emerging countries.

The main intuition for a stability–concentration relationship is that in a more concentrated banking system, banks are able to diversify their loans, improving the risk–return trade-off. The results obtained in the paper suggest that this is the case in Brazil.

The main contribution of this paper to the banking literature is that it presents a methodology to test the stability–concentration relationship for an emerging country. Empirical tests of this nature are not yet present in the literature. We do not attempt to find what should be the optimal level of concentration or what would be the optimal number of banks in the banking system.

The remainder of the article is structured as follows. Section 2 presents a brief review of the literature. In Section 3, the methods used in the article are discussed and the sampling process is defined. The empirical results obtained are presented in Section 4. Section 5 concludes the article with the final considerations and suggestions for further research.

2. Literature review

According to Beck et al. (2006), the theoretical forecasts on the relation between concentration and fragility of the banking system are conflicting. There exists at least two opposed visions, concentration–stability and concentration–fragility.

According to the first view, concentration–stability, some theoretical assumptions and empirical comparisons suggest that a banking system with many institutions and low concentration is more inclined to financial crisis than concentrated systems composed of a few banks (Allen and Gale, 2000, 2004). Beck et al. (2006) suggest that one of the hypotheses of the relation, concentration–stability, is that it would be substantially easier to monitor a few banks in a concentrated banking system than to supervise many banks in a less concentrated system. From that perspective, the banking supervision would be more effective, and the risk of contagion, as well as the systemic crisis, would be less pronounced in a concentrated market. Another basic hypothesis following that line of thought is that more competition would be associated with a profit reduction, which would increase the incentives for banks to assume higher risks (risk shifting). This leads us to believe that in more concentrated systems, the higher market power of the banks would lead to higher profits that would somehow serve as protection against adverse shocks and would increase the franchise value of the bank. This result would reduce the managers' and owners' incentives to assume excessive risks and, consequently, it would reduce the probability of systemic breakdown (Hellmann et al., 2000; Allen and Gale, 2000). Finally, the competition would tend to increase the rates paid to the depositors, decreasing the banks' margins of gain and increasing the probability of bankruptcy (Matutes and Vives, 2000).

متن کامل مقاله

دریافت فوری ←

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