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Bank Size, Market Power and Financial Stability

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1.1 Introduction

The financial crisis in which the world has been living since the summer of 2007 has shown the importance of the financial sector for the proper functioning of economies. For the European countries the financial crisis has signified a reduction in the volume of credit granted, decreased activity in international markets and an increase of risk and instability. Financial entities have seen how they have had to change their way of operating, adapting to a situation in which difficulties exist in obtaining finance in international markets, both in volumes and in terms of interest rates, and in which the levels of risk are substantially higher. Moreover, financial entities’ degree of risk aversion has increased considerably, which has translated into a hardening of credit conditions.

The experience of these two years of crisis shows that its intensity has been different depending on which countries are analysed. Thus, countries like the United States, the United Kingdom, France and Germany have needed the recapitalization of part of the financial sector (see European Central Bank, 2010). However, in other countries, such as Italy or Spain (except in the cases of the savings banks of Caja Castilla La Mancha and CajaSur), though government support has taken the form of guarantees for the issue of debt and the acquisition of financial assets, the public recapitalization of financial entities has not been necessary, at least up to mid-2010.

In the current context of economic and financial crisis, it is of special interest to analyse the importance of size, given its habitual connection with systemic risk. In the recent discussions of the G-20, the Financial Stability Board and the Bank for International Settlements (BIS), among others, specific proposals are aimed at preventing the possible systemic...
risk of the biggest banks, with higher requirements in terms of capital or restructuring plans in the event of failure (with the so-called living wills). Though our \textit{a priori} is that this connection is imprecise (since what makes a bank systemic is not so much its size as the complexity of its operations and the products with which it works, and the difficulty of controlling the risks assumed and of its management as a whole), the importance of size (with such important implications in terms of \textit{too big to fail}) may have consequences for banks' market power. The objective of this paper is to determine these consequences.

It is also of interest to analyse the relationship between the intensity of competition and financial stability, since economic theory does not offer us unequivocal results. Thus, on the one hand, the most traditional hypothesis postulates that, since competition reduces a bank's market value, a problem of moral hazard will arise, giving the bank incentives to take more risks in order to increase its returns, which will cause greater financial instability. On the other hand, an alternative hypothesis postulates a positive relationship between competition and financial stability: if a bank has market power it will be able to set a higher loan interest rate, leading to an increase in more risky projects. Furthermore, on the (questionable) assumption that a more concentrated banking market permits the biggest banks to exercise more market power, these banks enjoy an insurance due to the fact that they are too big to fall, so it may induce them to take more risks. Consequently, since it is theoretically possible to postulate both a negative and a positive relationship between market power and financial stability, it is necessary to offer empirical evidence.

In order to analyse the relationship between size, market power and financial stability, in the study we estimate indicators at bank level for a large number of countries and years. Specifically, market power is proxied by means of the Lerner index, while financial stability is measured by the so-called $Z$-score (which is an inverse measurement of banking risk or probability of failure). The Lerner index has the advantage over other indicators of competition of proxying market power at firm level, and not at country level (like market concentration or Panzar and Rosse's $H$ statistic).

As well as this introduction, the paper is structured in five sections. Section 2 reviews the most recent literature on the relationship existing between size, market power and financial stability, paying special attention to the importance of size in explaining both variables. Section 3 describes the empirical approach to the measurement of the variables and Section 4 presents the sample used. In Section 5 the results of the