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Bank governance, regulation and risk taking ☆

Luc Laeven [a,b,c,d,*], Ross Levine [e,f]

[a] International Monetary Fund, Washington, DC 20431, USA
[b] Centre for Economic Policy Research, London EC 1V 0DG, UK
[c] European Corporate Governance Institute, Brussels 1180, Belgium
[d] Center, Tilburg University, Tilburg 5000 LE, The Netherlands
[e] Department of Economics, Brown University, Providence, RI 02912, USA
[f] National Bureau of Economic Research, Cambridge, MA 02138, USA

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ABSTRACT

This paper conducts the first empirical assessment of theories concerning risk taking by banks, their ownership structures, and national bank regulations. We focus on conflicts between bank managers and owners over risk, and we show that bank risk taking varies positively with the comparative power of shareholders within the corporate governance structure of each bank. Moreover, we show that the relation between bank risk and capital regulations, deposit insurance policies, and restrictions on bank activities depends critically on each bank's ownership structure, such that the actual sign of the marginal effect of regulation on risk varies with ownership concentration. These findings show that the same regulation has different effects on bank risk taking depending on the bank's corporate governance structure.

1. Introduction

In this paper, we analyze risk taking by banks, their ownership structures, and national bank regulations. We focus on the potential conflicts between bank managers and owners over risk, and assess whether bank risk taking varies with the comparative power of shareholders within the corporate governance structure of each bank. Moreover, we examine whether the relation between national regulations and bank risk depends on each bank's ownership structure.

Policy considerations motivate this research. As emphasized by Bernanke (1983), Calomiris and Mason (1997, 2003a, b), Keeley (1990), and recent financial turmoil, the risk taking behavior of banks affects financial and economic fragility. In turn, international and national agencies propose an array of regulations to shape bank risk. Yet, researchers have not assessed how standard corporate governance mechanisms, such as ownership structure, interact with national regulations in shaping the risk taking behavior of individual banks. This gap is surprising because standard agency theories suggest that

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* Corresponding author at: International Monetary Fund, Washington, DC 20431, USA.

E-mail address: llaeven@imf.org (L. Laeven).

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ownership structure influences corporate risk taking (Jensen and Meckling, 1976; John, Litov, and Yeung, 2008). This gap is also potentially serious from a policy perspective. The same regulations could have different effects on bank risk taking depending on the comparative power of shareholders within the ownership structure of each bank. Changes in policies toward bank ownership, such as allowing private equity groups to invest in banks or changing limits on ownership concentration, could have very different effects on bank stability depending on other bank regulations.

Existing research further advertises the value of simultaneously examining bank risk, ownership structure, and bank regulations. Studying nonfinancial firms, Agrawal and Mandelker (1987) find an inverse relation between risk taking and the degree of managerial control, while John, Litov, and Yeung (2008) find that managers enjoying large private benefits of control select suboptimally conservative investment strategies. Yet, research on bank risk taking typically does not incorporate information on each bank's ownership structure (Keeley, 1990; Kroszner and Rajan, 1994; Hellmann, Murdoch, and Stiglitz, 2000; Demirguc-Kunt and Detragiache, 2002). In an influential exception, Saunders, Strock, and Travlos (1990) find that owner controlled banks exhibit higher risk taking behavior than banks controlled by managers with small shareholdings. They do not, however, test whether ownership structure and regulations jointly shape bank risk taking, or whether their results generalize beyond the United States to countries with distinct laws and regulations. No previous research evaluates theoretical predictions concerning the interactive effects of national regulations and bank-specific ownership structure on the risk taking behavior of individual banks.

We frame our empirical analysis around three theoretical keystones. First, diversified owners (owners who do not have a large fraction of their personal wealth invested in the bank) tend to advocate for more bank risk taking than debt holders and nonshareholder managers (managers who do not have a substantial equity stake in the bank). As in any limited liability firm, diversified owners have incentives to increase bank risk after collecting funds from bondholders and depositors (Galai and Masulis, 1976; Esty, 1998). Similarly, managers with bank-specific human capital skills and private benefits of control tend to advocate for less risk taking than stockholders without those skills and benefits (Jensen and Meckling, 1976; Demsetz and Lehn, 1985; Kane, 1985). From this perspective, banks with an ownership structure that empowers diversified owners take more risk than banks with owners who play a more subdued governance role.

Second, theory predicts that regulations influence the risk-taking incentives of diversified owners differently from those of debt holders and nonshareholder managers. For example, deposit insurance intensifies the ability and incentives of stockholders to increase risk (Merton, 1977; Keeley, 1990). The impetus for greater risk taking generated by deposit insurance operates on owners, not necessarily on nonshareholder managers. As a second example, consider capital regulations. One goal of capital regulations is to reduce the risk-taking incentives of owners by forcing owners to place more of their personal wealth at risk in the bank (Kim and Santomero, 1994). Capital regulations need not reduce the risk-taking incentives of influential owners, however. Specifically, although capital regulations might induce the bank to raise capital, they might not force influential owners to invest more of their wealth in the bank. Furthermore, capital regulations might increase risk taking. Owners might compensate for the loss of utility from more stringent capital requirements by selecting a riskier investment portfolio (Koehn and Santomero, 1980; Buser, Chen, and Kane, 1981), intensifying conflicts between owners and managers over bank risk taking. As a final example, many countries attempt to reduce bank risk by restricting banks from engaging in nonlending activities, such as securities and insurance underwriting (Boyd, Chang, and Smith, 1998). As with capital requirements, however, these activity restrictions could reduce the utility of owning a bank, intensifying the risk-taking incentives of owners relative to managers. Thus, the impact of regulations on risk depends on the comparative influence of owners within the governance structure of each bank.

Third, while banking theory suggests that bank regulations affect the risk-taking incentives of owners differently from those of managers, corporate governance theory suggests that ownership structure affects the ability of owners to influence risk (Jensen and Meckling, 1976). As argued by Shleifer and Vishny (1986), shareholders with larger voting and cash flow (CF) rights have correspondingly greater power and incentives to shape corporate behavior than smaller owners. From this perspective, ownership structure influences the ability of owners to alter bank risk in response both to standard risk shifting incentives and to incentives created by official regulations (Boyd and Hakenes, 2008). Thus, we examine how ownership structure interacts with bank regulation in shaping the risk-taking behavior of individual banks.

These theoretical keystones combine to make two testable predictions. First, diversified owners have stronger incentives to increase risk than nonshareholding managers, so banks with powerful, diversified owners tend to be riskier than widely held banks, holding other factors constant. Second, bank regulations (such as capital requirements, activity restrictions, and deposit insurance) affect the risk-taking incentives of owners differently from managers, so the actual impact of regulations on risk taking depends on the comparative power of shareholders relative to managers within each bank's corporate governance structure. This framework, however, does not consider optimal risk taking. Instead, our more modest goal is to provide the first empirical assessment of theoretical predictions concerning how a bank's ownership structure interacts with national regulations in shaping bank risk taking.

To assess these predictions, we compile new data on individual banks from economies with different regulations, yielding a database of more than 250 privately owned banks across 48 countries. On ownership, we first measure whether the bank is widely held, i.e., the bank does not have a large owner with at least 10% of the bank's