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Deposit insurance coverage, ownership, and banks' risk-taking in emerging markets

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A B S T R A C T

We ask how deposit insurance systems and ownership of banks affect the degree of market discipline on banks' risk-taking. Market discipline is determined by the extent of explicit deposit insurance, as well as by the credibility of non-insurance of groups of depositors and other creditors. Furthermore, market discipline depends on the ownership structure of banks and the responsiveness of bank managers to market incentives. An expected U-shaped relationship between explicit deposit insurance coverage and banks' risk-taking is influenced by country specific institutional factors, including bank ownership. We analyze specifically how government ownership, foreign ownership and shareholder rights affect the disciplinary effect of partial deposit insurance systems in a cross-section analysis of industrial and emerging market economies, as well as in emerging markets alone. The coverage that maximizes market discipline depends on country-specific characteristics of bank governance. This "risk-minimizing" deposit insurance coverage is compared to the actual coverage in a group of countries in emerging markets in Eastern Europe and Asia.

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1. Introduction

Deposit insurance is generally considered an important part of the regulatory structure for the banking system. This structure should protect the "safety and soundness" of the banking system while providing banks with the appropriate rules and incentives to allocate credit and liquidity efficiently. An important role of deposit insurance within the regulatory structure is to limit the risk of bank runs by guaranteeing that depositors receive some, or all, of their deposited funds with reasonable speed even if their banks fail and must be shut down (Diamond and Dybvig, 1983).

The flip side of the role of deposit insurance as a safeguard against bank runs, as well as a consumer protection device, is a moral hazard problem caused by limited liability of banks' shareholders and the reduced incentives of insured depositors to evaluate the riskiness of their banks. This moral hazard problem implies that banks have incentives to take on risk that can be shifted to a deposit insurance fund or to tax payers. These incentives are particularly strong if equity capital is low. Thus, deposit insurance systems can contribute to the very problem (systemic bank failure) they are designed to reduce.[1]

The substantial resources devoted to the design of a Capital Adequacy Framework by central bankers and regulators in the Basel Committee indicate that there is a strong concern about incentives for excessive risk-taking. Bank managers, on the other hand, tend to deny that such incentives exist. However, the incentives need not reveal themselves as deliberate risk-taking. Instead it is the competition among banks with the opportunity to finance their lending activities at a near risk-free interest rate that induces them to prefer debt financing to equity financing. Furthermore, competition for funding will not be based on banks' risk evaluation and risk management skills. Benink and Benston (2005) show how banks' equity capital relative to total assets has declined worldwide from a level of 20–30 percent in the 20s, close to that in non-financial firms, to a level around four percent in the late 80s when the Basel Committee began its work. During this period explicit and implicit guarantees of banks' liabilities were expanding.

Additional evidence of excess risk-taking is the frequency of banking crises around the world as documented by Caprio et al. (2005). Barth et al. (2006) argue that increased resources devoted to regulation and supervision and increased sophistication of supervisors have done little to reduce the incidence of banking crises. They call for increased reliance on market discipline in the regulatory framework for banks.

In this paper we ask how deposit insurance systems and important aspects of ownership of banks separately and interactively affect market discipline and its impact on banks' risk-taking incentives. We argued in Angkinand and Wihlborg (2006) that banks' incentives to shift risk are likely to be minimized by a deposit insurance system offering partial coverage because market discipline is likely to be weak at high as well as low levels of deposit insurance coverage. The weak discipline at low levels is caused by high likelihood that governments find themselves compelled to issue blanket guarantees to creditors of distressed banks, or to bail them out. Risk-shifting and risk-taking incentives are likely to be influenced by bank managers' objectives relative to shareholders' as well. The empirical analysis in this paper focuses on the interaction between depositor protection and aspects of bank ownership. Specifically, we ask whether the coverage of explicit deposit insurance systems that minimizes risk-taking depends on state and foreign ownership of banks, and on shareholder and creditor protection.

Emerging market economies are emphasized in the empirical analysis since the variety of ownership structures is particularly great in these countries. Furthermore, banks tend to dominate the financial systems in most of these countries, and many of them have recently liberalized and privatized domestic banking systems.

In Section 2 we review recent literature on the relationship between deposit insurance coverage and banks' risk-taking, and on the impact of ownership on banks' behavior and performance. Thereafter we lay out the theoretical framework for analysis of risk-taking and deposit insurance coverage in Section 3. The impact of bank governance on risk-taking is discussed, and the hypothesis for the empirical work is presented. Proxies for risk-taking, deposit insurance coverage, and governance are

[1] See, for example, Bhattacharya and Thakor (1993).