Available online at www.sciencedirect.com
ScienceDirect

Journal of Financial Stability 4 (2008) 23–39

Journal of FINANCIAL STABILITY

www.elsevier.com/locate/jfstabil

Do weak supervisory systems encourage bank risk-taking?

Claudia M. Buch[a,1], Gayle DeLong[b,*]

[a] *Eberhard-Karls-University, Tübingen, Germany*
[b] *Baruch College, City University of New York, United States*

Received 17 January 2007; received in revised form 3 December 2007; accepted 4 December 2007
Available online 4 January 2008

Abstract

Weak bank supervision could give banks the ability to shift risk from themselves to supervisors. We use cross-border bank mergers as a natural experiment to test changes in risk and the impact of supervision. We examine cross-border bank mergers and find that the supervisory structures of the partners' countries influence changes in post-merger total risk. An acquirer from a country with strong supervision lowers total risk after a cross-border merger. However, total risk increases when the target bank is located in a country with relatively strong supervision. This result is consistent with strong host regulators limiting the risky activities of their local banks. Foreign-owned competitors could then engage in the risky projects, especially if the foreign banks' supervisors are not strong. An acquirer entering a country with strong supervision appears to shift risk back to its home country. The results suggest that bank supervisors can reduce total banking risk in their countries by being strong.

Keywords: Government policy and regulation; Banks; Mergers

1. Motivation

Banks engaging in cross-border mergers raise the question of whether international activities of banks are at least partially motivated by the supervisory environment. Banks might use cross-border mergers to shift risk from themselves to supervisors. Past research has remained inconclusive with regard to effects of cross-border M&As in banking in terms of changes in

* Corresponding author. Tel.: +1 646 312 3493.
E-mail addresses: Claudia.Buch@uni-tuebingen.de (C.M. Buch), Gayle_DeLong@Baruch.CUNY.edu (G. DeLong).
1 Tel.: +49 7071 29 781 66.

1572-3089/$ – see front matter
doi:10.1016/j.jfs.2007.12.002

the risk of banks (Amihud et al., 2002). One reason for this could be that banks not only expand internationally to diversify risks but they also try to take advantage of supervisory incentives. Banks may, for instance, try to shift activities to countries in which they are less tightly regulated or in which they can shift risk to an underpriced deposit insurance system. This risk-shifting motive may counteract the positive effects of mergers in terms of the diversification of risks.

In this paper, we explore whether supervisory systems influence changes in the riskiness of a bank. The event of a cross-border bank merger provides a natural experiment to test changes in risk. Cross-border bank mergers could have two effects on the risks of banks. On the one hand, risk could decrease as banks can exploit opportunities for diversification. On the other hand, risk may increase if a cross-border merger creates an opportunity for banks to shift risk that a domestic merger does not. An acquirer could not only shift risk from itself to its supervisor but also from itself to the supervisor of another country. We expect the results of this paper to give us an idea of how governments try to influence the behavior of markets by influencing the behavior of banks and how banks respond to these influences.

The results of this paper are not only interesting from the point of view of the banking literature; they also give us a better idea of the influence of supervisory policies on risk in general. Moreover, we are able to ascertain the ability of banking firms to evade and to exploit supervisory systems. While other aspects such as the corporate governance of banks may influence risk-taking (see, for example, Johnson et al., 2001), we focus on bank supervision since we want to explore the direct influence of governments on markets. Additionally, the results give insights into the managerial motives for expanding internationally.

To answer the question of whether bank supervision affects the risk of banks following international bank mergers, we bring together different strands of the empirical literature. One strand of literature studies the risk and the efficiency implications of international bank mergers. Amihud et al. (2002) find that the acquirer's risk following a cross-border bank merger neither increases nor decreases. On average, neither acquirer's total risk nor their systematic risk falls relative to banks in the acquirer's home banking market. Perhaps barriers to cross-border bank mergers stemming from information costs and from regulations (Buch and DeLong, 2004) prevent risk reduction.

A second strand of literature suggests that the macro-economic and institutional environment has an influence on bank risk. We know from Esty and Megginson (2003) that the legal environment, including the strength of the enforcement of laws, influences bank behavior in global syndicated loans. Moreover, Zarruk and Madura (1992) model the influence of bank supervision on the setting of the optimal interest margin. Amihud et al. (2002) suggest that supervisory influences may provide motivations to increase risk. That is, an underpriced safety net could motivate managers to shift risk away from themselves and onto supervisors. If risk-shifting pays off, the managers benefit; if the bank becomes threatened with insolvency, supervisors come to the rescue. Nier and Baumann (2003) study the extent to which deposit insurance compels markets to discipline banks. The more generous the protection from deposit insurance, the less necessary is market monitoring and discipline. Examining data from OECD countries, Nier and Baumann find that the more generous the deposit insurance, the less capital a bank holds, suggesting that the bank is taking on more risk. Co-insurance, where depositors are only insured for some percentage of their deposits, and explicit deposit insurance are associated with banks having lower non-performing loan to total loan ratios, which is consistent with the banks' taking on less risk. Gropp and Vesala (2001) also show that explicit deposit insurance tends to lower risk in banking, possibly because explicit deposit insurance usually brings with it explicit boundaries to guarantees. Hovakimian et al. (2002) show that regulators can reduce risk-shifting from banks