Journal of Financial Stability 15 (2014) 112–126

Contents lists available at ScienceDirect

Journal of Financial Stability

journal homepage: www.elsevier.com/locate/jfstabil

Transmission of financial shocks in loan and deposit markets: Role of interbank borrowing and market monitoring

Franklin Allen[a], Aneta Hryckiewicz[b], Oskar Kowalewski[c,d,*], Günseli Tümer-Alkan[e]

[a] Imperial College Business School, United Kingdom
[b] Accounting Department, Kozminski University, Poland
[c] Institute of Economics of the Polish Academy of Science (INE PAN), Poland
[d] World Economy Research Institute, Warsaw School of Economics (SGH), Poland
[e] VU University Amsterdam and Duisenberg School of Finance, The Netherlands

ARTICLE INFO

Article history:
Received 6 May 2013
Received in revised form 27 March 2014
Accepted 16 September 2014
Available online 28 September 2014

JEL classification:
F15
F34
G21

Keywords:
Foreign banks
Credit supply
Market discipline
Interbank market
Crisis

ABSTRACT

We examine the international transmission of liquidity shocks from multinational bank holding companies to their subsidiaries during the financial crisis of 2008. Our results demonstrate that a subsidiary's reduction in lending is strongly related to its parent bank's lending via the interbank market. While subsidiaries that were dependent on interbank financing increased their credit supply prior to the crisis, they reduced their lending activities during the crisis. Additionally, we observe that interbank-dependent subsidiaries tried to change their funding strategy when they were unable to increase their deposit growth significantly during the crisis. During the crisis, subsidiaries could not rely on their parent banks' support via the interbank market and encountered problems in attracting new depositors, which could explain the significant decline in lending during the financial crisis. These findings highlight the need to regulate and monitor multinational funding strategies, especially in the interbank market.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

During the last two decades, financial integration has increased foreign ownership in the banking sector of many countries. A large body of research has documented the stabilizing role of foreign banks in financial systems, especially in developing countries (Demirguc-Kunt and Detragiache, 1997). Cull and Martínez Pería (2013) showed, however, that the total loan growth of foreign banks decreased more than the growth of domestic private credit did during the financial crisis of 2008. De Haas and van Lelyveld (2014) established that parent banks were not significant sources of strength for their subsidiaries during the global financial crisis. They reported that the decrease in the credit growth of foreign bank subsidiaries was nearly three times faster than that of domestic banks during the recent crisis. Little is known, however, about which foreign banks reduced lending during the financial crisis. In addition, we still do not know much about the relationship between the behavior of parent banks and that of their foreign subsidiaries.

One possible reason for the observed reversal in lending was the reduced support from parent banks to their foreign subsidiaries. However, it is also plausible that some foreign subsidiaries operated without any financial support from parent banks. Ivashina and Scharfstein (2010) documented that banks with access to stable deposits did not reduce their lending as much as banks with less access to deposits did during the recent financial crisis. Hence, we expect considerable variation across foreign banks depending on how they were financed. Our identification strategy relies on variations in the funding sources of foreign bank subsidiaries. In this study, we focus on the differences in interbank dependence and market discipline during the financial crisis. We analyze the determinants of foreign subsidiaries' lending behavior and market

* Corresponding author at: Institute of Economics of the Polish Academy of Sciences, Palace of Culture and Science, Pl. Defilad 1, 00-901 Warsaw, Poland. Tel.: +48 501093669; fax: +48 22 5649372.
E-mail addresses: allenf@wharton.upenn.edu (F. Allen), ahryckiewicz@kozminski.edu.pl (A. Hryckiewicz), okowale@inepan.waw.pl (O. Kowalewski), g.tumeralkan@vu.nl (G. Tümer-Alkan).

http://dx.doi.org/10.1016/j.jfs.2014.09.005
1572-3089/© 2014 Elsevier B.V. All rights reserved.

discipline across countries by including the pre-crisis period in our study.

Using a sample of 51 multinational banks with 269 foreign subsidiaries, we observed that subsidiaries that were dependent on borrowing and simultaneously had parent banks that were lending on the interbank market could increase their lending in the pre-crisis period. Therefore, we could assume that parent banks were lending to their subsidiaries, which fueled credit growth abroad. During the crisis, however, the situation of the subsidiaries changed dramatically due to the liquidity crunch on the interbank market and the deterioration of the financial situation of many parent banks. The funding channel for foreign subsidiaries might have also changed. We argue that subsidiaries that were dependent on the interbank market would try to increase their access to deposit funding during the crisis, especially those subsidiaries whose parent banks could not support them due to financial problems in the home markets. Our results indicate that subsidiaries dependent on the interbank market did change their funding strategy during the crisis. Those changes, however, did not translate into significant growth of deposits. This could explain why these subsidiaries significantly reduced their credit supply during the crisis. However, we were unable to demonstrate that parent bank-level and subsidiary-level variables determined the growth of deposits or interest costs during the crisis. Consequently, we did not find any evidence for market discipline. In contrast, we found that the capitalization of parent banks and their subsidiaries could explain the growth in lending of the subsidiaries during the crisis. We found some evidence to support the assumption that the parent banks' fundamentals could determine their subsidiaries' credit growth during a crisis.

Our paper contributes to the extant empirical research on the impact of the recent crisis on foreign banks in host countries in three ways. First, we extend the existing research on internal capital markets by including dependence on the interbank market as a proxy for the reliance of subsidiaries on parent banks. We aim to capture a substantial portion of intragroup transactions by including the interbank activities of both the subsidiary as well as the parent. Second, we analyze changes in the deposit policy of foreign banks. To the best of our knowledge, this is the first study to investigate the role of market discipline in an international transmission context. Ivashina and Scharfstein (2010) observed that access to deposits determined the lending behavior of banks during the crisis. Moreover, Allen et al. (2013) demonstrated that foreign bank deposits as well as intragroup deposits were an important part of internal capital market transactions in multinational bank holding companies during the recent crisis. Third, we document that the sensitivity of a subsidiary's lending and market discipline may depend on a number of factors, such as the parent bank's rating or ownership.

The remainder of the paper is organized as follows. In Section 2, we review the extant literature and present our hypotheses. In Section 3, we present our empirical strategy, and in the following section, we describe our data. Section 5 presents the results of the investigation of the impact of the financial performance of the parent on the supply of loans and deposit collection of its subsidiaries. Section 6 concludes the paper.

2. Literature review and hypotheses

Our study draws from two different bodies of literature. The first one is related to transmission of financial shocks and considers how a financial crisis in the home country of the parent bank affects the lending of its foreign subsidiaries in a host country. Peek and Rosengren (1997) investigated how the collapse of asset prices in Japan during the early 1990s affected the operations of Japanese bank subsidiaries abroad. They observed that a reduction in the parents' risk-based capital ratio translated into a significant decline in the total loans issued by the banks' US subsidiaries. Consistent with this evidence, De Haas and van Lelyveld (2006) demonstrated that the financial health of the parent bank impacts the ability of its subsidiaries to expand credit in Central and Eastern European (CEE) countries. In a subsequent paper, De Haas and van Lelyveld (2010) provided additional evidence for the existence of internal capital markets in multinational bank holding companies. They documented that lending by foreign bank subsidiaries depends on the financial strength of the parent bank. We formalize these findings in the following hypothesis:

Hypothesis 1. During the crisis, the credit growth of subsidiaries was negatively related to the parent banks' financial strength.

On the one hand, the parent banks' financial strength and the support they extend to their subsidiaries could explain the insensitivity of foreign bank lending to crises in the host countries. On the other hand, Cetorelli and Goldberg (2012) demonstrated that parent banks affected by a funding shock reallocate liquidity within the organization according to a locational pecking order. The foreign subsidiaries that were more important to the parent bank were relatively protected from liquidity reallocations, and traditional funding locations were used more extensively to buffer shocks to the parent bank's balance sheets. Jeon et al. (2013) found evidence that the transmission of financial shocks varied by the type of shocks during the recent financial crisis. They demonstrated that the transmission of financial shocks was strongest among foreign bank subsidiaries in CEE countries followed by those in Asia and Latin America. Similarly, Cull and Martínez Pería (2013) reported that foreign banks retrenched their lending significantly faster in Eastern Europe than in Latin America; they explained these differences based on the types of foreign banks. In Latin America, foreign banks enjoy substantial independence from parent banks and, hence, fund most of their operations with local deposits. In contrast, in Eastern Europe, foreign banks tend to be centrally managed; consequently, they rely more on parent banks' funding. Additionally, Ivashina and Scharfstein (2010) observed that in the US, domestic and foreign banks with access to a strong base of deposits reduce their lending significantly less than banks without such access to deposit financing generally do. They argued that banks with a large and stable base of deposits are less dependent on short-term debt market financing and, therefore, are less credit-constrained. Consequently, the decline in foreign bank subsidiary lending may also be attributed to the funding strategy. Based on this assertion, we build a second hypothesis:

Hypothesis 2. During the crisis, the credit decline was stronger for foreign subsidiaries that were dependent on interbank funding.

The second stream of literature is linked to market discipline. Our research aims to examine how the parent bank's financial situation and the subsidiaries' dependence on the interbank market affect the deposit levels of the subsidiaries. Existing evidence on the effects of the crisis on depositor discipline is inconclusive. On the one hand, Martinez Peria and Schmukler (2001) found that the sensitivity of deposit growth rates and interest costs to the measures of bank risk increased in Latin America during the post-crisis period. They demonstrated that deposit volumes are negatively correlated and deposit interest costs are positively correlated with accounting measures of bank risk. Additionally, they documented that deposit insurance does not diminish the degree of market discipline. Moreover, Oliveira et al. (2014) observed that during the recent crisis, some Brazilian banks were considered important components of the financial system and recorded substantial increases in

Download English Version:

https://daneshyari.com/en/article/7409581

Download Persian Version:

https://daneshyari.com/article/7409581

Daneshyari.com