J. Finan. Intermediation 19 (2010) 1–25

Contents lists available at ScienceDirect

J. Finan. Intermediation

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

Internal capital markets and lending by multinational bank subsidiaries

Ralph de Haas [a,*], Iman van Lelyveld [b]

[a] European Bank for Reconstruction and Development (EBRD), Office of the Chief Economist, One Exchange Square, London EC2A 2JN, United Kingdom
[b] De Nederlandsche Bank, Supervisory Policy Division, P.O. Box 98, 1000 AB Amsterdam, The Netherlands

ARTICLE INFO

Article history:
Received 7 September 2007
Available online 4 February 2009

JEL classificatiion:
F15
F23
F36
G21

Keywords:
Multinational banks
Credit supply
Internal capital markets
Financial crisis

ABSTRACT

We use new panel data on the intra-group ownership structure and the balance sheets of 45 of the largest multinational bank holdings to analyze what determines the credit growth of their subsidiaries. We find evidence for the existence of internal capital markets through which multinational banks manage the credit growth of their subsidiaries. Multinational bank subsidiaries with financially strong parent banks are able to expand their lending faster. As a result of parental support, foreign bank subsidiaries also do not need to rein in their credit supply during a financial crisis, while domestic banks need to do so.

1. Introduction

In this paper, we analyze two interrelated questions. First, we ask whether multinational banks operate an internal capital market across national boundaries. By an internal capital market we mean that parent banks allocate scarce capital to their subsidiaries. A multinational bank would not operate such a market in the absence of capital market frictions (Stein, 1997). Rather, subsidiaries would attract sufficient liabilities to finance profitable investment projects themselves. However, if capital markets are not functioning perfectly, it can be advantageous for parent banks with better access to external funding to internally allocate capital to subsidiaries in order to manage their lending growth.

* Corresponding author.
E-mail addresses: dehaasr@ebrd.com (R. de Haas), i.p.p.van.lelyveld@dnb.nl (I. van Lelyveld).

1042-9573/$ - see front matter
doi:10.1016/j.jfi.2009.02.001

Whether a bank operates an internal capital market or not is important because such a market creates financial linkages between subsidiaries.

The second and related issue we analyze concerns the consequences that the operation of an internal capital market by multinational banks may have for the countries involved. We ask whether the presence of multinational bank subsidiaries means that economic shocks are more easily transmitted across borders. In addition we want to know whether multinational bank subsidiaries 'cut and run' during a financial crisis or whether they, on the contrary, provide a stable source of credit (in particular when compared to domestic banks).

We contribute to the research on the existence and the ramifications of internal capital markets in several ways. As regards the existence of internal capital markets, we make two contributions. First, we examine whether banks operate internal capital markets across national boundaries. Empirical evidence on internal capital markets within banks only exists for the United States. Houston et al. (1997) show that the credit growth of a subsidiary is negatively correlated with the loan growth in other US subsidiaries of the bank holding. Dahl et al. (2002) show that such correlated credit growth patterns are due to equity flows between the parent bank and its subsidiaries. Ashcraft (2004) demonstrates that banks that are affiliated with a multi-bank holding company are less likely to experience financial distress and recover more quickly in case of such distress because of capital injections by the parent company. We extend this line of research to multinational banks.[1]

Second, our detailed information on intra-bank ownership allows us to analyze whether particular types of multinational bank subsidiaries are more closely integrated into internal capital markets than others. We distinguish between greenfield subsidiaries and takeover subsidiaries as well as between subsidiaries that are geographically close to their parent bank and those that are further away. Earlier empirical research treated bank subsidiaries as a homogenous group and ignored the potential differences between subsidiary types.

We also contribute to the research on the effects of multinational banking. Earlier research shows that lending by multinational banks tends to transmit home country financial shocks (Peek and Rosengren, 1997, 2000a; Van Rijckeghem and Weder, 2000, 2001) but to dampen host country financial shocks (Peek and Rosengren, 2000b; De Haas and Van Lelyveld, 2006). Multinational bank lending also tends to be influenced by the home country business cycle (Martinez Peria et al., 2002; Morgan and Strahan, 2004). We improve on this work in two ways. First, most studies limit themselves to multinational bank linkages between one specific home region (United States, Japan or Western Europe) and one specific host region (Latin America or central and eastern Europe). Our approach differs in that we do not make an ex ante distinction between home and host regions but acknowledge that countries can be home and host country at the same time. We also use a more comprehensive country sample that better reflects the current state of bank globalization:

- Our dataset includes 45 multinational banks from 18 home countries with 194 subsidiaries across 46 countries. Most parent banks (83 per cent) and subsidiaries (73 per cent) are based in Europe, partly reflecting the eastward expansion of many European banks after the fall of the Berlin Wall. Only about 14 per cent of all parent banks and subsidiaries are based in North America. North American banks are relatively domestically oriented, whereas European banks are on average more internationalized (IMF, 2007).
- The number of multinational bank subsidiaries in Africa and Asia is limited as many countries in these regions still have limitations on majority foreign bank ownership. Latin America is host to some 5 per cent of all subsidiaries in our dataset, mainly of Spanish origin.
- The time dimension (1991–2004) of our dataset reveals that banking systems have become increasingly globalized over time. Not only did the number of multinational banks increase, individual banks also became more globalized as measured by the number of foreign subsidiaries, especially through foreign takeovers.

[1] National regulatory constraints may also influence multinational bank lending. However, we expect that such constraints are more important for the initial entry decision of a multinational bank than for the credit expansion once the bank has entered a country. Focarelli and Pozzolo (2005) analyze the determinants of banks' foreign expansion while we analyze what determines their lending once they have established subsidiaries.