#### G Model MULFIN-511; No. of Pages 24

### ARTICLE IN PRESS

J. of Multi. Fin. Manag. xxx (2016) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

## Journal of Multinational Financial Management

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



## Multinational banks' deleveraging in the crisis preceded by expansion and profit seeking<sup>☆</sup>

#### Rainer Frey

Deutsche Bundesbank, Economics Department, Wilhelm-Epstein Str. 14, 60431 Frankfurt am Main, Germany

#### ARTICLE INFO

# Article history: Received 26 April 2016 Received in revised form 7 October 2016 Accepted 16 October 2016 Available online xxx

JEL classification:

F3 G2

Keywords:
Banks
Deleveraging
Foreign assets
Financial crisis
Pre crisis
Expansion
Profit seeking

#### ABSTRACT

After the collapse of Lehman Brothers, a rapid and far-reaching shrinkage of international banks' assets with a focus on foreign claims took place. For the largest 67 German banking groups in the pre-crisis episode, we find that their characteristics both in levels and in trends had repercussions for the crisis period. Above all, prior non-traditional banking activities resulted in balance sheet contraction in the crisis. While, from 2002 to mid-2008, a disproportionately high growth rate in profits to assets is found to be indicative of too much risk taking. In addition in just the last three and a half years before the outbreak of the crisis, a high average income or a strong growth in assets put balance sheets during the crisis under adjustment pressure. The results are driven by the group of foreign banks with large foreign assets and here at first place by the assets vis-a-vis non-financial centers.

© 2016 Elsevier B.V. All rights reserved.

#### 1. Introduction

Balance sheet deleveraging in the crisis was preceded by sizable balance sheet growth in the run-up to the crisis and was due, for the most part, to international activities. Thus, the most obvious thing is to ask – not least from a regulatory perspective – whether the balance sheet expansion was unsustainable, as excessive risk taking was maybe going on. To answer this, our study tries to isolate pre-crisis drivers of the multinationals' contractionary policies in the crisis. We focus on supply-side factors, as these may be accompanied by a credit constraint with harmful implications for the real economy. With their strong balance sheet shrinkage, especially in foreign assets during the financial crisis, the large and international

http://dx.doi.org/10.1016/j.mulfin.2016.10.002

 $1042\text{-}444\text{X}/\mathbb{O}$  2016 Elsevier B.V. All rights reserved.

Please cite this article in press as: Frey, R., Multinational banks' deleveraging in the crisis preceded by expansion and profit seeking. J. Multinatl. Financial Manage. (2016), http://dx.doi.org/10.1016/j.mulfin.2016.10.002

This paper has benefited from valuable comments by Joerg Breitung, Stefano Colonnello, Falko Fecht, Ulrich Grosch, Cornelia Kerl, Thomas Kick, Alexander Lipponer, Cordula Munzert and participants of the Bundesbank Research Seminar (2014), the 5th IWH/INFER Workshop on Applied Economics and Economic Policy (Halle, 2015) and the Paris Financial Management Conference (2015). The opinions expressed in this discussion paper are those of the author and do not necessarily reflect the views of the Deutsche Bundesbank or its staff.

E-mail address: rainer.frey@bundesbank.de

<sup>&</sup>lt;sup>1</sup> For Germany, we see no sizeable ongoing leveraging process in the pre-crisis period though there was a large balance sheet expansion over this time horizon. In the crisis, we see the deleveraging already stopped to the end of 2010 while the balance sheet shrinkage in foreign assets continued. Kalemli-Ozcan et al. (2012) find a procyclicality of the leverage ratio for US investment banks and large commercial banks and, to a lesser extent, for Europe.

<sup>&</sup>lt;sup>2</sup> In accordance, Giannetti and Laeven (2012) find a flight home effect in financial crises.

## G Model MULFIN-511; No. of Pages 24

## ARTICLE IN PRESS

R. Frey / J. of Multi. Fin. Manag. xxx (2016) xxx-xxx

banks attracted a great deal of public attention during the crisis. On account of their size alone, they have major relevance for the economies in which they are substantially engaged, and some might even be classified as systemically relevant. A negative effect on economies may arise in the event of a sharp increase in risk aversion or even if large losses materialize on the banks' balance sheets, which may force banks to adjust their exposures not only in risky assets but also in broader areas of their business. Furthermore, we interpret the supply-driven part of the balance sheet shrinkage as an indicator of banks' fragility.

Thus, our aim is to examine whether the contraction of large German banks' total foreign and total assets in the crisis can be explained by their pre-crisis structures and trends in these structures.<sup>3</sup> Especially in terms of the broadness of the pre-crisis variables which are captured, our approach goes beyond the existing literature, in which, commonly, a bank is shocked by a critical exposure or where solely the balance sheet structure within the crisis is considered. To gain a deeper - but also new - insight into this, we split off the withdrawal in foreign assets further into the reduction of assets vis-a-vis non-financial centers and vis-á-vis financial centers. We locate the drivers of the shrinkage primarily in the precrisis stage. In this context, we consider not only the banks' balance sheet positions but also the trends in these variables. With respect to bank structure prior to the crisis, we look, among other things, at specific exposures abroad (total foreign assets, assets vis-a-vis financial centers, assets vis-a-vis the periphery euro-area countries<sup>4</sup> – all relative to total assets), the funding structure (deposits versus short-term wholesale funding), the bank's capacity to buffer losses (core Tier 1 capital ratio), liquidity endowment, and income generation. In addition, we analyze the effect from the banks' trends in the banks'characteristics – pre-crisis growth rates of the above-mentioned balance sheet variables – in the run-up of the crisis from 2002 to mid-2008.<sup>5</sup> We further look to see whether the implications of the banks' pre-crisis trends change if we shorten the pre-crisis period by choosing 2005 as the starting year. Afterwards, in a panel estimation, we explain the withdrawals in the crisis with the same choice of bank characteristics, but now with their realizations during the crisis period. By doing this, we are able to detect potential similarities in the relevance of the bank's setup before and during the crisis, which also adds to the existing literature. We close our panel approach by categorical estimations for the crisis period, where the banks are grouped according to their pre-crisis characteristics and the trends in these characteristics – which, so to speak, reconciles our different approaches with bank characteristics from the pre-crisis and from the crisis. Our analysis relies on various Bundesbank bank statistics: balance sheet, external positions, accounting and banking supervision data. As we look primarily at the total balance sheet and foreign assets as a whole, we include all the banks' business fields where the demand factors are likely to be not only quite numerous but also hard to capture. However, as demand effects may also to some extent contribute to the process of balance shrinkage, especially abroad, we include a control for this effect in our analysis. In addition, government and central bank support for banks in the form of financial funds and additional liquidity supply may have also played a role in banks' behavior in the crisis but are not considered in the crisis, as their role may have been minor with respect to the outcome of our analysis: On the one hand, financial government support may have eased the adjustment pressure on banks; on the other hand, it was accompanied by imposed restrictive conditions acting in the opposite direction. With respect to additional liquidity measures, these may be helpful in the short term for avoiding turbulence, but they do not prevent banks from making strategic decisions which come into play in the time horizon applied in the study.

With respect to the pre-crisis characteristics, we find that banks' securities investment, activities in the financial markets, short-term funding and disproportionately high profit growth had a dampening effect on their activities in the financial crisis. In contrast, banks which succeeded in generating income throughout the pre-crisis period from 2002 to mid-2008 were less compelled to cut their balance sheet positions in the crisis. In general, already banks' expansionary policies in such balance sheet positions in the run-up to the crisis were enough to produce the described effects. When we shorten the pre-crisis period to begin in 2005, not only pre-crisis expansions in foreign and total assets but also average income exerted a negative impact on banks' activities during the crisis – which is a reversal of the outcomes for the longer pre-crisis periods. When we turn to the relevance of the banks' balance sheet variables during the crisis period, the additional outcomes occur that strong capital endowment and strong affiliate presence abroad have a stabilizing impact on foreign activities, while short-term funding, securities investment and activities in the periphery euro-area countries result in a reduction. Thus, apart from the pure relevance of bank characteristics during the crisis, banks' pre-crisis characteristics as well as already the pre-crisis trends in these characteristics affected their strategies in the crisis. Our results are generally strongest for banks with large amounts of foreign assets and for the shrinkage of their exposures in countries without financial centers.

The paper is organized as follows: Section 2 reviews the relevant literature, Section 3 continues by introducing our data. Section 4 describes our approach and our estimation output, and Section 5 concludes.

<sup>&</sup>lt;sup>3</sup> Sinkey and Greenawalt (1991) only consider the risk-taking behavior at large US commercial banks. They see large banks as representing the greatest risk to the financial system and they are the ones which are rescued by the government in order to maintain confidence in the national banking system. de longhe (2010) finds that risk increases with size and sees large banks as more exposed to region-wide shocks.

<sup>&</sup>lt;sup>4</sup> This group consists of Cyprus, Greece, Ireland, Italy, Portugal and Spain.

<sup>&</sup>lt;sup>5</sup> These trends may reflect banks' behavior to some extent. However, the term "behaviour" encompasses more: attitudes, preferences and strategies.

#### Download English Version:

## https://daneshyari.com/en/article/5101606

Download Persian Version:

https://daneshyari.com/article/5101606

<u>Daneshyari.com</u>