

# Learning from Economic Crisis: Evidence from the Russian Banking Sector

Mikko Mäkinen\*

Bank of Finland (BOFIT)

Extended Abstract: November 5, 2018

A growing number of studies in finance and economics suggests that there is scope for learning from experience for individuals and organizations. For example, the experiences of executives and investors can significantly affect their subsequent behavior and performance (e.g. Bertrand and Schoar, 2003; Malmendier and Nagel, 2011; Malmendier et al. 2011). Organizations, too, may change their behavior due to bad experiences. An unexpected adverse event could lead an institution to assess payoff probabilities differently (Gennaioli et al. 2012). Anecdotal evidence suggests that the near-bust experience of the Nokia Corporation in the late 1980s forced the conglomerate to radically change its business model, which enabled its global success in the 1990s.

While learning from experience is well-documented in literature, only few studies, to the best of my knowledge, consider whether banks can retain the lessons of financial crisis (or bad experiences). Berger and Udell (2004) test an institutional memory hypothesis by considering how loan officer skills deteriorate over time following a loan bust. They find that the trauma of the loan bust initially dominates the judgment of loan officers, but eventually credit standards ease. Bouwman and Malmendier (2015) analyze whether a bank's history affect its capitalization and risk-taking. They find that bank experiences of difficult times

---

\*Address: Snellmaninaukio, PO Box 160, 00101 Helsinki, Finland, telephone: +358 9 1831, e-mail: mikko.makinen(at)bof.fi. The author is grateful to Iftekhar Hasan and Thorsten Beck, as well as participants at the Bank of Finland seminar and the 8th CInSt Annual Banking Workshop for helpful comments. The views are those of the author and do not necessarily reflect those of the Bank of Finland.

predict more careful lending behavior and higher capitalization in the long run. Fahlenbrach et al. (2012) (henceforth FPS) is of particular importance to this study as they establish two hypotheses on the scope for bank learning. The learning hypothesis suggests that there is no persistence in banks performance across two crisis, implying that poorly performing banks can internalize the lessons of crisis experience and perform better in a next crisis. Alternative hypothesis, the risk culture hypothesis, is that there is persistence in banks business model (or risk culture), so that bank crisis experience provides useful information in explaining its performance in a subsequent crisis. Using data on 280 banks listed on US exchanges, they find<sup>1</sup> that a bank's poor stock return performance in the 1998 crisis is a strong predictor of poor performance and likelihood of failure in the 2008 crisis. They conclude this finding is consistent with the business model (or risk culture) hypothesis and inconsistent with the learning hypothesis. Relatedly, Berglund and Mäkinen (2018) (henceforth BM) study the scope of bank learning from crisis using panel data for European banks. They utilize the fact that Finland, Norway and Sweden – three rather similar Nordic countries – experienced severe economic and systemic banking crises in the early 1990s that other European countries largely avoided at that time.<sup>2</sup> Consistent with the learning hypothesis, they find Nordic banks were more profitable and less exposed to financial instability than other European banks during the 2008 financial crisis.

This paper studies the scope for bank learning from economic crises using data from Russia, a country that has been experienced two major economic crisis during the last 10 years. Specifically, using diverse empirical specifications and panel data of Russian banks, this paper analyzes whether a bank's performance in the 2009 crisis is a useful factor in explaining bank performance in the 2015 crisis. Second, the paper examines whether poor

---

<sup>1</sup>The preceding crisis in their study is the 1998 crisis, which was triggered by Russia's default on foreign debt and the collapse of the hedge fund managed by Long-Term Capital Management (LTCM), which was heavily exposed to Russian debt. Their subsequent crisis is the 2008 global financial crisis, which began with the collapse of Lehmann Brothers in September 2008.

<sup>2</sup>The economic and social costs of the crisis to Finland, Norway, and Sweden were so large that Reinhart and Rogoff (2008) include the Nordic crisis among the five worst post-World War II banking crises in industrialized countries before the 2008 Great Recession.

performing banks in the 2009 crisis were able change their behavior after the crisis using difference in differences analysis. The paper finds: (i) bank performance in the 2009 crisis is positively correlated with its performance in the 2015 crisis; (ii) banks that performed poor in the 2009 crisis, on average, did not perform worse than other banks in the 2015 crisis; and (iii) after the 2009 crisis, poor performing banks faced lower bank capital and higher overdue loans and credit-losses ratios in the short run, greater share of credit losses in the long run, and increase in leverage ratio both in the short- and long-run. Overall, the findings are consistent with the learning hypothesis of Fahlenbrach et al. (2012), suggesting that poor performing Russian banks in the 2009 crisis were able internalize the lessons of the crisis experience.

This paper contributes to the literature on the scope for learning from experience in five ways. First, we are unaware of prior studies that consider the scope for learning using data on all operating banks from one country. FPS (2012) use listed US banks only, while BM (2018) focus on the European retail-oriented banking sector, a broader category of banks than the list banks examined by Fahlenbrach et al. (2012), but rely on BankScope data, which may not be fully representative for a country's banking sector. Second, we are unaware of any study that takes advantage of a rich set of panel data for same individual banks in two crisis (2009 and 2015 here), can control for bank unobserved heterogeneity using panel data and apply difference in differences method. This is contrast to BM (2018), who, due to data availability limitations, were not able to use bank accounting data from the prior crisis period (1990-93 in their case). Third, contrast to FPS (2012), the prior crisis we look at in this paper is much more severe economically, which may have important bearings on banks' ability to recognize the point of altering their business model. Fourth, regarding the determinants and early warning indicators of banking crises, BM (2018) show that there is the scope of bank learning from prior crises. I provide corroborative evidence on this finding from a very different institutional setting, an emerging market economy. Finally, to the best of my knowledge, no studies yet examine the scope of learning from prior crises in the

Russian banking. I hope to partly fill these gaps in literature.

**Keywords:** financial crises; bank performance; Russian banks; learning.

**JEL Classification Numbers:** G01; G21; G34.