Journal of Financial Stability 13 (2014) 134–150

Contents lists available at ScienceDirect

Journal of Financial Stability

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

A cross-country analysis of bank bankruptcy regimes[☆]

Matej Marinč[a,b], Vasja Rant[a,*]

[a] Faculty of Economics, University of Ljubljana, Kardeljeva pl. 17, 1000 Ljubljana, Slovenia
[b] Amsterdam Center for Law & Economics (ACLE), Faculty of Economics and Business, University of Amsterdam, Roetersstraat 11, 1018WB Amsterdam, Netherlands

ARTICLE INFO

Article history:
Received 11 January 2014
Received in revised form 24 April 2014
Accepted 6 June 2014
Available online 14 June 2014

JEL classification:
G20
G21
G28
G33
E58
K23

Keywords:
Bank bankruptcy law
Bank insolvency regimes
Bank failures
Optimal resolution
Financial crisis

ABSTRACT

This article analyzes bank bankruptcy regimes across 142 countries. By employing factor analysis, we identify five main dimensions of bank bankruptcy frameworks: (1) difficulty of forbearance and ease of court appeal, (2) availability of supervisory tools, (3) court involvement, (4) supervisory powers with respect to managers, and (5) supervisory powers with respect to shareholders and preinsolvency phase. We use cluster analysis to identify and group countries according to two prevalent types of bank bankruptcy frameworks: a court-led and administrative bank bankruptcy regime. Administrative bank bankruptcy regimes are associated with less court involvement in the resolution process, less likely forbearance, a higher possibility of court appeal, greater availability of supervisory tools, weaker supervisory powers with respect to managers and stronger supervisory powers with respect to shareholders, and a preinsolvency phase as opposed to the court-led bank bankruptcy regimes. Administrative bank bankruptcy regimes are also associated with fewer creditor rights, less government effectiveness, and lower institutional quality than court-led bank bankruptcy regimes. We find some evidence that the type and main dimensions of a bank bankruptcy regime are related to the occurrence and severity of the global financial crisis.

1. Introduction

At the onset of the global financial crisis, bank supervisors lacked the tools to deal with failing banks. For example, the UK had to swiftly enact the Banking (Special Provisions) Act 2008 to be able to nationalize failing Northern Rock. Belgium, Luxemburg, and the Netherlands needed to support Fortis Bank to prevent its uncontrolled unwinding. Fortis shareholders even initially opposed the takeover by BNP Paribas, and the Brussels Appeal Court suspended the transaction until shareholders' approval was reached. These examples indicate that bank bankruptcy regimes were often inadequate and had to be upgraded to allow swift intervention rather than forbearance or bailouts of ailing banks even in the midst of an epic crisis.[1] To address these shortcomings, a new framework for bank recovery and resolution was formed in the EU with a clear preference toward orderly resolution. As European Commissioner Michel Barnier argued, "Ensuring that failing banks can be wound down in a predictable and efficient way with minimum recourse to public money is fundamental to restoring confidence in Europe's financial sector... With these new rules in place, massive public bail-outs of banks and their consequences for taxpayers will finally be a practice of the past."[2] An overview and international comparison of general features of bank bankruptcy regimes might make it possible to evaluate what is needed to successfully deal with banking crises.

☆ The authors would like to thank two anonymous referees, the editor Iftekhar Hasan, Marko Košak, Miroslav Verbič as well as participants of the 12th INFINITI Conference on International Finance in Prato, Italy, in particular Franziska Bremus, for their invaluable comments and suggestions. All errors remain our own.

* Corresponding author. Tel.: +386 15892740.
E-mail addresses: matej.marinc@ef.uni-lj.si, m.marinc@uva.nl (M. Marinč), vasja.rant@ef.uni-lj.si (V. Rant).

[1] The dilemma between intervention and forbearance or bailouts was the most pronounced in the case of large financial institutions, which posed the greatest risk for stability in the financial system.

[2] See European Commission-MEMO/13/1140, 12/12/2013, http://europa.eu/rapid/press-release_MEMO-13-1140_en.htm?locale=en

http://dx.doi.org/10.1016/j.jfs.2014.06.004
1572-3089/

Our first objective is to shed new light on the diversity of bank bankruptcy regimes in a systematic way by quantitatively analyzing the institutional, regulatory, and legal landscape of bank bankruptcy. We explore the World Bank (2013) database on bank regulation and supervision across 142 countries. Whereas Čihák et al. (2013) and Barth et al. (2013, 2008, 2004, 2003) were the first to analyze the World Bank database,[3] our focus is narrowed to a particular aspect of bank supervision: the bank bankruptcy regime. The large number of survey questions allows us to dissect the main dimensions of bank bankruptcy regimes. Our second objective is to evaluate whether the general characteristics of a bank bankruptcy regime are associated with the occurrence and severity of a banking crisis.

We use several statistical techniques in our analysis. We employ the Bayesian iterative Markov chain Monte Carlo imputation technique to impute missing data. Explorative factor analysis is then applied to identify the main dimensions of bank bankruptcy regimes, followed by cluster analysis to ascertain the main types of bank bankruptcy regimes across countries. Using regression models, we relate the characteristics of a bank bankruptcy regime to the global financial crisis and to the quality of the legal and institutional environment.

The contribution of this paper is to empirically identify five main dimensions of bank bankruptcy regimes: (1) difficulty of forbearance and ease of court appeal, (2) availability of supervisory tools, (3) court involvement, (4) supervisory powers w.r.t. managers, and (5) supervisory powers w.r.t. shareholders and preinsolvency phase. We group countries according to the two prevalent types of bank bankruptcy frameworks: a court-led bank bankruptcy regime and an administrative bank bankruptcy regime. An administrative bank bankruptcy regime is associated with less court involvement in the resolution process, less likely forbearance, higher possibility of court appeal, greater availability of supervisory tools, weaker supervisory powers w.r.t. managers, stronger supervisory powers w.r.t. shareholders, and a preinsolvency phase as opposed to a court-led bank bankruptcy regime.

We find some support that an administrative bank bankruptcy regime is positively associated with the presence of the global financial crisis compared to a court-led bank bankruptcy regime. On the other hand, court involvement in bank bankruptcy is associated with higher output loss and fiscal costs in the global financial crisis. This is aligned with the view that an administrative bank bankruptcy regime provides the supervisor with greater incentives to intervene in the failing bank compared to a court-led bank bankruptcy regime, increasing the probability but limiting the severity of a banking crisis. An administrative bank bankruptcy regime is also associated with reduced creditor rights, government efficiency, and institutional quality than a court-led bank bankruptcy regime.

This article is organized as follows. In Section 2, we review the extant literature on bank bankruptcy. In Section 3, we describe the World Bank (2013) database, focusing on cross-country comparison of bank bankruptcy frameworks. Section 4 outlines the empirical methodology. Section 5 presents the main empirical findings. Section 6 concludes the article.

2. Literature review and hypotheses formation

Bank supervisors face a trade-off when it comes to the handling of banking crises: while resolving distressed financial institutions may prevent future moral hazard and restore the health and functionality of the financial system, uncertainties and losses of various bank stakeholders arising from the resolution process may also trigger a systemic banking crisis (Marinč and Vlahu, 2012). As a consequence, forbearance may seem a rational choice for the supervisor hoping that improving macroeconomic conditions will repair bank balance sheets on their own, without the need for intrusive interventions. This, however, may aggravate systemic risk in the long run, due to higher moral hazard. Since preservation of financial stability is a key consideration in case of bank failures, the supervisors' dilemma has relevant implications for the design of bank bankruptcy regimes.

A starting point for our discussion of bank bankruptcy regimes comes from the notion that banks are considered special and that these special bank characteristics should be incorporated into the bankruptcy regime for banks. We then build hypotheses connecting features of the bank bankruptcy regime with the probability and severity of banking crises.

The large costs of systemic banking crises point to the need for a special bank bankruptcy framework. Without a special bank bankruptcy regime (or at least without special amendments to the general bankruptcy regime for systemically important banks; see Ayotte and Skeel, 2010), bank supervisors and policymakers might be forced to choose between several bad options. First, pushing a failing bank through the corporate bankruptcy regime might result in abrupt termination of bank operations with substantial costs of restructuring and potential systemic concerns. The resulting loss of confidence may trigger panic withdrawals in other banks, creating a systemic banking crisis with large repercussions for the real economy (see Dell'Ariccia et al., 2008).

Alternatively, the bank supervisor may engage in forbearance and allow insolvent banks to continue their operations (Boot and Thakor, 1993; Kane, 1987, 2005). Such "zombie" banks may then gamble for resurrection, impeding economic growth (Black and Hazelwood, 2013; Caballero et al., 2008). Policymakers may even be forced to bail out banks that are too-big, too-complex, too-interconnected, or too-many to fail, further distorting competition and incentives in the banking system (Gropp et al., 2010; Dam and Koetter, 2012; Duchin and Sosyura, 2014; Farhi and Tirole, 2012; Brown and Dinç, 2011; Cheng and Van Cayseele, 2010). Therefore, measures to deal with failing banks need to be designed with an objective of containing systemic stability in banking (Acharya, 2009; Acharya et al., 2011b).

Banks are considered special because they provide liquidity to depositors (but also to other clients; see Berger and Bouwman, 2009; Huang and Ratnovski, 2011). Liquidity provision makes banks inherently fragile institutions. Sudden withdrawals of deposits from a bank may trigger a full-scale bank run that may derail even a well-functioning bank.[4] To prevent panic-based bank runs, which lead to an excessive number of bank failures, Rochet and Vives (2004) argue for (limited) bailout policies in the form of the lender of last resort (LOLR) lending in which the central bank lends to illiquid but solvent banks. Rochet and Vives (2004) suggest that LOLR lending needs to be complemented with a preinsolvency

[3] Čihák et al. (2013) analyze whether bank regulation and supervision had an impact on how successfully banks weathered the global financial crisis. They show that crisis countries are characterized by lower but more complex capital requirements and fewer restrictions on activities. They also find that countries strengthen their resolution regimes as a response to the financial crisis. Our focus is on a bank bankruptcy regime and its relation with the global financial crisis.

[4] As a cure for coordination problems between bank creditors (e.g., a bank run by uninsured depositors), corporate bankruptcy law would suggest freezing uninsured deposits (see White, 2011). However, an abrupt deposit freeze in bank bankruptcy derails the liquidity provision function of a bank and creates substantial liquidity costs for bank clients (Diamond and Dybvig, 1983).