

A Bird Eye (Re)view of Key Readings

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This section of the journal indicates a few and briefly commented references that a non-expert reader may want to cover to obtain a first informed and broad view of the theme discussed in the current issue. These references are meant to provide an extensive, though not exhaustive, insight into the main issues of the debate. More detailed and specific references are available in each article published in the current issue.

On banks' resolution, financial stability, and credit recovery

The recent global crisis, the most severe since the great depression, has been characterized by the large number of distressed and failed banks (Acharya 2013, Brunnermeier, 2009). The crisis has shown the importance of having a robust and consistent mechanism to allow for the resolution of failed banks (Laeven and Valencia, 2010). The resolution of a financial institution is defined as the restructuring of the institution in order to ensure the continuity of its essential functions, preserve financial stability, and restore partly or fully the viability of that institution (Gordon and Ringe, 2015).

Systemic regulatory policies lead to collective moral hazard problem. This issue usually arises when banks have access to cheap capital, incentivizing them to increase their borrowing and reduce their liquidity. Consequently, interventions may have repercussions on the overall financial sector since some banks play safely, but others start to gamble (Fahri and Tirole, 2012).

The standard argument is that regulatory actions help distressed banks recover and restore charter values, thus disciplining bank's behaviour (Berger et al., 2016; Hakenes and Schnabel, 2010). Before the sovereign debt crisis, 'bail-out' approach was the more frequently regulatory intervention at the bank level used by governments to restore financial stability (Acharya et al., 2014).¹⁰ Claessens et al. (2011) summarize the range of bail-out measures at each stage of the crisis: (i) blanket guarantee and liquidity provisions during the containment stage of the crisis, (ii) capital injections in the next stage, (iii) debt-restructuring mechanism such as asset management companies or 'bad' banks in the final stage.

The literature is still divided about the repercussions of government interventions on banks' risk-taking behaviour. Dam and Koetter (2012) show that regulatory interventions may discipline banks' behaviour since the regulatory authority is allowed to impose restrictions on banks' operations, thus resulting in more careful monitoring of the bank. Government interventions in support of distressed banks may exacerbate moral hazard problems associated with contagion (Górnika and Zoikam, 2016). The latter effect dominates when the probability of contagion is high, then the rents that the government leave to rescued banks become irrelevant (Dell'Ariccia and Ratnovski, 2013). Similarly, Hryckiewicz (2014) find that among bail-out measures, nationalization, and assets management companies contributes most to the risk increasing. However, she also finds that, under an appropriate combination of policies, governments may mitigate the consequences of the above-mentioned effects.¹¹ Contrarily, Berger et al. (2016) find that capital injections are effective for small and large banks without increasing risk, whereas Black and Hazelwood (2013) find that TARP induced more risk in large banks than in the smallest ones. Philippon and Schnabl (2013) show that nationalization is a more effective measure than capital injections. However, recent results demonstrate that government capitalization of individual banks foster risk perception since capital injections reveals partly unknown problems (Cabrera et al., 2016).¹²

10. Acharya et al. (2014) show that bail-out programmes triggered the rise of sovereign credit risk in 2008. The authors document that changes in sovereign CDS explain changes in bank CDS after the implementation of the bail-out programmes in the Eurozone countries (see issue 2016.1 of this journal).

11. Similar arguments are found in Honohan (2016) after the crisis in Ireland.

12. See Huertas (2015) for a further revision.

These arguments share the finding that distorted incentives may alter credit allocation and damage real economy performance. This raises the question that which resolution policies are more effective in promoting financial intermediation. Laeven and Valencia (2013) suggest that certain bail-out policies like recapitalizations, can alleviate credit supply frictions. Accommodating policies, particularly not well-executed, may not accelerate credit supply and economic recovery, but instead increase both the cost of banking crises and the risk of moral hazard in the long term (Giannetti and Simonov, 2013; Honohan and Klingebiel, 2013). Korte (2015) shows that a relatively stronger implementation of bank resolution rules promotes credit supply by benefiting high quality firms (*quality channel*), and reallocating credit to firms that need it more (*quantity channel*). Prohibiting government interventions may increase financial instability from an *ex ante* point of view, but *ex post* governments may apply targeted bail-outs to systemically banks (Bianchi, 2016). Finally, Van Bakkum (2016) shows for the recent bail-out in Ireland that the benefits exceeded the cost for taxpayers.

On ‘bail-in’ and deposit insurance: New challenges for the European Banking Union

The financial safety net comes into action in case of bank distress and contains arrangements that limit the probability of bank failure and the cost associated with the resolution process (Benczur et al., 2016; Cariboni et al., 2016). In this regard, banks are required to hold minimum level of eligible liabilities for own funds, based on the institution size, risk and business model, to mitigate the possibly of depositors’ bail-in (Avgouleas and Goodhart, 2015; Avgouleas et al., 2013; Conlon and Cotter, 2014; Hadjiemmanuil, 2015).¹³

The main difficulty to undertake an efficient ‘bail-in’ mechanism is the danger of contagion from a single institution, due to holding other financial institutions’ outstanding debt of the failed one. An incorrect design of bail-in

13. The concept of ‘bail-in’ was pioneered by Calello and Ervin (2010) whom proposed that the holders of firm’s bonds would have their investments in the company written down and converted into shares. This would be an alternative to ‘bail-out’ approach or a disorderly insolvency procedure and would provide the necessary capital that firm was required to hold.

mechanism may have the impact of shifting risk to other parts of the financial sector (Flanery, 2005). A statutory bail-in mechanism differs from contractual contingent capital instruments with write-offs or conversion features such as convertible bonds or CoCos. Both instruments involve creditor-financed recapitalization, CoCos are *private financial contracts* with principal and schedule coupon payments that can be automatically converted into equity or written down when a predetermined trigger event occurs (classified as *going-concern*), whereas ‘bail-in’ is a *statutory power* which enables resolution authority to eliminate or dilute shareholders and to convert any contractual contingent capital instruments that have not already been converted (classified as *gone-concern*) when the bank is not viable (Zhou et al., 2012). Flanery (2014) shows that CoCos afford shareholders the benefits of leverage when assets return remains high, providing downside protection to bondholders without burdening shareholders with high capital levels. Then, CoCos might create an incentive for the prompt recapitalization of banks after significant losses of capital and, through a correct design, a solution could be provided for the “too-big-too-fail” problem (Calomiris and Herring, 2013). In fact, recent advances are growing towards the construction of a dual trigger mechanism for CoCos in periods of high aggregated systemic risk (McDonald, 2013). Accordingly, regulators could consider the social benefits of reduced risk of systemic financial crises against the costs of redistribution of value from equity holders to bond holders, thereby exacerbating the debt overhang problem and increasing idiosyncratic risk taking incentives (Allen and Tang, 2016).

Empirical results on the consequences of bank liability insurance is unusually uniform in its conclusions: bank liability insurance increases bank risk, although it is justified as a means of reducing liquidity risk (Calomiris and Jaremski, 2016).¹⁴ Some studies predicted that deposit insurance may generate moral hazard behaviour depending on the condition of insured banks, particularly in years leading up the recent crisis (Anginer et al., 2014). Calomiris and Chen (2016) find that the greater the generosity of the instruments and the coverage of deposit insurance, the higher bank’s asset risk and leverage, owing to deposit insurance allows banks to raise their default risk. Gropp et al. (2014) find that formerly-insured German savings banks cut

14. See Calomiris and Jaremski (2016) for a broad literature review on deposit insurance.

off lending from the riskiest borrowers when removed from deposit insurance. The economic argument for deposit insurance begins with the recognition of the costs. Government insurance removes the motivation of depositor to withdraw funds, and avoid the magnification of recessionary shocks produced by market discipline (Acharya and Thakor, 2016). However, more efforts in the implementation of the banking union are required, in particular fiscal tools for macroeconomic stabilization. Balassone et al. (2016) propose that these reforms should be accompanied by some increase in risk sharing, by improving the lending capacity of the ESM to provide timely and predictable financing.

On jurisdictional coordination: Multiple Point of Entry and Single Point of Entry

In Europe, each European Member State took an uncoordinated approach to solve the banking crisis by re-capitalizing and nationalizing a range of domestic banks (Dübel, 2013). Consequently, this approach contributed to contagion among European banks as investors had a wee knowledge about the resolution mechanism to be adopted in each country, potentially resulting in a ‘flight-to-safety’ (De Bruyckere et al., 2013) The adoption of a single regulatory regime and centralized supervision in the EU regarding G-SIIs -which are ‘too-big-to-fail’- is imperative to achieve a coherent single regulation (Singh, 2016).

Among policymakers, there is a lively debate about two specific resolution models. Under Multiple Point of Entry (MPOE) resolution, each national regulator performs a separate resolution, drawing on loss-absorbing capital that is held separately by national holding companies in each jurisdiction. In contrast, under Single Point of Entry (SPOE) resolution, a global bank is recapitalized by writing off debt or equity issued by a single global holding company that owns multiple subsidiaries in multiple jurisdictions (Bolton and Oehmke, 2016). Despite this debate, literature is developing a formal economic analysis of the trade-off between MPOE and SPOE based on cooperation of jurisdictions. Faia and Weder di Mauro (2016) find that resolution authorities choose the optimal fraction of bail-inable instruments depending on the extend of cooperation among jurisdictions. Regarding SPOE, the volume of bail-inable bonds under a non-cooperative regime is larger than under a

cooperative regime. Under the non-cooperative regime regulatory authorities are unable to internalize the cross-country spillovers of their actions. Losses to bondholders under MPOE are the same than under cooperative-SPOE when banks are fully exposed in foreign liabilities. In this line, Bolton and Oehmke (2016) find that SPOE is *a priori* more efficient than MPOE since it permits cross-jurisdictional transfers. As a result, SPOE can be implemented with lower loss-absorbing capital than MPOE, allowing banks to provide more socially valuable services. However, if regulatory authorities prefer ring-fence assets *ex post* to cooperation, then MPOE is preferable. The more decentralized the G-SIIs' activities, the greater the relative advantage of MPOE resolution.

These results have been built on research dealing with regulation and supervision of multinational banks. Dell'Ariccia and Marquez (2006) show that supranational regulations is more likely to emerge in homogeneous jurisdictions. Calzolari and Lóránth (2011) and Calzolari et al. (2016) show that regulatory authorities may take different decisions about multinational banks depending on whether banks adopt a branch or subsidiary structure. Supranational supervision encourages multinational banks to expand abroad using branches instead of subsidiaries, and in turn, banks chose representation form depending on anticipated supervisory actions. Paradoxically, the introduction of a common deposit insurance scheme does not change the previous result. Additionally, Hardy and Nieto (2011) show that strengthening coordinated prudential regulation and supervision may reduce the need of deposit guarantees, and help induce countries to limit protection to creditors and other bank creditors. Beck and Wagner (2016) advocates that currency unions should use an integrated approach to design their regulatory architecture by moving from a supervisory and regulatory coordination to a supranational body.

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