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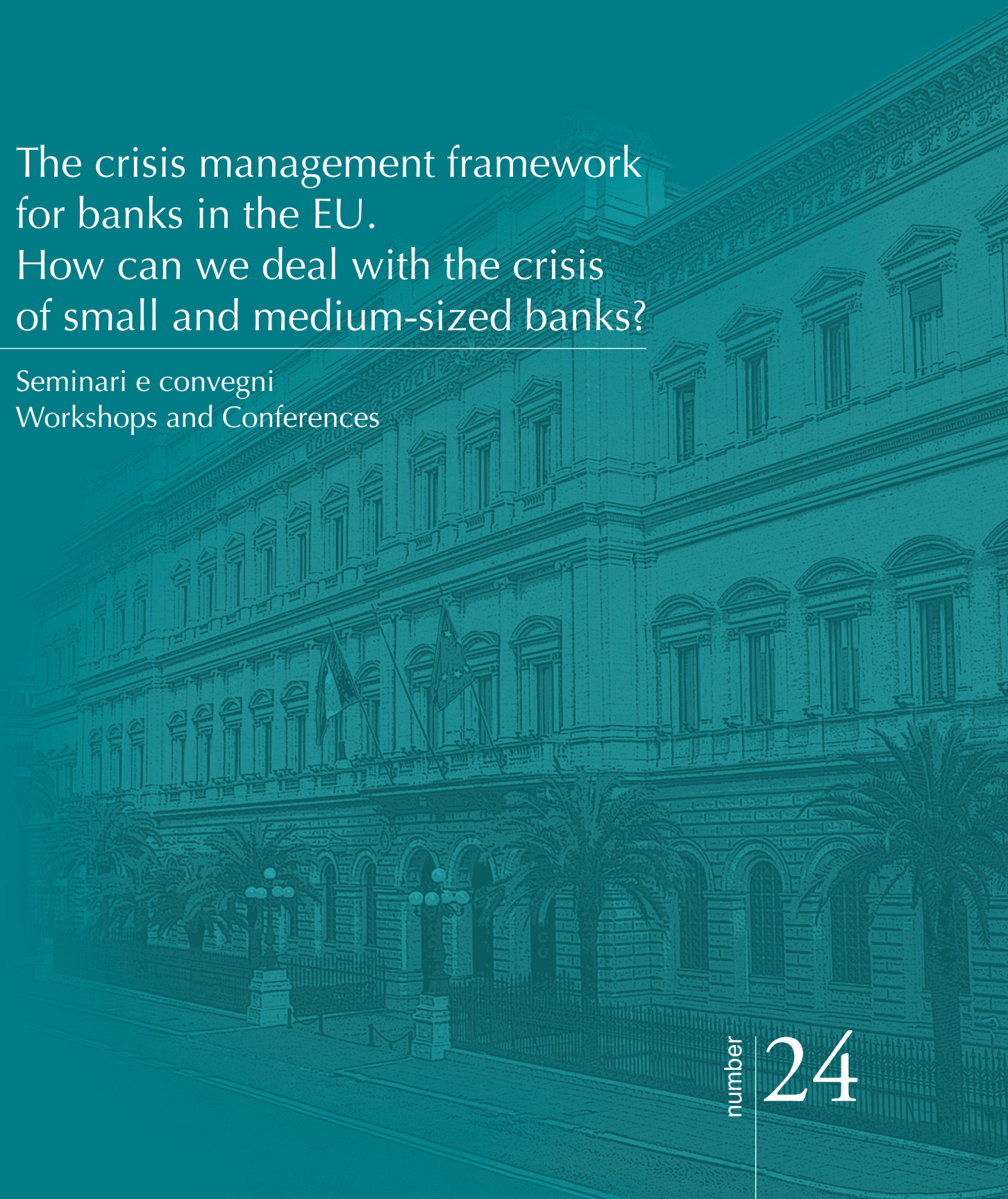
The crisis management framework for banks in the EU. How can we deal with the crisis of small and medium-sized banks?

Seminari e convegni
Workshops and Conferences



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This volume contains the papers and contributions that were presented at the Bank of Italy workshop "*The crisis management framework for banks in the EU. How can we deal with the crisis of small and medium-sized banks?*", held in an online format on 15 January 2021.

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An overview of the workshop

Alessandra de Aldisio[1]

In the EU legal framework, resolution proceedings can only be used when the public interest is at stake. Based on the interpretation of the public interest given thus far, the new resolution regime seems to be applicable to a small subset of euro-area banks and banking groups, only around 200 out of a total of about 3,000 as of end-2019. Any crisis among the remaining banks should therefore be dealt with via national insolvency procedures.

National insolvency regimes may result in a piecemeal liquidation, with no guarantees that exit from the market will take place in an orderly fashion. Indeed, if no interested acquirer can be rapidly found, liquidation will lead to the immediate disruption of the bank's core activities, to the disposal of assets and collateral at fire-sale prices, and to non-insured creditors having to wait a long time to obtain partial and uncertain reimbursement. More importantly, confidence in other banks may be shaken, triggering contagion. This may mean risks for financial stability and knock-on effects on the real economy. A disorderly piecemeal liquidation process is clearly not efficient and gives rise to serious concerns, given the social and economic significance of the banking business.

The establishment of a common deposit guarantee scheme (DGS) for the Banking Union would not fix the problem. While it would increase the overall level of confidence in the banking system, it would not per se avoid piecemeal liquidation, since the existing EU framework tilts the choice of the DGS towards depositor reimbursement instead of alternative interventions.

In the light of the above considerations, in January 2021 the Bank of Italy organized a policy workshop aimed at exploring areas for improvement in the European framework for managing the crises of small and medium-sized banks. This e-book contains the papers and contributions presented at the event.

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[1] Bank of Italy – Financial Supervision and Regulation, Regulation and Macroprudential Analysis Directorate. The text reflects the views of the author and her own reading of the contributions to the workshop; it does not involve the responsibility of the Bank of Italy.

The workshop confirmed that there is a broad consensus on the need to revise the framework to cater for the crises of small and medium-sized banks, and on the need to do it urgently.

The assumption underlying the regulator's focus on systemic banks was that, in most cases, the crises of small and medium-sized banks would not raise concerns for financial stability and could be subjected to ordinary liquidation procedures at the national level.

However, the experience of these first years of the Banking Union has proved that assumption wrong. The significant differences in national legal regimes for the liquidation of banks imply divergences from the European supervisory framework; they generate level playing field concerns that might impair the integration of banking markets and they may stand in the way of a smooth exit from the market of the weakest players (Enria, Visco). Furthermore, a great deal of empirical literature has shown that liquidating a bank, no matter how small, damages the economy by destroying the soft information embedded in these banks (Beck).

Ensuring that adequate and proportionate solutions are in place to manage and finance the failure of banks, while preserving their franchise value, is among the objectives that the European Commission intends to pursue with the review of the crisis management and deposit insurance framework, as part of the agenda for the completion of the Banking Union.[2]

There is also consensus that a transfer strategy is the appropriate solution for ensuring an orderly market exit for small and medium-sized banks, thereby avoiding a value-destroying piecemeal liquidation. A sale of viable parts of the business (assets and liabilities) to a third party would be beneficial not only for the DGS, which can avoid upfront expensive pay-outs, but also for creditors, as it preserves franchise value by upholding the continuity of business relationships (Balder and Vanberg). Critical functions would also be preserved, thus avoiding any disruptive effects on the economy.

When it comes to how to shape the new framework, however, two options concerning the nature of the applicable framework are possible: the first is to widen the scope of resolution and apply the resolution tools, and particularly the sale of business, to a larger number of banks, regardless of their systemic importance; the second is to introduce a harmonized orderly liquidation regime, replacing the national insolvency proceedings, for banks that do not pass the public interest test. Addressing the issue of the source of funding and the conditions to access it is needed for both options (Tornese).

As to the first option, a wider application of the resolution framework could be achieved by lowering the bar of the public interest assessment (PIA) or by removing the public interest requirement as part of the resolution trigger.

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[2] European Commission, *Combined Evaluation Roadmap/Inception Impact Assessment*, 10/11/2020, p. 3.

Restoy claims that a PIA may still be needed to justify any interference with property rights and a possible departure from the pari passu principle that may be needed for public policy reasons. In particular, as resolution actions may entail a sort of expropriation of contractual rights, an explicit PIA may help mitigate risks of litigation. Schillig instead argues that a PIA may be no longer necessary after the introduction of the BRRD. Extending the BRRD resolution regime would constitute an interference only with the property rights that were in place at the time the transformation takes effect. There would be no interference with any property rights that emerge thereafter as they would already be subject to the potential application of resolution tools and powers. The author therefore advocates extending the BRRD resolution regime to all bank failures by removing the public interest test as part of the resolution trigger.

Regardless of the choice about extending the PIA, there seems to be a broad agreement that the concept of public interest requires clarification for legal certainty purposes (Tornese). The approaches of resolution authorities are indeed quite different. While resolution has been 'for the few and not for the many' in the Banking Union, as confirmed by König, the Danish authorities have applied resolution to small and medium-sized banks to ensure that customers can continue to have access to critical functions, and therefore to contain risk of contagion. The strategy has been supplemented by requirements to hold eligible liabilities (MREL) that are lower than those required of the largest banks but sufficiently greater than standard prudential capital adequacy levels (Andersen and Hovedskov).

The Danish strategy raises the key issue of the market for MREL-eligible liabilities. A more extensive use of resolution, whether achieved by lowering the bar of the PIA or by removing it, is feasible if small and medium-sized banks can build-up an adequate level of MREL; however, thus far, issuance of MREL-eligible liabilities by these banks has been quite limited. Indeed, most of them are non-listed and mainly financed by deposits; it might prove overly expensive for them to tap senior non-preferred wholesale markets to issue MREL-eligible liabilities (e.g. due to fixed costs for due diligence, the need to obtain a credit rating, and so on), or altogether impossible (Enria, Restoy et al., Rivera). This could have a strong impact on banks' margins and even force some of them out of the market (Visco).

Balder and Vanberg note that institutions would not need to issue these liabilities directly on capital markets. For example, even smaller banks can issue private placements. The Danish small and medium-sized banks meet their MREL with capital which they gradually accumulate from retained earnings, during a phase-in period determined by the authority and based on assumptions about the banks' profitability. Buch underlines that the Capital Markets Union may support a market for MREL-eligible liabilities to develop over time, thus mitigating the problem of appropriate financing.

However, the problem is not only access to the market but also whether the business model of some banks allows them to sustain the level of MREL required to access the resolution fund, i.e. the 8 per cent minimum subordination requirement (Berrigan, Rivera). An empirical econometric study on the determinants of the interest rate at issuance of MREL

bonds (Sotelo) confirms that small institutions have a disadvantage in this market, and tend to pay more than big banks.

Schillig proposes loosening the conditions for accessing the resolution fund. In particular, institutions unable to access capital markets for subordinated debt instruments could be exempted from the 8 per cent minimum burden sharing necessary to access the resolution fund. These institutions could then be resolved by transferring their viable deposit business to a private sector purchaser and liquidating the residual entity, with both transfer and liquidation financed by the resolution fund and with an adequate contribution from the relevant deposit guarantee scheme.

The second option is to introduce a harmonized orderly liquidation regime specifically designed for banks. Under this option, national resolution authorities (in the short to medium term) or EU authorities (in the steady state) would be given special administrative liquidation powers to allow the transfer of some assets and liabilities to a viable bank.

National insolvency procedures are quite heterogeneous across EU Member States. Some countries have special regimes applicable only to banks, while others have ordinary insolvency regimes applicable to all kinds of firms; some implement judicial-based frameworks, others administrative-based frameworks. Due to this variety, creditors and depositors tend to be treated differently across the EU, fuelling financial fragmentation. A greater degree of harmonization of the national insolvency procedures for non-systemic banks is therefore necessary to strengthen the Banking Union and the single market (Enria, König, Visco).

Berrigan and Restoy et al. note, however that a complete convergence of insolvency regimes for banks would be challenging; there are material divergences reflecting national policy choices and property and contract laws. A pragmatic solution could be to adopt a gradual approach to harmonizing only some aspects of the insolvency framework. The ultimate goal, however, should be to put in place an EU administrative liquidation regime, alongside the resolution regime (König, Restoy et al.). Perrazzelli notes that the very special nature of banks and the need to achieve an effective crisis management framework for all banks could help overcome the obstacles to greater convergence in the EU.

Some steps forward in the direction of harmonization are needed in any case, as broadening the scope of resolution would not fully solve the issue, since there will still be banks to which, in the absence of any public interest, the European resolution framework would not apply (Enria, Schillig).

Coming to the sources of funding to support a transfer strategy in liquidation, many authors at the workshop noticed that the DGS' role cannot be limited to a pay-out of covered deposits, and so DGS funds should be used more efficiently to finance the orderly market exit of failing banks, subject to clear conditions. In the US, the FDIC (the Federal Deposit Insurance Corporation, the US federal deposit insurer and resolution authority) provides financial support for sales of assets and liabilities ('purchase and assumption transactions'), either in the form of cash compensation or loss-share arrangements, in the absence of less

costly alternatives. Murton argues that the Deposit Insurance Fund is the US version of MREL for small to medium-sized banks.

However, a number of legal constraints in the European framework currently hinder this possibility. One is the super-priority of European DGSs (DGSs are senior in relation to other depositors). This legal feature is meant to protect the DGS from losses; however, in practice it significantly reduces the DGS' ability to perform alternative interventions, and therefore increases the likelihood of disorderly liquidations.[3] Some authors argue that the current super-preference for DGS-covered deposits should be replaced with general depositor preference, while ensuring that the least cost principle for the use of DGS funds can be applied with appropriate flexibility (Bodellini, Restoy et al., Veron, Visco).

Restoy et al. argue that since super-preference benefits the DGS to the detriment of other unsecured creditors and depositors, it may increase the instability of those liabilities in stress situations, giving rise to withdrawals that could accelerate the deterioration of the banks' franchise. In other words, super-preference of covered deposits may jeopardize public policy goals in bank failure management without it being necessary to deliver the primary objective of protecting depositors, which is already achieved by deposit insurance.

This insight is confirmed by Murton and Shibut. In the US the treatment of uninsured depositors and other unprotected creditors has changed over time. From 1992 to 2007, losses were imposed on uninsured depositors at 65 per cent of bank failures. This percentage fell to 28 per cent in 2008, and only 6 per cent between 2009 and 2013. Shibut argues that imposing losses on uninsured depositors and other unprotected creditors when banks fail can reduce the FDIC's losses at failure, can encourage unprotected creditors at banks to exert discipline on banks that take excessive risks, and may encourage banks to limit risk-taking in response to creditor concerns. However, if the FDIC imposes such losses during crisis periods, then depositors and other creditors at other financial institutions may panic and thus harm both the banking system and the general economy.

Balder and Vanberg note that deleting the super-priority of covered deposits would be undesirable as it would translate into higher levies from the industry. They propose an alternative option for financing the 'purchase and assumption' tool, an ex post claim for recourse by the DGS against the failed bank. As it could depend on the existence of appropriate loss-taking liabilities, the proposal would not offer a solution that is less demanding than the resolution framework, as recognized by the authors.

Looking ahead, an integrated bank failure management regime within the Banking Union would include: (i) the creation of an EDIS entrusted with the power to pay out covered deposits in the event of liquidation and to support the market exit of failing banks through alternative interventions and (ii) the assignment of decision-making powers to the SRB for all bank failures in the Banking Union and the administration of the EDIS (Enria, Perrazzelli, Restoy et al, Beck, Veron).

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[3] Due to super-priority, alternative interventions are less likely to pass the least cost principle test.

However, as long as DGSs remain national it will be difficult to centralize decision-making. Centralization at European level only seems reasonable under a fully-mutualized EDIS (Perrazzelli). During the phase leading to the setting-up of the EDIS, some forms of centralization could be considered, provided that national resolution authorities are granted a decisive voice in the governance arrangements. The incentive misalignment between decision-making powers at European level and financing tools at national level could actually raise serious concerns. One idea could be to establish a 'two-keys' process: the SRB would maintain a strong role in triggering liquidation and proposing the transfer, but the NRA would maintain the right to block the transaction if it is considered excessively expensive for the national DGS (Enria).

Some have stressed another crucial point. The easier availability of external funding in a regime where bank liquidations are managed with a transfer of assets and liabilities supported by the DGS may create distorted incentives for resolution authorities when deciding on the public interest test, particularly if there are reasons why they wish to avoid the loss allocation that resolution would entail. In other words, a lower burden sharing may induce possible arbitrage, reduced market discipline and make the playing field uneven (Berrigan, Carletti, Sotelo, Veron).

In this regard, many participants recalled the principles that should guide any review of the crisis management framework: to preserve financial stability, to protect taxpayers, to reduce moral hazard and to preserve not only a level playing field but also proportionality. In particular, setting up different regimes for small banks and larger banks raises the issue of the right balance between a level playing field and proportionality, two principles which can be difficult to reconcile (Berrigan).

On the one hand, it was noted that the principle of same business, same risk, same rules also implies that access to funding, be it from the DGS or the SRF, cannot be different for small and medium-sized and large financial institutions (König).

On the other hand, a differentiation between larger banks, subject to MREL and bail-in, and smaller banks, subject to a different and less costly treatment, could be justified based on the proportionality principle (Visco). In addition, reducing or eliminating the MREL requirements for small and medium-sized banks would contribute to preserving some biodiversity in the EU banking system in terms of size and business model, with beneficial effects for financial stability as a whole (Berrigan, Visco). Schillig and Visco also note that two different regimes for larger and smaller banks would be in line with the original aim of addressing the 'too-big-to-fail' problem. Larger banks would have to pay a price for their size, consistent with the higher systemic risk they pose in the event of failure. Visco and Perrazzelli note further that the creditors of smaller banks are often individual households and small firms that are not able to adequately monitor financial intermediaries. Forcing them to absorb losses in order to reduce the risk of moral hazard seems a feeble argument. Even supposing this were possible, it would mean substantial inefficiencies and the risk of triggering bank runs. Finally, Rivera observes that if regulators ask banks to equip themselves with loss-absorbing capacity and some of them cannot do it, they are treating them unfairly.

Setting different regimes for larger and smaller banks is the approach adopted in the US. As recalled by Murton, systemically important financial institutions are subject to the Orderly Liquidation Authority (OLA) under Title II of the Dodd-Frank Act, while the Insured Depository Institutions (IDIs) are disciplined by the FDI Act. Powers, instruments and funding mechanisms differ across those two regimes. While the largest banking groups are subject to a TLAC requirement, there is no MREL requirement for small banks, even though haircuts can be applied to uninsured depositors and other unprotected creditors.

According to Veron and Gelpern, the United States has reached a balance between the objective of protecting deposits and the need to limit moral hazard, at least for all but the largest banks. They argue in favour of having the European deposit insurance fund participate in the funding of P&A-type transactions, i.e. allowing a future EDIS to finance 'alternative measures' as in Article 11(6) of the DGS Directive.

Restoy concurs that the US model is a good one, but argues that some of its features should not be directly imported. Specifically, the public interest test (which is not fully in line with the US approach) should remain a feature of the EU framework as it may help mitigate the risks of litigation, as well as reasonably calibrated MREL requirements for those 'middle class' banks" holding significant amounts of non-covered deposits. A combination of collective industry funding and internal means could be worth exploring, as suggested also by Sotelo.

To conclude, there is widespread agreement that a framework for dealing with the crises of small and medium-sized banks is an important missing piece of the Banking Union and the EU crisis management framework. Different, non-mutually exclusive, options are possible for the framework, i.e. wider resolution or orderly liquidation. In both of them, a transfer strategy would be the right solution to avoid a value-destroying liquation. In both of them, the external funding to facilitate that strategy and the conditions for accessing it are key.

Extending resolution to a wide number of banks is certainly the easiest solution from a legal point of view. Resolution is a harmonized framework with a varied set of tools, including the sale of business that allows an orderly exit from the market of the failed bank while, at the same time, preserving the continuity of the viable part of the business. However, some harmonization of national insolvency proceedings could still be necessary to deal with banks that do not pass the public interest test, in order to reduce market fragmentation and facilitate cross-border resolution.

Introducing a harmonized orderly EU liquidation regime could be more difficult. National insolvency procedures vary greatly across EU Member States, which reflects national policy choices, as well as non-harmonized property and contract laws. One way forward could be to adopt a gradual approach by only harmonising some aspects of national insolvency laws applicable to banks, to further align resolution triggers and liquidation conditions and to introduce new procedural rules for transferring assets and liabilities in liquidation. The aim of achieving an effective crisis management framework for all European banks

could help overcome the obstacles to greater convergence, as has happened several times in the past in the EU, for example with the introduction of the euro. In the end, making further progress in harmonization is mainly a political choice.

The fact that the public interest for resolution assessed *vis-a-vis* the objectives set by the BRRD has been excluded by the resolution authority does not preclude a public interest of a general nature from still being in place. In deviating from national insolvency proceedings for corporate firms, an orderly liquidation regime for banks would recognise a public interest in the smooth and orderly management of bank crises.[4] This would reduce the legal risks arising from any interference with shareholders' and creditors' rights.

As for the funding that is needed to finance a transfer strategy, which is widely recognized as a key issue, even those in favour of a wider resolution acknowledge that the conditions for accessing the resolution fund should be loosened for banks whose business and funding models would be incompatible with stringent MREL requirements. While defining the set of technical conditions to identify such a group of banks could be politically challenging, it could certainly be done.

In a harmonized orderly liquidation regime, the conditions that strictly limit access to DGS funds should be eased. The Bank of Italy has contributed to identifying some of these constraints and has put forward proposals, also drawing on the experience of the US, where a large number of crises of small banks have been successfully managed.[5] Looking ahead, the financial support for a transfer of assets and liabilities could be granted by the EDIS within an orderly liquidation regime managed by a centralized authority.

The main criticisms expressed by many of an orderly liquidation regime are the need to avoid the risk of tilting the choice of the authorities towards liquidation instead of resolution. If under liquidation we have the same tools applicable in resolution but on easier terms, the authorities may have incentives not to use resolution even for banks that are not as small. This risk could be addressed by identifying ex ante, through clear and proportionate criteria, the banks that will be liquidated and the banks that should be put into resolution in the event of failure. This would also increase legal certainty and predictability. The point is then not to align the creditors' treatment in liquidation and in resolution, but rather to make it more predictable ex ante to creditors whether their claims would be enforced in the context of an insolvency proceeding or in resolution.

This approach would create two different regimes, one for the largest banks and one for the others. It is the approach chosen in the US where the largest banking groups are subject to the Orderly Liquidation Authority under the Dodd-Franck Act, which can be considered a resolution regime in line with the FSB's Key Attributes, and the Insured

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4 C. Martinez, '*Case-study: the compulsory administrative liquidation of Banca Popolare di Vicenza and Veneto Banca*', in Law and Practice of the Banking Union and of its governing Institutions, Banca d'Italia – Quaderni di Ricerca Giuridica n. 88, April 2020.

5 De Aldisio, A., G. Aloia, A. Bentivegna, A. Gagliano, E. Giorgiantonio, C. Lanfranchi and M. Maltese (2019) '*Towards a framework for orderly liquidation of banks in the EU*', Banca d'Italia, Notes on Financial Stability and Supervision n. 15, August 2019.

Depository Institutions are dealt with under the FDI Act, which can be considered an administrative bank-specific insolvency regime (Restoy). The largest groups are subject to a TLAC requirement, while small and medium-sized banks are not required to build up a loss-absorbing capacity, although haircuts may be applied to uninsured depositors and other unprotected creditors.

There are strong arguments in favour of allowing small and medium-sized banks to access external funding, be it the DGS funding or the resolution fund, on easier terms than under the current framework: the proportionality principle; the need to preserve diversity in the EU banking system; the consistency with the original aim of the too-big-to-fail reforms; and the level playing field. Indeed, applying the same rules to banks that are different in terms of size, funding structure and business model would contradict the principle of fair – not formal – equality, which is the only one that ensures a level playing field.

This variety is an important element to ensure a dynamic and competitive banking market, as recognized in the public consultation recently launched by the EU Commission.[6] If we want to achieve an EU banking sector where different type of banks coexist, in terms of size, funding structure and business model, a different regime for small and medium-sized banks would be the right option. As highlighted by Carletti, we should first ask which optimal structure we want to have in the European banking sector. The crisis management framework should follow.

In shaping a harmonized orderly liquidation regime featuring the US model of 'purchase and assumption' (P&A) transactions, a trade-off between market discipline and financial stability still needs to be solved, depending on a number of features: the design of the transfer, the ranking of the DGS in the creditors' hierarchy and the calculation of the least cost test. The FDIC presentations at the workshop show that the treatment of creditors has changed over time and that high levels of creditor protection due to concerns for financial stability may be costly for the DGS and even deplete it with the need to replenish the fund afterwards. However, imposing losses on creditors during crisis periods may trigger bank runs, with adverse effects on both the banking system and the general economy.

The ultimate challenge is to find the right balance between reducing moral hazard and ensuring the adequate financing of crisis resolution in order to protect creditor's interests, taxpayers, public confidence and, ultimately, financial stability.

The FDIC was established 87 years ago and it has undergone several changes in its lifetime, institutional, legal and so on. One important lesson to take away is that the BRRD and the SRM are a starting point, from which further reforms have to be designed, as Europe gains experience and banking market structures change (Beck).

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6 European Commission, *Targeted Consultation Review of the Crisis Management and Deposit Insurance Framework*, p. 23.

Introductory remarks

Ignazio Visco

It is my pleasure to open this workshop on "The crisis management framework for banks in the EU. How can we deal with the crisis of small and medium-sized banks?" As is well known, in 2015 the Bank Recovery and Resolution Directive (BRRD) introduced a new crisis management regime for the European Union. The purpose of the directive was to tackle the "too-big-to-fail" problem and eliminate the need for bail-outs with public funds in the event of bank failures.

The focus of this reform – in line with the Key Attributes of Effective Resolution Regimes for Financial Institution published by the FSB in the aftermath of the global financial crisis of 2007-08 – was on systemically important banks, i.e. those banks whose failure would likely threaten financial stability and have severe repercussions on the real economy at home and abroad. During the global financial crisis, as well as in previous crisis episodes, the bail-out of such institutions was very costly for governments and, ultimately, taxpayers. Therefore, the solution envisaged at the global level was to internalise the losses through the implementation of the "bail-in", the main tool underpinning the new resolution framework. By shifting the cost of the crisis from taxpayers to investors and creditors, the framework also intended to reduce moral hazard and restore the level playing field for larger and smaller banks, by eliminating the implicit subsidies enjoyed by the former.

However, less attention has been paid so far to banks that are not systemic, namely the small and medium-sized banks that, in the European Union, represent the vast majority. So far, our understanding has been that the new resolution regime is only applicable to a small subset of banks and banking groups: in the euro area only around 200 banks out of a total of about 3,000 as of end-2019. Any crisis among the remaining banks should therefore be dealt with via national insolvency procedures.

Yet small and medium-sized banks contribute to a great extent to the financing of the economy. Less significant institutions (LSIs) hold 19 per cent of the total assets of the banking sector in the euro area; in some countries – such as Austria, Germany, Ireland and Luxembourg – this share rises to over one-third.

In addition, small and medium-sized banks could be those suffering the most from the economic consequences of the pandemic. Could this create an unprecedented "too-many-to-fail" problem, difficult to address within the current framework? A recent Bank of Italy analysis confirms that the effect of the pandemic on Italian banks' credit risk exposure could be higher among less significant institutions than among significant ones, due to the different sectoral composition of the loan portfolios of the two groups.

National insolvency procedures are very heterogeneous across EU member States. For example, some countries have special regimes applicable only to banks, while others have ordinary insolvency regimes applicable to all kinds of firms; some implement judicial-based frameworks while others administrative-based frameworks. This variety creates a level-playing-field problem, as creditors and depositors may be treated differently across the Union, thus fuelling financial fragmentation.

A greater degree of harmonisation of the national insolvency procedures for non-systemic banks is therefore necessary to strengthen the Banking Union and the single market. How, then, can we bring this about? And, most importantly, how should any new EU framework be shaped?

The main objective of any revision of the current framework should be to avoid disorderly piecemeal liquidations, with the consequent unnecessary destruction of value. In Europe this objective is actively pursued in the field of insolvency procedures for non-financial firms, for which harmonisation efforts are ongoing. It should also be pursued, *a fortiori*, in the banking field, where it is crucial not only to avoid destroying value, but also to preserve public confidence in the banking system.

Disorderly liquidations may have instead become more likely in recent years, due to several factors. Technological progress and changing customer habits are inducing banks to downsize their branch network: a key effect of this phenomenon is the reduced appetite of banks for acquiring ailing institutions. The economic crisis is also creating "overcapacity" in the EU banking sector, which, on average, struggles to remunerate capital, further diminishing returns on mergers and acquisitions. Under these conditions, the "franchise value" of ailing banks is small and potential buyers are often willing to enter into a deal only at negative prices.

As is well known, piecemeal liquidation would lead to the immediate disruption of the bank's core activities. Assets would have to be disposed of quickly at fire sale prices and collateral would have to be enforced; non-insured liability holders would have to face long delays to obtain only partial reimbursement; borrowers – especially small enterprises – could be exposed to liquidity constraints, which could then evolve into solvency problems. Confidence in other banks could be shaken, amplifying the risks for the economy at large. Unsurprisingly, disorderly piecemeal liquidation has so far been largely untested.

At present, there is nothing in the EU crisis management framework to prevent the difficulties of a non-systemic bank from evolving into a disorderly piecemeal liquidation. This fundamental weakness of the framework has not gone unnoticed. In the Financial

Sector Assessment Program for the euro area, the IMF called for a common legal framework for liquidation featuring "purchase and assumption" transactions (a transfer of business – assets and liabilities, business branches and legal relationships) supported by a European deposit guarantee scheme. The IMF argued that a transfer of assets and liabilities, instead of a piecemeal liquidation, would reduce the destruction of value and ensure a level playing field for creditors.

Ensuring that adequate and proportionate solutions exist to manage the failure of banks, while preserving their franchise value, is among the objectives that the European Commission intends to pursue, as part of the agenda for the completion of the Banking Union. This would be a key step to increasing the effectiveness and efficiency of the crisis management and deposit insurance frameworks.

One fundamental question concerns the sources of funding to finance a transfer strategy, be it in resolution or in liquidation. Under the current BRRD framework, a successful resolution strategy premised on the bail-in tool requires adequate levels of eligible liabilities (Minimum Requirement for own funds and Eligible Liabilities, MREL), preferably subordinated, to avoid losses being imposed on depositors and other retail creditors.

However, most medium-sized banks (not to mention smaller ones) are not equipped to tap capital markets in order to issue MREL instruments. Around 70 per cent of the significant banks under the direct supervision of the ECB are not listed, 60 per cent have never issued convertible instruments, and 25 per cent have not even issued subordinated debt. These shares rise sharply, of course, for smaller institutions. Requiring these banks to issue MREL-eligible liabilities to non-retail investors would therefore force them to resort to the wholesale market, obtain a credit rating and change their funding structure significantly. It could therefore have a strong impact on banks' margins and even force some of them out of the market, since issuance costs could prove too high to bear.

One possibility to overcome these problems is to finance the transfer of assets and liabilities of the failed bank to a viable third party with the support of a deposit guarantee scheme, as suggested by the IMF. Bail-in would then be applicable only to banks able to tap capital markets to build up enough MREL without radically modifying their funding structure, in line with the original aim of the reform, which was to address the "too-big-to-fail" problem. For all other banks, the deposit guarantee scheme would be responsible for ensuring an orderly exit from the market, without unnecessary destruction of value and spillover effects.

A number of legal constraints in the European framework currently hinder this possibility and should therefore be removed. I have already advanced this consideration years ago, also mentioning the role played in the United States by the Federal Deposit Insurance Corporation. The Bank of Italy has contributed to identifying some of these constraints and has put forward proposals, drawing also from the US experience, which has successfully managed a large number of crises of small banks.

The resulting differentiation between larger banks – subject to MREL and bail-in – and smaller banks – subject to a different and less costly treatment – could be justified on the basis of the proportionality principle, as well as with reference to the objective of preserving the valuable business model of small institutions that rely extensively (if not almost exclusively) on deposit taking and credit lending. Non-systemic banks would actually struggle to survive should their creditors start moving to larger banks because risks are perceived to be substantially lower. The proposed policy would then contribute to preserving some bio-diversity in the EU banking system, which would be beneficial for financial stability as a whole.

Indeed, this would be in line with the original aim of addressing the "too-big-to-fail" problem. Larger banks would have to pay the price for their size, consistently with the higher systemic risk they pose in the event of failure and in line with other strands of the regulatory framework, such as the capital requirements, which are more stringent for larger banks.

With regard to the risk of moral hazard that the different treatment of smaller banks could generate, the argument that uninsured depositors or senior bondholders should participate in absorbing losses in order to fend off this risk seems a feeble one. In the case of smaller banks, in fact, these are often individual households and small firms, who are not able to adequately monitor financial intermediaries. Forcing them to do so, even supposing this were possible, would entail substantial inefficiencies, not to mention the risk of triggering bank runs. Moreover, we must also bear in mind that imposing losses on the creditors of small and medium-sized banks in the absence of adequate MREL buffers would end up hitting their deposits, with possible negative spillover effects on other small banks.

Today's workshop provides an important opportunity to discuss these issues and explore views and suggestions that, hopefully, will contribute in a constructive way to the debate on how to improve the crisis management framework for small banks. So let me thank all the presenters, discussants and panellists who will share their views with us and provide useful insights on how to foster a safer financial system and a better economy.

Crisis management for medium-sized banks: the case for a European approach

Andrea Enria

Introduction

The crisis management framework for banks has advanced significantly in the decade following the great financial crisis. At the global level, the Financial Stability Board identified best practices for managing crises at large and complex institutions, known as "key attributes of effective resolution regimes for financial institutions". In the EU, the implementation of those principles was coupled with the establishment of European banking supervision and the Single Resolution Mechanism (SRM), tasked with enhancing the standards of supervision and resolvability of significant banks, ensuring a consistent approach towards preventing and managing crises at the largest banks across the banking union. However, in the quest to address the "too-big-to-fail" issues exposed by the great financial crisis, less attention was devoted to the management of crises at small and medium-sized banks. It was assumed that, in most cases, they would not raise concerns for financial stability and could be dealt with under ordinary liquidation procedures at the national level.

However, the experience of these first years of the banking union has proved that assumption wrong. The significant differences in national legal regimes for the liquidation of banks imply divergences from the European supervisory framework; they generate level playing field concerns that might impair banking market integration and they may stand in the way of a smooth exit from the market for the weakest players.

In some cases, the declaration that a significant bank was "failing or likely to fail" (FOLTF) did not trigger ordinary insolvency procedures under national laws, putting the bank in a limbo situation in which it had failed but could not exit the market. This happened for instance in the case of ABLV, in which the ECB's FOLTF decision for both the Latvian parent and its Luxembourg subsidiary was followed by the assessment of the Single Resolution Board (SRB) that a resolution procedure was not in the public interest. In the end, the Latvian parent shareholders decided to liquidate the bank voluntarily. The Luxembourg subsidiary

was subject to a suspension of payments regime until the start of the judicial liquidation process almost two years later.

Within the banking union, some Member States rely on administrative liquidation regimes for banks with instruments similar to those of resolution procedures, while others employ the same liquidation procedures that are applied to corporates. This raises even more complex issues, as similar cases may be managed in very different ways. For instance, in the case of the two large banks Banca Popolare di Vicenza and Veneto Banca – which in the SRB's view did not raise public interest concerns at the European level, notwithstanding the high level of combined assets in the same region – the Italian authorities were able to deploy a wide range of administrative tools to transfer the business of the failing entities to another bank, supported by State aid. Such tools, that would not be available in many other Member States, enabled a more favourable treatment of creditors than under the European resolution regime.

Besides the obvious level playing field issues, these differences stand in the way of a fully integrated market and run counter to the objectives of the banking union. Also, the level of protection enjoyed by different categories of investors and depositors could vary across participating Member States. As a result, the intrinsic value of a deposit in one Member State could differ from that in another, even within the banking union. But how should we envisage a consistent crisis management framework, conducive to an integrated banking market?

Towards a more European framework

Such frameworks exist, the most prominent example being that in the United States, centred around the Federal Deposit Insurance Corporation (FDIC). Most cases of bank failure, and especially those involving small and medium-sized banks, are resolved by the FDIC through purchase and assumption and the subsequent sale of deposits and good assets to other banks, which may well be headquartered in other federal states. The failed bank's customers are notified that their deposit or loan contracts are now with another bank and barely notice the effects of their bank's default. This approach to crisis management, whereby the viable parts of an insolvent bank are matched with a thriving acquirer, enables small and medium-sized banks to also reap the benefits provided by a large, integrated banking market. The US model offers attractive features, including a smooth exit from the market, minimal impact on customers, especially retail depositors and small borrowers, the potential to smoothen asymmetric shocks for a specific region through federal solutions to banking crises and the potential lower impact on public finances. In my view, this is the model to look at.

When considering an FDIC-like solution in the banking union, the most important aspects appear to me to be: (i) the role of a deposit guarantee scheme (DGS) covering the whole area; (ii) complete regulatory harmonisation, ideally through EU Regulations; and (iii) the importance of administrative tools for the liquidation of banks of all sizes.

First of all, the reference to the positive role played by a federal agency in the United States, combining the deposit guarantee and the resolution authority role, points clearly to the urgency of developing a European Deposit Insurance Scheme (EDIS) as the natural core component of a comparable approach in the banking union. The introduction of EDIS will be a crucial milestone for the integration of European financial markets. Only with EDIS will it be possible to manage a bank crisis with the level of efficiency that integrated financial markets offer. Lacking a European dimension, national deposit guarantee schemes tend to focus only on national solutions and thus forgo the gains of the large European market. The banking union should change this for good. If we want to achieve a fully integrated banking market in the EU, we should recall that the FDIC's success is based on combining resolution and deposit guarantee functions for almost all banks in the United States. The flexibility provided by the combination of crisis management with the management of the deposit guarantee scheme could help in identifying least-cost solutions, in no case more expensive than the plain reimbursement of insured depositors, with benefits for all stakeholders. EDIS is the only way of guaranteeing that each euro on deposit would carry the same value, irrespective of where the bank and the customer are located within the banking union.

Second, for more consistent crisis management, we need to see further harmonisation in the procedures and tools for dealing with failing banks that, in the SRB's assessment of the public interest, do not qualify for resolution. National insolvency laws are not currently harmonised and are not always tailored to the specificities of the banks. As mentioned before, experience has shown that, due to these differences, failed banks across the banking union are subject to divergent and somewhat uncertain outcomes depending on the features of the national legal framework. There is abundant evidence and research showing that the lack of harmonisation and, in some cases, predictability, in this area, acts as an additional deterrent for market participants, discouraging them from engaging in cross-border banking activity and cross-border consolidation, thus preventing further financial integration in the EU. I am not arguing for a harmonisation of insolvency laws across the EU, which would be welcome but very difficult to achieve. The objective should be to introduce a special administrative regime for bank liquidation with the maximum level of harmonisation, providing additional tools to those that can be deployed for most other companies.

Finally, the mix of tools and financing means available to the relevant authorities needs to be enhanced to adequately deal with the failure of medium-sized credit institutions. Resolution may not be suitable for those banks, while at the same time their liquidation, assuming a piecemeal depositors' pay-out liquidation, could well have an adverse impact in terms of destruction of economic value and financial stability, at least at regional level. We need to introduce adequate administrative tools to ensure that the failure of these banks can be handled in an orderly and effective manner, ensuring a timely and smooth exit from the market. This is very important: if the banks cannot exit the market in a smooth manner, there could be an incentive for governments to also extend some forms of support to banks that lack a sustainable business model. In the aftermath of the great financial crisis, this attitude has contributed to generating a heavy legacy of excess capacity in the system,

which has significantly affected efficiency and market valuations – a problem we are still grappling with today.

Identifying the main options to address the gaps

A more harmonised and fit-for-purpose crisis management framework for medium-sized banks in the euro area is therefore of the essence. What can concretely be done to achieve it?

From a supervisory perspective, as a first step, we should still focus on the actions that can prevent a bank's failure. Banks could have a wider range of credible options at their disposal to withstand severe stress. Banks' recovery plans play an important role here, and it is essential that banks not only identify potential barriers to the swift implementation of recovery options, but also take appropriate actions to address them in a timely manner. Within the banking union, European banking supervision will continue promoting and monitoring improvements in recovery plans, including for banks at which a crisis may well be addressed using liquidation procedures rather than through resolution.

We also need to make sure that failing banks not subject to resolution exit the market within a reasonable timeframe. The current Bank Recovery and Resolution Directive (BRRD) as recently amended provides clear guidance in this respect by requiring banks that have been declared "failing or likely to fail" to be wound up in an orderly manner. It is crucial that this provision is implemented in a way that avoids any residual risk of banks being left in limbo, otherwise additional legislative clarifications would be needed.

When it comes to the orderly market exit of a medium-sized bank, one option under discussion would be to broaden the scope of banks subject to resolution. This would level the playing field for failing banks in the banking union. Here, the question is whether medium-sized banks would be able to access adequate funding to support the preferred resolution strategy under the current resolution framework. For example, there are non-listed banks, predominantly financed by deposits, that do not regularly issue debt on regulated markets. It might prove expensive for these banks to tap senior non-preferred markets in order to issue the required amounts of liabilities eligible under the Minimum Requirement for own funds and Eligible Liabilities (MREL), as institutional investors might not be interested in their debt instruments. These banks might target retail investors instead. The BRRD has been amended to enhance the safeguards to avoid junior debt instruments being placed in the portfolios of captive retail customers under conditions that raise investor protection concerns, and discussions are ongoing about how protection for retail investors can be strengthened further. An excessive reliance on non-preferred and subordinated instruments placed in the portfolio of captive retail customers could also jeopardise the resolvability of a bank, as the ability to allocate losses to these retail investors in a crisis situation could prove highly questionable.

In any case, it is unlikely that broadening the scope of resolution would fully solve the issue, as there will still be banks to which the European resolution framework would not apply as no public interest has been identified. Hence, alternative policy options should be explored.

One option put forward in the current debate would be to ensure, through harmonisation at the European level, that all national resolution authorities have administrative powers to transfer assets and liabilities in liquidation, supported by national deposit guarantee schemes. Under this option, national resolution authorities would be given special administrative liquidation powers that allow for the transfer of some assets and liabilities as an alternative measure or as a complement to insured depositors' pay-out.

DGS funding can already be used for alternative measures under the current framework as an option given to Member States, but amendments to the super priority of the DGS and the assessment of the least-cost criterion would need to be considered in order to allow for a broader use of DGS resources to support effective crisis management.

Transforming this option into a common tool available to all national resolution authorities within a regulatory framework with maximum harmonisation would ensure a more effective treatment of failing banks across the banking union compared to the status quo. However, as discrepancies in national implementation and practices would still be possible, some form of coordination at European level would be needed. Moreover, the financial capacity of national DGSs and their use in practice could vary greatly across Member States, leaving this solution open to the risk of being sub-optimal at the European level, as it would maintain a strong link with the national sovereigns.

We should therefore look at more European solutions. Administrative liquidation powers, including the power to transfer assets and liabilities supported by national DGSs, and in the future by EDIS, can be allocated at the European level. Here, the toolkit available to the SRB would be expanded and equipped with the power to liquidate a bank when no public interest is identified, including by transferring some of its assets and liabilities to another bank within the banking union. As regards funding, one short-term option could be to grant the SRB powers to expand its use of DGS funds coupled with the establishment of a hybrid common deposit insurance.

This could be an intermediate stage towards the establishment of EDIS, which remains the ultimate objective. Giving an EU authority a more relevant role would promote more consistent treatment of banks and would enhance the system-wide effectiveness of crisis management in the banking union, enabling further integration of the banking sector while relying on cooperation with and among national authorities as well as national DGSs until a full-fledged EDIS is in place.

This European approach would be most conducive to ensuring orderly wind-ups across the banking union. But I am aware that in the absence of EDIS the misalignment in incentives between decision-making powers at European level and financing tools at national level could raise serious concerns. Thus, in a pre-EDIS scenario, specific governance arrangements

should be designed in order to ensure the adequate involvement of the national resolution authority (NRA) and the national DGS in the SRB decision-making process. One idea could be to establish a "two-keys" process: the SRB would maintain a strong role in triggering liquidation and proposing the transfer of a bank's assets and liabilities, but the NRA would maintain the right to block the transaction if it were considered excessively expensive for the national DGS.

Conclusion

So far, the impact of the COVID-19 pandemic on banks' balance sheets has remained limited. Banks entered this difficult period with a much stronger capital and liquidity position and strengthened risk management processes thanks to the financial reforms adopted after the great financial crisis. This has proven to be a fundamental element of strength, enabling the banking sector to continue lending to households, small businesses and corporates and to support the recovery of our economy.

But we should not be complacent. We cannot rule out that once the government support measures are lifted, some banks may experience a significant deterioration in their asset quality. Having an effective and integrated framework for managing crises, including for small and medium-sized banks, is essential to preserve the trust of depositors and the public at large, to avoid financial fragmentation and to safeguard financial stability.

There are incremental steps we can take to strengthen our crisis management framework, including for small and medium-sized banks. The proposals I discussed today could be an important step towards the completion of the banking union, which will only be achieved once a full-fledged EDIS is in place.

Session I

Effective crisis management frameworks for non-systemic banks: wider resolution or orderly liquidation?

Bank failure management in the European Banking Union: What's wrong and how to fix it[1]

Fernando Restoy, Rastko Vrbaski and Ruth Walters[2]

Executive summary

Despite the significant progress made in establishing a single resolution mechanism, the European banking union's current framework for bank failure management still has shortcomings. As exposed by several recent bank failures, these shortcomings prevent the framework from fulfilling the aims of both the resolution regime and the banking union.

The problems arise from four features peculiar to the European framework: (i) a conceptual distinction between resolution, which is available following a positive public interest assessment, and insolvency under the applicable national framework for all other bank failures; (ii) varying national insolvency regimes that are often ill-suited to dealing with banks; (iii) reliance on the bail-in of creditors as a condition for use of resolution funding arrangements; and (iv) stringent financial caps on the use of funds from deposit guarantee schemes (DGS) to support orderly bank failure management.

While each of those features may individually have a sound policy rationale, their combination has at least three effects that undermine the effectiveness of the overall framework. First, the default insolvency procedures for failed banks whenever the public interest threshold for resolution is not met are, in many cases, inefficient. Second, tensions and inconsistencies exist between the common resolution framework and national insolvency regimes. Third, there are no adequate strategies for dealing with the failure of mid-sized

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[1] This paper was published by F. Restoy, R. Vrbaski and R. Walters, "Bank failure management in the European banking union: What's wrong and how to fix it", *FSI Occasional Papers*, no 15, July 2020. The paper is available at https://www.bis.org/fsi/fsipapers15.htm.

[2] Fernando Restoy, Rastko Vrbaski and Ruth Walters. The views expressed are solely those of the authors and do not necessarily reflect those of the BIS or the Basel-based standard-setting committees. The authors are grateful to Claudio Borio, Alberto Casillas, Andrea Enria, Edouard Fernández-Bollo, Eglantine Flori, Luis Garicano, Mariano Herrera, Kumudini Hajra, Eva Hüpkes, Mathilde Janfils, Kerstin af Jochnick, Ernesto Mesto, Patrick Neilan, Jaime Ponce, Alexandros N Rokas, Sofia Toscano, Nicolas Véron and David Walker for helpful comments and insights and to Christina Paavola and Dmitrijs Randars for administrative support.

banks that are too large to be liquidated but too small and too traditional to be resolved using bail-in. In particular, banks that rely on deposits for their funding may have difficulty in issuing sufficient amounts of bail-in-able securities.

A transfer of business is arguably the most suitable strategy for facilitating an orderly market exit for failed small and medium-sized banks, but its use is currently restricted by restrictions on the funding available to support such sales. The minimum writedown requirement for use of the single resolution fund (SRF) is a core element of the EU resolution framework, aimed at reducing the moral hazard that might otherwise arise. However, even without modifying that condition, two minimum changes to the resolution framework and to national insolvency procedures would go some way to addressing the current shortcomings. First, some alignment of specific elements of national insolvency regimes is desirable to make them more effective and compatible with the resolution framework. Second, certain conditions need to be put in place to facilitate a more effective use of transfer transactions, both in resolution, using the sale of business tool under the EU resolution framework, and in insolvency.

A basic reform would therefore entail two main components: (i) a harmonisation of some key aspects of bank insolvency regimes, including the conditions for the availability of public support (if any); and (ii) a less restrictive financial cap for the use of funds from the national DGS to support a sale of business in both insolvency and resolution. The latter could be achieved by replacing the current super- preference for DGS-covered deposits by general depositor preference, while ensuring that the least-net- cost constraints on the use of DGS funds can be applied with appropriate flexibility.

Such a "basic reform" would improve the effectiveness of national insolvency regimes and reduce any inconsistencies with the resolution framework. By facilitating a transfer of viable business, this reform could reduce dependence on bail-in in resolution plans which in turn would permit a reduction in the levels of MREL required for mid-sized-traditional banks. For those banks, MREL requirements could be calibrated to take account of the increased availability of DGS funds to support a sale of business that is expected to result from the (reformulated) financial cap.

However, these changes would result in decision-making and funding being institutionally unaligned, since any use of the sale of business tool in resolution would be decided by the Single Resolution Board (SRB) but funded by the relevant national DGS. Moreover, those arrangements would not help to break the links between banks and sovereigns that remain, in spite of the progress made in establishing the banking union.

A more ambitious approach would aim for an integrated bank failure management regime within the banking union. Inspired in part by the US framework for failing banks and the role of the Federal Deposit Insurance Corporation, this approach would supplement the basic reform, in due course, with two additional measures: (i) the establishment of a European Deposit Insurance Scheme (EDIS) with powers not only to pay out covered deposits in the event of liquidation but also to support transfer measures to facilitate an orderly market exit of failing banks, subject to a reasonable financial cap; and (ii) centralisation in the SRB

of decision-making powers in relation to all bank failures in the banking union and the administration of EDIS.

The new framework would retain the current levels of MREL requirements for banks for which an "open-bank" bail-in is the preferred resolution strategy. It would also keep the current minimum bail-in conditions for SRF funding. However, for those medium-sized banks and smaller banks that would be expected, in the event of failure, to be subject to sale of business transactions, supported by EDIS, MREL requirements would be calibrated more moderately to reflect that expectation.

Section 1. Introduction

The current EU framework for dealing with non-viable banks is the result of legislative action and political choices in the wake of the Great Financial Crisis and the European sovereign debt crisis. Largely following the international standards set out in the FSB's *Key Attributes of Effective Resolution Regimes*, EU policymakers and legislators adopted the EU Bank Recovery and Resolution Directive (BRRD). The aim was to provide "a credible set of administrative tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of the institution's critical financial and economic functions, while minimising the impact of an institution's failure on the economy and financial system. [....] Those objectives should help avoid destabilising financial markets and minimise the costs for taxpayers".[3] The BRRD has been transposed into national law by all EU Member States.

A particular feature of the European framework is that it combines two distinct procedures – resolution and insolvency. The resolution regime is harmonised across Member States. In contrast, the legislative reforms that resulted in the BRRD made no significant changes to the national insolvency regimes. These regimes are in many cases long-standing, rooted in national property and contract law, and reflect different national policy choices that result in material divergences. As a consequence, these unharmonised regimes now exist in parallel with the harmonised administrative resolution regimes adopted in accordance with the BRRD.

The effectiveness of the European framework ultimately hinges on how those distinct regimes are aligned and operate in conjunction. Two concepts are important for determining under which regime a bank failure is managed and whether the primary responsibility lies at EU or at national level. The first is that of "significant institutions" and the second is the "public interest".

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[3] Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014; text quoted from recital 5, BRRD. The BRRD goes beyond the Key Attributes in that it includes broader requirements for recovery and resolution planning, restrictions on the use of the "asset management tool", governance arrangements for intra-union cross-border cooperation, and minimum loss-sharing conditions that must be met before the resolution funding arrangements can be used. For the policy debate at that time, see Véron and Wolff (2013).

"Significant institutions" are those subject to consolidated supervision by the European Central Bank (ECB). Together with institutions that are "less significant" but established in more than one Member State in the banking union, they fall within the remit of the Single Resolution Board (SRB). That is, resolution planning and decision-making for those banks is centralised at the European level under the Single Resolution Mechanism (SRM), which comprises the SRB, an autonomous EU agency, and the national resolution authorities designated under the BRRD by each Member State. The SRB leads the resolution planning for those banks; decides whether to take resolution action if such a bank is declared failing or likely to fail; and, if resolution action is undertaken, adopts a resolution scheme that specifies the resolution tools that will be used and any use of the Single Resolution Fund (SRF). The scheme is executed by the relevant national resolution authority or authorities using their powers under the national resolution frameworks. Non-viable banks within the banking union that are not considered significant do not fall under the remit of the SRB. Decisions about such banks fall to the responsible national resolution authority (NRA), including whether the bank is resolved under the BRRD or wound up under the national insolvency regime.

The concept of the "public interest" is the most important determinant as to whether a failing bank is dealt with under the (harmonised) resolution regime or (potentially divergent) national insolvency procedures. This requires a public interest assessment (PIA), framed as a decision by the resolution authority as to whether taking "resolution action is necessary in the public interest". For banks that fall within the SRM, the PIA is made by the SRB.[4]

For banks outside the SRM's remit, the assessment is made by the NRA. Where the PIA is negative, the failing bank is subject to proceedings under the applicable national insolvency regime, provided that the grounds for insolvency are established. As a result, the "normal" insolvency procedures are the default wherever a positive public interest in resolution is not established, whether or not the institution is "significant".

In this paper, we discuss how the current framework falls short of ensuring effective bank failure management. We focus on three problems. First, national insolvency regimes are often poorly suited to dealing with the specificities of banks' failures. They tend to destroy value and may create sectoral distress unless accompanied by substantial liquidation aid. Second, the lack of alignment between certain elements of resolution and insolvency can hinder the resolution framework from achieving its objectives. Third, there is a broad category of banks that may perform functions for which continuity may be desirable but whose business models may not be compatible with the conditions necessary for the use of certain resolution tools. These shortcomings may prevent the current bank failure management framework from fulfilling the aims of the banking union.

The paper proposes possible reforms to address these shortcomings. Although less ambitious approaches could be beneficial in the short term, the ultimate objective

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[4] That is, the SRB in its Extended Executive Session, involving five SRB Board Members and the Member from the relevant NRA.

should be to develop an integrated bank failure management framework within the banking union. This would imply expanding the functions currently performed by the SRB in order to ensure the orderly exit or restructuring of all types of failing or non-viable bank.

The paper is structured as follows. Section 2 summarises the main elements of the current European bank failure management framework. Section 3 discusses the problems in more detail. Section 4 outlines the features of a basic reform to address the main challenges posed by the status quo. Section 5 proposes a more ambitious reform and Section 6 concludes.

Section 2. The status quo: Two discrete regimes for failing banks

The resolution framework under the BRRD

Conditions for resolution

In principle, the scope of the EU resolution framework under the BRRD is broad. Any EU credit institution may be put into resolution if: (i) it is found to be failing or likely to fail (FOLTF); (ii) there is no reasonable prospect that other private sector or supervisory measures (including writedown or conversion of capital instruments) could prevent its failure within a reasonable time frame; and (iii) resolution action is necessary in the public interest. Of these conditions, the third – the PIA – is the most susceptible to interpretation.

The BRRD provides only a brief and high-level explanation of what is meant by "necessary in the public interest". Resolution is deemed to be in the public interest if it is a necessary and proportionate means of achieving the specified resolution objectives, which include continuity of critical functions, avoiding adverse effects on the financial system, or protecting public funds, depositors, and client funds and assets; and winding up the bank through normal insolvency proceedings would not achieve those objectives to the same extent.[5] The BRRD elaborates this latter idea: "A failing institution should in principle be liquidated under normal insolvency proceedings. However, liquidation under normal insolvency proceedings might jeopardise financial stability, interrupt the provision of critical functions, and affect the protection of depositors. In such a case it is highly likely that there would be a public interest in placing the institution under resolution and applying resolution tools rather than resorting to normal insolvency proceedings."[6]

Table 1 takes stock of the outcome of the public interest assessments in a number of cases since the BRRD came into force.

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5 Article 32(5) BRRD.

6 Recital 45 BRRD.

Table 1: Bank failures since enactment of BRRD

Table 1

Name of bank	Date	Assets at failure	SI*	PIA	PIA Authority**	Procedure***
Jadranska Banka	10/2015	HRK1.9bn	no	positive	NRA	Resolution
CariChieti	11/2015	EUR 4.7bn	no	positive	NRA	Resolution
Banca Popolare dell'Etruria	11/2015	EUR 12.3bn	no	positive	NRA	Resolution
Cassa di Risparmio di Ferrara	11/2015	EUR 6.9bn	no	positive	NRA	Resolution
Banca delle Marche	11/2015	EUR 22.7bn	no	positive	NRA	Resolution
Coop Peloponnese	12/2015	EUR (200m)	no	positive	NRA	Resolution
BANIF	12/2015	EUR 12.8bn	no	positive	NRA	Resolution
Andelskassen JAK	1/2016	DKK 250m	no	positive	NRA	Resolution
Maple Bank	2/2016	EUR 5bn	no	negative	NRA	Insolvency
Trasta Komercbanka	3/2016	EUR 430m	no	positive	NRA	Insolvency
Banco Popular Español	6/2017	EUR 148bn	yes	positive	SRB	Resolution
Banca Popolare di Vicenza	6/2017	EUR 34bn	yes	negative	SRB	Insolvency
Veneto Banca	6/2017	EUR 28bn	yes	negative	SRB	Insolvency
ABVL	2/2018	EUR 183m	yes	negative	SRB	Insolvency
Tesla Stedna Banka	2/2018	HRK 4m	no	negative	NRA	Insolvency
Dero Bank	3/2018	EUR 27m	no	negative	NRA	Insolvency
Banca Base	4/2018	EUR 38m	no	negative	NRA	Insolvency
Kobenhavns Andelskassen	9/2018	DKK 411m	no	positive	NRA	Resolution
PNB Banka	8/2019	EUR 550m	no	negative	SRB	Insolvency

* "Significant Institution" subject to consolidated supervision by the ECB.

** Authority that carried out the public interest assessment: the national resolution authority (NRA) of the home Member State or the SRB.

*** "Insolvency" includes any collective procedure other than resolution under the BRRD.

Sources: SP Global, public domain.

As the table shows, the SRB has made only one positive PIA, in the case of Banco Popular Español, with assets of close to EUR 150 billion at the time of its failure.[7] By contrast, it made a negative PIA in the cases of ABLV, PNB and the two "Veneto Banks", the latter each with EUR 30 billion in assets.[8] The SRB's negative PIA for the Veneto banks was made on the grounds that their deposit and lending functions were likely to be substituted given the large number of other banks active in the region. The SRB explains its interpretation of the PIA in its paper on its "Approach to the Public Interest Assessment", published in July 2019.[9] This draws on the definition of "critical functions" in the BRRD, indicating that the SRB ultimately considers significant adverse effects on financial stability only if such consequences materialise at the level of one or more Member States.[10] However, national authorities have applied different criteria when assessing whether resolution is in the public

7 SRB (2017a).

8 The decisions on Banca Popolare de Vicenza and Veneto Banca are set out, respectively, in SRB (2017b,c). See also the briefing by Mesnard et al (2017).

9 See SRB (2019).

10 Article 2(1)(35) BRRD defines critical functions as "activities, services or operations the discontinuance of which is likely in one or more Member States, to lead to the disruption of services that are essential to the real economy or to disrupt financial stability [....]".

interest, reaching differing interpretations of what constitutes sufficient public interest to justify resolution.

Tools and procedures

The EU resolution framework provides resolution authorities with the resolution tools specified by the FSB *Key Attributes*,[11] including bail-in, sale of business and bridge banks.[12] All are exercised by an administrative resolution authority (RA) rather than a court or court-supervised insolvency practitioner. The bail-in tool is used to absorb losses and recapitalise a failing bank (or capitalise a successor entity) by writing down equity and unsecured liabilities, or converting such liabilities to equity, in accordance with the applicable creditor hierarchy. The sale of business tool allows the resolution authority to transfer some or all of the assets and liabilities, including deposits, of a bank in resolution to a willing third-party purchaser with the necessary authorisations to conduct the transferred business. The tool may therefore be used to effect both whole-bank sales and partial transfers, depending on the circumstances and the market for the bank's business. Partial transfers may be used to maintain the critical functions through their sale to a third-party acquirer, combined with the failed bank's liquidation and market exit. The bridge bank tool permits critical functions to be transferred to a temporary entity that should maintain those operations until it is sold to a third party.

Any loss allocation through the use of resolution tools is subject to the "no creditor worse off" (NCWO) safeguard. This entitles creditors that suffer greater losses than they would have if, instead of being resolved, the bank had been liquidated under the applicable insolvency regime, to financial compensation. The "counterfactual" for the purposes of applying the NCWO safeguard is the national insolvency regime (or regimes) that would have applied to the bank or group entity in question.

Sources of funding for resolution

At times, external funding is needed to support resolution action. In sale of business transactions, funding is required to support transfers where there are insufficient viable assets in the failed bank to back a transfer of deposits and possibly other liabilities that authorities may wish to preserve.[13] The BRRD envisages several potential sources of funding

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11 See KA 3.2 for a general list of resolution powers; KA 3.3 for powers to transfer assets and liabilities; KA 3.4 for bridge institutions; KA 3.5 for bail-in within resolution; and KA 4 for powers to impose a temporary stay on the exercise of early termination rights. It should be noted that the general list includes powers to effect an orderly wind-down (liquidation) (KA 3.2 (xii)).

12 Transfer powers may also be used for the "asset separation tool" (transfer of impaired assets to an asset management vehicle), which must be carried out in combination with other resolution powers. Additionally, the EU resolution framework confers other powers specified in the Key Attributes, including the power to impose temporary stays on the exercise of early termination rights; powers to control and operate a bank in resolution; and ancillary powers for achieving continuity of critical functions.

13 In the United States, the vast majority of P&A transactions performed by the FDIC during the GFC required some sort of support from the FDIC (FDIC (2018)).

to support resolution.[14] Those sources include resolution funding arrangements under the BRRD and SRM Regulation; deposit guarantee schemes; and, in exceptional circumstances and depending on the terms of the national resolution framework, public funds.

Resolution funds

The SRF comprises resolution funding arrangements within the banking union and national resolution funds at Member State level. The SRF is funded through contributions from the industry that are calculated pro rata to the share of a bank's liabilities, minus own funds and covered deposits, to the total of such liabilities of all banks in participating Member States, and adjusted on a discretionary basis to reflect the risk profile of the individual institution.[15]

The resources available from resolution funds are restricted, without the possibility of exemptions or overrides. First, the funding available in an individual case is capped at 5% of total liabilities (including own funds) of the bank in resolution.[16] Second, the funds may be used only for specified purposes: most importantly, the resources are not available to absorb losses directly. Finally, and arguably the restriction that has the most material impact on the feasibility of resolving certain banks, access to the arrangements is contingent on the prior writedown of a minimum of 8% of total liabilities (including own funds) of the bank in resolution.[17] The BRRD minimum requirement for own funds and eligible liabilities ("MREL"), which requires banks to build and maintain sufficient loss-absorbing capacity to support the preferred resolution strategy, is intended to facilitate bail-in and enable this condition to be met.

Deposit guarantee schemes

Deposit guarantee schemes (DGS) are governed by the EU Deposit Guarantee Scheme Directive (DGSD) and predate the resolution framework. Under the BRRD, DGS must contribute cash to fund resolution measures that preserve the access of covered depositors to their deposits.[18] The DGS contribution in resolution is mandatory, and access to this funding does not depend on a minimum writedown of liabilities or other conditions. In theory, therefore, a DGS contribution could support a sale of business transaction provided that it includes the covered deposits. However, the DGS contribution in any bank resolution is capped at the lower of (i) the loss the DGS would have suffered if it had paid out the covered deposits in a liquidation of the bank, net of recoveries it would have made

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14 The EU resolution framework is designed to draw first on resources within the bank, and in particular loss absorbency through capital instruments and other unsecured liabilities. The purpose of the minimum requirement for own funds and eligible liabilities (MREL) is to provide on-balance sheet loss absorbency to fund resolution through the use of bail-in.

15 Article 70 (1) SRMR: individual annual contributions are calculated on the basis that aggregate annual contributions shall not exceed 12.5% of the fund's target level. Detailed rules for calculating individual contributions are set out in Delegated Regulation (EU) 2015/63, supplemented by Implementing Regulation (EU) 2015/61.

16 Article 44(5)(b) BRRD.

17 Article 44(5)(a) BRRD.

18 Article 109 BRRD.

from its subrogated claims in the insolvency; and (ii) 50% of its target level under the DGSD. The purpose of the cap is to protect the DGS by ensuring that it is not depleted beyond the losses it would have incurred by paying out covered deposits, and to prevent it from being exhausted by a single bank failure. The cap also effectively limits the extent to which DGS funding can be used to support liabilities other than covered deposits (which might also be transferred in a sale of business transaction).

The rationale for a cap is therefore sound. However, the first limb (capped at the costs of payout net of recoveries) is particularly restrictive as a result of the super-preference of covered deposits that was introduced under the BRRD framework. Since the DGS is subrogated to the preferred claims of covered depositors, this increases the recovery rate of DGS in liquidation. In many cases, where the assets of the failed bank are sufficient to cover most or all of the preferred claims, the DGS may expect to recover from the liquidation most of the funds that it has used to protect the covered depositors of the insolvent bank. Where the DGS fully recovers the amount paid out, its loss is equivalent to the cost of funding for the period between payout of covered deposits and the termination of the liquidation.

Public funds

Public funds may be used in exceptional cases for public equity support or temporary public ownership. The BRRD permits Member States to include such "government financial stabilisation tools" in resolution frameworks as a national discretion but, where available, their use is subject to conditions (in addition to state aid controls) aimed at ensuring it is a last resort in circumstances where a significant adverse impact on the financial system cannot otherwise be avoided.[19]

National insolvency regimes

The "normal" insolvency frameworks that apply to banks vary considerably across EU Member States.[20] In some Member States, there is a specific insolvency regime for banks, distinct from the ordinary corporate regime, while in others banks are subject to the general insolvency framework, with or without modifications. Frameworks also vary as to whether they are judicial or administrative.[21] Within those different formats, national insolvency regimes also differ in key substantive respects. These include the grounds for insolvency; the procedures and tools that are available; and sources of external funding that may be available.

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19 Article 56 BRRD. The decision must be taken by the responsible ministry or government department and the resolution authority acting together, after consulting the central bank. Government stabilisation tools are not available in a resolution carried out under the SRMR.

20 The BRRD framework has introduced some minimum harmonisation of creditor hierarchies as regards depositor preference and the insolvency ranking for "senior non-preferred" debt instruments issued by EU credit institutions within their consolidation perimeter. Other aspects are harmonised only to a limited extent, for example, the aspects covered by the Financial Collateral Directive and Settlement Finality Directive.

21 See Baudino et al (2018) and Atanasova et al (2019) on the differences between bank insolvency laws.

Grounds for insolvency

In some EU Member States, banks are subject to the general corporate insolvency regime. Grounds for insolvency in such cases are typically based on balance sheet or cash flow insolvency: for example, when the liabilities exceed the assets or the entity is unable to pay its debts as they fall due. Such grounds are not aligned with the conditions for resolution ("failing or likely to fail") under the BRRD.[22] This could theoretically result in a situation in which a bank is declared to be failing by the relevant resolution authority but insolvency cannot be initiated, and the failing bank remains in limbo.[23] In countries with modified or bank-specific insolvency regimes, other grounds may be available such as those based on quantitative capital thresholds or on other material regulatory breaches. However, it is rare that insolvency regimes include forward-looking grounds, such as the "likely to fail" condition for resolution. As a consequence, insolvency is often initiated at a stage when the franchise value has already been largely eroded, making it considerably more difficult to preserve viable business and maximise whatever value remains.

Differences in substantive provisions

The insolvency regimes that apply to banks also differ between Member States in a number of other key respects, including the insolvency objectives and tools available; the powers and rights of actors (supervisors, courts, liquidators, creditors' committees); and substantive creditor rights (eg set-off and netting, recognition of non-financial collateral arrangements).[24] While the BRRD framework introduced some harmonisation of national creditor hierarchies through depositor preference, the creation of a new class of non-preferred senior debt (eligible as MREL) and the ranking of certain claims resulting from own funds,[25] they otherwise differ. Those differences may be a function of broader policy preferences about which classes of claims should enjoy protection relative to others. There has been no harmonisation of other substantive elements. In particular, the extent to which sale of business transactions can be carried out in insolvency varies across Member States, depending on the objectives of the insolvency and the powers and procedures available.[26]

Table 2 takes a closer look at insolvency grounds and other features of national frameworks.

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22 The BRRD defines "failing or likely to fail" by reference to four alternatives, any one of which may be sufficient on its own: (i) actual or likely breach of authorisation requirements; (ii) a balance sheet test (a bank's assets actually or likely to be less than its liabilities); (iii) actual or likely inability to pay debts as they fall due; or (iv) the need for extraordinary public financial support for the bank (Article 32(4)).

23 This may have been the case with ABVL. Article 32b BRRD, inserted by Directive (EU) 2019/879, seeks to address this risk.

24 See McCormack et al (2016) for an overview of those differences in the EU.

25 Article 48(7) BRRD.

26 The BRRD specifies 'sale of business' as a resolution tool by which resolution powers are used to transfer some or all of the assets and liabilities of a failing bank, or its ownership, to a willing purchaser. This paper also uses the term 'sale of business' to refer to similar transactions carried out in insolvency. These are also known as Purchase and Assumption (P&A) transactions.

Insolvency features in selected European jurisdictions Table 2

Jurisdiction	Regulatory breaches as grounds for insolvency	Capital triggers as grounds for insolvency	Type of proceeding	Type of regime	DGS funding*
France	No	No	Court-based	Modified corporate	No**
Germany	No	No	Court-based	Modified corporate	No**
Greece***	Yes	No	Administrative	Bank insolvency	Yes
Ireland	No	No	Court-based	Modified corporate	Yes**
Italy****	Yes	No	Administrative	Bank insolvency	Yes**
Luxembourg	Yes	No	Court-based	Bank insolvency	Yes
Netherlands	Yes	Yes	Court-based	Bank insolvency	No
Slovenia	Yes	No	Administrative	Bank insolvency	No
Spain	No	No	Court-based	Modified corporate	No**

* This column refers to the transposition of the options under Articles 11(3) and 11(6) DGSD, which provide for DGS funds to be used to fund "preventative measures" that prevent the failure of a credit institution and/or "alternative measures" that preserve access of depositors to covered deposits within an insolvency proceeding.

** Jurisdiction has transposed the national option under Art. 11(3) to allow use of DGS funds (of funds of Institutional Protection Schemes) for "preventative measures".

*** In Greece, breach of capital maintenance rules may result in an administrative liquidation procedure.

**** In Italy, an administrative liquidation procedure may be also be opened on grounds that the bank is failing or likely to fail.

Source: Baudino et al (2018); Atanasova et al (2019); own research.

Sources of funding for insolvency

Creditors of an insolvent company should expect to bear losses and share any value realised in liquidation in accordance with their ranking. Funding from sources outside of the company's assets should not be required in this process. However, given the nature of bank insolvencies and the public policy concerns that they entail, external sources of funding may be available in some frameworks to alleviate the impact of the allocation of losses on certain creditors. These include deposit guarantee schemes and, ultimately, public funds.

Table 3 illustrates the extent to which sale of business is available, with funding to support it, in resolution and insolvency under the EU and national regimes.

Deposit guarantee schemes

The availability of DGS funds to finance measures in insolvency varies across Member States. The DGSD enables, but does not require, Member States to allow DGS funds to be used for purposes other than pay out of covered deposits (see Table 2). These take two forms: (i) to prevent the failure of a bank ("preventative measures"); and (ii) to finance "alternative measures" that preserve depositors' access to covered deposits in the context of insolvency proceedings.[27] Alternative measures include transfers of liabilities (including deposit books) from a bank in insolvency to another bank. DGS funding may be provided where there is a shortfall in assets to fully back that transfer. The amount of DGS funds

[27] Preventative measures are permitted by Article 11(3), and measures to preserve access to deposits by Article 11(6), of the DGSD.

available for alternative measures is subject to a financial cap: the cost to the DGS must not exceed the costs that it would have incurred in paying out those covered deposits, net of recoveries from subrogation to the depositors' claims in insolvency. As with the DGS contribution to resolution, the interaction of this cap with the super-preference for covered deposits has the effect of limiting the amount of DGS funds that would be available to fund alternative measures in insolvency. Only 10 Member States have implemented this option in national law.[28]

Sale of business (SoB) in resolution and insolvency — Table 3

	Features	Resolution (SRM)	Resolution (National)	Insolvency*
	SoB tool available	Yes	Yes	Varies across MS
DGS funds	DGS funding for SoB	Yes	Yes	Varies across MS
DGS funds	- Access condition	None	None	None
DGS funds	- Amount capped	Yes**	Yes**	Yes***
Resolution funds	Other funding for SoB	Yes (RF)	Yes (RF)	No
Resolution funds	- Access condition	Minimum writedown****	Minimum writedown****	n/a
Resolution funds	- Amount capped	5% of total liabilities	5% of total liabilities	n/a
	Public support	Not available	Financial stabilisation tools	State aid

* "Insolvency" refers to any national collective insolvency proceedings for banks other than resolution under the BRRD.

** DGS funding in resolution is capped at the lower of: (i) the loss the DGS would have suffered if it had paid out the covered deposits in a liquidation of the bank, net of recoveries it would have made from its subrogated claims in the insolvency; and (ii) 50% of its target level under the DGSD.

*** DGS funding for "alternative measures" in insolvency is capped at the costs, net of recoveries, the DGS would have incurred in paying out covered deposits. Member States implement the least-cost test in different ways, see CEPS (2019).

**** Use of resolution funding arrangements under the BRRD is contingent on a minimum writedown of 8% of total liabilities. "Total liabilities" include own funds and are measured as of the time of resolution action.

Source: own research.

PUBLIC FUNDS

Public funds have been used to support insolvency procedures, including through liquidation aid to finance the transfer of a bank's business.

Such support is subject only to state aid rules. In 2013, in the context of the financial crisis, the state aid regime recognised that, "due to the specificities of credit institutions and in the absence of mechanisms allowing for the resolution of credit institutions without threatening financial stability, it might not be feasible to liquidate a credit institution under

[28] CEPS Report for the European Commission on "Options and national discretions under the Deposit Guarantee Scheme Directive and their treatment in the context of a European Deposit Insurance Scheme", November 2019. The option has been implemented by Belgium, Denmark, Finland, Greece, Ireland, Italy, Luxembourg, Lithuania, Malta, Poland and the United Kingdom (while an EU Member State, and still available). Only three of those jurisdictions – Italy, Poland and the United Kingdom – have practical experience of using the DGS to fund alternative measures, and the report notes that those cases generally involved small institutions and the sums involved were low.

ordinary insolvency proceedings".[29] Accordingly, the grant of state aid to "ensure the orderly liquidation of distressed credit institutions, while limiting negative spillovers on the sector and on the economy as a whole" may be compatible with the Treaty.[30] Under the state aid framework, any use of public funds as liquidation aid is subject to conditions, including burden-sharing by shareholders and subordinated creditors, set on a case-by-case basis. However, burden-sharing typically takes the form of loss absorption by available capital, and existing junior debt. As there are no minimum writedown requirements and senior instruments are not affected, state aid restrictions for liquidation aid are less stringent than the 8% minimum contribution to loss absorption required for access to resolution funding arrangements.

In the case of the "Veneto banks" for example, the Italian authorities found that, notwithstanding the SRB's negative PIA, public policy reasons justified, in the context of a national liquidation proceeding, the provision of substantial liquidation aid to the acquirer of those banks in the form of cash and loan loss guarantees. This assessment was motivated by the perceived need to prevent destruction of value, serious losses for non-professional creditors and a sudden interruption of lending to businesses and families.[31]

Section 3. Three problems with the current framework

The existence of two distinct regimes for failing banks, with different conditions, tools and sources of funding, means that in any bank failure the relevant authorities need to decide which regime applies. Chart 1 illustrates the decision-making process required under the European framework to determine whether a bank is resolved or wound up under the applicable national insolvency regime.

Those arrangements lead to three weaknesses of the current bank failure management framework in the banking union: (i) national insolvency procedures are the default process for bank failure management whenever the public interest threshold for resolution is not met, and they vary in effectiveness; (ii) tensions and inconsistencies exist between the resolution framework and national insolvency regimes; and (iii) specific obstacles exist to an orderly management of the failure of mid-sized banks.

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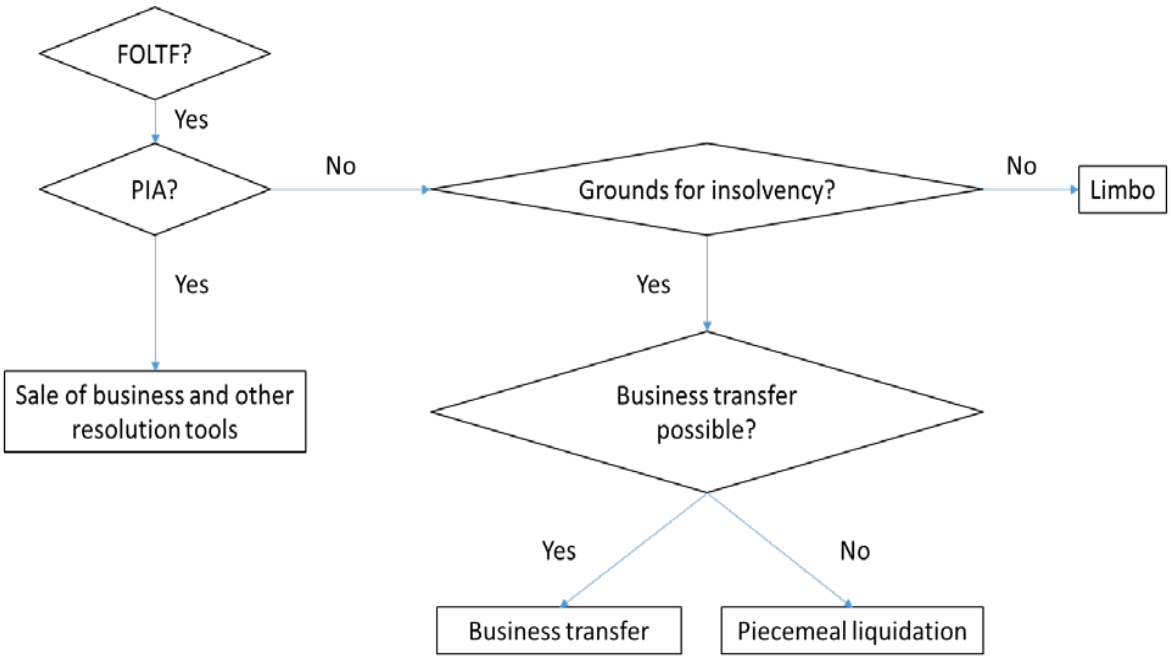
29 Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('2013 Banking Communication') (2013/C216/01). The Communication was adopted prior to the finalisation of the BRRD, but the principles and rules set out in it continue to apply.

30 Article 107(3)(b) of the Treaty on the Functioning of the European Union "exceptionally" allows for aid to remedy a serious disturbance in the economy of a Member State; see also European Commission (2017).

31 For a broader discussion of the PIA in the "Veneto" cases, see Merler (2017) and Kenadjian (2019). Kenadjian also discusses how these cases compare to the approach to bank failure management in the United States.

Chart 1: Decision-making under the current framework



Source: Authors' conceptualisation.

A legacy problem: Inefficient insolvency

A first problem results from the fact that national insolvency regimes that are closely based on ordinary corporate insolvency procedures are generally ill-suited to dealing with the specific challenges of managing a bank failure. This is typically the case where the grounds for insolvency are based on balance sheet tests that prevent a timely intervention before an extreme deterioration of firms' value or where the proceedings do not provide for or facilitate transfers of deposits and viable parts of a bank's business. Even where DGS funding is available to support alternative measures – such as deposit transfers – in insolvency, the way in which the financial cap is applied may make it difficult in practice to finance even the transfer of covered deposits.

The significance of this problem depends on the range of banks that are expected to be subject to insolvency proceedings rather than resolution. If that range is broad and includes mid-sized banks that have some cross-border operations, the shortcomings of current insolvency procedures are likely to constitute a material obstacle to effective bank failure management unless liquidation aid is available.

A problem of alignment: Inconsistencies between resolution and insolvency

The second problem results from the fact that the resolution and insolvency frameworks are insufficiently aligned in key respects. While measures have been taken to

align resolution triggers and grounds for insolvency, there remain two areas, in particular, where a lack of alignment may have an impact on the functioning of the resolution framework. These relate to the increased complexity of applying the NCWO safeguard under the resolution framework arising from differences in creditor hierarchies and rights across national insolvency regimes; and the greater flexibility in the use of public funds in insolvency, compared to resolution.

NCWO assessments and outcomes in resolution

Where a bank is resolved, resolution actions are subject to the NCWO safeguard, which confers a right to financial compensation to any creditor that suffers greater loss in resolution than would have been the case if the bank had been liquidated under the applicable insolvency regime (or regimes) (the NCWO "counterfactual"). The NCWO counterfactual therefore requires an assessment of what the bank's creditors would have recovered under the national regime that would have applied to the settlement of the creditor's claims in a liquidation. In the resolution of a cross-border bank, this may require the counterfactual to be assessed on the basis of multiple national regimes with different creditor hierarchies and safeguards, including different rules about set-off, that could affect the expected recoveries in liquidation. This increases the complexity of an already difficult assessment and, potentially, aggravates the risks of legal challenge by creditors against the valuation used for the purposes of the NCWO safeguard.

Differences in creditor rights and the hierarchy of claims under national insolvency frameworks may also lead to varying outcomes for creditors in the context of a resolution, depending on the location of the creditor or the claim. This possibility arises where part of the failed bank is wound down (for example, in connection with a partial transfer to a purchaser or bridge bank). The residual failed bank would be liquidated under one or more national insolvency frameworks, and the treatment of creditors of the same banking group could vary depending on the applicable national law. This would also be the case if the banking group in question is within the remit of the SRB, since any liquidation of the parts of the bank in resolution would be carried out under national insolvency frameworks.

More public support for insolvency

The relative flexibility for the use of public funds in bank insolvency raises a broader conceptual point. It is anomalous if public support is in principle more easily available in insolvency, where the bank failure has not met the public interest threshold, than in resolution, which is conditional on a positive PIA. This potentially creates distorted incentives for authorities and perpetuates the bank-sovereign link that the resolution framework and the banking union is intended to address.[32]

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[32] This point is broadly accepted. See, for example, Restoy (2019a), König (2019b), EUROFI (2019), Dombret (2019), Farkas (2019).

A structural problem: The middle class

The third problem is of a different nature. It concerns how to deal with mid-sized banks that are primarily funded by equity and deposits and have not traditionally accessed capital market funding.

Effective resolution requires the failing bank to have sufficient liabilities that can absorb losses without undermining the resolution objectives. MREL is intended to ensure that condition can be met and banks that will be resolved have sufficient bail-in-able liabilities to support the proposed resolution strategy. All banks within the scope of the BRRD are subject to the MREL requirement, which is set individually, and incorporates both the bank's regulatory capital and any additional loss absorbency and recapitalisation capacity that is necessary for resolution.[33]

For mid-sized banks, however, it may be challenging to issue sufficient amounts of MREL eligible debt, as their business model is based predominantly on deposit-funding.[34] The EBA (2020) notes that global systemically important institutions and other larger groups can meet between 43% and 58% of their MREL shortfall by adapting the terms of marketable debt instruments that currently do not qualify for MREL. However, for groups with total assets below EUR 100 billion the equivalent percentage is between 4% and 23%, suggesting that these groups would need to change their funding structure significantly.[35] That is, issuing sufficient MREL to support bail-in resolution strategies or meet minimum writedown requirements for access to the SRF may be inconsistent with the business model of mid-sized banks (Restoy (2018)). Continuing profitability may ultimately require them to find new investment opportunities with a sufficiently high risk-adjusted return, with a concomitant impact on their risk profile.

If sale of business is a plausible strategy for those banks, this challenge could be mitigated to the extent that such a strategy justifies lower levels of MREL compared to banks for which bail-in is the preferred strategy. In a bail-in, liabilities are written down or converted into equity in the existing bank, which remains open and continues to operate throughout the process (pending possible post-resolution restructuring that might reduce its size and balance sheet). A bail-in strategy therefore requires sufficient MREL to absorb losses and recapitalise the entire entity. By contrast, in a partial transfer – in which only some of the assets and liabilities are transferred to a purchaser – only the part of the failing bank's business that is transferred continues to operate. Only that subset of its operations

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33 The level of MREL required is determined taking into account a number of considerations. These include the size, the business and funding models, and the risk profile of the bank; and the extent to which the bank's failure would have adverse effects on financial stability. MREL requirements are typically highest for large, complex banks for which the resolution strategy involves use of bail-in. For smaller banks that are expected to be wound up under the applicable bank insolvency regime, MREL may be set at the level required to meet regulatory capital requirements, without additional loss absorbency for resolution.

34 See Restoy (2018) for an estimate on how debt requirements would affect funding costs and profitability of those banks. EBA (2020) estimates the total MREL shortfall at EUR 178 billion as of end-2018.

35 Around 70% of significant banks under direct supervision by the SSM are not listed, 60% have never issued convertible instruments and 25% have not issued subordinated debt either.

will therefore need to be recapitalised, and the "recapitalisation component" of MREL might be reduced proportionately.[36] The SRB acknowledges this principle by accepting a 20% "downward adjustment" of the recapitalisation component of MREL for banks with a resolution strategy that primarily relies on transfer tools.

However, the feasibility of transfers depends on two conditions: the availability of a willing and suitable acquirer and a source of funding to compensate the acquirer where the liabilities to be assumed in the transaction are larger than the value of the assets transferred. Such funding may not be available, or available in sufficient quantities, since the use of the resolution fund is conditional on the minimum 8% contribution to loss absorption by shareholders and creditors while the contribution by the national DGS is subject to the financial cap described above.

Given these uncertainties, authorities may not be confident that transfer to a third-party acquirer will reliably be available in the circumstances of a bank's failure. The SRB therefore requires a "variant strategy" (such as bail-in) as a fallback option, and MREL is "calibrated prudently to reflect the most stringent strategy".[37] If the most effective variant strategy is bail-in, there is little scope for reducing the MREL requirements from the level required to support the continuity of the whole bank immediately following resolution.[38]

The significance of this problem depends on whether the failure of such a bank is likely to give rise to public interest concerns. Where this is not the case, the applicable national insolvency framework may be sufficient. However, insolvency may not be able to ensure the continuity of functions that may be important at a regional level or for a particular market segment. Such functions provided by mid-sized banks might be considered relevant for the economic system, even if they fall short of "critical functions" as defined in the BRRD. That characteristic may be used by national authorities to justify the provision of public support to preserve those functions.

Addressing the problems

To address these problems, much can be gained by making sale of business a more plausible failure management strategy. Sale of business strategies typically provide

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36 The default formula for MREL calibration is based on two components: (i) a default loss-absorbing amount, which reflects the losses that the bank will incur; and (ii) a recapitalisation amount, which reflects the capital needed to meet ongoing prudential requirements for the operations that will be maintained after resolution. See Commission Delegated Regulation (EU) 2016/1450.

37 See paragraphs 25-27 of the SRB statement of its MREL policy for the second wave of resolution plans, 16 January 2019.

38 This is SRB policy. In its 2018 Policy Statement on MREL for the second wave of resolution plans, the SRB states: "When considering the appropriate resolution tools and the need for a variant strategy, MREL targets should be set at a level ensuring that the implementation of both strategies is credible and feasible. Where transfer strategies rely on a third party and market conditions to be implemented, the SRB requests a variant strategy. Therefore, the MREL needs to be calibrated prudently to reflect the most stringent strategy (baseline or variant). When the resolution plan envisages a variant strategy relying on an open-bank bail-in approach, the MREL target is based on the bail-in tool."

continuity of deposit taking and other core functions for local and regional communities; limit the responsibility of public authorities for dealing with the assets and obligations of a failed bank over a prolonged period of time; and facilitate a swift market exit of the failed institution. In the United States, the vast majority of bank resolutions performed by the Federal Deposit Insurance Corporation (FDIC) take the form of sales of the whole bank, or of specified assets and liabilities, to a purchaser that takes over the transferred business (generally referred to as "purchase and assumption" (P&A) by the FDIC).[39]

However, sale of business strategies depend on a number of prerequisites that may currently not be met. First, the minimum writedown required for access to resolution funds mean that, where there are insufficient viable assets in the failed bank to back a transfer of deposits and possibly other liabilities, it is difficult to secure the funding needed to find a suitable buyer willing to assume the deposits and any other liabilities that authorities may wish to preserve. Second, sale of business strategies require that the systems of the failing bank should be able to provide the necessary information to support a transfer within the required time frame. Third, where partial transfers are contemplated, the bank's asset and liability structure must be such that it is feasible to separate them quickly. Moreover, the selection of liabilities for transfer should be consistent with the applicable creditor hierarchy to minimise the risk of successful claims under the NCWO safeguard.

Various measures could be taken to improve the options for managing the failure of a mid-sized bank either under the EU resolution framework or through an insolvency procedure under national law. If mid-sized banks are expected to be resolved, a sale of business strategy could be made more feasible by greater scope for using the existing mandatory DGS contribution to help fund the transaction. This could be achieved by modifying the financial cap so that the DGS contribution to resolution is raised, which in turn could allow a lower calibration of MREL for such banks. However, effective management of bank failures would also depend on DGS funds being available under national frameworks to support a sale as an alternative measure to the paying out of covered deposits. Moreover, if mid-sized banks are expected to be subject to insolvency, more effective insolvency procedures, including administrative powers to carry out transactions similar to sales of business in resolution, would be needed. Some further reform and harmonisation of national insolvency frameworks will also be needed. In particular, the conditions for availability of liquidation aid need to be addressed.

The following sections explore how solutions to these problems could be achieved through a basic reform (Section 4) and through a more ambitious integrated framework for managing bank failure (Section 5).

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[39] P&A has been the "standard" resolution action for most of the FDIC's history, at least up to the 1990s. For a discussion on how recent bank failure interventions in Europe compare with the FDIC approach, see Kenadjian (2019). For underlying policy considerations for the FDIC approach, see Bovenzi et al (1990).

Section 4. A basic reform

A basic reform would have two main features: a greater alignment of insolvency and resolution; and measures to materially improve the feasibility of sale of business as an option for managing bank failures. The first would involve harmonisation of some aspects of bank insolvency, while the core element of the second would be to ensure appropriate DGS funding of transfer transactions.

Feature 1: Harmonisation of some aspects of bank insolvency

A complete convergence of insolvency regimes for banks would be both technically and politically challenging.[40] Nevertheless, the harmonisation of a few elements of those regimes is needed to minimise the most damaging inconsistencies between resolution and insolvency. Some of these reforms could be achieved by amending the BRRD.[41]

First, the conditions for resolution and grounds for insolvency would need to be brought into greater alignment so that, where a bank is determined to be failing or likely to fail, it can be put into either resolution or insolvency, depending on the outcome of the PIA. A gateway for such alignment has been created under the 2019 amendments to the BRRD, which inserted a provision that requires Member States to ensure a bank that meets the other conditions for resolution but is subject to a negative PIA is "wound up in an orderly manner in accordance with applicable national law".[42] To make this operational, it needs to be transposed into national legislation in a way that ensures that insolvency proceedings can be opened immediately following a negative PIA. This will require close coordination between authorities in charge of the PIA and insolvency.

Second, the conditions on which public funding is available in resolution and liquidation should be aligned. Currently, public funds may be provided for the purpose of "liquidation aid" in insolvency on terms that are less onerous than those that apply to use of resolution funding arrangements. The consequence is that some creditors may be better treated under insolvency than under resolution. More importantly, the easier availability of public funding in liquidation may create distorted incentives for resolution authorities when deciding the PIA, particularly if there are reasons why they wish to avoid the loss allocation that resolution would entail. The state aid regime should therefore be revised to introduce more clear and restrictive conditions on the provision of "liquidation aid".[43]

Third, creditor hierarchies under national insolvency regimes and creditors' rights to set-off may need to be further harmonised to the extent necessary to facilitate the application

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40 Garicano (2020) develops this point forcefully.

41 For example, Article 108 BRRD already requires some harmonisation of national creditor hierarchies to introduce depositor preference and harmonise the ranking of certain debt instruments in bank insolvency.

42 Article 32b BRRD, inserted by Directive (EU) 2019/879.

43 See similar comments on the need to align the state aid framework with the bank resolution framework by König (2019b) and Gelpern and Véron (2019).

of the NCWO safeguard in resolution.[44] That should, however, be subject to further analysis to establish whether the nature of the differences in creditor hierarchies has a material impact on the application of the safeguard that could be mitigated by further harmonisation.

Feature 2: Facilitate funding for orderly market exit

The second key feature of a basic reform would be to secure adequate funding for sale of business strategies to support transfers where there are insufficient assets in the failed bank.

One option for securing sufficiently flexible funding within resolution would be to modify the 8% minimum writedown requirement for access to the resolution funding arrangements under the BRRD and SRM. A loosening of this requirement in appropriate cases could enable resolution funds to be used where a full 8% writedown would undermine the resolution objectives or would not be feasible given the capital structure of the bank. However, it is acknowledged that agreement of such a measure would be technically complex and, in particular, politically challenging. For those reasons, this measure will not be considered further in this paper.

Another source of funding are the DGS.[45] Under the current European framework, although DGS funds to support measures such as sale of business are in principle available in both resolution and insolvency, they are capped by reference to the net losses the DGS would have suffered if it had paid out the covered deposits in a liquidation of the bank (see Section 2). In both contexts, that financial cap in practice considerably limits the contribution of DGS, because the DGS would subrogate to the covered deposits it has paid out, benefit from their super-preference in insolvency and may therefore expect a high rate of recovery of its losses. A basic reform should therefore aim to secure adequate DGS funding to better support transfer measures (whether in resolution or in insolvency) while maintaining a reasonable financial cap, based on the net cost to the DGS of paying out covered deposits in liquidation.[46]

One way to achieve this would be to introduce additional flexibility in the assessment of the costs of payout to the DGS. That could be achieved, for example, by including the estimated contagion effects on other institutions and other externalities caused by the liquidation of a bank that would have imposed costs on the DGS over a specified period. Some Member States

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44 This point is also made by König (2019a).

45 For the international range of practices relating to DGS support in resolution, see Baudino et al (2019).

46 Credible backup funding arrangements for DGS would continue to be important to maintain public trust in deposit insurance and ensure that funds are available whenever needed to in accordance with a DGS's mandate.

have introduced that type of flexibility in their own transposition of DGSD.[47] However, any expansion of the relevant costs would need to be circumscribed by rules to ensure consistent application, and such rules would almost certainly be difficult to formulate and agree.

A potentially more effective approach would be to replace the current super-priority of covered deposits with a general depositor preference, under which covered and non-covered deposits rank senior to other liabilities, but *pari passu* with each other. This relatively straightforward modification would reduce the expected recoveries of the DGS in a liquidation following the payout of covered deposits. This, in turn, would raise the financial cap for DGS support for transfer transactions. The financial cap would nevertheless continue to be determined by reference to covered deposits that the DGS would have paid out, net of recoveries, in liquidation.

The conceptual argument for differentiating between covered and non-covered deposits in the creditor hierarchy is not obvious. First, super-preference for covered deposits is not necessary to deliver the policy objective of protecting a specific class of depositors to a specified level. That is already achieved by deposit insurance. Second, super-preference for covered deposits benefits the DGS and, ultimately, the contributing banks to the detriment of other unsecured creditors, including non-covered depositors. That may increase the instability of those liabilities in stress situations, giving rise to withdrawals that could accelerate the deterioration of the banks' franchise. In other words, super-preference of covered deposits may jeopardise public policy goals in bank failure management without being necessary to deliver the primary objective of deposit insurance. The US experience helps to illustrate the benefits of general depositor preference in the orderly management of bank failures (see Box 1).

BOX 1 – DEPOSITOR PREFERENCE: THE FDIC EXPERIENCE

Under the original US deposit insurance law, the Banking Act of 1933, insured deposits ranked higher than uninsured deposits and general creditors, while the latter ranked equally (insured depositor preference). In 1935, however, depositor preference was abolished and all depositors were given the same rank as general creditors. In the 1980s, the FDIC developed a "pro rata technique" to avoid treating all creditors of a given class equally. This allowed it to distinguish, for the purposes of sale transactions, between deposits (both insured and uninsured) and other liabilities, so long as non-deposit creditors received at least as much as they would have received in liquidation. That approach was codified in 1989. In 1993, all deposits were given preference over

[47] Italy takes into account the impact that liquidation (as opposed to "alternative measures") would have on other banks and the system as a whole. Portugal transposes it so that the cost of payout is gross (ie the sum of covered deposits), rather than net of recoveries; Denmark also had a more flexible calculation of "least cost" when using DGS funding under the predecessor of the DGSD; see CEPS (2019); for a discussion of the calculation on a net vs gross basis, see Croitoru et al (2018); the aspects of indirect costs and contagion are also discussed by De Aldisio et al (2019).

other unsecured creditors, but insured and uninsured deposits continued to rank *pari passu*.[1]

Since 2007, the FDIC has managed the failure of almost 500 US banks. In most cases, it conducted purchase and assumption transactions that entailed some form of financial support for the acquirer in form of a cash compensation or loss-share arrangements. That financial support was provided by the deposit insurance fund.[2]

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1 For more details on depositor preference, and a discussion of the underlying issues from a US perspective, see Bennett et al (1999) and, comparing international approaches, Hardy (2013). For different forms of depositor preference, see Dobler et al (2020).

2 See FDIC (2017) for the historical record and FDIC (2019) for the technical and operational aspects of P&A.

What would be achieved and what challenges would remain?

The basic reform would address some of the deficiencies of the current bank failure management framework. The inconsistencies between resolution and insolvency would be reduced by harmonising some key aspects of national insolvency regimes. The problem of mid-sized banks would be mitigated by the availability of DGS funds to facilitate transfer transactions in both resolution and insolvency.

First, by making available adequate funding to support an orderly market exit, the basic reform could reduce the need to build large stocks of gone-concern capital in banks for which the sale of business tool is the preferred resolution strategy. The availability of DGS support – through cash or loan-loss guarantees – to a potential acquirer of the whole or a part of the balance sheet of a failing bank would make the sale of business strategy less uncertain, thereby justifying a less conservative approach by the resolution authority when setting MREL.

Second, although the basic reform would not, in principle, prescribe the creation of administrative bank insolvency regimes at national level, it would provide incentives for national authorities to move in that direction. In particular, more flexible conditions for the use of DGS funds to support alternative measures, such as transfers of assets and liabilities, could encourage jurisdictions that have not so far used the relevant option in DGSD to do so and to put in place arrangements to allow a more active role of DGS in crisis management.

However, a number of challenges would remain.

First, while the modification of depositor preference would result in more DGS funding for transfers, this might still be insufficient to fund such transactions for some mid-sized banks. The broader the set of liabilities to be included in the transaction, the more difficult it will be to match those with valuable assets and, therefore, the larger the contribution

required from the DGS to support the sale. Conversely, the more limited the transfer, the greater is the risk that the liquidation of the liabilities left behind will give rise to instability.

This could be an issue for mid-sized banks with material amounts of non-covered deposits. Authorities normally aim to transfer both covered and non-covered deposits, since splitting deposit books is likely to reduce the attractiveness to purchasers and erode the franchise value. Any shortfall between the value of transferred assets and liabilities would need to be covered by the DGS to make the sale of business feasible. This is facilitated if, as proposed, all deposits rank *pari passu* in the credit hierarchy. However, as a result of the financial cap, the maximum support that the DGS can provide is still determined by the net cost to the DGS of the payout of covered deposits. Therefore, as seen in Box 2, the required support for the DGS to find a suitable buyer depends critically on the ratio of non-covered deposits to total assets. The larger the ratio, the larger the required support, the more likely that the financial cap could become binding and, therefore, the less feasible the sale of business transaction would be.

BOX 2 – UNDERSTANDING THE FINANCIAL CAP

The following stylised example helps to illustrate what factors affect the support available from the DGS to the acquirer in a sale of business transaction.

Suppose a bank is financed only by going- and gone-concern capital, covered deposits (CDs) and non-covered deposits (NDs). Assume that authorities want to implement a sale of business transaction in which all CDs and NDs would be transferred to an acquirer, together with banks' assets and, if needed, support from the DGS.

Denote by A the maximum amount that a buyer would pay to acquire all the bank's assets (the whole franchise). Denote also by m the proportional discount over A (value destruction) that would be suffered by a piecemeal sale of assets in a liquidation.

Losses incurred by the DGS from paying-out covered deposits would be CL = CD – mA if covered deposits are super-preferred and CL = CD – mA CD/(CD+ND) if, under general depositor preference, the DGS has to share discounted assets with non-covered depositors. Under a sale of business transaction, the DGS may need to cover the difference between the value of the assets and that of transferred liabilities. If all deposits have to be transferred, the cost for the DGS would be CS = CD + ND – A. The financial cap would imply that CS cannot be larger than CL.

Expressing the difference between CL and CS as a proportion of total assets, the margin for the DGS to support the sale of business transaction (MS) per unit of assets could be expressed, if covered deposits are super- preferred, as follows:

$$MS/A = 1 - m - ND/A$$

Under general depositor preference, however, that margin would be expressed as follows:

$$MS/A = 1 - mCD/(CD+ND) - ND/A$$

In either regime, maximum support decreases as the proportion of non-covered deposits over total assets increases. However, it increases with the value destruction potential of liquidation, as compared with sale of business. Notice that the margin available for the DGS to support the transaction would disappear (MS would become negative) for large values of m (little value destruction in liquidation) and ND. In particular, if the percentage of non-covered deposits over total assets is sufficiently large, the transaction would not be feasible because of the financial cap on DGS funds. However, for any scenario in which ND is greater than zero, the margin of support for the DGS is greater under general depositor preference than under super-preference of covered deposits.

As a consequence, for a sale of business strategy to work for banks with significant volumes of non-covered deposits, there have to be sufficient assets that are backed by non-transferred (non-deposit) liabilities. As those liabilities would remain in the residual entity that would be liquidated, they would best satisfy the eligibility criteria for MREL. Therefore, notwithstanding downward adjustments to MREL for banks with a sale of business strategy, MREL calibration should weigh the size and composition of their balance sheet and, in particular, the amount of non-covered deposits held. As a result, even with increased DGS funding, some banks with a sale of business resolution strategy may need non-negligible amounts of MREL – above minimum regulatory capital – to support that strategy.

The second challenge is of an institutional nature. The use of national funds to support a resolution action that is decided and conducted by the SRB for a bank supervised by the ECB could give rise to complexities in decision-making and governance, and to potential conflicts.[48] The mandatory DGS contribution to resolution is a feature of the current framework. However, the proposed reform would make that contribution potentially more significant.

The third, and possibly the most significant shortcoming of the basic reform, is that it does not help to break the links between banks and sovereigns, which is a core objective of the banking union. Section 5 describes how the basic reform could be complemented by additional features in order to address its main deficiencies.

Section 5. An integrated framework for bank failure management

The basic reform described above would strengthen both the insolvency and the resolution regimes and largely remove the main inconsistencies that undermine their functioning. However, those regimes would remain separate and administered by different

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48 Restoy (2019c) and Garicano (2020) suggest transitional arrangements in which the SRB and domestic authorities would share decision-making powers.

authorities, one European, the others national. Moreover, European and national funding mechanisms would coexist.

A more far-reaching reform would aim to centralise decision-making processes and funding mechanisms in the management of all bank failures in the banking union. This model is seen in the US framework for failed banks and the role it provides for the FDIC, and other jurisdictions with similar unitary frameworks.[49] That could be achieved by adding two further features to those under the basic reform.[50]

Feature 3: A European Deposit Insurance Scheme (EDIS)

EDIS would have the mandate to protect covered depositors of all credit institutions in the banking union. As well as being used to pay out the deposits of failing banks, EDIS would be available to support alternative measures, as envisaged in the DGSD, and sale of business strategies, as provided in the BRRD. That support would remain subject to a financial cap that would be redefined as described in Feature 2. EDIS would coexist with the SRF, which would continue supporting resolution strategies for banks with a positive PIA. In particular, the use of the SRF would not be linked to the protection of covered deposits and would not be capped by reference to the costs of payout.

While the specifications for EDIS lie outside the scope of this paper, the centralisation of decision- making about the use of those funds for bank failure management in a European authority implies the need for an extensive, if not full, mutualisation.[51]

Feature 4: Enlarging the SRB's decision-making capacity to all banks

The SRB would manage EDIS and decide how the funds are used. The SRB's decision-making remit would be expanded to include all banks in the banking union. The tools available to manage any individual bank failure would depend on the outcome of the PIA. Resolution under the BRRD and the SRM Regulation (SRMR), and supported by SRF funding where necessary, would continue to apply to banks that are subject to a positive PIA. The SRF would therefore continue to be the main source of funding for the resolution of banks with critical functions that need to be maintained.

However, under the new framework, the SRB could decide that a failing bank subject to a negative PIA should be managed through a transaction that includes a transfer of the

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49 Jurisdictions with "unitary" frameworks include Canada (CDIC), Japan (DICJ) and Mexico (IPAB).

50 For an outline of the concept of a "European FDIC", see Restoy (2019b), König (2019c) and Gelpern and Véron (2020). On how the FDIC model compares with the approach in the EU, see Deslandes et al (2019), Gelpern and Véron (2019) and Véron (2019).

51 Garicano (2020) and Gelpern and Véron (2019) make proposals for the relative contributions of national and European deposit insurance funds. See also Véron (2017), Bundesfinanzministerium (2019) and Garicano (2020) for a discussion of different formulas to modify the regulatory treatment of sovereign debt with the aiming of facilitating an agreement for the creation of EDIS.

eligible deposits, followed by a liquidation of the residual bank. This measure would be pursued where the SRB decides that it would be desirable to facilitate an orderly market exit. That decision would include assessing whether the maximum DGS support available within the financial cap would be sufficient to find a suitable buyer that could swiftly assume the key functions (eg deposit-taking) of the failing bank. The transaction could be funded by EDIS, provided that the amounts involved were within the financial cap.

In order to support this, an administrative transfer tool, similar to the sale of business tool under the BRRD, would need to be available for banks that do not meet the PIA. This would require new EU legislation and modification of national insolvency frameworks to enable a national authority to execute the SRB's decision.[52] It would make sense for that national authority to be the NRA (with expanded competences to enable it to exercise this function). The new tool for transfer transactions in insolvency would differ from the resolution sale of business tool under the BRRD, reflecting the fact that it would be used following a negative PIA. Its use would be governed by the conventional insolvency objectives of preserving the value of the failed bank's assets and maximising the net return on those assets for the benefit of creditors. General depositor preference would facilitate transfers of both covered and non- covered deposits, but the ability to deviate from pari passu treatment of creditors of the same class when selecting liabilities for transfer would be limited.

The procedure for the winding-up of banks not meeting PIA for which sale of business is not feasible, and the residual parts of a bank following an administrative transfer, would be liquidation under national insolvency regimes.[53]

What would be achieved and what challenges would remain?

The more far-reaching reform would achieve greater consistency between resolution and insolvency procedures and so facilitate the use of wider variety of instruments for smaller banks, backed by funding.

In institutional terms, decision-making and funding would be aligned and governance improved. This is crucial as any failure management strategy and any funding decision entails a substantial exercise of discretion and institutional independence. That includes the performance of a PIA; the valuation of the failed bank's assets at the point of intervention so as to quantify losses; the selection of liabilities to be transferred in a sale of business; and the quantification of hypothetical costs to the DGS of payout for purposes of the least-cost test.

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52 This paper does not attempt to set out in any detail how the new tool could be conferred. At a minimum, it would involve supplementing national insolvency regimes with a new, and harmonised, administrative tool for selling all or parts of failing banks, although it is acknowledged that integrating this into judicial insolvency frameworks may require material changes at national level.

53 Gelpern and Véron (2019) suggest a more radical approach under which all banks would effectively be subject to a common European resolution framework.

Furthermore, to the extent that it expands the potential reach for marketing failing banks' portfolios and the funding capacities of resolution authorities, an integrated framework may also increase the options for cross-border acquisitions. This would significantly improve capacities for managing the failures of mid-sized banks without calibrating MREL at levels required for an open-bank bail-in strategy.

Lastly, an enhanced role for the SRB in decision-making for banks with a negative PIA reduces the potential for materially divergent approaches to how such banks are dealt with.

While bank failure management capacities would be significantly enhanced, risks would obviously remain since, even after removing the super-preference of covered deposits, the financial cap on the use of EDIS may still limit the ability to undertake sale of business transactions for some mid-sized banks.[54] In those cases, MREL would continue to be calibrated at the levels needed to support bail-in and access to SRF. In addition, an expansion of the functions and responsibilities of the SRB would have significant implications for its resourcing and the range of staff skills required. And lastly, the creation of a (fully mutualised) EDIS, with the ability to effectively support bank failure management, remains a political challenge. In particular, a less restrictive financial cap (for example, by adopting a general depositor preference rule) to support sales of business may have implications for the target size of EDIS.

Section 6. Concluding remarks

Despite the appreciable progress made in establishing a single resolution mechanism, the banking union's current bank failure management framework has significant shortcomings. These defects, as exposed in recent bank failures, hinder both the resolution framework and the banking union from fulfilling their aims. In particular, in the current situation it is hard to guarantee that all failing banks could be resolved effectively or liquidated without taxpayer support.

There is thus a strong case for further reforming that crisis management framework. The paper suggests a reform agenda comprising four main elements that could be implemented sequentially, namely to (i) harmonise some key aspects of bank insolvency regimes; (ii) revise the conditions for the use of DGS funds in both resolution and insolvency; (iii) create a European deposit insurance scheme to be administered by the SRB; and (iv) give the SRB decision-making powers over the entire banking system in the euro area.

Of course, the adoption of such an ambitious reform is bound to encounter obstacles, whose removal may require difficult political compromises. That is why a sequential approach, starting with a basic reform – comprising the first two elements of the proposed agenda –

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[54] In that regard, that the maximum coverage in the European Union (€100,000) is substantially lower than in the United States (USD 250,000). That difference makes the EU financial cap for DGS funding of alternative measures more stringent than the US version.

could have some merit. However, there are no low-hanging fruits. If it is to be effective and reduce the links between banks and sovereigns, a consistent and comprehensive bank failure management framework will require an increased transfer of responsibilities from national jurisdictions to European authorities and the sufficient availability of mutualised resources to fund alternative tools.

References

Atanasova, S, S Buckingham, S Frazzani and N Véron (2019): "Study on the differences between bank insolvency laws and on their potential harmonisation", European Commission, September.

Baudino, P, R Defina, J M Fernández Real, K Hajra and R Walters (2019): "Bank failure management – the role of deposit insurance", *FSI Insights on policy implementation*, no 17, August.

Baudino, P, A Gagliano, E Rulli and R Walters (2018): "How to manage failures of non-systemic banks? A review of country practices", *FSI Insights on policy implementation*, no 10, October.

Bennett, R and J Marino (1999): "The consequences of national depositor preference", *FDIC Banking Review*, vol 12, no 2.

Bovenzi, J and M Muldoon (1990): "Failure-resolution methods and policy considerations", *FDIC Banking Review*, vol 3, no 1.

Bundesfinanzministerium (2019): *Position paper on the goals of the banking union*, November.

CEPS (2019): "Options and national discretions under the Deposit Guarantee Scheme Directive and their treatment in the context of a European Deposit Insurance Scheme FINAL REPORT", November.

Croitoru, O, M Dobler and J Molin (2018): "Resolution funding: who pays when financial institutions fail?", *IMF Technical Notes and Manuals*, August.

De Aldisio, A, G Aloia, A Bentivegna, A Gagliano, E Giorgiantonio, C Lanfranchi and M Maltese (2019): "Towards a framework for orderly liquidation of banks in the EU", *Notes on Financial Stability and Supervision*, no 15, August.

Deslandes, J, C Dias and M Magnus (2019): "Liquidation of banks: towards an 'FDIC' for the Banking Union?" European Parliament Economic Governance Support Unit, February.

Dobler, M, M Moretti and A Piris Chavarri (2020): "Managing systemic banking crises", IMF Monetary and Capital Markets Department, no 20/05, February.

Dombret, A (2019): "A brief progress report on the resolution framework in Europe", in A Dombret and P Kenadjian (eds), *Resolution in Europe: The Unresolved Questions*, De Gruyter, 2019.

EUROFI (2019): "Making the Banking Union effective: what priorities?", in regulatory update, September. European Banking Authority (2020): *EBA Quantitative MREL Report*, February.

European Commission (2017): *State aid: How the EU rules apply to banks with a capital shortfall – factsheet,* June.

Farkas, A (2019): "Resolution in Europe, still some way to go", in A Dombret and P Kenadjian (eds), *Resolution in Europe: The Unresolved Questions*, De Gruyter, 2019.

Federal Deposit Insurance Corporation (2017): *Crisis and Response: An FDIC History, 2008–2013*.

——— (2019): *Resolution Handbook*.

Garicano, L (2020): "Two proposals to resurrect the Banking Union: the Safe Portfolio Approach and SRB", paper prepared for ECB Conference on "Fiscal Policy and EMU Governance", Frankfurt, 19 December.

Gelpern, A and N Véron (2019): *An effective regime for non-viable banks: US experience and considerations for EU reform*, Study requested by the ECON committee, July.

——— (2020): *A European FDIC: What it means and how to do it*, forthcoming.

Hardy, D (2013): "Bank resolution costs, depositor preference, and asset encumbrance", *IMF working paper*.

IMF Staff (2018): "Bank resolution and crisis management, technical note euro area policies", Financial Sector Assessment Program, June.

Kenadjian, P (2019): "Open questions on bank resolution in Europe", in A Dombret and P Kenadjian (eds), *Resolution in Europe: The Unresolved Questions*, De Gruyter, 2019.

König, E (2019a): "The journey to resolvability", in A Dombret and P Kenadjian (eds), *Resolution in Europe: The Unresolved Questions*, De Gruyter, 2019.

——— (2019b): *Massnahmen und Unterschiede in der Bankenabwicklung in Europa und den USA*, Brussels, Single Resolution Board, 4 October.

——— (2019c): "Welcome speech" at the SRB Conference 2019, Brussels, 10 October.

McCormack, G, A Keay, S Brown and J Dahlgreen (2016): "Study on a new approach to business failure and insolvency: Comparative legal analysis of the Member States' relevant provisions and practices", University of Leeds, January.

Merler, S (2017): "Bank liquidation in the European Union: clarification needed", *Bruegel Policy Contribution*, no 1, January.

Mesnard, B, A Margerit and M Magnus (2017): "The orderly liquidation of Veneto Banca and Banca Popolare di Vicenza", European Parliament Briefing.

Restoy, F (2018): "Bail-in in the new bank resolution framework: is there an issue with the middle class?", March, speech at the IADI-ERC International Conference: "Resolution and deposit guarantee schemes in Europe: incomplete processes and uncertain outcomes", Naples, 23 March.

——— (2019a): *The European Banking Union: achievements and challenges*, in Euro Yearbook 2018: *Completing Monetary Union to forge a different world*, Fundación ICO, January.

——— (2019b): "How to improve crisis management in the banking union: a European FDIC?", speech at the CIRSF Annual International Conference 2019 on "Financial supervision and financial stability 10 years after the crisis: achievements and next steps", Lisbon, 4 July.

——— (2019c): "Reforming the European crisis management framework", intervention at the "Banking Union Workshop", European Parliament, 4 December.

Single Resolution Board (2017a): "Decision of the Single Resolution Board of 7 June 2017 concerning the assessment of the conditions for resolution in respect of Banco Popular Español", SRB/EES/2017/08.

——— (2017b): "Decision of the Single Resolution Board of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Veneto Banca", SRB/EES/2017/11.

——— (2017c): "Decision of the Single Resolution Board of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Banca Popolare di Vicenza", SRB/EES/2017/12.

——— (2018): "Decision of the Single Resolution Board of 23 February 2018 concerning the assessment of the conditions for resolution in respect of ABLV Bank AS", SRB/EES/2018/09.

——— (2019): "Public interest assessment: SRB approach. Brussels: Single Resolution Board", 3 July.

Véron, N (2017): "Sovereign concentration charges: a new regime for banks' sovereign exposures", European Parliament, November.

——— (2019): "Taking stock of the Single Resolution Board", European Parliament Economic Governance Support Unit, July.

Véron, N and G Wolff (2013): "From supervision to resolution: next steps on the road to European banking union", *Bruegel Policy Contribution*, 2013/04, February.

EU BANK INSOLVENCY LAW HARMONIZATION: WHAT NEXT?

Michael Schillig

I. Introduction

Prior to the COVID-19 crisis, the (further) harmonization of insolvency laws pertaining to credit institutions was firmly in the crosshairs of EU regulators and policy makers.[1] The principal arguments were twofold: The complexities resulting from divergent national bank insolvency laws pose a challenge for the application and credibility of the BRRD[2]/SRM[3] resolution framework;[4] and inadequate national insolvency law regimes invite

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1 Elke König, *Why we need an EU liquidation regime for banks* Eurofi Article 5 September 2018 (available at https://srb.europa.eu/en/node/622); also Elke König, Speech: Hearing at the ECON committee of the *European Parliament - SRB Chair, Elke König* 2 July 2019 (available at https://srb.europa.eu/en/node/807); Fernando Restoy, *How to improve crisis management in the banking union: a European FDIC?* CIRSF Annual International Conference 2019, Lisbon, Portugal, 4 July 2019 at 5-8; Bundesministerium der Finanzen (BMF), non-paper: Positionspapier zum Zielbild der Bankenunion (November 2019), 3 (available at http://prod-upp-image-read.ft.com/d3117b58-ffbb-11e9-b7bc-f3fa4e77dd47); Ursula von der Leyen, A Union that strives for more: My agenda for Europe: Political Guidelines for the next European Commission 2019-2024, 9 (available at https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf); European Commission, Report from the Commission to the European Parliament and the Council on the application and review of Directive 2014/59/EU (Bank Recovery and Resolution Directive) and Regulation 806/2014 (Single Resolution Mechanism Regulation), COM(2019) 213 final 9.

2 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms [...], OJ L 173, 12.6.2014, 190; as amended by Directive (EU) 2017/1132 of the European Parliament and of the Council of 14 June 2017, OJ L 169, 30.6.2017, 46; Directive (EU) 2017/2399 of the European Parliament and of the Council of 12 December 2017, OJ L 345, 27.12.2017, 96; Directive (EU) 2019/879 of the European Parliament and of the Council of 20 Mai 2019, OJ L 150, 7.6.2019, 296.

3 Regulation (EU) 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010, OJ L 225, 30.7.2014, 1; as amended by Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 806/2014 as regards the loss-absorbing and recapitalization capacity of credit institutions and investment firms, OJ L 150, 7.6.2019, 226.

4 European Commission (n 1) 9.

national bailouts through generous State aid outside the resolution regime.[5] In short, a harmonised bank insolvency law framework could mitigate 'the destruction of value, level the playing field for creditors, and reduce the risk of member states "gaming" the system'.[6] In the wake of the COVID-19 crisis, the Commission has temporarily relaxed the State Aid framework with a view to enabling Member States to adopt the necessary measures in support of their economies.[7] As a result huge amounts have been mobilised, and will put a strain on national budgets for years to come. As a consequence, effective and efficient national bank insolvency regimes will be even more relevant when the COVID-19 crisis subsides and economies return to, a perhaps new, normal.

On the basis of an analysis of the status quo pain points of the current crisis management framework in the banking sector, the paper advocates the extension of the BRRD resolution regime to all bank failures, by removing the public interest test as part of the resolution trigger. The ensuing consolidation would significantly reduce complexity and enhance the transparency and credibility of the resolution framework. The counterarguments, in form of possible fundamental rights infringements, liquidation as least cost option and lack of bail-inable debt at smaller institutions, remain unpersuasive. Section II critically analyses the conditions for resolution and possible opt-outs that allow policymakers to game the current multi-track system, it also discusses the complexities of the *status quo* and identifies the preferable high-level policy options for (further) harmonization. These may be implemented by extending the scope of the BRRD resolution framework to all bank failures, regardless of whether they meet the public interest test. The practicalities of, and objections to, this approach will be discussed in Section III. Section IV. concludes.

II. Status quo pain points and possible remedies

BRRD and SRM have established a harmonized and partly integrated framework for the resolution of potentially any financially distressed credit institution and certain investment firms[8] (hereafter: 'institutions' or 'financial institutions') as an alternative and exception to their treatment under domestic 'normal insolvency proceedings.'[9] Resolution applies where (i) the competent authority, after consulting the resolution authority,[10] determines that

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5 Agnès Bénasy-Quéré, et al, *Reconciling risk sharing with market discipline: A constructive approach to euro area reform*, Centre for Economic Policy Research Policy Insight No. 91 6 (January 2018); Fernando Restoy, *Bail-in in the new bank resolution framework: is there an issue with the middle class?* Speech at the IADI-ERC International Conference, Naples, Italy, 23 March 2018 at 6 (available at https://www.bis.org/speeches/sp180323.htm).

6 International Monetary Fund, Euro Area Policies: Financial Sector Assessment Program Technical Note – Bank resolution and Crisis Management (IMF Country Report No 18/232, July 2018) para 28.

7 Communication from the Commission: Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak C(2020) 1863 final.

8 Art 1(1) of the BRRD delineates its subject matter and scope in line with the CRD IV Regime (Regulation (EU) No 575/2013 and Directive 2013/36/EU).

9 As defined in BRRD, Art 2(1.)(47); BRRD, Art 32(1)(c) and (5), 32b; SRMR, Art 18(1)(c) and (5).

10 Or *vice versa*, if the Member State so provides and resolution authorities have access to the information necessary in order to make the determination of failure; BRRD, Art 32(2).

the institution is failing or likely to fail; provided (ii) there is no reasonable prospect that failure could be prevented through alternative, in particular, private sector measures; and (iii) resolution action is necessary in the public interest,[11] that is, it achieves, and is proportionate to, one or more of the resolution objectives, [12] and winding up of the institution pursuant to normal insolvency proceedings would not meet those objectives to the same extent. Thus, in the absence of systemic implications, 'normal insolvency proceedings' apply as the default option.[13] The BRRD/SRM resolution framework seeks to replicate the loss allocation principles of general insolvency law so as to curtail moral hazard and enhance market discipline; whilst at the same time providing a tailored administrative procedure with far-reaching powers to prevent the systemic implications of contagious knock-on effects.[14] When triggered, the BRRD/SRM resolution regime supersedes and displaces the applicable national bank insolvency law.[15] A semi-mandatory loss allocation cascade applies: Equity, capital instruments, subordinated debt and senior unsecured debt may be called upon to contribute to the absorption of losses, not, however, secured debt and covered deposits. The framework leaves considerable room for differential treatment of creditors of the same class and beneficial treatment on systemic risk grounds[16] of creditors and classes in deviation from the statutory order of priority under national insolvency law.[17] Investors are protected on the basis of the 'no-worse-off' principle.[18] However, before any losses can be passed on to the relevant resolution financing arrangement and eventually the national budget, shareholders and creditors must absorb a minimum amount of losses of 8% of total liabilities,[19] and fund aid is, in principle, limited to 5% of total liabilities.[20] Where resolution is financed through resolution funds and statutory deposit guarantee schemes, the relevant EU State aid rules apply concurrently with the BRRD/SRM framework. Outside of resolution, the State aid rules may override and modify the loss allocation schedule under national bank insolvency law and shield (some) investors from losses.

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11 BRRD, Art 32(1); SRMR, Art 18(1).

12 These are: (i) to ensure the continuity of critical functions; (ii) to avoid significant adverse effects on financial stability, including by preventing contagion and maintaining market discipline; (iii) to protect public funds by minimizing reliance on extraordinary public financial support; (iv) to protect depositors as well as client funds and assets; in each case whilst minimizing the cost of resolution and avoiding the unnecessary destruction of value; BRRD, Art 31(2); SRMR, Art 14(2).

13 BRRD, Art 32(5), 32b; SRMR, Art 18(5).

14 Christos Hadjiemmanuil, 'Bank Stakeholders' Mandatory Contribution to Resolution Financing: Principle and Ambiguities of Bail-In' in: ECB Legal Conference 2015: From Monetary Union to Banking Union, on the Way to Capital Markets Union, New Opportunities for European Integration (2015) 232-234; Christos Hadjiemmanuil, 'Limits on State-Funded Bailouts in the EU Bank Resolution Regime,' (2016.2) European Economy 91, 101; Jens-Hinrich Binder, 'Systemkrisenbewältigung durch Bankenabwicklung? Aktuelle Bemerkungen zu unrealistischen Erwartungen' (2017) Zeitschrift für Bankrecht und Bankwirtschaft 57, 60.

15 BRRD, Art 86.

16 BRRD, Art 48(5) with Art 44(2) and (3); Hadjiemmanuil (2015) (n 14) 237.

17 Karl-Philipp Wojcik, 'Bail-In In The Banking Union' 53 (2016) C.M.L. Rev. 91, 130.

18 Wojcik (n 17) 120-122; Emilios Avgouleas and Charles Goodhart 'Critical Reflections on Bank Bail-ins' 1 (2015) Journal of Financial Regulation 3, 18, pointing out the risk of litigation that the 'no-worse-off' principle is likely to generate.

19 BRRD, Art 44(5), 101(2); SRMR, Arts 27(7), 76(3).

20 Any additional fund aid or state aid beyond the 5% limit is subject to strict pre-conditions; BRRD, Art 44(7); SRMR, Art 27(9) and (10).

1. 'Designed for circumvention'?[21]

Any decision to let losses lie where they fall, or to impose losses on some but not on others, will inevitably hurt the constituencies that will be called upon to contribute to loss absorption, invite public scrutiny and criticism, and is likely to generate lengthy litigation.[22] Therefore, resolution authorities and competent authorities have strong incentives to avoid politically inconvenient decisions where possible. The conditions for resolution leave ample room for opting out of the BRRD's minimum loss contribution requirement. Whether the BRRD/SRM resolution framework will be triggered in any given case is largely a discretionary judgment on the part of the competent authority and the resolution authority.[23]

An institution will be deemed to be failing or likely to fail in case of a breach of capital requirements, illiquidity or insolvency[24], or if it requires extraordinary public financial support.[25] Given that according to Haldane, the reported capital ratios are 'as much an article of faith as fact, as much art as science,'[26] the determination of a breach of the regulatory threshold is largely a matter of discretion. Illiquidity and insolvency are similarly fluid concepts: financial assets are notoriously volatile and, depending on market movements, may quickly turn into financial liabilities, and *vice versa*.[27] 'Extraordinary public financial support' is defined as State aid under Art 107(1) TFEU (and similar public financial support at supra-national level).[28] According to the Commission's Banking Communication of 2013,[29] a public intervention does not constitute State aid if it takes the form of central bank emergency liquidity assistance (ELA) granted to temporarily illiquid but solvent institutions in exceptional circumstances. Liquidity assistance on this basis is subject to neither the BRRD/SRM nor the State aid framework. Thus, the eventually resolved Spanish banking group Banco Popular could be propped up for two days with EUR 3.6 bn of ELA from the Bank of Spain; only postponing the inevitable but allowing sophisticated creditors to exit without sustaining any losses. Moreover, an investment attributable to a Member State may not amount to State aid if made under the same conditions that a private owner would have accepted, in the sense that any risks assumed by the State and its emanations will be compensated at market rates. Consequently, when the regional government as shareholder funded the recapitalization

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21 Anna Gelpern and Nicolas Véron, 'An Effective Regime for Non-viable Banks: US Experience and Considerations for EU Reform' Study Requested by the ECON committee (2019), 53.

22 See the list of pending cases concerning the resolution of Banco Popular on the website of the European Banking Institute: https://ebi-europa.eu/publications/eu-cases-or-jurisprudence/; see further Rosa Maria Lastra, Costanza A Russo and Marco Bodellini, 'Stock take of the SRB's activities over the past years: What to improve and focus on?' Study Requested by the ECON committee, 13-15 (2019) Appendix.

23 Jens-Hinrich Binder et al, 'The choice between judicial and administrative sanctioned procedures to manage liquidation of banks: A transatlantic perspective,' (September 2018) 8 (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3244334) at 12.

24 BRRD, Art 32(4) (a) – (c); SRMR, Art 18(4)(a) – (c).

25 BRRD, Art 32(4)(d); SRMR, Art 18(4)(d).

26 A Haldane, 'Capital Discipline', Speech given at the American Economic Association, Denver, 9 January 2011, 3, available at www.bis.org/review/r110325a.pdf.

27 S Schelo, Bank Recovery and Resolution (Alphen aan den Rijn: Kluwer Law International, 2015) 24.

28 BRRD, 2(1)(28); SRMR, Art 3(1)(29.).

29 Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('Banking Communication'), OJ EU 30.7.2013 C216/1.

of the German lender NordLB it did not amount to failure triggering resolution.[30] Further, a measure may exceptionally be subject only to the State aid regime, completely outside of the BRRD/SRM resolution framework. This will be the case where extraordinary public financial support takes the form of a so-called 'precautionary recapitalization' or constitutes a state guarantee of newly issued liabilities.'[31] With Commission approval, the Italian government recapitalized Banca Monte dei Paschi di Siena (MPS) on the basis of the former;[32] whereas Banca Carige was rescued by relying on the latter.[33] Both banks had been struggling for years with ever-increasing capital shortfalls, raising serious doubts as to their long-term viability.[34]

Advances from national industry financed resolution funds and deposit guarantee schemes may amount to State aid in accordance with general State aid doctrine.[35] However, in Joined Cases T-98/16, T-196/16 and T-198/16 *Italian Republic et al v European Commission* the General Court held that financial support granted by the privately organized and funded Italian FITD to the ailing Banca Tercas did not amount to State aid because the level of involvement and input of the Bank of Italy as competent authority in the restructuring measures was insufficient to render the Fund's intervention attributable to the State. [36] Thus, where the resources of the privately organized fund are exclusively obtained from the financial services sector on a voluntary basis,[37] the

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30 European Commission – Press release, 'State aid: Commission concludes that recapitalization of German NordLB is market conform' (5 December 2019), available at https://ec.europa.eu/commission/presscorner/detail/en/IP_19_6684.

31 This is subject to the following conditions: (i) support is being granted in order to remedy a serious disturbance in the economy of a Member State and to preserve financial stability; (ii) the beneficiary is solvent; (iii) the measure is of a precautionary and temporary nature and proportionate for remedying the consequences of a serious disturbance; (iv) it is not used to offset losses that the institution has incurred or is likely to incur in the near future; and for a precautionary recapitalization also (v) the injection of own funds or purchase of capital instruments is made at prices and on terms that do not confer an advantage upon the institution, that is, it is made at market prices and not as overpayment; (vi) the institution is not failing on other grounds; and (vii) a precautionary recapitalization is limited to injections necessary to address a capital shortfall established through a stress-test or similar exercise conducted by the ECB, EBA or national authorities. See further Hadjiemmanuil (2016) (n 14) 109; Christos V. Gortsos, 'A poisonous (?) mix: Bail-out of credit institutions combined with bail-in of their liabilities under the BRRD – The use of 'government financial stabilisation tools (GFSTs),' 16 (Oct. 12, 2016); https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2876508.

32 Banca D'Italia, *The 'precautionary recapitalization' of Banca Monte dei Paschi di Siena* (Dec. 29, 2016); https://www.bancaditalia.it/media/approfondimenti/2016/ricapitalizzazione-mps/precautionary-recapitalization-MPS.pdf?language_id=1.

33 European Parliament Briefing, Recent Measures for Banca Carige from a BRRD and State Aid perspective (February 2019), available at https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/624413/IPOL_BRI(2019)624413_EN.pdf.

34 Binder (2017) (n 14) 70-71; Ignazio Angeloni, 'EU's banking misfortunes share a common thread' Financial Times, September 12, 2019.

35 Case 290/83 *Commission v France* ECLI:EU:C:1985:37 para 15.

36 In Joined Cases T-98/16, T-196/16 and T-198/16 *Italian Republic et al v European Commission* ECLI:EU:T:2019:167. An appeal is currently pending before the Court of Justice.

37 e.g. Statut des Einlagensicherungsfonds (December 2018), §2a; Satzung Bundesverband deutscher Banken (November 2018), §6. This will be different where the statutory DGS is utilized for restructuring purposes in accordance with DGSD, Art 11(3). The necessary involvement of resolution authority and competent authority are likely to trigger the applicability of the State aid framework; C Brescia Morra, 'The New European Union Framework for Banking Crisis Management: Rules versus Discretion' (2019) ECFR 349, 364-365.

involvement of public authorities in any rescue measures is minimal and the available amount is sufficiently large so that the national budget is unlikely to be needed as a backstop, EU State aid would have no role to play,[38] the institution would not be failing and a rescue with deposit guarantee fund assistance may constitute a suitable private sector alternative.[39]

Resolution will be in the public interest if it achieves, and is proportionate to, one or more of the resolution objectives, and winding up of the institution pursuant to normal insolvency proceedings would not meet those objectives to the same extent. The SRB has attempted to clarify its approach to 'Public Interest Assessment.'[40] Although this provides some procedural clarity, the substantive elements remain vague and unspecific.[41] For example, the presence in the market of institutions with a business model that is similar to that of the failing institution may support the assumption of an enhanced risk of contagion justifying resolution;[42] or may suggest easy substitutability of the functions provided by the institution so that corporate insolvency would be sufficient.[43] With this flexible public interest test, smaller institutions may be resolved through national bank insolvency law, supported by generous State aid packages granted by the home Member State. Generally, under national bank insolvency law any losses sustained by an institution are to be fully absorbed by equity and debt investors in accordance with a (largely) mandatory order of priority. Only covered depositors will never be asked to contribute to loss absorption, although the deposit guarantee scheme subrogated to the claims of covered depositors may. However, this baseline loss sharing arrangement may be superseded by the EU State aid regime. Pursuant to the Banking Communication, the State aid regime requires a contribution to loss absorption of equity, capital instruments and subordinated debt only; senior unsecured debt and any higher-ranking debt will in principle remain untouched.[44] The Commission has wide discretion for differential treatment of creditors within the same class and across

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38 Gelpern and Véron (n 21) 42.

39 BRRD, Art 32(1)(b); SRMR, Art 18(1)(b).

40 Single Resolution Board, Public Interest Assessment: SRB Approach (July 2019), https://srb.europa.eu/sites/srbsite/files/2019-06-28_draft_pia_paper_v12.pdf.

41 see further Lastra et al (n 22) 13-15.

42 Decision of the Single Resolution Board in its Executive Session of 7 June 2017 concerning the adoption of a resolution scheme in respect of Banco Popular Español, S.A, (the "Institution") with a Legal Entity Identifier: 80H66LPTVDLM0P28XF25, Addressed to FROB (SRB/EES/2017/08) para 4.4.2.

43 Decision of the Single Resolution Board in its Executive Session of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Veneto Banca S.p.A. (the "Institution") with a Legal Entity Identifier 549300W9STRUCJ2DLU64, addressed to Banca d'Italia in its capacity as National Resolution Authority (SRB/EES/2017/11) para 4.2.1.1; Decision of the Single Resolution Board in its Executive Session of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Banca Popolare di Vicenza S.p.A. (the "Institution") with a Legal Entity Identifier V3AFM0G2D3A6E0QWDG59, addressed to Banca d'Italia in its capacity as National Resolution Authority (SRB/EES/2017/12) para 4.2.1.1. See further Single Resolution Board, Notice summarising the decision taken in respect of ABLV Bank, AS (Feb. 2018); https://srb.europa.eu/en/content/ablv; Single Resolution Board, Notice summerising the decision taken in respect of ABLV Bank Luxembourg S.A. (Feb. 2018); https://srb.europa.eu/en/content/ablv; and Single Resolution Board, Notice summarizing the decision taken in respect of AS PNB Banka (August 2019), https://srb.europa.eu/sites/srbsite/files/20190815_summary_of_non-resolution_decision_pnb_banka.pdf.

44 Banking Communication, para 41-46.

classes, subject only to the 'no-worse-off' principle.[45] There is no minimum amount of loss contribution by investors and no fixed cap on the amount of public money that may be advanced.[46] Although conceptually this route seems to be reserved for smaller non-systemic institutions, there is nothing that would prevent a 'national champion' from being rescued in this way: the government of a Member States may strike a deal with the Commission on the granting of State aid, and then argue that resolution under BRRD/SRM would not meet the resolution objectives to the same extent as (part) liquidation under national insolvency law combined with generous State aid would.[47] The Bank of Italy has already argued along these lines.[48] Although at the resolution planning stage the public interest assessment should disregard any extraordinary public financial support,[49] at the resolution trigger stage this prerequisite does not apply, and in any case the prospect of state aid may *de facto* influence the SRB's decision.[50] That this is not just a theoretical concern shows the loss of credibility resulting from the Deutsche Bank bail-out speculations[51] shortly after the new framework had become operational.[52]

The ability to circumvent the resolution framework introduces flexibility into the system, and arguably allows resolution authorities to deal with individual cases in the most appropriate way. However, as it stands, the BRRD/SRM regime is likely to be relevant for only a small number of 'easy cases' where the application of resolution tools and powers is straightforward, the potential spillover effects limited and/or the political implications minimal.[53] 'Hard cases' are likely to be treated to generous public funding and State aid measures. Of the available escape routes, central bank liquidity can be freely created without directly affecting national budgets;[54] precautionary recapitalizations and state guarantees of newly issued debt are (at least on paper) subject to strict preconditions; and industry funded rescue measures do not directly expose taxpayers to losses.

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45 Gortsos (n 31) 18.

46 Although aid should be limited to the minimum necessary, Banking Communication, para 15.

47 The new BRRD, Art 32b does not make a difference; see III 4. below.

48 Where the SRB has decided to launch the BRRD/SRM procedure, the entire value of the equity and the junir bonds of an institution may be lost, and senior bonds and unprotected deposits may be subject to bail-in. This may generate higher costs for all the parties involved: the State, banking customers and the rest of the banking system, contrary to the goal of minimizing the costs of resolution and avoiding the destruction of value; https://www.bancaditalia.it/media/fact/2017/0712-venete-anticipo/index.html.

49 BRRD, Art 15(1); SRMR, Art 8(6); SRB, Public Interest Assessment, 12.

50 Gelpern and Véron, (n 21) 45.

51 When Deutsche Bank faced the prospect of a $14bn fine in the United States, the German newspaper *Die Zeit* reported that officials in Berlin, Frankfurt and Brussels were secretly preparing a rescue package. M Schieritz and A Storn, 'Was wäre, wenn …' Die Zeit Online (13 October 2016) (http://www.zeit.de/2016/41/deutsche-bank-aktie-krise-rettungsplaene). The German government flatly denied the report. However, speculation in the financial press continued for several weeks.

52 Lea Steinbruecke, *Are European banks still too-big-to-fail? The impact of government interventions and regulatory reform on bailout expectations in the EU*, 3-4 (Dec. 31 2017); https://ssrn.com/abstract=3098296. The study demonstrates that paying higher prices for large European bank stocks is rational for investors because of the implicit state guarantee, as demonstrated by the loss in portfolio value immediately following the Lehman bankruptcy which signalled that even a large bank may fail. Portfolio losses were soon reversed when it became clear that no large European bank would be allowed to fail.

53 Binder (2017) (n 14) 68; Hadjiemmanuil (2015) (n 14) 247.

54 Josh Ryan-Collins, Tony Greenham, Richard Werner & Andrew Jackson, Where Does Money Come From? (New Economics Foundation, 2012), 67, 79-80, 103.

It is therefore the public interest test that constitutes the Achilles heel of the BRRD/SRM resolution framework. Relying on State aid to bailout institutions that have been referred to treatment under national bank insolvency procedures may significantly add to the unsustainable strain already put on (some) national budgets as a result of the COVID-19 measures. Overall, this is likely to jeopardize the credibility of the crisis management framework as a whole. The Banking Union was designed with a view to breaking the negative feedback loop between the banking sector and sovereign debt.[55] The current set-up seeks to address this vicious cycle at two levels: First, by pooling certain supervisory powers at the ECB,[56] national competent authorities are prevented from engaging in regulatory forbearance with a view to putting their national champions at a competitive advantage. Secondly, the installation of an integrated resolution framework seeks to enhance the credibility of the notion that national budgets will in future be less exposed to the costs of bank bailouts.[57] However, national budgets remain exposed and the negative feedback loop intact where an institution's (part) liquidation under national insolvency law is funded by State aid (and also as long as national budgets backstop national deposit guarantee schemes).[58] This may not matter much for smaller banks. However, the availability of this escape route for larger and even the largest and most complex institutions blows a massive hole into the EU crisis management framework.

2. Internal complexity

Within the EU crisis management framework, national bank insolvency law is relevant as either a standalone default option where resolution tools and powers are unavailable, or as a supporting regime that complements the resolution framework. Harmonization with a focus on the supporting role may (pragmatically) seek to address only certain issues. A focus on bank insolvency law as a standalone default option requires a (more) comprehensive approach.

The BRRD/SRM resolution framework remains incomplete and is supplemented by the applicable national insolvency law, resulting in complexity within the resolution regime itself. Two issues are particularly pertinent: the liquidation of the residual entity under 'normal insolvency proceedings' where the viable parts of an institution have been transferred to a private sector purchaser or a bridge institution;[59] and the liquidation analysis on the basis of

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55 European Commission, Communication from the Commission to the European Parliament and the Council: A roadmap towards a banking union, COM(2012) 510 final; also European Commission, Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions on completing the Banking Union, COM(2017) 592 final 3.

56 Art 1 of Regulation (EU) No 1024/2013. Any supervisory tasks that have not been conferred remain with the national competent authorities.

57 Nicolas Véron, Europe's Radical Banking Union (Bruegel Essay and Lecture Series, 2015) 20-23.

58 S Buckingham et al, Study on the differences between bank insolvency laws and on their potential harmonization, Final report (Brussels, November 2019) 61, available at https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/191106-study-bank-insolvency_en.pdf.

59 BRRD, Art 37(6).

the ranking of different classes of creditors under national insolvency law mandated by the 'no-creditor-worse-off' principle.[60]

The sale of business tool, the bridge bank tool and the asset separation tool entail a transfer of an institution's shares, assets, rights, and/or liabilities to a separate legal entity. The residual entity must be wound up under 'normal' insolvency proceedings.[61] In this context, a lengthy and inadequate bank insolvency procedure may prevent the resolution authority from applying the transfer tools at all.[62] The enactment of bank specific insolvency law was deemed to be necessary by some Member States to ensure that the residual entity can provide to the recipient entity the services and facilities necessary to ensure an uninterrupted continuation of critical functions. The prime example is the bank administration procedure under English law.[63] Short of comprehensively harmonizing the liquidation of the residual entity, at least the grounds for opening bank insolvency proceedings should be harmonized so as to bring them in alignment with the resolution trigger. This is relevant also where national bank-insolvency law applies as a standalone process. When Latvian ABLV Bank A.S. and its Luxembourg subsidiary (ABLV Bank Luxembourg S.A.) had to be closed in the wake of allegations of money laundering, sanctions violations and bribery, the SRB's decision that resolution was not in the public interest[64] was addressed to the national resolution authorities of Latvia and Luxembourg, respectively, with a view to its implementation in accordance with national law. As a result, the Latvian parent entity was liquidated under Latvian law. However, upon request by the Luxembourg resolution authority, the Tribunal de Commerce de Luxembourg decided that the evidence provided was insufficient to justify the opening of liquidation proceedings, dismissing the resolution authority's request.[65] Thus, aligning the grounds for opening bank insolvency proceedings with the criteria for failure would ensure the ready availability of procedures for dealing with the residual entity following the application of transfer tools, and may prevent further financial loss through a smooth transition to national bank insolvency procedures where resolution is not in the public interest.

The BRRD has harmonized the national orders of priority to a limited extent: eligible deposits[66] of natural persons and micro, small and medium-sized enterprises (NP/SME eligible deposits) take priority over claims of ordinary, unsecured creditors. To the extent that eligible deposits are covered by deposit insurance, they have an even higher ranking

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60 BRRD, Arts 34(1)(g), 73–75; SRMR, Arts 15(1)(g), 29.

61 BRRD, Art. 37(6).

62 Jens-Hinrich Binder et al, 'The choice between judicial and administrative sanctioned procedures to manage liquidation of banks: A transatlantic perspective,' (September 2018) 19 (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3244334).

63 Banking Act 2009, sec.136(2); 137(1)(a); 138.

64 Single Resolution Board (ABLV Bank, AS) (n 43); Single Resolution Board (ABLV Bank Luxembourg S.A.) (n 43).

65 The alternative request to put the institution under the protection of the suspension-of-payments regime was successful and two external administrators appointed. Eventually, the institution agreed to the commencement of the judicial liquidation process.

66 BRRD, Art 2(1) No 95; Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes OJ L173, 12.6.2014,149 (DGSD), Arts 2(1) No 4, 5.

than non-covered NP/SME eligible deposits.[67] Art 108(1) BRRD does not require general depositor preference, however. Accordingly, general depositor preference (in tiered form) has been adopted by some Member States, notably Italy and Slovenia, whereas others adhere to the tiered preference of covered and NP/SME eligible deposits only, with Germany, Luxembourg and Ireland following this latter approach.[68] The former benefits large corporate depositors at the expense of other senior unsecured debt who, under the latter approach, will share *pari passu* with corporate depositors. The new Art 108(2) has introduced the asset class of non-preferred senior debt, ranking below ordinary unsecured claims and above capital instruments. This new asset class aims to facilitate the meeting of the subordination requirement as a prerequisite for TLAC/MREL eligibility with a view to enhancing the effectiveness of the bail-in tool. Moreover, the newly introduced BRRD, Art 48(7) ensures that own funds items (Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments) have a lower priority in national insolvency law than any other claim that does not qualify as an own funds item.[69]

Legal systems show great diversity when it comes to creditor hierarchies and differences may have significant (re-)distributive effects. For example, a high ranking of employee wage claims benefits labor at the expense of other investors; carve-outs from a security interest for the benefit of unsecured creditors may work to the advantage of customers and suppliers at the expense of secured creditors; the statutory subordination of shareholder loans, imposed under German,[70] Spanish and Austrian law, but not in the Netherlands or England[71] benefits outside lenders at the cost of intra-group debt. In this respect, a certain order of priority may reflect the fundamental value judgements inherent in an insolvency law regime. On the other hand, the assigning of preferential status to a certain class of creditors may indicate nothing more than the lobbying power of a social group at a particular moment in time. In any case, different orders of priority under national bank insolvency law may have a direct impact on the costs of resolution and on the exposure of the respective resolution fund. Moreover, on the basis of BRRD, Art 109, the exposure of the relevant (statutory) deposit guarantee scheme also depends on the applicable order of priority. Consider otherwise

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67 BRRD, Art 108(1). A deposit guarantee scheme subrogating to the rights of covered depositors has the same (higher) ranking as covered depositors.

68 Patrizia Baudino et al, 'How to manage failures of non-systemic banks? A review of country practices' FSI Insights on policy implementation No 10 (2018) 12-15; Buckingham et al (n 58) 35.

69 Introduced by Directive (EU) 2019/879, the provision has to be implemented by 28 December 2020. On the issues potentially arising under the old law see Buckingham et al (n 58) 33-34.

70 For Germany: InsO, §39(1) No.5, (4) and (5): shareholder loans but also debt securities held by a shareholder have a ranking subordinate to general unsecured creditors, except where the shareholder-creditor holds less than 10% of the share capital and is not involved in the management. There is further the so-called 'rescue privilege' exempting shareholders who acquired their shares in the course of a rescue attempt.

71 Martin Gelter and Jürg Roth, 'Subordination of Shareholder Loans From a Legal and Economic Perspective' (2007) Harvard John M Olin Fellow's Discussion Paper No. 13, available at http://ssrn.com/abstract=998457; Rolef de Weijs, 'Harmonization of European Insolvency Law: Preventing Insolvency Law from Turning against Creditors by Upholding the Debt-Equity Divide' (2018) ECFR 403, 418-420.

identical credit institutions licensed in France and Germany, respectively,[72] with assets of 1000 that are funded as shown in Table 1:[73]

	France[74]		**Germany**[75]	
Assets 1000	Employee wage claims	70		
	New money privilege	150		
	Covered deposits	500	Covered deposits	500
	NP/SME Eligible Deposits	100	NP/SME Eligible Deposits	100
	Senior unsecured debt Bail-inable Non-bail-inable (other deposits)	 50 30 80	Senior unsecured debt Bail-inable Non-bail-inable (other deposits of 30, employee wage claims of 70)	 50 100 150
	Subordinated bonds (MREL[76])	50	Subordinated bonds (MREL)	50
			Shareholder loans	150
	Capital	50	Capital	50

Assume that asset values have to be written down to 700.[77] Consider the institution licensed in France. In liquidation, the losses would be fully absorbed by capital, subordinated bonds, senior unsecured debt and NP/SME deposits. The deposit guarantee fund would pay off covered depositors and take their place within the creditor hierarchy. After paying the employee wage claims and new money creditors in full, the remaining 480 of the (net) proceeds would go to the deposit guarantee fund, receiving 96 cents for every Euro and sustaining a 4% loss. If resolution was in the public interest, for example in order to prevent depositor runs at other institutions, the sale of business tool could

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72 Under the 'home Member State' principle, where an institution has obtained authorization determines the applicable resolution and insolvency law; Directive 2001/24/EC, Arts 9 and 10.

73 On bank funding structures in the Eurozone see ECB, 'Recent developments in the composition and cost of bank funding in the euro area' (2016) ECB Economic Bulletin 26, 34.

74 Diego Valiante, Harmonising Insolvency Laws in the Euro Area: Rationale, stocktaking and challenges, CEPS Special Report No. 153 / December 2016, 18.

75 Stephan Kolmann, 'Bail-in und Verlustabsorption – Ein Überblick' in Andreas Igle, Marcel Krüger, Christian Stepanek and Sven Warnecke (eds) Bankenabwicklung und MREL (Frankfurt School Verlag, 2018) 169, 176-182.

76 To be more precise, the amount depicted in this and the following tables as 'MREL' is actually 'MREL – capital', with MREL being the sum of the loss absorption amount (basically equal to minimum capital requirements) and the recapitalization amount; BRRD, Art 45c(2).

77 For losses sustained in recent bank failures see Stefan Best and Oliver Read, 'Bankenabwicklungsrichtlinie – Theorie und Praxis der europäischen Bankenabwicklung' in Andreas Igle, Marcel Krüger, Christian Stepanek and Sven Warnecke (eds) Bankenabwicklung und MREL (Frankfurt School Verlag, 2018) 341, 347-348.

be utilized to transfer the deposit portfolio to a private sector purchaser and liquidate the residual entity. When applying any of the transfer tools the resolution authority is constrained by the general resolution principles, notably that creditors bear losses in accordance with the order of priority under national insolvency law and that creditors of the same class are treated equitably, unless provided otherwise in the BRRD.[78] The normative force of these 'principles' is not entirely clear. Although the wording seems rather strict and prescriptive, their designation as 'principles' (rather than rules) suggests that they do not have to be applied in an 'all-or-nothing' fashion, but merely have to be taken into account without dictating a particular outcome; in other words, principles have a dimension of weight or importance depending on the circumstances, and can be overcome where conflicting principles are attributed a higher weight in a given case.[79] This reading would grant resolution authorities a significant margin of discretion, supported also by the resolution framework's underlying rationale: ensuring the continuation of systematically important arrangements by selecting them for transfer and leaving behind non-critical arrangements for liquidation.[80] If this reading is correct,[81] the resolution could unfold as follows: The deposits of 630 and an equivalent amount of assets could be transferred to a private sector purchaser for the nominal amount of 1 Euro. The employee wage claims would remain with the residual entity and receive full payment in liquidation out of the proceeds of the remaining assets. The 'new money' creditors would have to be compensated to the tune of 150 pursuant to the no-creditor-worse-off principle.[82] Left behind capital, junior debt and senior unsecured debt other than deposits would receive nothing. In this resolution, depositor access to their funds has been ensured without a payout from the deposit guarantee fund. Pursuant to Art 109 BRRD, the deposit guarantee fund has to contribute to the resolution an amount equal to the loss the covered depositors – rather: the deposit guarantee fund – would have sustained in liquidation which is here 20.[83]

Now consider the credit institution licensed in Germany: In a hypothetical liquidation, of the (net) assets of 700, 500 would have gone to the deposit guarantee scheme subrogated for the covered depositors, and 100 to NP/SME eligible depositors. The remaining 100 would be shared by all senior unsecured creditors on a *pro rata* basis, receiving 67 cents in the EUR and sustaining losses of 33%.[84] In resolution, the deposits of 630 and an equivalent amount of assets could be transferred to a private sector purchaser for a nominal purchase

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78 BRRD, Art 34(1)(b) and (f); SRMR, Art 15(1)(b) and (f).

79 Ronald Dworkin, Taking Rights Seriously (Bloomsbury, 1977) 39-44.

80 Jens-Hinrich Binder, 'The Position of Creditors Under the BRRD' in: *Commemorative Volume in memory of Professor Dr. Leonidas Georgakopoulos*, Bank of Greece's Center for Culture, Research and Documentation, 2016, 37, 49 (available at SSRN: https://ssrn.com/abstract=2698086).

81 A strict interpretation as rules would not change the exposures of resolution and deposit guarantee funds. All deposits (630) as well as employee wage claims and new money claims could be transferred together with assets of 700, leaving a shortfall of 150 for which the resolution fund would compensate the purchaser. The deposit guarantee scheme would have saved 20, for which it has to reimburse the resolution fund.

82 Full payment of 150 in liquidation; 0 in resolution.

83 4% loss of 500 in covered deposits.

84 100/150.

price of 1 EUR. In the liquidation of the residual entity, the remaining 70 would be shared pro rata among senior unsecured debt (other than deposits), receiving 58 cents in the EUR and sustaining losses of 42%. Capital, shareholder loans and subordinated bonds would receive nothing. Under the 'no-creditor-worse-off' principle, senior unsecured debt (other than deposits) will have to be compensated out of the resolution fund to the tune of overall 10.8.[85] No contribution would be required from the deposit guarantee fund.

This simple numerical example shows that, *ceteris paribus*, the difference in creditor ranking has a direct impact on the costs of resolution and the exposure of the resolution fund (150 v 10.8), even under the integrated resolution framework of the SRM. Also, this analysis is straightforward only because our scenarios are based on legal systems under which the treatment of various classes of creditors is reasonably clear. Where there is no clear determination by statute and conflicting case law muddies the waters,[86] application of the 'no-worse-off' principle may be very challenging and result in prolonged litigation. The example shows further that different orders of priority under national bank insolvency law can have a direct impact on the exposure of national deposit guarantee funds (20 v 0), and thus indirectly, through the inevitable government back stop, on national budgets.

As the third pillar of the Banking Union, the Commission has proposed a European Deposit Insurance Scheme (EDIS)[87] that envisages a European Deposit Insurance Fund administered by the Single Resolution Board. Deposit Insurance would be progressively mutualized,[88] eventually resulting in full insurance at Banking Union level. The scheme remains politically controversial.[89] Divergent national insolvency laws may result in varying degrees of loss exposure of the European Deposit Insurance Fund depending on a failing institution's home jurisdiction. In addition to differences in creditor hierarchies, divergent outcomes may be caused by lengthy and inefficient insolvency regimes, potentially reducing recovery rates for the Fund in liquidations.[90] This in turn may be reflected in the risk-based premiums levied on banks to fund EDIS, contrary to the idea of a level playing field. Further harmonization of bank insolvency law is therefore essential before EDIS or a similar regime for the Eurozone can be launched.[91]

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85 67%*(50+70) – 58%(50+70) = 10.8.

86 de Weijs (n 71) 419.

87 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 806/2014 in order to establish a European Deposit Insurance Scheme, COM(2015) 568 final.

88 In its 2017 Communication, the European Commission (n 116) 10-13 suggested a more gradual introduction of EDIS.

89 The German Bundesministerium der Finanzen seems to have relaxed its previously stiff opposition somewhat; BMF (n 1) 6-7.

90 Binder et al (n 62) 19.

91 Maria J. Nieto, 'Bank Resolution and Mutualization in the Euro Area' 2016.2 European Economy 131, 151-152.

General (tiered) depositor preference, as repeatedly advocated by the ECB,[92] would make it less likely that compensation will be payable to senior unsecured creditors under the 'no-worse-off' principle. It could be introduced by amending BRRD, Art 108(1) accordingly. Although this would go a long way, creating a true level playing field would require more comprehensive harmonization. General depositor preference would have to be combined with a rule that grants all deposits (in tiered form) priority over all other unsecured claims. This would require tackling contentious redistributive issues, such as employee wage claims, new money privileges, and shareholder loans. It has been pointed out that in respect of creditor hierarchies a significant level of harmonisation has already been achieved.[93] Given the strong national preferences for certain orders of priority it could be argued that tackling the remaining discrepancies may not be worth the political effort,[94] in particular where the overall amount of creditor classes that receive preferential or subordinated treatment in any given jurisdiction is likely to be small. However, whereas this latter consideration may be relevant for items like employee wage claims, the effect of new money privileges or shareholder loan subordinations may potentially be quite substantial.

3. External complexity

National bank insolvency regimes differ in terms of the role and responsibilities of courts and regulatory authorities, the powers of office holders, the degree of creditor involvement, and the triggers for opening proceedings, as well as a myriad of substantive law issues, including the scope of a moratorium, set-off, transactions in the vicinity of insolvency, executory contracts and pending litigation.[95] The institutional design alternatives range from court-centered judicial proceedings at one end of the spectrum to purely administrative procedures with regulators in the driving seat at the other, and various hybrid systems in between.[96] The availability of multiple procedures across and within Member States, combined with the division of responsibilities between Union and national levels, both institutionally (SRB/Commission *versus* national resolution authorities) and substantively (SRM *versus* BRRD implementing national legislation), renders the crisis management framework very complex and opaque.

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92 ECB, Opinion of the European Central Bank of 3 May 2016 on the resolution and winding up of banks (CON/2016/28) para. 3.1.7.; ECB, Opinion of the European Central Bank of 8 March 2017 on a proposal for a directive of the European Parliament and of the Council on amending Directive 2014/59/EU as regards the ranking of unsecured debt instruments in insolvency hierarchy (CON/2017/6) para 1.2.-1.4.; ECB, Opinion of the European Central Bank of 16 October 2015 on recovery and resolution of credit institutions and investment firms (CON/2015/35) para 3.7.3.

93 Buckingham et al (n 58) 44.

94 ibid 58.

95 Baudino et al (n 68); Binder et al (n 62); Buckingham et al (n 58); Eva Hüpkes, 'Insolvency – Why a Special Regime for Banks?', in IMF, Current Developments in Monetary and Financial Law Volume 3 (Washington DC 2003); International Monetary Fund and World Bank, An Overview of the Legal, Institutional, and Regulatory Framework for Bank Insolvency (April 2009).

96 Binder et al (n 62); Baudino et al (n 68); Buckingham et al (n 58) 13-15; IMF and World Bank (n 95).

Consider a credit institution that has obtained its banking license in Germany, and will be within the scope of application of the SRM.[97] If the institution is under direct ECB supervision, that is, if it is deemed to be significant in accordance with the relevant criteria[98] or the ECB assumes direct supervision,[99] its resolution will be within the remit of the SRB as resolution authority.[100] Otherwise, the German resolution authority[101] will be responsible.[102] If the institution is failing and the SRB as resolution authority makes the determination that resolution is in the public interest,[103] the SRB will adopt a resolution scheme on the basis of the directly applicable SRM Regulation[104] that places the institution under resolution, determines the application of resolution tools and powers and the use of the Single Resolution Fund.[105] In order to implement the resolution scheme, the SRB ensures that the national resolution authority takes the necessary action pursuant to the German law implementing the BRRD (which is the SAG[106]).[107] If resolution is within the remit of the national resolution authority, the BaFin may determine that resolution is in the public interest in which case the institution will be subject to resolution under the SAG.[108]

Where the relevant resolution authority (SRB or BaFin) determines that resolution is not in the public interest, German corporate insolvency law will apply as the default option. For institutions and their investors, anticipation as to whether the resolution framework (supranational or domestic) or national bank insolvency law will come into play is not an easy endeavor. Designation of an institution as significant for SSM purposes does not necessarily mean that resolution will be in the public interest.[109] Similarly, an institution that has not been designated as significant may be brought within the remit of the SRB by either the ECB assuming direct supervision[110] or the SRB taking

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97 SRMR, Art 2(a).

98 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, OJ EU 29.10.2013 L287/63 (SSMR); Art 6(4); Regulation (EU) No 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation) OJ EU 14.5.2014 L141/1.

99 SSMR; Art 6(5).

100 SRMR, Art 7(2)(a).

101 That is the Federal Agency for Financial Supervision (BaFin), SAG, §3(1).

102 SRMR, Art 7(3)(e).

103 SRMR, Art 18(1)(c) and (5).

104 The resolution scheme will enter into force only if within 24 hours of its transmission by the SRB to the Commission neither Commission nor Council object; SRMR, Art 18(7)-(9).

105 SRMR, Art 18(6). This is subject to a prior decision by the Commission confirming that the use of the Fund is compatible with the Treaty provisions on State aid; SRMR, Art 19(1) and (3).

106 *Gesetz zur Sanierung und Abwicklung von Instituten und Finanzgruppen (Sanierungs – und Abwicklungsgesetz – SAG)*, of 10 December 2014 (BGBl. I S. 2091), last amended by Article 8(10) of the Law of 8 July 2019 (BGBl. I S. 1002).

107 SRMR, Art 18 (9), 29.

108 SAG, §62(1) No. 2. However, where a resolution action requires the use of the Single Resolution Fund, the SRB would again be mandated to adopt a resolution scheme; SRMR, Art 7(3) sentence 2.

109 As seen in the cases of Banca Popolare di Vicenza and Veneto Banca; Decision of the Single Resolution Board (Veneto Banca) (n 42); Decision of the Single Resolution Board (Banca Popolare di Vicenza) (n 42).

110 SSMR, Art 6(5).

direct responsibility.[111] Again, neither of these decisions would preclude a determination that resolution is not in the public interest. And neither can an institution within the responsibility of BaFin be certain that resolution will not be deemed to be in the public interest, or that the SRB will not assume direct responsibility. Resolution planning may provide some relief in this respect. However, resolution plans are not binding; although the envisaged resolution strategy will be the starting point at the 'failing or likely to fail' stage, the resolution authority may deviate from the plan where this appears to be appropriate in the light of the circumstances at the relevant time.[112]

Within the realm of bank insolvency law our institution would be confronted with a range of different procedures: 'pre-insolvency' procedures specifically for credit institutions in form of the restoration procedure and the reorganization procedure [113] or liquidation through the general insolvency procedure in modified form.[114] However, both resolution and (pre-)insolvency may be avoided through Germany's complex web of deposit guarantee and institutional protection systems. For example, the *Einlagensicherungsfonds des Bundesverbandes deutscher Banken eV*, provides additional protection[115] to the depositors of private law credit institutions. The fund's responsibilities go beyond a mere 'paybox' function: 'In the interest of depositors', the fund is tasked with 'providing assistance to banks that are currently in, or in the near future likely to face, financial difficulties.' It may take any suitable measure, including the payment of creditors, the furnishing of guarantees and the assumption of other obligations.[116] When Düsseldorfer Hypothekenbank suffered significant portfolio losses and a fatal margin call, the fund initially guaranteed the bank's loss exposure and subsequently took it over through a wholly owned investment company, to eventually sell it back to the market.[117] Provided the intervention does not amount to State aid, the deposit guarantee fund option has emerged as the preferred alternative.[118] However, the ready availability of such funds may increase moral hazard with detrimental effects on market discipline.[119] Moreover, institutions in Member States where such funds are available may obtain a comparative funding advantage, contrary to the notion of an EU level playing field.

The various German bank insolvency law procedures remain predominantly court-based, although the arguments in favor of administrative bank insolvency regimes

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111 SRMR, Art 7(4)(b).

112 SRMR, Art 7(3) sentence 3.

113 The restoration procedure is available to any failing German credit institutions; KredReorgG, §§1(1), 2(1). The reorganization procedure is only available for credit institutions whose continuation is under threat, resulting in a threat to the stability of the financial system as a whole; KredReorgG, §§1(1) sentence 2, 7(2).

114 Only BaFin as the competent authority can petition the court for the opening of insolvency proceedings; KWG, §46b.

115 In addition to the protection mandated by the DGSD and implemented through statutory compensation schemes.

116 Statut des Einlagensicherungsfonds (December 2018), §2.

117 https://bankenverband.de/newsroom/presse-infos/verkauf-der-dusseldorfer-hypothekenbank/.

118 A De Aldisio et al, 'Towards a framework for orderly liquidation of banks in the EU' (2019) 15 Notes on Financial Stability and Supervision 1.

119 Gelpern and Véron (n 21) 44.

are well rehearsed: Standard insolvency law is unable to deal with the impact of failure on other institutions and on the financial system as a whole.[120] There are no adequate mechanisms for safeguarding financial stability concerns and for ensuring continued access to vital financial services notably deposits and lending.[121] A judicial process is too slow to effectively protect depositors and minimize the risk of runs at similar institutions.[122] Proponents of court-based solutions point to the 'rule of law virtues' as compared to an administrative process based on regulatory discretion. Both sides agree that banks in distress require special treatment. Disagreement mainly concerns the extent to which special treatment should deviate from standard insolvency procedure.[123] For deposit taking institutions the swift and efficient transfer of deposits will usually entail a transfer of the liability side of the deposit agreement in disapplication of the general principle that only the asset side of a contractual arrangement may be assigned to a third party without the consent of the counterparty in debt under the contract.[124] Thus, even where the procedure is essentially court-based and structured in accordance with general insolvency law, the necessity for efficiently handling deposits inevitably introduces an 'administrative element.'[125] For deposit-taking institutions a purely court-based system therefore seems unsuitable; the special powers that are necessary to override the generally applicable law would render any framework at least hybrid, regardless of whether these powers are exercised by the court, the office holder, or an administrative authority. The lack of such comprehensive powers to transfer assets and liabilities in German court-based bank (pre-)insolvency law may explain its limited relevance in practice, which instead heavily relies on the intervention of deposit guarantee and institutional protection schemes.

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120 Commission Staff Working Document: Impact Assessment accompanying the document Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms, COM(2012) 280 final, SWD(2012) 166 final (BRRD IA), 11; EU Commission, Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms, COM(2012) 280 final (BRRD Proposal), 5; FDIC, 'The Orderly Liquidation of Lehman Brothers Holding Inc. under the Dodd-Frank Act' (2011) 5 FDIC Quarterly 1, 5.

121 BRRD IA, 11; BRRD Proposal, 5; FDIC (n 130) 1.

122 FDIC (n 120) 7-9; M Čihák and E Nier, The Need for Special Resolution Regimes for Financial Institutions – The Case of the European Union, IMF Working Paper WP/09/200 (September 2009) 6-7; T Jackson, 'Chapter 11F: A Proposal for the Use of Bankruptcy to Resolve (Restructure, Sell, or Liquidate) Financial Institutions', in K Scott, G Schultz and J Taylor (eds.), Ending Government Bailouts As We Know Them (Stanford, CA: Hoover Press, 2009) 217, 218.

123 ibid 449; D Skeel, 'Single Point of Entry and the Bankruptcy Alternative' (2014) University of Pennsylvania Faculty Scholarship Paper 949, 15-18.

124 Jan Dalhuisen, Dalhuisen on Transnational Comparative, Commercial, Financial and Trade Law Volume 2: Contract and Moveable Property Law (Hart, 5th edn 2013) 393.

125 For example, the UK Bank Insolvency procedure for deposit takers, as a modified version of the general compulsory winding up process, requires specific provisions for allowing the bank liquidator to arrange for the transfer of deposit accounts to another institution. Accordingly, such arrangement 'may disapply … any restriction arising by virtue of contract or legislation …;' including 'any restriction, inability or incapacity affecting what can and cannot be assigned or transferred …, and a requirement for consent.' Banking Act 2009, sec. 124.

The newly inserted BRRD, Art 32b provides that an institution the resolution of which is not in the public interest shall be wound down in accordance with national law.[126] Although it seems clear that the institution as a legal entity has to be liquidated, this does not preclude a reorganization of (parts of) its business on a going concern basis where this is possible under national insolvency law and would not adversely affect resolution objectives.[127] In practical terms there is no clear dividing line between liquidation and reorganization/corporate rescue anyway. Usually the viable parts of a firm will be preserved as a going concern and the non-viable assets disposed of on a piecemeal basis and liquidated. Where the entire business of the residual entity is no longer viable, liquidation will be the most cost effective and perhaps only option. However, there seems to be no good reason as to why in appropriate circumstances national bank insolvency law may not be utilized for preserving a failing institution or parts thereof, notably its depositor base, as a going concern. This can be achieved in two principal ways: First, the business remains with the institution and the latter's debt load is reduced, by writing down or rescheduling liabilities and/or converting debt to equity. Although in this case the legal entity will be preserved, non-viable parts of the business may still be liquidated, for example by divesting from non-profitable lines of business and disposing of impaired assets. In bank insolvency regimes the role of creditors will be much reduced,[128] and the transformation of their property rights effectuated through administrative powers in form of bail-in, write down and/or transfer tools. Alternatively, the business (assets and certain liabilities), or parts thereof, may be transferred (sold) to a new entity with a more sustainable capital structure, leaving some of the existing debt behind with an empty shell to be liquidated.[129] Although the initial legal entity, which is never worth preserving in its own right, will eventually come to an end, the viable parts of the business are rescued and preserved as a going concern under new ownership, possibly integrated into an existing firm. This requires extensive powers on the part of an office holder or public authority to dispose of the debtor's assets and liabilities without creditors' or shareholders' consent. In practice, both techniques may be combined.[130] As US experience shows, an effective sale of business tool or bridge bank tool makes (even more) sense and should be available for smaller, non-systemic institutions as well.[131]

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126 Whereas the SRMR has always been clear that the institution is to be wound up under national insolvency law where the Council objects to a resolution scheme on public interest grounds (SRMR, Art 18(8)) this was less obvious where the resolution authority determined that the public interest requirement had not been met (BRRD, Art 32(5)).

127 Decision of the Single Resolution Board (n 42) para 4.3: winding up as referring to applicable Spanish insolvency law in its entirety, presumably including the restructuring option.

128 Baudino et al (n 68) 20-22; Buckingham et al (n 58) 37.

129 On the Italian bank specific Compulsory Administrative Liquidation procedure: Decision of the Single Resolution Board (Veneto Banca) (n 42) para 15; Decision of the Single Resolution Board (Banca Popolare di Vicenza) (n 42) para 15; further Buckingham et al (n 58) 38-40.

130 For non-financials, see Kon Asimacopoulos & Justin Bickle (eds.), European Debt Restructuring Handbook: Leading Case Studies from the Post-Lehman Cycle (2013).

131 BMF (n 1) 2; Buckingham et al (n 58) 59.

III. The way forward: BRRD extension?

It is possible to reduce the complexity emanating from divergent national bank insolvency laws within the BRRD/SRM resolution framework by further harmonizing the most pertinent issues, notably creditor rankings and the initiation problem. However, given that the transfer tools rely on the availability of an effective and efficient procedure for dealing with the residual entity, even the harmonization of bank insolvency law with a focus on its supporting role within the resolution process seems to necessitate a more comprehensive approach. This is certainly true for the harmonization of bank insolvency law as the standalone default option. In this respect, a harmonized European bank insolvency law should not be limited to a liquidation tool but be able to accommodate restructuring and reorganization options in appropriate circumstances. An EU-level bank insolvency regime with broad administrative powers currently exists in form of the BRRD/SRM resolution framework for institutions that at the point of failure are deemed to be systemically important. Extending this regime to institutions of all shapes and sizes, by removing the public interest test as part of the resolution trigger, would prevent a further gaming of the system based on public interest considerations, enhance the credibility of the crisis management framework and protect national budgets, thereby reducing the bank-sovereign debt feedback loop. This would come at the cost of a mandatory contribution to loss absorption of equity, junior and senior creditors, and potentially even uninsured depositors.[132] Whether under this regime the social costs of resolution would exceed those of a (partial) bailout, as the Bank of Italy seems to think,[133] is impossible to verify.[134] All that can be said is that the more limited and uncertain the likely benefits of a bailout, the stricter should be the measures that ensure a socially acceptable contribution to loss absorption by private investors.[135] This could be more consistently achieved under the proposed BRRD extension than under the current framework that is riddled with opt outs.

Under the proposed approach, any institution regardless of its size and complexity would be subject to the resolution tools and powers provided for by the BRRD. Depending on a least cost assessment, the institution could be restructured by transferring the viable parts of its business to a private sector purchaser or bridge bank, possibly in combination with a bail-in, and liquidating the non-viable parts on the basis of the BRRD-implementing legislation; or the institution could be recapitalized through bail-in with financial support from resolution funds. In addition to the removal of the public interest test, a number of further amendments would be necessary to make this solution viable.

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132 But see below III.3) on the potential protection of depositor entitlements.

133 n 48 above.

134 M Schillig, 'The (Il-)Legitimacy of the EU Post-Crisis Bailout System' (2020) 28 American Bankruptcy Institute Law Review 135, 166-168: the social costs and benefits of resolution/bailouts go far beyond the sums injected and the revenue received; there are hidden costs and non-pecuniary costs and benefits that are impossible to verify with any precision *ex ante* and *ex post*.

135 ibid 173.

1. Geographical reach

Restraining the negative feedback loop between sovereign debt and the banking sector is particularly significant for the Eurozone. Consequently, some commentators envisage (further) harmonization only for the Banking Union.[136] Others, including the ECB[137] and the Chair of the SRB, Elke König, favor EU-wide rules.[138]

Early on the Commission emphasised that the 'creation of the banking union must not compromise the unity and integrity of the single market.' Accordingly, 'a move to the banking union without any risk of fragmenting the single market' was possible only because of the 'single rulebook' providing a common substantive foundation across the single market on which the banking union could be built.[139] This line of reasoning strongly supports bank insolvency law harmonization for the single market in its entirety. In respect of the administrative responsibilities of the SRB, the German Constitutional Court has argued that a Euro-zone only harmonisation measure could still reduce single market fragmentation.[140] However, this is less plausible for the substantive law on which the banking union is built. The applicable bank insolvency law directly or indirectly determines the content of a claim holder's property rights, the expected value of an investor's claim, and an institution's cost of capital. A Eurozone only harmonization measure has the propensity of perpetuating an un-level playing field within the single market: Eurozone institutions may attract funding on better terms than their counterparts from rest-EU Member States. Eurozone investors may shy away from investing in institutions outside the Eurozone's bank insolvency framework which they are familiar with and avoid incurring the search costs emanating from familiarising themselves with other regimes, thereby reducing financial integration within the single market.[141]

Consequently, in accordance with the approach underpinning the banking union, the harmonization of bank insolvency law should be aimed at the single market in its entirety. Extending the BRRD to all failures regardless of their systemic impact by removing the public interest test would fill a major gap within the single rule book and prevent regulatory fragmentation between Eurozone and rest-EU.

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136 Bénasy-Quéré et al (n 5) 6; IMF (n 6) para 27, 28. The Commission's Study, albeit not entirely clear, seems to favour a similar approach; Buckingham et al (n 58) 56-64.

137 ECB (2016) (n 92) para. 3.1.7.; ECB (2017) (n 92) para 1.2. – 1.4.; ECB (2015) (n 92) para 3.7.3.

138 König (2018) (n 1), but see also König (2019) (n 1) advocating a more incremental approach; Restoy (n 5) 5-8.

139 European Commission, Communication from the Commission to the European Parliament and the Council: A roadmap towards a banking union, COM(2012) 510 final 4 and 5.

140 German Constitutional Court (BVerfG), Judgment of 30 July 2019, 2 BvR 1685/14 and 2 BvR 2631/14, para 251, 252.

141 Of course, rest-EU Member States would have an incentive to either join the banking union or adjust their bank-insolvency laws accordingly, or perhaps provide an even better regulatory framework to create an advantage for their national champions. However, an uncoordinated catch up would further increase fragmentation. Also, search costs would remain, and where rest-EU Member States outcompete the Eurozone, adjustments to the harmonized regime could be made only through the slow and cumbersome ordinary legislative procedure.

2. Property rights implications

However, according to the Commission, because 'the possible tools may involve a significant interference with the fundamental rights of shareholders and creditors, the triggers for resolution must … ensure … that the intervention is in the public interest.'[142] Resolution therefore constitutes only an alternative to normal insolvency proceedings and provides a means for restructuring or winding down a bank the failure of which would create concerns as regards the general public interest.[143] This line of reasoning suggests that the BRRD/SRM resolution framework is compatible with fundamental rights only if the public interest test is included as part of the trigger for launching resolution proceedings, which therefore, can only ever be *ultima ratio*. This conclusion seems doubtful.

The fundamental right most likely to be implicated through the application of resolution tools and powers is the right to property, which can be found in the EU Charter on Fundamental Rights[144] and is guaranteed by the ECHR.[145] It consists of the general right to own, use and dispose of lawfully acquired possessions,[146] including shares in a company[147] and claims that are enforceable[148] or have come into existence under applicable law.[149] Any interference may be justified in the public interest and subject to the principle of proportionality, which, in case of a deprivation of possessions, requires fair compensation.[150] The relevant provisions of the BRRD/SRM resolution framework as the legal basis for individual measures imposed by resolution authorities must meet the proportionality test in the abstract and independently of any concrete resolution action.[151]

Consider our earlier hypothetical.[152] Assume that the bail-inable senior unsecured debt holder has acquired its property rights at time T_0 when liquidation under national insolvency law was the only option. If the institution later (at T_2) sustains asset losses of 300 resulting in liquidation, senior unsecured debt would, under German law, receive a dividend of 67 cents in the Euro. Now assume that at T_1 a resolution regime was introduced as an *ultima ratio* alternative. If subsequently (shortly after T_2) resolution is triggered, the bail-inable senior unsecured debt would, *ceteris paribus*, receive only 58 cents in the Euro.[153] The legal

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142 BRRD IA 39; BRRD Proposal para 4.4.7.

143 BRRD Proposal 6.

144 Charter of Fundamental Rights of the European Union (2010/ C 83/02) OJ EU 30.3.2010 C83/389 (CFR), Art 17.

145 European Convention on the Protection of Human Rights and Fundamental Freedoms (ECHR), Article 1 of the Additional Protocol to the Convention.

146 ECtHR, Case of *Soctransavto Holding v Ukraine* (Application no 48553/99, Judgment of 25 July 2002) para 90.

147 ECtHR, Case of *Soctransavto Holding v Ukraine* (Application no 48553/99, Judgment of 25 July 2002) para 92.

148 ECtHR, Case of *Stran Greek Refineries and Stratis Andreadis v Greece* (Application no 13427/87, Judgment of 09 December 1994) para 59.

149 ECtHR, Case of *Pressos Compania Naviera SA v Belgium* (Application no 17849/91, Judgment of 20 November 1995) para 31.

150 EU Network of Independent Experts on Fundamental Rights, Commentary of the Charter of Fundamental Rights of the European Union (June 2006) 166.

151 Wojcik (n 17) 120.

152 Above Table 1.

153 100/300 = 0.33.

provisions that authorize the resolution action constitute an interference with the bail-inable senior unsecured debt holders' property rights (established at T_0); initially in the form of a regulation of the use of property by law, which when exercised may amount to a (partial) deprivation. Protecting financial stability is generally considered a legitimate aim in the public interest.[154] Compensation for the bailed-in senior unsecured debt is provided for under the 'no-worse-off' principle.[155]

Now assume that the senior unsecured bail-inable debt was obtained at time $T_{1.5}$ when the resolution alternative had already been in place. The property rights of our debt holder are from their inception encumbered with the possibility of resolution action, including bail-in. Property rights only exist by virtue of the applicable law, and their content is determined solely by the legal provisions that shape and define them.[156] However, the legal framework establishing property rights must be of a certain quality.[157] According to the ECtHR, the law must be 'formulated with sufficient precision to enable the individual … to regulate his conduct,'[158] 'to foresee to a degree that is reasonable in the circumstances, the consequences which a given action may entail.'[159] These requirements in the current context demand a sufficiently precise restriction on the exercise of the resolution authority's discretion: the application of resolution tools and powers cannot be arbitrary and at will, but must be subject to predefined and reasonably observable trigger conditions. Although vague and subject to the discretion of competent or resolution authorities, the 'failing or likely to fail' test is, at least theoretically, based on observable economic conditions. An additional level of discretion in form of the public interest test does not enhance accessibility and foreseeability; on the contrary, it significantly reduces predictability. Further, to appreciate the consequences of an investment decision, potential rights holders must be able to price the respective property rights reasonably accurately *ex ante*. Given that the special treatment of certain liabilities on a discretionary basis is inherent in the resolution process,[160] the adequate pricing of property rights would be very difficult without a specific baseline scenario. Under the 'no-worse-off' principle the likely loss given default will be at least not worse than the loss given default in a hypothetical liquidation. Thus, the cost of capital can be based on this 'worst-case scenario' as a benchmark.[161] The 'no-worse-off' principle is thus relevant, not so much as a compensation mechanism for deprivation, but as a device for ensuring compliance with the 'foreseeability' criterion.

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154 ECtHR, Case of *Bugajny and others v Poland* (Application No 22531/05, Judgment 6 Nov 2007), para 63.

155 BRRD, Arts 34(1) lit. g, 73, 75. Compensation does not have to be at full market value in all circumstances; ECtHR, Case of *The Holy Monasteries v Greece* (Application No. 13092.87 and 13984/88, Judgment of 9 December 1994) para 71.

156 Maunz/Dürig, Grundgesetz-Kommentar, 87. EL März 2019, GG Art. 14 para 148.

157 Advocate General Cruz Villalón, Opinion Case C-70/10 *Scarlet Extended v SABAM*, 14 April 2011, ECLI:EU:C:2011:255 para 94.

158 ibid.

159 ECtHR, Case of *Margareta and Roger Andersson v. Sweden* (Application No 12963/87, Judgment of 20 January 1992) para 75.

160 Binder (n 80) 46-47.

161 S. Gleeson, 'Legal Aspects of Bank Bail-Ins' *LSE Financial Markets Group Paper Series, Special Paper 205* (January 2012), 8-10.

Now assume that at T_1 resolution is not introduced as *ultima ratio*, but as a complete replacement without the public interest test. For the holders of bail-inable senior unsecured debt who obtained their property rights at $T_{1.5}$ the analysis would be the same as before: provided the resolution authority's discretion is adequately restricted and the property rights can be priced with reasonable precision *ex ante*, there would be no interference with property rights. For holders of bail-inable debt obtained at T_0 there would be an interference with property rights. However, this regulation of the use of property (authorizing a partial deprivation) can be justified as serving a legitimate aim in the public interest. In *Olczak v Poland* the ECtHR has held that measures taken by the National Bank of Poland to protect the interest of a bank's customers who had entrusted their assets to the bank and to avoid the heavy financial losses that the bank's bankruptcy would have entailed are compatible with the notion of public interest.[162]

Consequently, extending the BRRD/SRM resolution regime by removing the public interest test would constitute an interference only with the property rights in existence at the time this transformation takes effect. Property rights that emerge thereafter would already be encumbered with the potential application of resolution tools and powers. For deposit taking institutions, the interference with pre-existing property rights could be justified. After all, according to the Commission, '[i]n the absence of bank specific resolution tools, the reorganization of banks under insolvency procedures would most likely be unsuccessful, as debtors would immediately withdraw funds from the banks.'[163] This makes it difficult to argue that resolution can only ever be the *ultima ratio* alternative: if the default option is likely to be unsuccessful – in other words, less effective for achieving the legitimate aim of protecting depositors – why retain it at all? This conclusion is confirmed by the fact that some Member States, notably Italy,[164] already operate purely administrative bank insolvency procedures very similar to the BRRD resolution regime. And even under standard insolvency/restructuring law for non-financials may dissenting creditors be 'expropriated' in a cross-class cramdown or simply by being outvoted within their class, provided that some form of best-interest-of-creditor test is satisfied.[165]

Moreover, removing the public interest test would actually benefit investors. Pricing uncertainty would be reduced. Creditors would be faced with a more aligned system of creditor rights as the new baseline and could more easily price their investments accordingly.

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162 ECtHR, Case of *Olczak v Poland* (Application no. 30417/96, Judgment of 7 November 2002) para 84; further CJEU Joined Cases C-8/15 P to C-10/15 P *Ledra Advertising* ECLI:EU:C:2016:701 para 74; GC Case T-680/13 *Dr K Chrysostomides & Co LLP v Council of the European Union* ECLI:EU:T:2018:486 paras 288-292, 317-323.

163 BRRD IA, 11. Indeed, at least initially policy makers envisaged that the new resolution regime would apply to banks of all shapes and sizes; Buckingham et al (n 58) 52.

164 On the Compulsory Administrative Liquidation procedure under Italian law: Decision of the Single Resolution Board (Veneto Banca) (n 42) para 8-18; Decision of the Single Resolution Board (Banca Popolare di Vicenza) (n 42) para 8-18; and further Buckingham et al (n 58) 13-15.

165 Directive (EU) 2019/1023, Arts 10, 11; or for German law see InsO, §245. This seems compatible with the right to property: ECtHR, Case of *Bäck v Finland* (Application No 37598/97, Judgment of 20 July 2004).

3. Liquidation as least cost alternative

According to Binder, the BRRD resolution toolbox may be unsuitable as a 'catch all solution' for bank failures of all sizes and complexity because liquidation may yield more efficient outcomes than the application of resolution tools in cases where the risk of systemic contagion is small or nonexistent.[166]

Under the BRRD, resolution authorities already seem to have the powers necessary to effectively liquidate a failing institution. Notably, resolution authorities may take control of an institution so as to operate it with all the powers of the shareholders and the board of directors and to manage and dispose of its assets.[167] Further, the resolution authorities have the power to remove or replace senior management, and to transfer equity and debt securities as well as any other assets, rights, and liabilities without the need for approval of concerned parties that would normally apply.[168] The transfer of assets may take effect free from any encumbrances or third party rights. Moreover, securities may be delisted, and contracts may be modified or cancelled.[169] And further, the 'rights and powers conferred upon shareholders, other owners and the management body' that the resolution authority may exercise[170] also entails, depending on the applicable corporate law, the shareholders' right to liquidate their corporate entity at will, and the management's or office holder's responsibility to pay dividends to the creditors and shareholders out of the proceeds of liquidation.[171] On that basis, it seems entirely feasible for the resolution authority under the BRRD resolution framework to seize a failing institution, operate it with a view to effectuating an orderly liquidation, sell its assets on a piecemeal basis, and distribute the proceeds in accordance with the order of priority applicable under national law.

It may be argued that these resolution powers are only available in the context of the application of one or more of the resolution tools – sale of business, bridge bank, asset management and bail-in – and not in isolation. BRRD, Art 63 (1) sentence 1 could be interpreted in this way ('powers necessary to apply the resolution tools'). Also, according to Recital (84), '[r]esolution authorities should have all the necessary legal powers that, in different combinations, may be exercised when applying the resolution tools.' However, this textual argument is not conclusive. Pursuant to Art 72 (1), the powers to take control of an institution and to dispose of its assets may be exercised 'in order to take a resolution action,' the latter being defined as the decision to place an institution under resolution combined with 'the application of a resolution tool, *or* the exercise of one or more

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166 Jens-Hinrich Binder, 'Proportionality at the resolution stage: Calibration of resolution measures and the public interest,' 18 (July 3, 2017); https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2990379.

167 This control may be exercised directly, by the resolution authority itself, or indirectly, through a person or persons appointed by the resolution authority for that purpose; BRRD, Arts 63(1), 72; or even a 'special manager;' BRRD, Art 35.

168 BRRD, Art 63(2).

169 BRRD, Art 64(1).

170 BRRD, Art 63(1) lit. (b); 72(1) lit. (a).

171 C Gerner-Beuerle and M Schillig, Comparative Company Law (OUP 2019) 890-901.

resolution powers.'[172] This suggests that the availability of resolution powers is not limited to their application within the context of a particular resolution tool. This conclusion is also supported by a purposive interpretation. The objective of the BRRD/SRM resolution framework is to provide authorities with 'adequate resolution tools to handle situations involving both systemic crisis and the failure of individual institutions.'[173] Moreover, it was not deemed to be 'necessary to prescribe the exact means through which the resolution authorities should intervene in the failing institution.' Rather, resolution authorities should decide on the exercise of their powers according to the circumstances of each case.[174] If this reading is correct, the application of the BRRD liquidation powers currently requires the support of the applicable national law: for the order of priority of claims, and also for an effective claims procedure that the BRRD currently does not include. On both issues there is room for further harmonization.

Under the SRM, it is currently not possible for the SRB to devise a resolution scheme that would mandate the liquidation of the institution under resolution, without the application of at least one of the resolution tools. This is clear from the wording of SRMR, Arts 18(6) lit. (b) and 23.[175] This would leave room for a liquidation in combination with, say, the sale of business tool, similar to a purchase and assumption transaction, where parts of an institution are transferred to a private sector purchaser or purchasers and the rest is liquidated in accordance with the national legislation implementing the BRRD. If the public interest test would be removed, SRMR, Arts 18(6) lit. (b) and 23 could be amended so as to make clear that the resolution scheme shall determine the application of resolution tools *and/or powers*, which would then include the BRRD liquidation powers to be implemented by the national resolution authority on the basis of national transposing legislation.

A further issue would be to ensure that the resolution authority actually goes down the liquidation route where this is the most cost efficient alternative. It is possible to read a version of the 'least cost rule' into the BRRD/SRM resolution framework.[176] In pursuing the resolution objectives the resolution authority must aim to minimize the cost of resolution and avoid the unnecessary destruction of value.[177] Although of equal significance, resolution authorities are required to balance the resolution objectives as appropriate in each individual case, and, more importantly, to choose the tools and powers that best achieve the objectives that are relevant in the circumstances at hand.[178] For those institutions for which the risk of systemic contagion is negligible, the objectives of the protection of public funds combined with the minimization of the resolution costs would seem to strongly direct

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172 BRRD, Art 2(1) (40), *my emphasis*.

173 BRRD, Recital (6).

174 BRRD, Recital (85).

175 '[S]hall determine the application of the resolution tools' sale of business, bridge institution, asset separation or bail-in; SRMR, Art 22(2). The German version of Art 18(6) lit. (b) seems to be even clearer: 'Durch das Abwicklungskonzept … wird bestimmt, … die Abwicklungsinstrumente …, anzuwenden.'

176 See also DGSD, Art 11(3)(c), establishing the least cost principle in the context of a statutory DGS being utilized for alternative measures with a restructuring purpose; Brescia Morra (n 37) 363.

177 BRRD, Art 31(2); SRMR, Art 14(2).

178 BRRD, Art 31 (1) and (3); SRMR, Art 14(1) and (3).

the resolution authority towards liquidation if this is the least costly strategy. In that sense, resolution authorities are not completely free to pick and choose between the different objectives. Given the limited experience thus far with the BRRD/SRM resolution framework it is probably too soon to introduce a firmer 'least cost test.' For now, resolution authorities could communicate and clarify their approach to the 'least cost test' and thereby self-restrict their discretion in this respect.[179]

4. Minimum loss absorption

Finally, it could be argued that the BRRD/SRM resolution framework is only suitable for institutions 'whose size and business models allow for a sufficiently large issuance of subordinated liabilities that could be bailed in … without undue risk of negative impacts;'[180] or in other words, smaller banks for which liquidation would be the preferred option may not have the capacity to issue sufficient MREL instruments so as to comply with the mandatory 8% loss contribution requirement without the risk of hurting retail investors and depositors.[181]

The setting of a minimum requirement of own funds and eligible liabilities (MREL) and the verification of whether institutions maintain the minimum aggregate amount is part of the resolution planning process.[182] Resolution authorities may determine the required minimum on a case-by-case basis depending on the risks associated with a specific institution and its resolvability.[183] Under the SRM, the SRB – after consulting the competent authorities, including the ECB – determines the minimum requirement for the institutions for which it is directly responsible ('significant' institutions and cross-border groups).[184] For other institutions, minimum requirements are to be determined by national resolution authorities in the course of the drafting of resolution plans.[185]

MREL seeks to ensure that an institution can absorb losses to an extent sufficient to restore compliance with minimum capital requirements.[186] The required minimum amount depends on the feasible resolution strategy and the need to ensure that the institution can be resolved through the application of resolution tools or through liquidation in a way that meets the resolution objectives. Pursuant to the SRB's MREL policy, developed prior to the 2019 Banking package, for institutions for which liquidation is the preferred resolution

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179 C-526/14 *Kotnik and others* ECLI:EU:C:2016:570 para 38-44.

180 Restoy (n 5) 5.

181 A Lehmann, 'Impediments to resolvability of Banks' In-Depth Analysis Requested by the ECON committee (December 2019), available at https://bruegel.org/wp-content/uploads/2019/12/IPOL_IDA2019634360_EN.pdf, 16.

182 BRRD, Art 10(7)(o), 45e, 45f; SRMR, Art 12(4), 12a(1).

183 BRRD, Art 45c(1); SRMR, Art 12(1) and (3).

184 SRMR, Art 12(1). The determination is addressed to the national resolution authorities, which then implement the minimum requirements in accordance with their powers under national law and verify and ensure that institutions are in compliance with minimum requirements at all times; SRMR, Art 12(5).

185 SRMR, Art 12(3).

186 BRRD, Art 45(2)(a) and (b); SRMR, Art 12a(2)(a) and (b).

strategy, MREL will be set at the level of the loss absorption amount (LAA) [187] only.[188] There will be no recapitalization amount[189] and no Market Confidence Charge, [190] reflecting the gone concern status of the institution in case of failure. However, the SRB is committed to an 8% benchmark for MREL in all cases, including liquidation, so that, if necessary, there would be access to financing arrangements such as the Single Resolution Fund.[191] This suggests that resolution planning, at least in accordance with the SRB's MREL policy, could take care of the 8% minimum contribution problem. However, it may well occur that an institution primarily funded by capital and deposits does not meet the 8% MREL requirement at the time of failure in which case losses would have to be imposed on depositors with potentially adverse effects for financial stability (runs on other banks). For cases where the risk of contagion is unlikely to be high, it may well be argued that there is no justification for generally insulating the holders of unsecured senior debt, including deposits, from bearing any losses.[192] However, this would likely weaken the competitive position of smaller banks as compared to GSIBs contrary to the rationale of tackling the 'too-big-to-fail' problem. Conversely, an outright removal of the 8% minimum loss contribution requirement, which is not mandated by international standard setters, would open the door for generous in-resolution bailouts resulting in increased moral hazard and reduced market discipline.

In order to allow the absorption of losses by financing arrangement in the liquidation context[193] without having to encroach on depositors' entitlements, a sensible way around the 8% minimum loss contribution requirement has to be found for smaller institutions. This could take the form of an exemption based on a certain threshold below which the 8% minimum loss contribution does not apply. Short of an outright exemption, the 8% clause could perhaps be 'teleologically reduced' by way of interpretation so that it would not apply to banks below the threshold. Such thresholds are already being considered for different purposes. For example, according to the Bank of England, for institutions providing fewer than around 40,000 to 80,000 transactional bank accounts (modified)

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187 BRRD, Art 45(c)(3)(b)(i) and (a)(i); SRMR, Art 12d(3)(b)(i) and (a)(i).

188 In accordance with BRRD, Art 45c(2) subparagraph 2; SRMR, Art 12d(2) subparagraph 2; SRB, Minimum Requirement for Own Funds and Eligible Liabilities (MREL): SRB Policy for 2017 and Next Steps (December 2017) para 26; SRB, Minimum Requirement for Own Funds and Eligible Liabilities (MREL): 2018 SRB Policy for the first wave of resolution plans (November 2018) para 10; SRB, Minimum Requirement for Own Funds and Eligible Liabilities (MREL): 2018 SRB Policy for the second wave of resolution plans (January 2019) para 17.

189 BRRD, Art 45(c)(3)(b)(ii) and (a)(ii); SRMR, Art 12d(3)(b)(ii) and (a)(ii).

190 BRRD, Art 45(c)(3) subparagraphs 7 and 8; SRMR, Art 12d(3) subparagraphs 7 and 8.

191 SRB, Introduction to Resolution Planning (September 2016) 39; SRB, MREL: Approach taken in 2016 and next steps (2016) para 31; SRB (2017) (n 184) para 30; SRB (2018) (n 184) para 14; SRB (2019) (n 184) para 21. This is in line with BRRD, Art 45c(3) subparagraph 4; SRMR, Art 12d(3) subparagraph 4.

192 Martin Hellwig, 'Precautionary Recapitalization: Time for Review,' European Parliament In-Depth Analysis (July 2017) (available at http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/602089/IPOL_IDA(2017)602089_EN.pdf) para. 2.5.

193 Resolution financing arrangements would have to be made available for the funding of not just resolution tools, as currently stipulated in Art 101(1), but also for liquidation purposes. This could be addressed by replacing the term 'resolution tools' in Art 101(1) with the term 'resolution tools and powers'. According to the BMF (n 1) 2-3, non-systemic institutions should not be able to rely on the Single Resolution Fund, any financing of resolution and/or liquidation measures should come from deposit insurance funds. However, the appropriate allocation of burdens between resolution funds and deposit guarantee funds could be achieved through a calibration of BRRD, Art 109.

insolvency would likely be the appropriate resolution strategy, rather than the application of stabilisation powers.[194] Similarly, with a view to reducing legal uncertainty and the risk of litigation, it has been suggested to develop (indicative) thresholds above which resolution should be assumed to be in the public interest.[195] However, if, as suggested here, the public interest requirement would be removed, this idea could be utilized for developing a threshold that would exempt those institutions from the 8% minimum loss contribution whose business and funding models, notably their access to capital markets, would be incompatible with stringent MREL requirements in form of subordinated debt instruments. These institutions could then be resolved by, for example, transferring their viable deposit business to a private sector purchaser and liquidating the residual entity, with both transfer and liquidation financed by the resolution fund with an adequate contribution from the relevant deposit guarantee scheme.

IV. Conclusion

In its current form, the EU's crisis management framework for the banking sector suffers from severe short comings. The resolution trigger is riddled with opt outs and loopholes, and a very flexible public interest test offers an escape route from mandatory loss contribution towards generous State aid. The BRRD/SRM resolution framework relies on the applicable national insolvency law to supplement its otherwise incomplete structure with remaining differences potentially having a direct impact on the costs of resolution, the exposure of the resolution fund and of national deposit guarantee schemes. The availability of multiple procedures across and within Member States, in combination with a division of responsibilities between Union and national levels, both institutionally and substantively, results in significant opacity for investors.

The most straightforward option for addressing these flaws would be extending the BRRD resolution framework so as to cover all institutions regardless of whether their failure would have a systemic impact. This would reduce current opportunities for gaming the system, and enhance legal certainty and transparency for stakeholders and the taxpaying public. A further alignment of creditor hierarchies and also of the claims process would be necessary to achieve the maximum effect. In order to cater for institutions with limited capacity to issue subordinated debt instruments as part of MREL, an exception to the 8% minimum loss contribution requirement should be introduced. The result would be a single rulebook with much reduced gaps, addressing many of the weaknesses of the current system.

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194 Bank of England, The Bank of England's approach to setting a minimum requirement for own funds and eligible liabilities (MREL) (June 2018) 5.

195 Lastra et al (n 22) 11.

The key role that deposit guarantee schemes could and should play in bank crises: a proposal to amend the European Union framework

Marco Bodellini

1. Introduction

In the Banking Union, only few failing or likely to fail (FOLF) banks[1] will be resolved, whereas for the majority of them winding-up[2] will be the default option.[3] As a consequence, one of the most relevant issues concerns the way in which insolvency proceedings take place – pursuant to the domestic and not harmonised[4] rules of the Member State in which the FOLF bank is established[5] – and the tools that authorities can employ.[6]

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1 According to article 32 paragraph 4 of the Directive 2014/59/EU, 'an institution shall be deemed to be failing or likely to fail in one or more of the following circumstances: (a) the institution infringes or there are objective elements to support a determination that the institution will, in the near future, infringe the requirements for continuing authorisation in a way that would justify the withdrawal of the authorisation by the competent authority including but not limited to because the institution has incurred or is likely to incur losses that will deplete all or a significant amount of its own funds; (b) the assets of the institution are or there are objective elements to support a determination that the assets of the institution will, in the near future, be less than its liabilities; (c) the institution is or there are objective elements to support a determination that the institution will, in the near future, be unable to pay its debts or other liabilities as they fall due; (d) extraordinary public financial support is required except' in a few cases.

2 The terms winding-up and liquidation will be used interchangeably across the paper.

3 See Dias – Deslandes – Magnus, (2019), 7, quoting Andrea Enria who, referring to *Veneto Banca* and *Banca Popolare di Vicenza*, said that 'The decision that there was no EU public interest at stake in the crises of two ECB-supervised banks that were hoping to merge and operate in the same region with combined activities of around EUR 60 billion sets the bar for resolution very high'.

4 The introduction of an administrative bank liquidation tool to be assigned to the Single Resolution Board 'could reduce fragmentations along national lines arising from different domestic insolvency regimes and thereby increase the effectiveness of the EU legal framework through legislative harmonisation'; see Lastra – Russo – Bodellini (2019), 18; accordingly see also International Monetary Fund (2018), 7.

5 See Bodellini (2019), 52, arguing that the rules of the BRRD provide that the default option is the submission of FOLF institutions to winding-up according to the law of the Member States where such institutions are established.

6 This will, therefore, depend on the domestic rules of the jurisdiction where the FOLF bank is established. As a consequence, the fact that insolvency proceedings rules of participating Member States are not harmonised represents a further issue undermining the effectiveness of the Banking Union.

There is general agreement in considering corporate insolvency proceedings run by law courts and aimed at liquidating the FOLF entity as inappropriate for banks.[7] Indeed, even the failure and winding-up of banks that do not meet the public interest test for resolution could negatively affect the banking and financial system – or a part of it – and then possibly impact the real economy.[8] Hence, it is key that insolvency proceedings applying to FOLF banks enable the authorities to apply tools allowing to handle them in such a way that the negative impact(s) on the banking and financial system and the real economy can be avoided or, at least, minimised. Yet, this goal can be reached if the FOLF bank's most critical functions continue. The latter are mostly depositors' access to their deposits, payment services and borrowers' financing.[9]

The legal instruments that could permit the FOLF bank's critical functions to continue are similar to some of the resolution tools which are regulated by the Bank Recovery and Resolution Directive[10] (BRRD), namely a sale of business-like tool, a bridge institution-like tool and an asset separation-like tool.[11] Insolvency proceedings applying to FOLF banks should then have an administrative nature and give to the authorities the power to use these tools as well as the discretion to choose among them on a case-by-case basis. In this way, through such special administrative regimes (administrative) authorities could manage to keep the stability of the system and reduce the destruction of value.

Yet, if this is the case, then it can be argued that the distinction between liquidation and resolution is artificial[12] as liquidation could be regarded simply as one of the resolution tools to apply, after the use of the others, to the residual part of the troubled bank.[13] The latter, in turn, will be often just an almost empty entity where only equity instruments and (mainly subordinated) debt instruments will be left within the liabilities side of the balance sheet. This is confirmed by the Financial Stability Board's Key Attributes of Effective Resolution Regimes for Financial Institutions, where liquidation is listed among the resolution powers.[14] In this vein, FOLF banks would be resolved, in one way or another,

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7 See Guynn, (2012), 121, 137-140, arguing that bankruptcy intervention produces erosion of the financial institution's value exacerbating the losses for creditors; see Ringe, (2016), 5, who argues that there is consensus about the fact that traditional bankruptcy procedures are not appropriate to deal with failing global banks as they are usually long and complicated and therefore can undermine market confidence and destabilize the financial system; see Huertas, (2013), 167-168; see also Shleifer – Vishny, (2011), 29.

8 Accordingly see European Forum of Deposit Insurers (2019), 27, arguing that 'it cannot be excluded that liquidation through pay-out of non-systemic banks (particularly if multiple) may be a threat to public confidence and financial stability in a specific situation of a single Member State and a particular credit institution'; see also Baudino – Gagliano – Rulli – Walters (2018), 1.

9 See Schillig, (2013), 754, arguing that 'traditional banks perform quasi-utility function' being the primary source of liquidity for many financial and non-financial institutions.

10 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms [2014] OJ L 173/190.

11 Bodellini, (2020), 3.

12 See Restoy (2019), 1, arguing that this is not the case in many other jurisdictions outside the EU where such a distinction does not exist.

13 See Leckow – Gullo – Emre (2019), 31.

14 See Financial Stability Board (2014), 8.

and after the application of resolution (or resolution-like) tools, the residual entities would be liquidated.[15]

Still, such special administrative regimes would properly work, thereby making the winding-up be orderly as provided by the BRRD,[16] only if an active role were to be played by the deposit guarantee schemes (DGSs).[17] In some countries over time DGSs have proven to be up to the task to effectively contribute to resolving bank crises. Yet, in this regard, a review of the European Union legal framework is needed to enable DGSs to effectively perform such an important role through the so-called optional measures.

To this end the Italian experience and legal framework are an interesting case study. The list of solutions implemented over time by Italian authorities to handle troubled banks interestingly shows that piecemeal liquidation with DGSs reimbursing covered depositors was carried out only a few times in relation to very small banks. Such approach was based on the grounds that the application of resolution-like tools, with DGSs support, enables a more efficient crisis management.[18]

Also, looking at the Italian legal regime before the transposition of the BRRD, it can be argued that a resolution-like administrative procedure was typically activated to handle bank crises, as to say that each FOLF bank was to be resolved. The main difference with the resolution regime currently in place is that typically creditors were not affected by burden sharing measures. In other words, in the past only shareholders suffered losses, together with the DGS (within the limits resulting from the application of the least cost principle), the Bank of Italy providing loans with interest rates lower than market rates and, in cases involving systemic banks, the taxpayers due to public support provision.

Moving from the analysis of the Italian framework and experience, this paper recommends the adoption of special administrative regimes dedicated to troubled banks, harmonised at EU level and based on the interventionist role of DGSs. The paper is divided into seven sections as follows. After this introduction, section 2 discusses the past and new Italian framework to deal with troubled banks and analyses the three administrative procedures currently in place, namely, special administration, compulsory administrative liquidation and resolution. Section 3 focuses on the application of the transfer of assets and liabilities tool and of other resolution-like tools in the context of compulsory administrative liquidation, also looking at relevant case-law. Section 4 analyses the EU and Italian regimes concerning the functions performed by DGSs in bank crises by discussing some relevant cases. Section 5 deals with the legal constraints affecting the DGSs ability to intervene through optional measures and advances a reform proposal. Section 6 spells out the quest for harmonised special administrative regimes based on the leading role of DGSs. Section 7 concludes.

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15 See International Monetary Fund (2018), 7.

16 Article 32b of BRRD.

17 See Dobler – Moretti – Piris (2020), 16.

18 Bodellini, (2020), 4.

2. The Italian bank crisis management legal framework

The Italian legal system has had special regimes for bank crisis management since the beginning of the twentieth century.[19] Since then small and mid-sized troubled banks have been handled through the application of special tools, within special administrative procedures according to special rules, rather than through their submission to corporate insolvency proceedings run by law courts that apply to non-financial firms.[20] Differently, when the bank in crisis was considered systemic, typically it was rescued through a public intervention, sometimes in the context of a crisis management procedure, sometimes outside.[21]

Before the transposition of the BRRD in 2015 the domestic system had in place two different administrative procedures to be initiated to handle troubled banks, *i.e.* 1) special administration and 2) compulsory administrative liquidation.

The main reasons for having two administrative procedures dedicated to troubled banks were and still are: 1) their ability to enable administrative authorities (Bank of Italy and Ministry of Finance) to quickly intervene in front of the first symptoms of a bank's problems, 2) the involvement of external experts who are meant to take over the entity's decision-making and find out the causes for such problems, 3) the banking supervisor's oversight on the procedure, and, 4) their capability to allow for the adoption of solutions more effective for depositors, other bank's counterparties, the banking and financial system as well as the real economy.[22] The underlying assumption is that law court-run corporate insolvency proceedings do not have the same abilities and, therefore, should not be used to handle banks in trouble.[23] This is to say that in bank crises there is always a special public interest to protect. And such a special public interest, to be identified in the safeguard of depositors and in the stability of the system, can be more effectively protected through special administrative procedures run by administrative authorities.[24]

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19 See Fortunato (1991), 715, arguing that even before the adoption of the first Banking Act in 1936, that introduced special administrative procedures to handle troubled banks, the system had in place rules dealing with the crisis of some special credit institutions, namely *casse di risparmio* and *casse rurali e artigiane*.

20 From a more general perspective see Baudino – Gagliano – Rulli – Walters (2018), *passim*, arguing that the insolvency regimes for troubled banks can be grouped as follows: 1) corporate insolvency law (adopted by France, Spain, Germany); 2) modified corporate insolvency law (adopted by UK, Ireland); 3) free-standing bank insolvency regime (adopted by Italy, Greece, Luxemburg, Switzerland and many others outside Europe, like US, Canada).

21 See Brescia Morra (2019b), *passim*.

22 Bodellini, (2020), 10.

23 Accordingly see Ringe, (2016), 6, who argues that 'bankruptcy entails a court-supervised process that is designed to protect the substantive and procedural rights of all creditors without particular regard for broader public interests'; see also Restoy (2019), 4, arguing that these regimes are particularly inefficient in 'those jurisdictions that do not have bank-specific rules and have to rely on regular court-based corporate insolvency procedures. The application of those procedures tends to be lengthy and less able to preserve the residual value of a bank's franchise and of its net assets, thereby contributing to the generation of stress that could eventually spread to other institutions'.

24 Bodellini, (2020), 10.

On these grounds and also due to the satisfactory outcomes achieved over time, after the transposition of the BRRD, with the introduction into the domestic system of the resolution procedure, the Italian legislator decided to keep in place these two procedures as well. Thus, there are now three different administrative procedures that could be initiated to handle a troubled bank depending on the circumstances, namely 1) special administration, 2) compulsory administrative liquidation, and, 3) resolution.

The conditions for a bank to be placed under these procedures are different, as the rationale behind the legislative decision to have all of them in place is to provide the authorities with the possibility to choose the right procedure on a case-by-case basis.[25]

2.1 The special administration

Special administration is now used as an early intervention measure to refer to the jargon of the BRRD. Pursuant to the Italian Consolidated Banking Act,[26] when there are serious violations of laws and regulations or of the articles of association as well as when there are serious irregularities in the management or when the situation of the bank is significantly deteriorating or there are relevant losses or there is a specific request from the bank itself and the other early intervention measures are not sufficient, the Bank of Italy can place such bank under special administration, thereby removing the members of the governing and supervising bodies and appointing new administrators and auditors.[27]

The appointed administrators are required to perform all the tasks and functions of the dissolved governing body.[28] The banking authorisation is not revoked, as the bank is meant to continue doing business. Additionally, the administrators are meant to analyse the economic and financial situation, remove the irregularities and find out the solutions needed in the interests of depositors and the bank itself.

In exceptional circumstances, with a view to safeguarding the bank's creditors, the administrators may decide to interrupt the repayment of the bank's liabilities. Such a decision needs to be authorised by the Bank of Italy and the interruption cannot last more than 1 month. This 1 month period can, however, be extended for 2 more months. In such a period no enforcement action can be brought by creditors against the bank.

The special administration has a limited duration of no longer than 1 year but can be extended for additional 1 year periods, if necessary. Its primary objective is to resolve all the

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25 This was not the case in the past before the transposition of the BRRD, when special administration and compulsory administrative liquidation used to have very similar activation triggers. The two procedures could be initiated in the event of unsafe and unsound conducts, fraud and illegal behaviours, violations of laws, or non-compliance with prudential regulations. The difference between the elements triggering the two procedures was grounded in the seriousness of the situation, *i.e.* serious in the case of special administration and particularly serious in the case of compulsory administrative liquidation; see Boccuzzi (2011), 193.

26 Legislative Decree no. 385 of 1993.

27 Article 70 paragraph 1 of Legislative Decree no. 385 of 1993.

28 Article 72 of Legislative Decree no. 385 of 1993.

problems affecting the bank with a view to making it restart properly functioning and doing business as usual.[29]

2.2 The compulsory administrative liquidation

Compulsory administrative liquidation is the procedure to initiate when the bank's crisis is considered irreversible and therefore the institution is not deemed able to continue operating. Indeed, FOLF Italian banks cannot be placed under normal corporate insolvency proceedings.[30] Nevertheless, the rules of the Insolvency Act[31] on the insolvency procedures for non-financial firms apply also to FOLF banks to the extent that they are compatible with the compulsory administrative liquidation rules.[32]

The Minister of Finance, upon Bank of Italy proposal, submits a bank to compulsory administrative liquidation when: 1) the bank is FOLF, 2) there is no reasonable prospect that any alternative private sector measures, including measures by an Institutional Protection Scheme (IPS), or supervisory action, including early intervention measures taken in respect of the institution, would prevent the failure of the institution within a reasonable timeframe, and, 3) there is no public interest in resolving the bank.[33] It follows that a FOLF bank that does not meet the public interest test for being submitted to resolution is to be placed under compulsory administrative liquidation. With the submission of the bank to compulsory administrative liquidation, the Bank of Italy appoints the liquidator(s) as well as the members of the oversight committee and keeps the power to instruct them.

The most significant legal effects arising from the submission of a bank to compulsory administrative liquidation are: 1) withdrawal of the banking authorisation, 2) interruption of liabilities' payment as well as of the return of assets to the bank's counterparties, 3) termination of contractual relationships, *inter alia* loans, overdrafts and current accounts, with the effect that credit lines are immediately called back; 4) stay of individual enforcement actions, which, as a result, cannot be brought against the bank, as assets' liquidation and creditors' payment must take place according to the special rules laid down in the Consolidated Banking Act and Insolvency Act.

The final objective of this procedure is the liquidation of the assets and the payment of the creditors, which are to be carried out by the liquidators under the supervision of the oversight committee and the Bank of Italy. The creditors' interest to be repaid should then drive the action of both the authorities and the liquidators. Yet, a number of other extremely important interests are taken into due consideration in running the procedure. Chief among

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29 Recently two Italian banks (*i.e.* Cassa di Risparmio di Genova – Carige and Banca Popolare di Bari), one of which significant (*i.e.* Carige), have been submitted to special administration; see Dias – Deslandes – Magnus, (2019), 1; see also Capriglione (2019), 222.

30 Article 80 paragraph 6 of Legislative Decree no. 385 of 1993.

31 Royal Decree no. 267 of 1942.

32 See Nigro (1996), 144.

33 These conditions are set out by article 80 paragraph 1 of Legislative Decree no. 385 of 1993, article 17 paragraph 1, article 20 paragraphs 1 and 2 and article 21 paragraphs 1 and 2 of Legislative Decree no. 180 of 2015.

them are the stability of the system, the confidence of depositors and investors and the safeguard of the going concern value of the FOLF bank. Italian authorities have always considered these interests as very important. [34]

The rationale behind the legislative choice to have and keep such a procedure in place is similar – to a certain extent – to the one relating to the resolution procedure. To this end, corporate insolvency proceedings, (typically run by law courts), which apply to non-financial firms, are usually lengthy and slow and primarily aimed at liquidating the assets with a view to using the arising proceeds to pay creditors.[35] As a consequence, in this way the continuation of the FOLF bank's activities would not be guaranteed with a potential destabilising impact on its counterparties and, more broadly, on the banking and financial system and possibly on its geographical area of operation as well. For these reasons they are not appropriate for banks.[36] Even though the final objective of compulsory administrative liquidation is the assets' liquidation and the payment of the bank's creditors, the Italian authorities have rarely considered the atomistic liquidation (also referred to as 'piecemeal' liquidation)[37] as an effective and efficient crisis management procedure for FOLF banks, because it does not ensure the continuation of critical functions thereby potentially affecting the bank's counterparties. This in turn might end up destroying the going concern value of the good parts of the bank in crisis and therefore can be detrimental for both the bank's creditors and for the system as a whole.[38]

Further evidence of this view can be found in that the submission of a bank to compulsory administrative liquidation does not need to wait for the bank to be insolvent. Accordingly, even before the transposition of the BRRD with the introduction of the concept of 'failing or likely to fail',[39] Italian banks were placed under compulsory administrative liquidation when there were serious elements making the authorities think that the bank was no longer able to properly perform the banking activity in a sound manner. The inability to properly perform the banking activity in a sound manner is not necessarily equivalent to insolvency. Such a condition, which also includes insolvency, encompasses a number of different situations and can be met much earlier than when the bank is actually deemed balance sheet insolvent. Obviously, the determination of when the bank was considered no longer able to perform the banking activity in a sound manner was based on a relevant amount of discretion given to the administrative authority (*i.e.* the Bank of Italy). But this anticipatory, yet discretionary, approach was regarded as the most effective way to protect depositors and, in turn, the whole system.[40]

On these grounds, the management of bank crises in Italy has most of the time taken forms resembling – in many ways – the ones of the current resolution procedure. This has

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34 Bodellini, (2020), 13.

35 Bodellini (2017), 145.

36 See Huertas, (2013), 167-168; Guynn, (2012), 121, 137-140; Ringe, (2016), 6.

37 The terms atomistic liquidation and piecemeal liquidation are used interchangeably across the paper.

38 Bodellini (2018), 369.

39 Article 32 paragraph 4 of BRRD.

40 Bodellini, (2020), 14.

been often achieved through the use of a legal tool called transfer of assets and liabilities, which looks similar to the so-called sale of business tool regulated under articles 38 and 39 of the BRRD.[41] Such tool looks similar to the sale of business tool in that it is meant to transfer both assets and liabilities of the FOLF bank to another bank at market prices (which are expected to be higher than liquidation prices), thereby allowing for the continuation of (at least some of) the activities of the FOLF bank through the purchasing one and safeguarding in this way the going concern value of the FOLF entity.[42]

All this means that, from a legal perspective, the compulsory administrative liquidation under Italian law has rarely been applied as a procedure simply aimed at dissolving the bank in crisis after the sale of the assets and the payment of creditors. In other words, it has not been conceived as a real piecemeal liquidation. Rather, it has been primarily applied as a means to allow for the continuation of the failing bank's activity through a different bank, thereby merging together the dissolving function of the liquidation procedure with the business continuity character of the transfer of assets and liabilities tool.[43] In this way, the following outcomes have been achieved: 1) deposits have been moved to the purchasing bank and depositors, therefore, have been fully protected, thereby avoiding runs on other banks and possibly systemic risk, 2) borrowers have been allowed to keep on accessing finance provided by the purchasing bank, avoiding to negatively affect the real economy, 3) assets and liabilities (or at least some of them) have been transferred to the purchasing bank, thereby allowing for the continuation of the business activity and maintaining the going concern value.[44]

2.3 The resolution

Resolution has been introduced into the Italian framework through the transposition of the BRRD. A bank is submitted to resolution when: a) the bank is FOLF; b) there is no reasonable prospect that any alternative private sector measures, including measures by an IPS, or supervisory action, including early intervention measures taken in respect of the institution, would prevent the failure of the institution within a reasonable timeframe; c) a resolution is, according to the Bank of Italy's view,[45] needed in the public interest.[46]

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41 According to article 2, paragraph 1, number 58 of BRRD, the sale of business tool is 'the mechanism for effecting a transfer by a resolution authority of shares or other instruments of ownership issued by an institution under resolution, or assets, rights or liabilities, of an institution under resolution to a purchaser that is not a bridge institution …'. According to article 38 paragraph 1 of BRRD, 'Member States shall ensure that resolution authorities have the power to transfer to a purchaser that is not a bridge institution … (b) all or any assets, rights or liabilities of an institution under resolution'.

42 See Bodellini, (2020), 14.

43 See Fortunato (1995), 777.

44 See Fauceglia (1997), 452, emphasising that the public interest of safeguarding depositors has been protected through keeping the business work and continuing the previous contractual relationships of the failing bank.

45 Obviously such determination is to be made by the SRB in the case of banks under its remit.

46 These conditions are set out by article 17 paragraph 1, article 20 paragraphs 1 and 2 and article 21 paragraphs 1 and 2 of Legislative Decree no. 180 of 2015.

Resolution and compulsory administrative liquidation are the two alternative procedures that are to be activated in the event of a bank being FOLF. The *discrimen* adopted to choose between the two is the presence of a public interest to safeguard through resolution action or its lack thereof. It follows that public interest is the element driving the resolution authorities in deciding whether to resolve or to liquidate a FOLF institution.[47] Under the BRRD, the default option is the submission of FOLF institutions to winding-up pursuant to the law of the Member States where such institutions are established. This has been further reiterated by article 32b of BRRD,[48] stating that Member States shall ensure that a FOLF institution in relation to which the resolution authority considers that all the conditions for resolution are met, except for the resolution action being in the public interest, shall be wound up in an orderly manner in accordance with the applicable national law. However, if and when winding-up is not considered able to achieve the resolution objectives to the same extent as resolution, then authorities are meant to resolve the troubled institutions.[49] A clear understanding of the concept of public interest and its consistent interpretation are therefore key.[50] Public interest in this context seems to be primarily connected with the need to keep financial stability, or in negative terms, to avoid instability.[51] Resolution authorities, thus, have been given the difficult task of ascertaining *ex ante* whether the crisis of a bank and its subsequent winding-up can create financial instability.[52] In this context, the introduction of some thresholds above which the public interest is presumed (and therefore resolution should be preferred) could result useful on the grounds that they might provide the system with greater legal certainty.[53] In other words, their determination could provide some clearer indication of what 'public interest' really means and when such a criterion is actually met. Obviously, these thresholds would reduce the discretion of the resolution authorities, since they would be in this way guided in their choice.[54] The advantage, nevertheless, would be to know well in advance what should be the crisis management procedure to initiate in the event of a bank being FOLF.[55] This in turn could reduce the risk of litigation. For all these reasons, such thresholds could help remove potential impediments to resolvability.[56]

The importance of a clear understanding and coherent interpretation of the concept of public interest is the reason why on 3 July 2019 the SRB has published a paper outlining its

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47 See Lastra – Russo – Bodellini, (2019), 10.

48 This new article has been introduced within the BRRD by Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 (so-called BBRD 2).

49 See Bodellini, (2018), *passim*.

50 See Bodellini (2019), 52.

51 See Lastra – Russo – Bodellini, (2019), 11.

52 See Wojcik, (2016), 98, arguing that such an assessment involves a significant degree of discretion.

53 See Lastra – Russo – Bodellini, (2019), 11.

54 *Id*., 11.

55 *Id*., 11, where we underline that a similar approach has been developed by the Bank of England, that 'considers that provision of fewer than around 40,000 to 80,000 transactional bank accounts (accounts from which withdrawals have been made nine or more times within a three-month period) is generally likely to indicate that a modified insolvency would be appropriate'; see Bank of England, (2018), 5.

56 See Bodellini (2019), 53.

approach to the Public Interest Assessment (PIA).[57] Intuitively, the PIA aims at ascertaining whether the resolution of a FOLF institution is considered necessary in the public interest. Accordingly, the paper provides detailed procedural guidelines aimed at driving the resolution authorities in determining whether resolution is in the public interest.

The paper emphasizes that in performing the PIA the SRB starts by assessing 'whether liquidation under insolvency proceedings would be likely to put the resolution objectives at risk … If the resolution objectives are deemed at risk, the SRB then assesses the expected effects of the chosen resolution strategy and compares such effects with those of winding-up the bank under insolvency proceedings'.[58] It also outlines the elements to take into account in assessing whether the failure of a bank could have significant adverse effects on financial stability, these being the risk of contagion and the effects of the potential action on market discipline.[59]

The SRB's paper is very helpful in that it discloses the steps of the process that the SRB goes through in determining whether the resolution of a given institution is in the public interest and, as such necessary, should the latter become FOLF. The publication of these guidelines is particularly important in that they will be able to reduce inconsistencies between solutions adopted to handle bank crises in the Banking Union, and possibly beyond.[60] Nonetheless, the concept of public interest remains abstract and vague, and thus potentially subject to different interpretation by different authorities as well as by the same authority at different points in time.

Against this background, a few years after the adoption of the BRRD and the establishment of the Banking Union, with the Single Resolution Board (SRB) in charge to handle the crisis of banks under the supervisory remit of the European Central Bank (ECB) within the Single Supervisory Mechanism (SSM) along with cross-border banking groups, what seems now clear is that only few, large, complex and interconnected banks will be submitted to resolution should they be FOLF.[61] Hence, even significant banks under direct supervision of the ECB within the SSM and cross-border banking groups will be submitted to winding-up should they be determined as FOLF, as the cases of *Veneto Banca* and *Banca Popolare di Vicenza* have shown.[62] This policy position could also influence the decisions of national resolution authorities (NRAs) that might feel uncomfortable in submitting less significant banks, under their direct remit, to resolution according to the domestic law(s) transposing the BRRD, in light of the fact that significant banks under the remit of the SRB would be wound up in the event of being FOLF. Today, perhaps, the four small-sized

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57 See Single Resolution Board, (2019), 6, where it is stated that the SRB approach to the PIA for the banks under its remit has been developed by the SRB itself in close collaboration with the National Resolution Authorities and in consultation with the European Central Bank in order to ensure a level playing field in the Banking Union.

58 *Id*., 7.

59 *Id*., 8.

60 See Bodellini (2019), 53.

61 Dias – Deslandes – Magnus (2019), 7.

62 Bodellini (2018), 386.

Italian banks which were resolved by the Bank of Italy back in 2015[63] would be liquidated, or differently handled in the context of special administration, as a consequence of the 2017 SRB's decision not to resolve *Veneto Banca* and *Banca Popolare di Vicenza* due to the alleged lack of a public interest to do so.[64]

This is a further reason to advocate the adoption by every Member State of special administrative insolvency regimes dedicated to banks, tailored around the peculiar features of these institutions and possibly harmonised at European Union level.[65]

3. The transfer of assets and liabilities tool and the other resolution-like tools available within compulsory administrative liquidation

The Italian Consolidated Banking Act provides the bank's liquidators with any power that is necessary to efficiently liquidate the bank's assets.[66] Accordingly, among other measures, the liquidators can: 1) sell assets and liabilities, 2) sell the business or just some parts of the business, 3) sell a bulk of assets and contractual relationships.[67]

The wording of article 90 paragraph 2 of the Consolidated Banking Act is not very clear and might appear somehow misleading in that assets and liabilities for a bank are primarily the banking-related contractual relationships and those are also the main components of the business. Therefore, it seems that the three options, *i.e.* 1), 2) and 3), given to the liquidators and mentioned by the article are, in fact, just one whose extent will vary, in practice, depending on the amount and type of assets and liabilities included in the perimeter of the transfer.[68] Indeed, the transfer can also be just partial. Still, the FOLF bank's creditors have the right to be treated according to the *pari passu* principle on the basis of their ranking as set forth by the Insolvency Act and the Consolidated Banking Act.

In many cases of compulsory administrative liquidation that took place in the past, liquidators typically tried to find another bank willing to purchase all (or a relevant amount) of the assets and liabilities of the FOLF entity.[69] Still, fairly obviously, the value of the liabilities transferred to the purchasing bank exceeded the value of the assets. In order to compensate

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63 These four small-sized Italian banks are *Banca delle Marche*, *Banca Popolare dell'Etruria*, *Cassa di Risparmio di Ferrara* and *Cassa di Risparmio di Chieti*; see Bodellini (2017), 151.

64 See Bodellini (2018), 387.

65 Elsewhere I have argued that the differences featuring the national insolvency proceedings of the EU Member States can end up determining that an institution might be deemed as resolvable in that it can be effectively liquidated thanks to the rules of its Member State, whilst another one in similar conditions might not be considered resolvable due to the insolvency proceeding rules of its Member State. This can therefore impact upon the resolvability assessment, thereby influencing the authorities' action as well as threatening the level playing field between institutions established in different Member States; see Bodellini (2019), 50.

66 Article 90 paragraph 1 of the Legislative Decree no. 385 of 1993.

67 Article 90 paragraph 2 of the Legislative Decree no. 385 of 1993.

68 See Bodellini (2019), 18.

69 See Fauceglia (1997), 452, arguing that the role played by Bank of Italy in this phase has been particularly relevant since the choice of the purchasing bank needs to be authorised by the Authority, that, in practical terms, could end up making the choice itself.

the purchasing bank for taking on such a negative balance, commonly two different tools were applied: 1) the involvement of the DGS if the amount of resources to provide was estimated to be lesser than the amount that the DGS should have paid to covered depositors in the context of an atomistic liquidation without the transfer of deposits to another bank; 2) a collateralised loan with capped interest rates of 1% to be given by the Bank of Italy to the purchasing bank.[70] In times when interest rates used to be rather high, the possibility to access a loan with very low rates meant to transfer to the Bank of Italy the cost of the FOLF bank's crisis management.[71]

The rescue strategy was typically prepared beforehand. Accordingly, banks facing a crisis were not immediately submitted to compulsory administrative liquidation, unless it was clear since the very beginning that they were unequivocally insolvent and/or that their crisis was irreversible. Before the submission to compulsory administrative liquidation, the bank in crisis was often submitted to special administration during which the administrators were requested to analyse the economic and financial situation and find out its causes as well as possible solutions for recovery, if available. Typically, as a result of this preliminary assessment, the administrators had to write down the loans' book value, thereby recording a loss. When the loss could be absorbed and the bank was seen as recoverable, the special administration ended. This often took place through a merger with another bank or through the acquisition by another larger and more solid bank, typically supported by the DGS. By contrast, when the loss was too high and the bank was not considered to be able to recover, then it was submitted to compulsory administrative liquidation.[72] Still, the previous submission to special administration was helpful to plan a strategy for managing the crisis,[73] for example by finding another bank willing to purchase assets and liabilities so that the transfer could take place simultaneously or immediately after the submission of the FOLF bank to compulsory administrative liquidation.[74]

A very critical aspect relates to the timing of the transfer of assets and liabilities. Since these are mostly contractual relationships that would automatically terminate upon submission of the bank to compulsory administrative liquidation, either their transfer to another bank takes place at the same moment when the bank is placed under compulsory administrative liquidation (or immediately afterward) or a special legal tool interrupting the effects of the contracts' termination needs to be employed as well.[75] In order to allow the liquidators to gain more time to find the most effective way to liquidate the bank's assets, they were, and still are, given an additional power, namely the power to continue the failing

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70 This tool was provided for by the Decree of Minister of Finance 27 September 1974 (so-called *Sindona* Decree that was adopted to deal with the crisis of *Banca Privata Italiana*).

71 See Minervini (1990), 6, who argued that the generalised approach to rescue every failing bank through such a tool would end up increasing moral hazard and affecting the free market competition with the final outcome of having an inefficient banking system.

72 See Bodellini, (2020), 19.

73 See Belviso (1972), 356; Belviso (1979), 274.

74 See Fauceglia (1997), 452, emphasising that it has been common practice over time to transfer assets and liabilities at the same time when the Bank of Italy submitted the FOLF bank to compulsory administrative liquidation.

75 See Bodellini, (2020), 19.

bank's activities.[76] The exercise of this power needs the Bank of Italy's authorisation[77] and causes that the contractual relationships are not terminated, as would otherwise be the case.[78] Such a tool might result particularly useful in that it does not make the contractual relationships automatically terminate upon submission of the bank to liquidation, thereby keeping intact the business organisation and maintaining its going concern value. This, in turn, enables the liquidators to keep on searching for another institution willing to buy (all or some of) the FOLF bank's assets and liabilities at market prices rather than just a few assets at liquidation prices. The conditions to satisfy in order to exercise this power are: a) urgency, and, b) such a strategy being considered more effective in order to liquidate the assets.[79]

This power, however, raised a lively debate among scholars, since it permits a bank that does not have a banking license anymore to keep on performing reserved activities.[80] In other words, the authorisation to continue the bank's activity interrupts the effects of the banking license withdrawal, although the exercise of such power is limited to the extent that it aims at liquidating more effectively the assets. Nevertheless, the debts arising from acts performed in this phase acquire a super priority in the liquidation ranking. And this could negatively affect previous unsecured creditors should the bank's assets be insufficient to pay their credits as a result of the continuation of the activity.[81]

Such a power has not been exercised very often over time. Nonetheless, in the case of *Banca Network Investimenti*, the institution was submitted to compulsory administrative liquidation on 16 July 2012 and two days later, on 18 July 2012, Bank of Italy authorised the continuation of the provision of investment services.[82]

3.1 Transfer of assets and liabilities vis-à-vis piecemeal liquidation

Liquidators have the power to decide on how to liquidate the FOLF bank. The wording of article 90 of the Consolidated Banking Act emphasises that liquidators have every power they need in order to effectively liquidate the assets. In so doing their aim should be to search for the most efficient way to reach that goal. Among the tools that they are empowered to use is also the one of transferring the whole bulk (or just a part) of assets and liabilities. This tool has been typically seen as an alternative to the bank's atomistic liquidation.[83]

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76 Article 90 paragraph 3 of Legislative Decree no. 385 of 1993. Also, the Bank of Italy itself can decide that the bank's activity is to continue when the liquidators take office.

77 The Bank of Italy will decide whether to authorise the continuation of the activity or not after consulting with the oversight committee. According to Fauceglia (1996), 711, the oversight committee is also meant to point out how the continuation of the bank's activity should take place.

78 See Bodellini, (2020), 20.

79 Desiderio (1981), 270.

80 Fauceglia (1996), 711; Colavolpe (1996), 1072; Libonati (1965), 34; Pratis (1972), 463; Desiderio (1981), 270.

81 See Bodellini, (2020), 20.

82 See Banca d'Italia, (2012a).

83 Bodellini, (2020), 21.

The choice between these two alternatives (*i.e.* atomistic liquidation or transfer of assets and liabilities to another bank) has to be based on a comparative assessment and on the consequent prospective valuation of which one is supposed to be the most efficient solution.

A clear example of how this comparative assessment is performed is provided by the cases of *Banca Popolare di Vicenza* and *Veneto Banca* which were both submitted to compulsory administrative liquidation in 2017, through a special law,[84] and where the Bank of Italy developed a counterfactual scenario on the basis of which the liquidation strategy was informed.[85]

According to such counterfactual scenario, the Bank of Italy came to the conclusion that the wind-down of the two banks under normal insolvency proceedings without State aid would have increased the liquidation costs. The wind-down scenario was developed assuming that all of the assets and rights and some of the liabilities would have been sold.[86] According to such scenario the sale of the loans portfolio to private investors would have taken place at discounted prices for each asset class within a 3 to 5 year time horizon.[87] In this regard, it was also stated that the counterfactual scenario consisted of the liquidation of both banks 'under normal insolvency proceedings without any State support. Under that scenario, the liquidator would have overseen the termination of the activities, the seizure of the pledged performing assets by the secured creditors, the administration of the unencumbered assets and the activation of the DGS to protect depositors'.[88]

More precisely, the counterfactual scenario developed by Bank of Italy looked at what would have been the outcomes should an atomistic liquidation have taken place without any public support. The main assumptions adopted were: 1) the assets' liquidation would have taken place at liquidation prices and according to the liquidation timeframe, 2) the contractual relationships would have been immediately terminated with liquidators calling back all the loans and credit lines previously extended, 3) the DGS would have fully paid the covered depositors, 4) the activities performed by the two failing banks would have been immediately interrupted.[89]

In this hypothetical scenario, according to Bank of Italy, approximately 100,000 SMEs and 200,000 households would have been obliged to pay back overnight to the two banks their loans for about EUR 26 billion. This, in turn, would have created a domino effect triggering a huge number of failures affecting many more counterparties.[90] Uninsured depositors and senior creditors would have had to wait for the liquidation timing

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84 Law no. 121 of 2017.

85 See European Commission (2017), *passim*, where it is said that in order to choose between the liquidation strategy eventually adopted and the alternative atomistic liquidation, the Bank of Italy run a counterfactual scenario focusing on the consequences potentially arising from the adoption of the latter strategy.

86 *Id*., paragraph 52.

87 *Id*., paragraph 52.

88 *Id*., paragraph 105.

89 See Banca d'Italia, (2017a).

90 See Banca d'Italia, (2017b).

(*i.e.* many years) to try to get their money back, approximately EUR 20 billion.[91] The DGS should have had to immediately reimburse the covered depositors for an amount of approximately EUR 10 billion, and after that it could have exercised the subrogation right to the depositors' rights in the liquidation procedure. Nevertheless, due to the limited amount of immediately available resources, the DGS should have asked its member banks for extra contributions.[92] Also, the guarantees released by the State with regard to bonds issued by the two banks in the first months of 2017 would have been immediately enforced. As a consequence, the State would have had to pay immediately EUR 8.6 billion and then it could have exercised the ensuing subrogation right in the liquidation procedure.[93] In the view of the Italian Authorities, all these negative consequences could be avoided only with the measures eventually adopted.

These two cases, among many others, show that it has been common practice over time to prefer the transfer of assets and liabilities to another bank over atomistic liquidation of the assets, since the former has been regarded as able to allow, on one side, for the continuation of critical functions and, on the other side, for the protection of the going concern value. Consequently, the atomistic liquidation with the DGS reimbursement of covered depositors took place just in some residual cases involving small banks.[94]

3.2 Case-law concerning compulsory administrative liquidation

When assets and liabilities are transferred from the FOLF bank to another bank, the FOLF bank's creditors have the right to be treated according to the *pari passu* principle on the basis of their creditor ranking as set forth by the Insolvency Act and Consolidated Banking Act.[95] This rule should allow creditors who were negatively and unfairly affected by the transfer of assets and liabilities to bring a legal claim possibly against the bank, the liquidators and the authorities.

Yet, typically so far all the bank's liabilities have been transferred to the purchasing bank with the effect that only shareholders had to bear losses[96] and each FOLF bank's creditor was fully safeguarded. When this did not happen, like in the case of *Veneto Banca* and *Banca Popolare di Vicenza*, still the State found the way to compensate with alternative measures

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91 *Id*.

92 *Id*.

93 *Id*.

94 See Fondo Interbancario di Tutela dei Depositi, (2020), 1, according to which between 1988 and 2018, the main Italian DGS intervened twice to reimburse depositors. In the case of *Banca di Tricesimo* the Italian DGS paid EUR 3,4 million to covered depositors, whereas in the case of *Banca Network Investimenti* it paid EUR 73,9 million to covered depositors. With regard to the mutual banks' DGS, see Baldi – Bredice – Di Salvo (2015), 144-145, underlining that in the period between 1997 and 2015, this DGS intervened 80 times and only in one case it reimbursed covered depositors.

95 Article 90 paragraph 2 of Legislative Decree no. 385 of 1993.

96 Brescia Morra, (2019b), *passim*; Maccarone (2015), 177.

(*i.e.* through the so-called Solidarity Fund) the retail investors who purchased subordinated bonds which were left within the failing banks.[97]

Also, there is case-law concerning claims brought forward by the failing bank's shareholders and former directors complaining about: 1) the lack of conditions for the submission of their bank to compulsory administrative liquidation, 2) the way in which liquidation took place. In these cases, typically law courts ruled that the Bank of Italy needs to be given substantial discretion in making its own choices.[98] And, in turn, such discretionary choices cannot be questioned by law courts unless they are manifestly wrong or adopted by violating procedural rules.

In relation to the impact of these measures on fundamental rights, from a more general perspective, it is worth noting that according to the BRRD, resolution tools can be applied when resolution action is in the public interest. The main issue is that resolution tools, which are able to negatively affect property rights and creditor claims, can be employed even when the bank is just FOLF, which means that the bank is not necessarily balance sheet insolvent. In such a context the public interest is used as the legal basis to permit to negatively affect fundamental rights even though the entity is not insolvent (or not insolvent yet). When there is no public interest to safeguard and at the same time the bank is just FOLF, but not yet balance sheet insolvent, the legal basis to justify the negative impact on fundamental rights might be missing. This could be the case when resolution-like tools are adopted in the context of a FOLF bank's liquidation.[99]

Still, tools similar to the resolution tools affecting fundamental rights were used even before the adoption of the BRRD, therefore outside the resolution procedure. This is, for example, the case of the application of burden sharing measures adopted, according to the 2013 European Commission Banking Communication, in order for a bank to be eligible to receive State aid.[100] In this context, to justify the application of burden sharing measures to shareholders and subordinated creditors, the Court of Justice of the European Union ruled that 'The scale of losses suffered by shareholders of distressed banks will, in any event, be the same, regardless of whether those losses are caused by a court insolvency order because

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97 The so-called Solidarity Fund has been established in 2015 by Law no. 208 of 2015; pursuant to Law no. 119 of 2016, the Italian DGS has been tasked to manage and finance the Solidarity Fund. Originally, the Solidarity Fund has been established in order to compensate the retail investors who bought subordinated bonds of four small-sized banks (*Banca delle Marche, Banca Popolare dell'Etruria, Cassa di Risparmio di Ferrara* and *Cassa di Risparmio di Chieti*) which were resolved in 2015. Subsequently, Law no. 121 of 2017, through which *Banca Popolare di Vicenza* and *Veneto Banca* were liquidated, has given also the retail investors who bought subordinated bonds issued by such banks the possibility to obtain a compensation to be paid by the Solidarity Fund.

98 See *Tribunale Amministrativo Regionale del Lazio*, 7 January 2017 no. 166; *Tribunale di Arezzo*, 11 February 2016; *Tribunale di Roma*, 27 April 1977, (concerning the compulsory administrative liquidation of *Banca Privata Italiana* and the shareholders' and creditors' legal claims brought against the Bank of Italy); see also Nigro (1996), 144; Capriglione (1978), 90.

99 See Bodellini, (2020), 24.

100 Communication from the Commission of 30 July 2013 on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ("Banking Communication"), O.J. 2013, C 216/1.

no State aid is granted or by a procedure for the granting of State aid which is subject to the prerequisite of burden-sharing'.[101]

Thus, when powers affecting fundamental rights are exercised outside an insolvency proceeding (for example to prevent it), it is relevant for the authorities to be able to show that the outcomes for shareholders and creditors would have been equally negative also in the event of liquidation. But a similar approach could be adopted also when these powers are exercised in the context of an insolvency proceeding other than an atomistic liquidation. In this case the benchmark to consider would be the outcomes arising from an atomistic liquidation, in which typically the assets are sold at liquidation prices. Accordingly, in order for the application of the transfer of assets and liabilities tool to take place in an insolvency proceeding, the authorities should be able to demonstrate that this strategy is not more detrimental for shareholders and creditors than the atomistic liquidation of the bank's assets. A further safeguard to avoid litigation arising from the application of such a tool could be to introduce a provision requesting authorities to run a counterfactual scenario. This could be a preventive assessment of whether the transfer of assets and liabilities tool would have more negative effects for shareholders and creditors than a piecemeal liquidation. The decision on the strategy to adopt then should be based on the outcomes of such an assessment.[102]

3.3 The other resolution-like tools

Liquidators can exercise every possible power that is needed in order to efficiently liquidate the FOLF bank's assets. The second paragraph of article 90 of the Consolidated Banking Act lists some of the powers that can be exercised for liquidation purposes. In this list, however, a bridge bank-like tool and an asset separation-like tool are not explicitly mentioned.[103] This, nevertheless, does not necessarily mean that their use cannot take place in the context of a compulsory administrative liquidation.[104]

In the case of the *Banco Ambrosiano* crisis in the eighties, for example, a pool of market participants, which were exposed towards the troubled bank, set up a new entity aimed at buying some parts of the bank in crisis, thereby adopting a tool which looks similar – at least from the substantial perspective – to the bridge bank tool currently regulated by the BRRD.[105]

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101 Court of Justice of the European Union, *Kotnik and Others v. Drzavni zbor Republike Slovenije*, Case C-526/14, judgement of 19 July 2016.

102 See Bodellini, (2020), 25.

103 According to article 2, paragraph 1, number 60 of BRRD, the bridge institution tool is 'the mechanism for transferring shares or other instruments of ownership issued by an institution under resolution or assets, rights or liabilities of an institution under resolution to a bridge institution …'; according to article 2, paragraph 1, number 55 of BRRD, the asset separation tool is 'the mechanism for effecting a transfer by a resolution authority of assets, rights or liabilities of an institution under resolution to an asset management vehicle …'.

104 Bodellini, (2020), 25.

105 See Rulli (2017), 108.

This interpretation finds further support in the fact that a tool similar to the asset separation tool, which is not explicitly regulated by the Italian law in the context of compulsory administrative liquidation either, has been employed in some cases in the past, such as in the compulsory administrative liquidation of *Veneto Banca* and *Banca Popolare di Vicenza*. The legal basis for the application of such a tool was a law decree then converted into a law.[106] The liquidation strategy provided, *inter alia*, for the transfer of non-performing loans to a State-owned management company (*Società di Gestione degli Attivi*), empowered to manage these assets with a long-term view, supposedly more efficient for the recovery of the transferred assets. It is worth noting that *Società di Gestione degli Attivi* has been established back in 1997 to handle the crisis of the *Banco di Napoli*.[107] In that case, *Banco di Napoli* was not submitted to compulsory administrative liquidation but rescued with public money,[108] instead, through a special law,[109] and its bad loans were transferred to the State-owned *Società di Gestione degli Attivi*.[110]

These cases should provide some valid elements to argue that, if necessary, even a bridge bank-like tool could be adopted. Yet, it might be appropriate to ground its use on some solid legal foundations, such as a specific law.[111]

4. The Italian Deposit Guarantee Schemes

Special administration and compulsory administrative liquidation have been over time effective crisis management procedures also due to the willingness of DGSs to play a leading role in supporting the troubled banks. In fact, many bank crises were solved thanks to the decision of the DGSs to either help restructure the bank under special administration or finance the acquisition of (some parts of) the bank placed under liquidation, by taking on the negative mismatch between assets and liabilities to be transferred to the purchasing institution.

The decision to do so was made by the members of the DGSs, namely the banks participating to the schemes and the main reason for accepting to take on financial burdens in so doing was grounded in the awareness that otherwise the whole system would have been negatively affected both in reputational and economic terms.

Nonetheless, the DGSs always performed a cost-benefit analysis of their interventions using as their benchmark the hypothetical cost that they would have had to pay to reimburse covered depositors had their deposits not been transferred to another bank. If such

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106 Law no. 121 of 2017, converting Law Decree no. 99 of 2017, *recante disposizioni urgenti per la liquidazione coatta amministrativa di Banca Popolare di Vicenza S.p.A. e di Veneto Banca S.p.A.*

107 Giglio – Setola (2002), 230.

108 See Belviso (1998), 1.

109 Law no. 588 of 19 November 1996. Interestingly, the European Commission did not find any breach of the State aid prohibition rules; see Giglio – Setola (2002), 230; Sepe (2017), 22.

110 Salanitro, (1997), 409; Giglio – Setola (2002), 230.

111 See Bodellini, (2020), 26.

assessment showed that the cost of depositors pay-out would have been higher than 1) the amount to employ to facilitate the restructuring, or, 2) the funds to give to the purchasing bank in order to acquire the failing one's assets and liabilities, then the intervention was to take place.[112]

The Italian banking system has in place two DGSs, which were originally established on a voluntary basis as private law consortia between the seventies and the eighties. The first one is the mutual banks' DGS, which was set up in 1978 by the Italian mutual banks and is meant to intervene with regard to banks belonging to that category, whereas the second one is the main Italian DGS[113] which was set up in 1986 by the Italian banks, along with some foreign banks' branches, other than mutual banks.[114]

The structure of both DGSs was changed in 1997 to reflect the newly introduced duty for each bank to become member of a scheme.[115] At the time of their establishment, the underlying idea was to create two reactive system-wide tools, funded directly by banks, to be employed in the event of crises, on the grounds that it is in the interest of the whole banking system to prevent or, at least, mitigate the negative effects of crises. And their main function has been exactly to play a relevant role in resolving bank crises deploying resources provided by the other banks.[116]

4.1 The EU legal framework on DGSs

With the first European Directive on DGSs,[117] the most relevant legal innovation has been to make obligatory for every bank to be member to a scheme, this being a required condition for exercising the banking activity. The rationale for the introduction of specific binding rules on DGSs membership was closely connected to the important function that the latter are meant to perform in ensuring confidence in the system.[118]

Even the legislation on DGSs has been significantly amended in recent times. After the Directive adopted in 2009,[119] that harmonised at EU level the coverage limit, setting it at EUR 100,000 per depositor, in 2014 a new Directive,[120] so-called Deposit Guarantee Schemes Directive (hereafter DGSD), has been adopted in the context of the new European regulatory and supervisory architecture.[121]

According to the DGSD, DGSs have now four functions to play; two of them are mandatory whereas the remaining two are just optional as Member States are free

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112 The cost of depositors pay-out was calculated also in light of the amount that the DGS expected to recover from the insolvency proceeding after subrogating to the depositors' rights.

113 The so-called *Fondo Interbancario di Tutela dei Depositi*.

114 Boccuzzi (2011), 220.

115 See Baldi – Bredice – Di Salvo (2015), 142; see Boccuzzi (2011), 220.

116 See Bodellini, (2020), 27.

117 Directive 94/19/EC.

118 See Ingves (2017), 1.

119 Directive 2009/14/EC.

120 Directive 2014/49/EU.

121 See Bodellini, (2020), 27.

to decide whether they want their DGSs to also perform the latter in addition to the mandatory functions.[122]

Such functions are: 1) pay-box function in liquidation, which is mandatory, 2) resolution financing, which is mandatory as well, 3) implementation of alternative measures aimed at preventing a bank's failure, which is optional, and, 4) provision of financial means in the context of liquidation aimed at preserving access of depositors to covered deposits, which is optional as well.[123]

The pay-box function is exercised in the context of a piecemeal liquidation and aims at protecting the covered depositors of a failing bank.[124] It is considered the primary function of a DGS.[125] After paying-out the covered deposits, the DGS is then entitled to subrogate to the covered depositors' rights in the assets' liquidation process, benefiting now from the same preference given to covered depositors by article 108 of the BRRD.[126] The granting to DGSs of the same preference given to covered depositors in the liquidation ranking makes more likely for the schemes to recover a relevant part (or possibly all) of the amount used to reimburse covered depositors. But this, in turn, could affect the DGS's ability to perform the other functions.[127]

Additionally, the DGS has to finance the resolution of a FOLF bank according to a number of conditions set forth by article 109 of BRRD, thereby playing the function of loss absorber to the benefit of covered depositors.[128] Particularly, a DGS will contribute to resolution financing to the extent that it would have suffered a loss by reimbursing depositors should such bank have been submitted to ordinary insolvency proceedings. Accordingly, should the bail-in tool be applied, the DGS would be requested to provide the bank under resolution with resources equivalent to the amount by which covered deposits would have been written down in the hypothetical event of the application of the bail-in tool to them (so-called virtual bail-in); should the other resolution tools be applied, similarly, the DGS would be required to contribute an amount equivalent to the losses that such covered depositors would have suffered. Still the exercise of this function

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122 Article 11 of DGSD.

123 The paper will refer to the measures under article 11 paragraphs 3 and 6 of DGSD as optional measure(s), optional intervention(s) or optional function(s) interchangeably.

124 See Bodellini, (2020), 28.

125 According to article 11 paragraph 1 of DGSD the financial means of a DGS shall be primarily used in order to repay depositors pursuant to this Directive.

126 According to article 108 paragraph 1 of BRRD, 'Member States shall ensure that in their national laws governing normal insolvency proceedings: (a) the following have the same priority ranking which is higher than the ranking provided for the claims of ordinary unsecured creditors: (i) that part of eligible deposits from natural persons and micro, small and medium-sized enterprises which exceeds the coverage level provided for in Article 6 of Directive 2014/49/EU; (ii) deposits that would be eligible deposits from natural persons and micro, small and medium-sized enterprises were they not made through branches located outside the Union of institutions established within the Union; (b) the following have the same priority ranking which is higher than the ranking provided for under point (a): (i) covered deposits; (ii) deposit guarantee schemes subrogating to the rights and obligations of covered depositors in insolvency'.

127 See Bodellini, (2020), 28.

128 According to article 11 paragraph 2 of DGSD the financial means of a DGS shall be used in order to finance the resolution of credit institutions in accordance with Article 109 of BRRD. The resolution authority shall determine, after consulting the DGS, the amount by which the DGS is liable.

is now made more unlikely by the introduction of depositor preference within article 108 of BRRD, determining that the DGS should make a contribution only when all the other liabilities ranked below covered deposits are not enough to absorb the incurred losses.[129]

Beside the two mandatory functions, Member States can decide to allow their domestic DGSs to intervene at an early stage to prevent a bank's crisis by providing different forms of finance.[130] These are the so-called 'alternative measures'. Nevertheless, such measures need to meet some criteria in order to be deployed,[131] particularly the 'least cost principle', under which they cannot end up being more expensive for the DGS than the amount it would have paid to reimburse depositors had the bank undergone a piecemeal liquidation.[132]

The last optional function that a DGS can perform is the provision of financial support in the context of a liquidation aimed at preserving access of depositors to their covered deposits.[133] Member States might decide that their domestic DGSs can also intervene in the context of a bank's liquidation by providing different forms of finance, mainly to allow depositors to keep on accessing their deposits.[134] Nevertheless, these interventions need to comply with the 'least cost principle', and therefore they cannot end up being more expensive for the DGS than the amount it would have paid to reimburse depositors had the bank been submitted to a piecemeal liquidation. [135]

A further layer of complexity arises from the application of some State aid rules to the optional measures that DGSs can be empowered to perform according to the domestic rules of the Member States in which they are established. Accordingly, the European

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129 Gleeson – Guynn (2016), *passim*.

130 These measures are contemplated also by principle 15 of the IADI Principles for Effective Deposit Insurance Systems, stating that 'The deposit insurer should be part of a framework within the financial system safety net that provides for the early detection and timely intervention and resolution of troubled banks'; see IADI (2010), 21.

131 According to article 11 paragraph 3 of DGSD, the following conditions need to be met: (a) the resolution authority has not taken any resolution action under Article 32 of BRRD; (b) the DGS has appropriate systems and procedures in place for selecting and implementing alternative measures and monitoring affiliated risks; (c) the costs of the measures do not exceed the costs of fulfilling the statutory or contractual mandate of the DGS; (d) the use of alternative measures by the DGS is linked to conditions imposed on the credit institution that is being supported, involving at least more stringent risk monitoring and greater verification rights for the DGS; (e) the use of alternative measures by the DGS is linked to commitments by the credit institution being supported with a view to securing access to covered deposits; (f) the ability of the affiliated credit institutions to pay the extraordinary contributions in accordance with paragraph 5 of this Article is confirmed in the assessment of the competent authority.

132 See Boccuzzi – De Lisa (2016), *passim*.

133 According to article 11 paragraph 6 of DGSD, Member States may decide that the available financial means may also be used to finance measures to preserve the access of depositors to covered deposits, including transfer of assets and liabilities and deposit book transfer, in the context of national insolvency proceedings, provided that the costs borne by the DGS do not exceed the net amount of compensating covered depositors at the credit institution concerned.

134 These measures are contemplated also by principle 16 of the IADI Principles for Effective Deposit Insurance Systems, stating that '…In addition, the deposit insurer or other relevant financial system safety-net participant should have the authority to establish a flexible mechanism to help preserve critical banking functions by facilitating the acquisition by an appropriate body of the assets and the assumption of the liabilities of a failed bank (*e.g.* providing depositors with continuous access to their funds and maintaining clearing and settlement activities)'; see IADI (2010), 22.

135 See Gortsos (2019), 7.

Commission Banking Communication 2013 provides that while the performance of the pay-box function by a DGS does not qualify as provision of State aid measures, on the contrary, when a DGS provides funds in the context of a bank's liquidation or at an early stage to prevent the bank's failure, for the intervention not to qualify as State aid, regardless of the private nature of the resources, it needs that such resources are not under the State's control and that the decision to intervene is not imputable to the State.[136] If this is not the case, the intervention will be considered as State aid and will need to be authorised by the European Commission, on the assumption that burden sharing measures apply.[137]

Such provision is particularly critical since a bank receiving finance, which is qualified as extraordinary public financial support, would be consequently considered as FOLF under article 32 of BRRD. This in turn would compromise the DGS's attempt to prevent the bank's failure.[138]

4.2 The Italian experience

The two optional measures have been frequently employed by several DGSs also in some EU Member States and over time have proven to be effective.[139] Italy has had in place for long time rules allowing the DGSs to perform both optional functions,[140] and interestingly these measures were carried out much more often than the mandatory pay-box function on the grounds of being considered more effective than the latter.[141]

In practice, instead of paying-out the amount of covered deposits in the event of a piecemeal liquidation, the DGSs used: 1) to finance in several ways its member in trouble, typically in the context of a special administration, to prevent the situation from escalating and becoming an irreversible crisis; this has taken place by financing the acquisition of the troubled bank by another bank, by recapitalising it, by providing guarantees, by purchasing shares, by taking on the mismatch between liabilities and assets to be transferred, and, 2) to provide different forms of financial support in the context of a compulsory administrative liquidation with the goal of preserving access of depositors to their covered deposits; this has taken place by financing the acquisition of the troubled bank by another bank, by purchasing shares, by taking on the mismatch

136 European Commission Banking Communication 2013, paragraph 63.

137 See Bodellini, (2020), 30.

138 Brescia Morra (2019a), 365.

139 See European Forum of Deposit Insurers (2019), 4, stating that according to a survey recently conducted on its members '14 DGSs out of 37 (8 private and 6 public) provide for 'preventative measures' ex Art. 11.3 DGSD in their Statute … 17 DGSs (6 private and 11 public) provide for 'possible interventions in liquidation' ex Art. 11.6 DGSD in their Statute'; see also European Banking Authority (2020), 76, stating that according to a similar survey, 'Fourteen respondents from fourteen Member States reported that the use of measures under Article 11(3) was allowed in their jurisdiction'.

140 See Boccuzzi (2011), 234.

141 Similarly see Carstens (2018), 3, arguing that the deposit insurer may require a wider range of instruments, beyond conventional liquidation actions which are 'needed to protect deposits as well as to manage and sell the bank's assets in a way that minimises the cost to the deposit insurance funds and maximises value for creditors'.

between liabilities and assets to be transferred. In so doing, the DGSs informed their decisions on a preventive assessment of both the potential success of the intervention and its cost *vis-à-vis* the amount they should have paid to covered depositors should the bank have been submitted to a piecemeal liquidation ('least cost principle').[142]

From 1988 to 2018, the main Italian DGS intervened 12 times; in 8 cases, the intervention was conducted to allow the application of the transfer of assets and liabilities tool in the context of a liquidation, thereby avoiding an inefficient piecemeal liquidation; in 2 cases, the intervention supported banks under special administration and only in 2 cases, the DGS simply reimbursed covered depositors in the context of a piecemeal liquidation.[143] In the last 3 years the Italian DGS intervened two more times by subscribing to very large increases of capital to the benefit of *Cassa di Risparmio di Genova* and *Banca Popolare di Bari,* both placed under special administration.[144] In line with such approach, between 1997 and 2015 the mutual bank's DGS (*Fondo di Garanzia dei Depositanti del Credito Cooperativo*) intervened 80 times and only in one case it reimbursed covered depositors.[145]

Although the outcomes resulting from the adoption of such optional measures have been over time rather satisfactory, in 2015 the European Commission took a different view, as compared to its previous position, and changed its approach in relation to the application of the State aid rules to the DGSs optional interventions.[146]

4.2.1 The Tercas case and the new position taken by the European Commission

Banca Tercas was a small-sized Italian bank mostly operating in a limited area in the southern part of the country, which had been placed by the Bank of Italy under special

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142 See Bodellini, (2020), 31.

143 See Fondo Interbancario di Tutela dei Depositi, (2020).

144 See Ilsole24ore, (2020), *passim*; Reuters (2020), *passim*.

145 Baldi – Bredice – Di Salvo (2015), 144-145.

146 In the *Sicilcassa* case indeed the European Commission took the opposite approach. *Sicilcassa* was first submitted to special administration and then, due to a further deterioration, was placed into compulsory administrative liquidation. In this context, a relevant part of its assets together with almost all of its liabilities and the business organisation (staff, contracts, branches) were transferred to *Banco di Sicilia*. Bad loans, by contrast, were left within the entity under liquidation. The negative gap between assets and liabilities transferred to *Banco di Sicilia* was compensated by: 1) the means provided by the DGS (amounting to approximately EUR 500 million); 2) a capped collateralised loan with favourable interest rate provided by the Bank of Italy pursuant to Decree of Minister of Finance of 27 September 1974. The European Commission, nonetheless, opened the procedure relating to State aid provision, focusing, among other aspects, on: 1) the intervention of the DGS to cover losses; 2) the granting by the Bank of Italy of a capped collateralised loan with a favourable interest rate. Interestingly, the European Commission determined that the contribution of the DGS to cover the mismatch between assets and liabilities transferred to *Banco di Sicilia* did not qualify as State aid because the scheme was composed of a majority of private banks. Moreover, the autonomy and independence of the DGS was recognised by excluding the existence of any public control over the operation. Therefore, the attendance of the DGS's meetings by a Bank of Italy's representative, with no voting right, was deemed irrelevant. With regard to the capped collateralised loan with a favourable interest rate granted by the Bank of Italy, the European Commission stated that even though it qualified as a State aid, it was compatible with the Treaty due to the restructuring measures adopted by the bank and the conditions posed by the Commission; see European Commission, (2000), *passim*; on the *Sicilcassa* case see also Vignini (2019), 18.

administration in 2012.[147] In October 2013, in the search for a solution to the crisis, *Banca Popolare di Bari* showed its willingness to recapitalize *Tercas*. The condition required by *Banca Popolari di Bari* to do so was the provision of a support by the Italian DGS, amounting to EUR 280 million, aimed at absorbing losses, covering the negative equity and buying the impaired assets. Although the board of the DGS voted in favour of the required intervention and the Bank of Italy authorized it, the former decided to stop the transaction due to a disagreement with *Banca Popolare di Bari* relating to the value of the impaired assets. Such disagreement was however settled and after receiving a second authorization from the Bank of Italy on 7 July 2014, the DGS provided the support. On 27 July 2014, *Banca Popolare di Bari* subscribed to an increase of capital amounting to EUR 230 million and on 1 October 2014 the special administration ended.

On 2 March 2015 the European Commission, however, informed Italy of the opening of the infringement procedure according to Article 108 (2) TFEU.[148] The Commission took the view that the measures implemented by the Italian DGS qualified as State aid provisions pursuant to article 107 TFEU and article 63 of the European Commission Banking Communication 2013. This interpretation was eventually confirmed on 23 December 2015 on the basis of: 1) the alleged public nature of the resources owned by the scheme; 2) the public mandate exercised by the Italian DGS in the operation and 3) the role played by the Bank of Italy in the approval of the intervention.[149]

In the view of the Commission, despite the private nature of the contributions to the DGS, 'resources that remain under public control and are therefore available to the public authorities constitute State resources'.[150] Accordingly, the Commission stated that 'imputability to the State of an aid measure taken by a *prima facie* independent body which does not itself form part of the State can be inferred from a set of indicators arising from the circumstances of the case'.[151] The European Commission was of the opinion that the Italian DGS was exercising the public mandate of protecting depositors, not only in the event of pay-out in the context of liquidation, but also through the power to engage 'in other types and forms of intervention', as provided by the Italian legislation and under direction of the Bank of Italy. The control of Bank of Italy over the DGS was inferred by a number of powers that the former is meant to exercise, such as the authorization of the DGS's interventions and the approval of its Statute. This interpretation was further reinforced by the Bank of Italy's participation to the DGS's meetings through one of its officials as an observer.[152] Additionally, the functions performed by the special administrator, appointed by the Bank of Italy, were seen as an indicator of public control.[153] Also, moving from the mandatory participation in the DGS for every Italian non-mutual bank and the control exercised by

147 See Banca d'Italia, (2012b).
148 European Commission, (2015a), *passim*.
149 *Id*., *passim*.
150 *Id*., paragraph 113.
151 *Id*., paragraph 116.
152 *Id*., paragraphs 129-131.
153 See Vignini (2019), 17.

Bank of Italy over the scheme, the Commission came to the conclusion that the latter has a public mandate such that its actions are 'subject to public policy objectives that are specific, fixed and defined by public authorities and controlled by them, notably the public policy objectives of protecting depositors'[154] and preserving the stability of the financial system.[155] In light of such considerations, the intervention was qualified as the provision of an unlawful State aid measure primarily because the rescue strategy did not include the application of burden sharing measures.[156]

As a consequence, Italy was requested to recover the illegitimately granted aid.

4.2.2 The effects arising from the new Commission's position

The new stance adopted by the European Commission with regard to the qualification of DGS's interventions had a relevant impact on the Italian banking system which at that time was facing a number of crises. Between 2014 and 2015 there were 4 small-sized banks in a serious situation of distress that had been placed under special administration, namely *Cassa di Risparmio di Ferrara*, *Banca delle Marche*, *Banca Popolare dell'Etruria* and *Cassa di Risparmio di Chieti*.[157] The original plan was to set up a DGS's intervention to efficiently handle their crisis in line with the consolidated strategy, but the newly established interpretation of the European Commission did no longer permit to implement such measures. As a consequence, all of them were resolved by the Bank of Italy at the end of 2015 based on the intervention of the Italian resolution fund.[158]

Differently, in 2015 the Mutual Banks' DGS, facing the crisis of one of its members, namely *Banca di Romagna Cooperativa*, put in place an intervention that the Commission qualified as compliant with the State aid framework. Particularly, *Banca di Romagna Cooperativa* was placed under compulsory administrative liquidation and the DGS supported the transfer of its assets and liabilities to *Banca Sviluppo,* after that both shareholders and subordinated creditors were made bear the previous losses.[159]

Still, after the decision to oblige Italy to recover the aid granted in the *Tercas* case, a solution compliant with the new view of the Commission had to be found. The Italian DGS, then, decided to set up a voluntary scheme to be (voluntarily) funded by the Italian banks.[160] The voluntary scheme replicated the same intervention that the DGS was meant to perform,

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154 European Commission, (2015a), paragraph 140.

155 *Id*. paragraph 141.

156 The other two reasons were that: 1) Italy did not present a restructuring plan, so the Commission was not able to evaluate if the aided entity could return to long-term viability, and 2) no measures were implemented that would have sufficiently limited the distortion of competition created by the aid.

157 See Bodellini (2018), 380.

158 See Bodellini (2017), 151.

159 European Commission (2015b), *passim*.

160 The Voluntary Scheme was established with a separate management, but relies on the DGS's administrative bodies. The Scheme is financed by a group of banks representing 84.4% of the DGS's member banks and 96.1% of the DGS's covered deposits (31 December 2017).

thereby paving the way for the recapitalisation carried out by *Banca Popolare di Bari*, that, in so doing, acquired the control of *Tercas*.

Since its creation, the Voluntary Scheme has intervened also in favour of *Cassa di Risparmio di Cesena*, *Cassa di Risparmio di Rimini* and *Cassa di Risparmio di San Miniato* (cumulatively providing EUR 784 million) and *Cassa di Risparmio di Genova* (providing EUR 318 million).[161]

4.2.3 The judgement of General Court of the European Union

Italy, *Banca Popolare di Bari* and the Italian DGS, with the intervention of Bank of Italy, nevertheless, challenged the European Commission's decision in the *Tercas* case, bringing a legal claim before the General Court of the European Union for its annulment. The claim was based on the alleged infringement of Article 107 TFEU for the erroneous reconstruction of the facts concerning: 1) the public nature of the resources; 2) the imputability to the State of the contested measures; 3) the granting of a selective advantage and 4) the assessment of the compatibility of the alleged State aid with the internal market.[162]

On 19 March 2019, the General Court of the European Union issued the judgment in Joined Cases T-98/16, T-196/16 and T-198/16 and annulled the Commission's decision.[163]

With regard to the nature of the resources employed, the Court stated that, although it is irrelevant that the aid is granted by public or private bodies established by the State with the mandate to do so, still the State's control over an undertaking's activities cannot be automatically presumed. By contrast, when the aid is granted by a private body with autonomous powers over the use of its resources, like in the case of the Italian DGS, the Commission faces an even greater burden to prove the existence of public control over the use of such resources and to show that the entity's activities are imputable to the State. In these cases, the Commission must adequately prove that the State had the power to exercise a dominant influence in granting the aid, but also that the public authority had specifically exercised that power in the adoption of the contested measure.[164]

Accordingly, the Court examined whether the Commission met such more pervasive burden of proof, focusing on: a) the scope of the public mandate entrusted to the Italian DGS; b) the autonomy of the DGS in deciding on the measures to implement and c) the financing of the measure using State resources.[165]

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161 Information on the Voluntary Intervention Scheme is available at https://www.fitd.it/Schema_volontario/Lo_schema_volontario_di_intervento.

162 Vignini (2019), 21.

163 General Court of the European Union, Italian Republic and Others *v* European Commission, Joined Cases T-98/16, T-196/16 and T-198/16, Luxembourg, 19 March 2019.

164 *Id*. paragraphs 69-70.

165 *Id*. paragraph 90.

On the first aspect, the Court took the view that the DGS was not carrying out any public mandate, since such alternative measures, which are never mandatory, were adopted by the DGS only to avoid the financial consequences of reimbursing covered depositors in case of a piecemeal liquidation.[166] This finds further evidence in the fact that the DGS intervened on the premise that its measures complied with the least cost principle.[167]

On the second element, the Court highlighted that the DGS is a private consortium of banks, which acts on behalf and in the interest of its members and its bodies are composed of the banks' representatives who are appointed by the DGS's members themselves.[168] By contrast, the Court deemed that the Bank of Italy authorization of the financial support does not constitute a suitable indicator to prove the imputability of the measure to the State.[169] Similarly, the Court rejected the arguments that the Bank of Italy could exercise control over the DGS activities just by attending its meetings through one of its officials as an observer with no voting rights.[170]

With regard to the third aspect, the Court came to the conclusion that DGS's intervention was the result of the free willingness to do so of its members, autonomously deciding: 1) to entrust the DGS with the power to carry out those alternative measures; 2) to finance the assistance granted to *Tercas*, pursuing their own private interest of avoiding the more expensive reimbursement of covered depositors to be performed in the event of a piecemeal liquidation.[171]

In this regard, the Commission failed to sufficiently prove that the resources were under the control and at disposal of the Italian public authorities.[172] All these elements and considerations drove the Court to annul the Commission's decision.[173] Nonetheless, the European Commission appealed against the judgment of the General Court before the Court of Justice.[174] On 2nd March 2021, the Court of Justice of the European Union dismissed the appeal brought by the Commission against the judgment of the General Court, stating that the General Court rightly found that those measures do not constitute State aid because they are not imputable to the Italian State.

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166 *Id*. paragraph 97.
167 *Id*. paragraph 104
168 *Id*. paragraph 113.
169 *Id*. paragraph 120.
170 *Id*. paragraph 121.
171 *Id*. paragraph 159.
172 *Id*. paragraph 161.
173 *Id*. paragraph 162.
174 http://curia.europa.eu/juris/document/document.jsf?text=&docid=216205&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=8873673; the appeal states: 'The Commission considers that the judgment under appeal is based on incorrect legal considerations and distortion of the facts, which irremediably invalidate its findings and the operative part of the judgment'.

5. The legal constraints to DGSs optional interventions in bank crises: a reform proposal

Although the General Court (and then the Court of Justice) overruled the European Commission's decision in the *Tercas* case, there are still some constraints affecting the DGSs ability to implement optional measures. A combination of a number of rules with a different rationale can, indeed, make the DGS optional measures very difficult to be implemented.[175]

These provisions are: 1) State aid rules, particularly the European Commission Banking Communication 2013, paragraph 63, and, 2) depositor preference pursuant to article 108 of BRRD, which applies also to DGSs when subrogating to depositors' rights in the insolvency proceedings, combined with a narrow reading of the 'least cost principle'.

The first issue is that, under the Banking Communication 2013, when a DGS provides funds in the context of a bank's liquidation or at an early stage to prevent the bank's failure, the intervention does not qualify as State aid, regardless of the private nature of the resources, only if such resources are not under the State's control and the decision to intervene is not imputable to the State. When this is not the case, the intervention is to be considered as State aid and therefore needs to be authorised by the Commission, on the assumption that burden sharing measures are implemented. This, in turn, creates further issues since the DGS does not have any power to apply burden sharing measures.[176]

This provision is critical also because a bank receiving financial means, qualified as extraordinary public financial support, would be consequently considered as FOLF under article 32 of BRRD.[177] Clearly, this could compromise the DGS's attempt to prevent the bank's failure.[178] In this regard the European Banking Authority has stated that 'there may be merit in clarifying in the EU framework that the use of DGS funds for failure prevention would not in itself trigger the determination that the institution was failing or likely to fail'.[179]

The *Tercas* case, from this viewpoint, is particularly interesting since it clearly shows the European Commission's interpretation of its Banking Communication 2013 rules. The latter indeed decided that a private law consortium privately funded and managed, such as the Italian DGS, granted State aid measures to *Tercas* mostly because its intervention

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175 See Bodellini, (2020), 37.

176 See European Forum of Deposit Insurers (2019), 5, arguing that this 'reflects an asymmetry with the resolution authorities powers'; therefore 'considering that Article 11.3 already states that "the DGS shall consult the resolution authority and the competent authority on the measures and the conditions imposed on the credit institution" it might be appropriate to provide for an explicit pro-active role in this regard in favour of the DGS when packaging the entire intervention, also in order to clarify the roles and responsibilities of each player involved'.

177 Bodellini (2018), 373.

178 See Bodellini, (2020), 38.

179 See European Banking Authority (2020), 80, also suggesting that 'The wording of Article 11 of the DGSD should be clarified to ensure that measures mentioned in Article 11(3) are referred to as 'preventive measures' and those in Article 11(6) are referred to as 'alternative measures', because currently the measure under Article 11(3) is referred to as an 'alternative measure', which could create confusion about the purpose of such measures'.

was considered to have been influenced and directed by the public authorities.[180] This interpretation has been criticised and eventually the Commission's decision has been overruled by the General Court and then by the Court of Justice.[181] Although the decision of the General Court is relevant, in order to clarify the legal regime in place and avoid uncertainties a review of the Banking Communication 2013 rules on DGS's optional measures would be necessary.[182]

The need for a review of the Banking Communication is supported by a number of considerations. From a systematic perspective, if the main goal of the new system is, according to the Financial Stability Board Key Attributes of Effective Resolution Regimes for Financial Institutions, to handle a bank's crisis without using public money while avoiding the creation of financial instability,[183] which is in itself a very difficult objective to achieve,[184] it is conceptually wrong to make the use of private resources, like the ones of the Italian DGS, more complicated.[185] And this is true also when a public authority, such as the banking supervisor, finds it appropriate to exercise a form of moral suasion on the banking industry participants to coordinate and implement an effective solution in the interest of the system as a whole. Such position rests on the consideration that the use of private resources by definition cannot be qualified as State aid provision.[186] Even more so, in a context where resources are by nature finite and where public intervention is discouraged, then any possible privately funded solution should be facilitated.[187]

The revision of the Banking Communication 2013 rules should ensure that the optional functions implemented by those DGSs that raise private resources and comply with the least cost principle do not qualify as State aid measures. In this way, it would be also possible to resolve the friction between article 11 of DGSD, the Banking Communication 2013 rules and article 32 of BRRD, stating that the provision of extraordinary public financial support would make the bank FOLF. Indeed, if such measures will no longer qualify as a State aid provision, their implementation will not cause the recipient bank to be considered FOLF and therefore the DGSs intervention, as regulated under article 11 of DGSD, could take place.

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180 See Bodellini, (2020), 38.

181 Maccarone (2019), *passim*.

182 Accordingly see European Banking Authority (2020), 81, stating that 'Subject to the outcome of the Commission's appeal in the *Tercas* case, the EBA invites the Commission to consider if there is a need to amend the Banking Communication and the potentially different consequences for DGSs depending on their legal status and/or governance structure'.

183 Financial Stability Board (2014), 1, stating that the implementation of the Key Attributes 'should allow authorities to resolve financial institutions in an orderly manner without taxpayer exposure to loss from solvency support, while maintaining continuity of their vital economic functions'.

184 See Biljanovska (2016), 105-106, arguing that "market discipline and financial stability cannot be achieved simultaneously".

185 See Bodellini, (2020), 38.

186 Similarly see International Monetary Fund (2018), 28, arguing that 'Deposit and asset transfers funded by DISs could likewise be granted a presumption of compliance when provided on a "least cost" basis according to agreed open procedures and subject to European-level oversight, thus minimizing competition concerns'.

187 See Bodellini, (2020), 39.

The second issue arises from the introduction of the depositor preference by the BRRD, which also applies to DGSs subrogating to depositors' rights in the insolvency proceedings. This rule coupled with a strict application of the 'least cost principle' can end up making every DGS optional intervention very difficult, if not impossible at all. In fact these interventions are allowed only to the extent that the DGS does not end up spending more money than the amount it would have had to pay in order to reimburse covered depositors in the context of a piecemeal liquidation ('least cost principle').[188] The critical aspect is that due to the depositor preference, which also benefits the DGS, it is unlikely that the DGS will be called to bear losses at all. This would happen only when losses are so relevant that all the other liabilities ranked below deposits are not enough to absorb them.[189]

Although, by only considering the bank crisis in question, the DGS might look better off thanks to the depositor preference rule, as it will recover all (or a relevant part of) the resources provided to reimburse the affected covered depositors, in general terms this is not necessarily the best possible outcome.[190] The latter would indeed occur when the DGS intervention is regarded as the overall cheapest and safest solution, thereby contributing also to taxpayers' protection.[191]

Nevertheless, due to the depositor preference rule, for DGSs it will be almost impossible to provide any form of assistance aimed at preventing the bank's failure as well as to finance measures in the context of liquidation, in contrast with the US framework.[192] As a consequence, typically a piecemeal liquidation is to take place and this will cause the destruction of much more value, negatively affecting both the other unsecured creditors and potentially the banking system as whole.[193] A disorderly liquidation, indeed, can trigger a crisis of confidence, entailing massive shifts of deposits across institutions, and in particularly serious situations even deposit runs. Should the crisis spread to other banks as well then the costs for the DGS of paying out covered depositors could be much higher than foreseen.[194]

Obviously such a solution would be neither beneficial for the system nor in the interest of the DGS itself. Since the interest of the DGS is the interest of its members, which in turn

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188 On this see European Banking Authority (2020), 81, stating that 'There is a need to provide more clarity on how to assess that: the costs of the measures do not exceed the costs of fulfilling the statutory or contractual mandate of the DGS (as per Article 11(3)); the costs borne by the DGS do not exceed the net amount of compensating covered depositors at the credit institution concerned' (as per Article 11(6)). There is also a need for more clarity on what kind of costs should be taken into account in the abovementioned assessments (only direct or also indirect costs – and what costs constitute indirect costs), particularly because the current lack of clarity poses the risk that different authorities will take different approaches to the least cost assessment; such clarifications should be made in a legal product that provides sufficient legal certainty for DGSs'.

189 See Bodellini, (2020), 39.

190 See De Aldisio – Aloia – Bentivegna – Gagliano – Giorgiantonio – Lanfranchi – Maltese (2019), 6, who use an example to demonstrate that even when an optional measure implemented by the DGS ends up being more expensive for it than depositors pay-out, such a strategy is typically more effective from a system-wide perspective.

191 See European Forum of Deposit Insurers (2019), 25.

192 Restoy (2019), 4.

193 See Bodellini, (2020), 40.

194 See De Aldisio – Aloia – Bentivegna – Gagliano – Giorgiantonio – Lanfranchi – Maltese (2019), 9.

are the banks composing the banking system, then the interest of the DGS is the interest of the banking system at large. In other words their interests are aligned. Moving from this premise, the 'least cost principle' should be reconsidered with a view to taking into account the overarching interest of the system and not only the cost paid by the DGS in performing optional measures.[195] Accordingly, the amount to be paid should be confronted against the sum of direct and indirect costs for the banking system – and potentially for the real economy – arising from a piecemeal liquidation.[196] This is to say that disregarding the 'indirect costs' for the system would lead to a partial result unable to indicate the best possible solution to adopt. This reading seems to be supported by the rationale behind the DGSD that clearly provides the possibility for DGSs to intervene with optional measures. It would be incoherent to provide this possibility and then to have in place other rules in different legislative acts substantially hindering the performance of such measures. But even more so, this is the very essence of the Financial Stability Board Key Attributes of Effective Resolution Regimes that mandate to resolve FOLF banks, without using public money and without creating negative systemic effects.[197] Given that the DGSs' resources are those provided by banks, their use aimed at handling crises should be facilitated on the grounds that otherwise there might be the risk that either taxpayers' money will be needed or the whole system, and thereby the public, would be negatively affected.[198] Accordingly, the incentive should be moved from preferring (an often inefficient) piecemeal liquidation (with the DGS paying-out depositors) to enabling more system-wide effective DGSs optional measures. Indeed, as it is, the legal framework makes a strategy, which is often not effective (*i.e.* piecemeal liquidation with DGS's reimbursement of covered depositors), the only practically possible strategy.

The counterargument to this proposal could be that a system-wide interpretation of the least cost principle would be either arbitrary and inaccurate or practically impossible to make. Nevertheless, in this regard it has been stated that even though calculating indirect costs would not be easy, still according to previous experiences such costs can be material and, therefore, a methodology to assess them could be developed.[199] At any rate, if such a different application of the 'least cost principle' aimed at taking into account the overarching interest of the system was to be regarded as practically unfeasible, then a more radical solution could be the abrogation *sic et simpliciter* of the extension to DGSs of the depositor

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195 See Bodellini, (2020), 40.

196 See European Forum of Deposit Insurers (2019), 6, stating that in the context of the measures pursuant article 11 paragraph 6 of DGSD, 'the 'least cost evaluation' is recommended to consider a comprehensive range of elements, including the direct (financial, operational, etc.) and indirect costs (missing return on liquidity, increasing cost of funding, etc.) of pay-out, adequate haircuts on the expected recovery side, and also contagion and reputation risks which may lead to further reimbursements; on the other side, the costs of "interventions in liquidation" for the DGS, entailing refundable or recoverable disbursements and guarantees, are proposed to be calculated to the extent of expected losses estimated at the date of the intervention; in case of shortfall between assets and liabilities to be transferred, clearly also the related cost to be covered by the DGS in favour of the acquiring bank has to be considered'.

197 See Financial Stability Board (2014), 1.

198 See Bodellini, (2020), 41.

199 De Aldisio – Aloia – Bentivegna – Gagliano – Giorgiantonio – Lanfranchi – Maltese (2019), 9, state that 'even if it is more difficult to quantify these costs than it is to quantify direct costs, experience shows that they can indeed be material, as the history of crises is full of contagion episodes. It would not be overly difficult to identify a methodology to estimate these additional costs'.

preference in the exercise of their subrogation rights within the insolvency proceedings.[200] In substantial terms, the outcome would be the same, with the result of allowing DGSs to perform also the optional measures pursuant to article 11 paragraphs 3 and 6 of the DGSD. Since the interests of the system and the interests of DGSs are parallel, the latter should not raise any opposition to such a legislative amendment.[201]

6. The importance of European harmonised special administrative regimes based on the role of DGSs

The study of the Italian framework and experience provides arguments supporting the quest for the adoption of Union-wide harmonised special administrative regimes based on the role of DGSs to handle troubled banks.

In this regard, a number of reform proposals have been advanced. The main are: 1) the expansion of the SRB's powers to allow it to handle the failure of every bank established in the Banking Union regardless of their systemic or not-systemic nature; 2) the creation of a European DGS to be managed by the SRB, that accordingly will be empowered to execute the transfer of covered deposits of failing banks to an acquirer, as well as to apply other resolution-like tools; 3) the adoption of a European bank-specific insolvency regime.[202]

The first two proposed solutions would be more effective and potentially able to remove those inconsistencies currently affecting the design of the Banking Union and hindering the real integration of the European banking sector. Nevertheless, currently there seems to be little political willingness to move towards radical architectural reforms. The unwillingness to create a mutualised European Deposit Insurance Scheme (EDIS), as the third pillar of the Banking Union, is a clear indicator of how difficult it is, from the political perspective, to set up centralised mechanisms, administered at European level, which collect resources from the Member States to be then redistributed across countries depending on the actual needs. Thus, the more limited proposal, here advanced, to create national special administrative regimes dedicated to troubled banks, yet harmonised at European Union level and based on the interventionist role of DGSs could be an effective intermediate step which can, in turn, lead progressively towards the adoption of more comprehensive solutions thereby creating over time a more resilient legal framework. Such special administrative regimes are meant to provide national authorities with resolution-like tools, and this is particularly important to maintain the stability of the system and reduce the destruction of value. With harmonised regimes in place showing their effectiveness, the following step to centralise at Banking Union level

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200 *Id*., 8, arguing that 'to broaden the number of cases in which the DGS may carry out alternative interventions, the super-priority rule could be eliminated for subrogated DGSs (it could still be applied to insured depositors)'.

201 See Bodellini, (2020), 41.

202 See Restoy (2019), 5.

the decision-making process, the administration of common financial resources and the application of national tools, similarly to what happens in the event of public interest resolution, could become easier and politically more acceptable. In other words, such an intermediate step could help gradually complete the Banking Union by building some solid foundations for the creation of an EDIS also empowered (either directly or through the SRB) to carry out optional interventions.[203] Such a proposal is also supported by the fact that many jurisdictions still apply normal corporate insolvency regimes to troubled banks, which are considered to be inappropriate for this purpose.[204]

Yet, if such regimes will be adopted, then the distinction between liquidation and resolution, made by the EU legislation, is to be seen just as an artificial one, since the former should be regarded simply as one of the resolution tools to apply, after the deployment of the others, to the residual parts of the troubled bank. The latter will be often just an (almost) empty entity in which only equity instruments and (mostly subordinated) debt instruments will be left within the liabilities side of the balance sheet.[205] Such an interpretation finds support also in the Financial Stability Board's Key Attributes of Effective Resolution Regimes for Financial Institutions, where liquidation is listed among the resolution powers.[206] As a consequence, every troubled bank would be actually resolved, in one way or another, and after the application of resolution (or resolution-like) tools, the residual (almost empty) entity would be liquidated.[207]

Looking at the Italian experience before the transposition of the BRRD, it can be argued that a resolution-like procedure was typically initiated to handle bank crises, as to say that every FOLF was to be resolved. The main difference with the resolution regime currently in place is that creditors typically were not affected by burden sharing measures, that means that only shareholders suffered losses together with the DGS (in compliance with the least cost principle), the Bank of Italy providing loans with interest rates lower than market rates and, in cases involving systemic banks, the taxpayers due to the public intervention.

Nonetheless, in order for such special administrative regimes to properly work and, thereby for the liquidation to be orderly, as provided by the BRRD, an active and leading role should be played by the DGSs. Accordingly, each Member State should be encouraged (*rectius* requested) to transpose in its domestic system the provisions

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203 See Bodellini, (2020), 42.

204 See Baudino – Gagliano – Rulli – Walters (2018), 6, arguing that about 1/3 of the countries over the world do not have bank-specific provisions in their insolvency legal framework. These countries include also mature economies such as France, Germany, Japan and Spain. Other developed countries, such as UK and Ireland, have modified corporate insolvency regimes which apply to banks.

205 See Bodellini, (2020), 42.

206 Financial Stability Board (2014), 8, stating that 'Resolution authorities should have at their disposal a broad range of resolution powers, which should include powers to do the following: … (xii) Effect the closure and orderly wind-down (liquidation) of the whole or part of a failing firm with timely payout or transfer of insured deposits and prompt (for example, within seven days) access to transaction accounts and to segregated client funds)'.

207 See also International Monetary Fund (2018), 7.

under article 11 paragraphs 3 and 6 of DGSD regulating the DGSs optional measures in order for them to be empowered to implement such measures at the early intervention stage as well as at the liquidation stage. Still, from this perspective a review of the EU legislation concerning State aid measures and depositor preference is needed to permit DGSs to properly and effectively carry out their function through the so-called optional measures.[208]

7. Concluding remarks

The Italian framework for handling bank crises is built on the possibility for the authorities to choose one of the three different administrative procedures that the system has in place, namely, 1) special administration, 2) compulsory administrative liquidation and 3) resolution. The choice will be made by the authorities on a case-by-case basis depending on the circumstances featuring the crisis concerned.

Against this background, the most relevant aspect is that having a special administrative regime dedicated to troubled banks, which provides the authorities with resolution-like tools, is of paramount importance to maintain the stability of the system and reduce the destruction of value.

Looking at the Italian experience before the transposition of the BRRD, this paper argues that a resolution-like procedure was typically initiated to handle bank crises, as to say that every FOLF was to be resolved. Accordingly, the paper advocates the adoption of special administrative regimes dedicated to troubled banks, harmonised at European Union level and based on the interventionist role of DGSs. Such regimes should allow the national authorities of European Union Member States to deploy resolution-like tools, with a view to keeping the stability of the system and reducing the destruction of value.

Nonetheless, in order for such special administrative regimes to properly work and, thereby for the liquidation to be orderly, as provided by the BRRD, an active and leading role should be played by the DGSs. From this perspective a review of the legislation is needed to allow them to properly perform their function through the so-called optional measures. And in this regard the paper advances a reform proposal that could help gradually complete the Banking Union.

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208 See Bodellini, (2020), 43.

References

Andenas – Chiu (2013), Financial Stability and Legal Integration in Financial Regulation, European Law Review, 38, 2013

Arner (2007), Financial Stability, Economic Growth, and the Role of Law (Cambridge University Press, Cambridge), 2007

Baldi – Bredice – Di Salvo (2015), Bank-Crisis Management Practises in Italy (1978-2015). Perspectives on the Italian Cooperative Credit Network. The Journal of European Economic History, 2015, 2

Banca d'Italia (2012a), *Provvedimenti rilevanti di carattere particolare delle autorità creditizie. Sezione XI Provvedimenti straordinari. Banca Network Investimenti S.p.A. Bollettino di Vigilanza n. 7, luglio 2012*, available at www.bancaditalia.it

Banca d'Italia (2012b), Banca Tercas – Cassa di Risparmio della Provincia di Teramo. Nomina degli organi dell'amministrazione straordinaria, published in the Italian Official Gazzette – Serie Generale n° 138, 15 June 2012, available at www.bancaditalia.it

Banca d'Italia (2017a), *La Crisi di Veneto Banca S.p.A. e Banca Popolare di Vicenza S.p.A.: Domande e risposte*, available at https://www.bancaditalia.it/media/notizie/2017/crisi-banche-venete/20170811_QA_venete.pdf

Banca d'Italia (2017b), *Informazioni sulla Soluzione della Crisi di Veneto Banca S.p.A. e Banca Popolare di Vicenza S.p.A.*, *Memoria per la VI Commissione Finanze della Camera dei Deputati, Luglio 2017*, available at https://www.bancaditalia.it/media/notizie/2017/Nota-Venetobanca-e-BPV.pdf

Bank of England (2018), The Bank of England's approach to setting a minimum requirement for own funds and eligible liabilities (MREL), Statement of Policy, 2018

Baudino – Gagliano – Rulli – Walters (2018), Why do we need bank-specific insolvency regimes? A review of country practices, FSI insights on policy implementation, no. 10 October 2018

Belviso (1972), Il trasferimento dell'azienda bancaria nella liquidazione coatta amministrativa. Banca Borsa Titoli di Credito, 1972, I

Belviso (1979), La liquidazione coatta nel quadro di una riforma delle procedure concorsuali. Giurisprudenza Commerciale, 1979, I

Belviso (1998), La liquidazione coatta amministrativa e il caso Banco di Napoli. Banca Borsa Titoli di Credito, 1998, I

Biljanovska (2016), Aligning Market Discipline and Financial Stability: a More Gradual Shift from Contingent Convertible Capital to Bail-in Measures. European Business Organisation Law Review, 2016, 17

Boccuzzi (2011), Towards a new framework for banking crisis management. The international debate and the Italian model. Quaderni di Ricerca Giuridica della Consulenza Legale della Banca d'Italia, 2011

Boccuzzi – De Lisa (2016), The Changing Face of Deposit Insurance in Europe: from the DGSD to the EDIS Proposal, in Bracchi – Filotto – Masciandaro, (Eds.) The Italian banks: which will be the "new normal"? Rapporto sul Sistema Finanziario, Roma 2016

Bodellini (2017), Greek and Italian 'lessons' on bank restructuring: is precautionary recapitalization the way forward?. Cambridge Yearbook of European Legal Studies, 2017, 19

Bodellini (2018), To Bail-In, or to Bail-Out, that is the Question. European Business Organization Law Review, 2018, 19

Bodellini (2019), Impediments to resolvability: critical issues and challenges ahead. Open Review of Management, Banking and Finance, 2019, II

Bodellini (2020), Alternative forms of deposit insurance and the quest for European harmonized deposit guarantee scheme-centred special administrative regimes to handle troubled banks. The Uniform Law Review, 2020, 2-3

Brescia Morra (2019a), The New European Union Framework for Banking Crisis Management: Rules versus Discretion. European Company and Financial Law Review, 2019, 3

Brescia Morra (2019b), Crisi bancarie e disciplina degli aiuti di Stato: un chiarimento importante dalla Corte di Giustizia. Banca Borsa Titoli di Credito, 2019, II

Calello – Erwin (2010), From Bail-Out to Bail-In, The Economist, 28th January 2010

Capriglione (1978), Discrezionalità del provvedimento amministrativo di messa in liquidazione coatta di un'azienda di credito e pretesa risarcitoria del socio, Banca Borsa Titoli di Credito, 1978, II

Capriglione (2019), Banking crises and systemic crises. The Italian case. Law and Economics Yearly Review, 2019, II

Carstens (2018), Deposit insurance and financial stability: old and new challenges. Keynote address. 17th IADI Annual General Meeting and Annual Conference on "Deposit insurance and financial stability: recent financial topics". Basel, 18 October 2018

Colavolpe (1996), Decreto EUROSIM: le modifiche al T.U. bancario. Società, 1996, I

De Aldisio – Aloia – Bentivegna – Gagliano – Giorgiantonio – Lanfranchi – Maltese (2019), Towards a framework for orderly liquidation of banks in the EU, Notes on Financial Stability and Supervision of Banca d'Italia, No. 15 August 2019

Desiderio (1981), La liquidazione coatta amministrativa delle aziende di credito, Milano, 1981

Dias – Deslandes – Magnus (2019), Recent measures for Banca Carige from a BRRD and State Aid perspective, European Parliament Briefing, February 2019

Dobler – Moretti – Piris (2020), Managing Systemic Banking Crises. New Lessons and Lessons Relearned. International Monetary Fund, Monetary and Capital Markets Department, No. 20/05

European Banking Authority (2020), Opinion on Deposit Guarantee Scheme Funding and Uses of Deposit Guarantee Scheme Funds, EBA/OP/2020/02, 23 January 2020

European Commission (2017), Decision of 25 June 2017 on State aid measures in the context of *Veneto Banca* and *Banca Popolare di Vicenza* liquidation, (State Aid SA. 45664, 2017/N – Italy – Orderly Liquidation of *Banca Popolare di Vicenza* and *Veneto Banca* – Liquidation Aid)

European Commission, (2000), Decision of 10 November 1999 conditionally approving the aid granted by Italy to the public banks Banco di Sicilia and Sicilcassa (2000/600/EC), Official Journal of the European Communities, L 256/21, 10.10.2000

European Commission (2015a), Decision on the State aid SA.39451 (2015/C) (ex 2015/NN) implemented by Italy for Banca Tercas, Brussels, C (2015) 9526, 23 December 2015

European Commission (2015b), State aid: Commission approves liquidation aid for Italian bank Banca Romagna Cooperativa. European Commission – Statement 15/5409. Brussels, 18 July 2015

European Forum of Deposit Insurers (2019), EFDI State of Play and Non-Binding Guidance Paper, Guarantee Schemes' Alternative Measures to Pay-out for Effective Banking Crisis Solution, 7 November 2019

Fauceglia (1996), L'esercizio provvisorio nella liquidazione coatta amministrativa delle banche. Giurisprudenza Commerciale, 1996, I

Fauceglia (1997), La cessione di attività e passività nella liquidazione coatta amministrativa delle banche e la successione nei rapporti contrattuali, Banca Borsa Titoli di Credito, 1997, I

Financial Stability Board (2014), Key Attributes of Effective Resolution Regimes for Financial Institutions, 15 October 2014

Fondo Interbancario di Tutela dei Depositi (2020), FIDT's Interventions, Interventions Report, available at https://www.fitd.it/Cosa_Facciamo/Interventi

Fortunato (1991), Sulla liquidazione coatta delle imprese bancarie. Banca Borsa Titoli di Credito, 1991, I

Fortunato (1995), La liquidazione coatta delle Banche dopo il Testo Unico: lineamenti generali e finalità. Banca Borsa Titoli di Credito, 1995, I

Giglio – Setola (2002), La disciplina degli aiuti di Stato e le crisi bancarie italiane, Mercato Concorrenza Regole, 2002, 1

Gleeson – Guynn (2016), Bank resolution and crisis management. Law and practice. Oxford, 2016

Gortsos (2019), The role of deposit guarantee schemes (DGSs) in resolution financing. EBI Working Paper Series. 2019 no. 37. 28 March 2019

Guynn (2012), Are Bailouts Inevitable?, Yale J. on Reg., 2012, 29

Huertas (2013), The case for bail-ins, in Dombret and Kenadjian (Eds), The Bank Recovery and Resolution Directive, (Institute for Law and Finance Series)

Ilsole24ore (2020), Carige, firmato l'accordo per la soluzione privata di salvataggio, 18 March 2020

Lastra (2006), Legal Foundations of International Monetary Stability, (Oxford University Press, Oxford), 2006

Ingves (2017), Remarks given at IADI conference on "Designing an Optimal Deposit Insurance System". Keynote address at IADI Conference, Basel, 2 June 2017

International Association of Deposit Insurers (2010), Core Principles for Effective Deposit Insurance Systems. A methodology for compliance assessment. December 2010

International Monetary Fund, (2018), Euro Area Policies, Financial System Stability Assessment, IMF Country Report No. 18/226, July 2018

Lastra – Russo – Bodellini (2019), Stock take of the SRB's activities over the past years: what to improve and focus on? Study requested by the ECOM Committee of the European Parliament, March 2019

Leckow – Gullo – Emre (2019), Bank Resolution Frameworks: Key Legal Design Issues, Bank Resolution Key Issues and Local Perspectives (Brodie ed.), INSOL International, London, 2019

Libonati (1965), Contratto bancario e attività bancaria, Milano, 1965

Maccarone (2015), Il ruolo e l'ambito di intervento dei fondi di risoluzione e dei DGS nelle crisi bancarie. Diritto della Banca e del Mercato Finanziario, 2015, 2

Maccarone (2019), La sentenza del Tribunale europeo sul caso Tercas. Bancaria, 2019, 3

Minervini (1990), Il 'ristoro' ex d.m. 27 settembre 1974 e il fondo interbancario di tutela dei depositi. Giurisprudenza Commerciale, 1996, I

Nigro (1996), La disciplina delle crisi bancarie: la liquidazione coatta amministrativa. Giurisprudenza Commerciale, 1996, I

Pratis (1972), La disciplina giuridica delle aziende di credito, Milano, 1972

Restoy (2019), How to improve crisis management in the banking union: a European FDIC? CIRSF Annual International Conference 2019 on 'Financial supervision and financial stability 10 years after the crisis: achievements and next steps', Lisbon, Portugal, 4 July 2019, available at www.bis.org

Reuters (2020), Italy in talks with EU over Popolare Bari rescue, 9 January 2020

Ringe (2016), Bail-in between Liquidity and Solvency, University of Oxford Legal Research Paper Series, Paper No. 33/2016

Rulli (2017), Contributo allo studio della risoluzione bancaria, Torino, 2017

Salanitro (1997), La cessione dei crediti anomali ad una società di gestione (c.d. bad bank). Banca, Borsa Titoli di Credito, 1997, I

Schillig (2013), Bank Resolution Regimes in Europe – Part I. Recovery and Resolution Planning, Early Intervention, European Business Law Review, 2013, 24

Sepe (2017), La vecchia e la nuova socializzazione delle perdite: elementi di continuità e di discontinuità. Rivista Trimestrale di Diritto dell'Economia, 2017, 4

Shleifer – Vishny (2011), Fire Sales in Finance and Macroeconomics. Journal of Economic Perspectives, 2011, 25

Single Resolution Board (2019), Public Interest Assessment: SRB Approach, 2019, available at www.srb.europa.eu.

Vignini (2019), State Aid and Deposit Guarantee Schemes. The CJEU Decision on Tercas and the role of DGSs in banking crises. The role of the CJEU in shaping the Banking Union: notes on Tercas (T-98/16) and Fininvest. Quaderni di Ricerca Giuridica della Consulenza Legale della Banca d'Italia. Number 85. May 2019

Wojcik (2016), Bail-in in the Banking Union. Common Market Law Review, 2016, 53

Discussion

Thorsten Beck

Thank you very much for the invitation. I am delighted to be here and to be asked to comment on these three papers.

I would like to go through the three papers in detail and offer my comments on each of them. They are all clearly written from a legal, regulatory viewpoint, based on experience, based on specific ideas, and – as you have already seen – they aim all in the same direction, in the sense that the BRRD, or the reform of the bank resolution framework we have seen over the last ten years or so in Europe is not complete and that we have to take the next step.

To summarise, the three papers identify three problems. First, resolution as it currently stands is only applicable for banks where there is a public interest in their resolution. This seems to be the case mostly for significant institutions, although the overlap is not a complete one: it could be a significant institution that does not have a public interest in resolution and there are less significant institutions where there could be a public interest. But still, for institutions where there is no public interest, liquidation is still the default option and of course we know from experiences like the US, for example, but also from many other countries, that liquidation is not the best form of dealing with a failing bank. Second, there is a lot of variation across countries within the EU in terms of how to liquidate a bank, in some countries through an administrative process, such as in Italy, for example, and in other countries court-based; as shown in one of the papers, this also has implications for creditor rankings and thus pay-outs. Finally, there is a limitation of the use of deposit insurance schemes in the resolution and/or liquidation of banks; the conflict between Italy and the European Commission on the case of Tercas bank, where the Commission claimed that deposit insurance resources in the resolution of this bank constituted state aid (a decision now reversed by the Court of Justice of the EU) illustrates this problem.

These problems and the current discussion are happening on the background on possible post-COVID-19 bank fragility and thus the possible need to deal with a larger number of small and mid-sized bank failures as well the medium-to long-term challenge for consolidation and restructuring of the European banking system.

In the following, I will revisit some of the themes that the three papers have touched upon but with an economic viewpoint. I will start from basics: why do we regulate banks and why do we have a bank resolution framework apart from the corporate insolvency framework in the first place? Three problems drive the need for regulation and for a specific bank resolution framework: the domino problem; the hostage problem; the fridge problem. The domino problem is that one bank rarely fails by itself but triggers other bank failures; the hostage problem relates to the depositors who might initiate a bank run (which nowadays does not necessarily imply people queuing in front of branches, but can be done on-line and can also consist of money markets not rolling over short-term funding for banks; the fridge problem (a bit like milk that stays too long out of the fridge in hot weather) is that banks create information about borrowers and this information will be lost if you liquidate a bank completely. How can we minimise these externalities stemming from the failure of the bank? And how can we do this, without creating what we economists call moral hazard risks, i.e., providing incentives for banks to take aggressive risks, with the knowledge that authorities will step in to help avoid these externalities?

We can put the contrasting objectives into a very simple framework, as illustrated in Figure 1: there are two goals of an effective bank resolution framework: on the one hand, we want to minimise the external costs of bank failure, the domino, hostage and fridge problems; on the other hand, we want to enforce discipline, thus avoiding moral hazard risks. So, the two corner solutions are, on the one hand, forbearance, open bank assistance and thus minimising external costs (this corner solution is illustrated by the bail-out taken in 2008-2009), and on the other hand, liquidation of a bank, such as in the case of Lehman Brothers. But such a liquidation is basically sending a financial institution into corporate insolvency, which is slow and disruptive for the rest of the financial system, especially in case of larger but even mid-sized banks. We can also identify an ideal framework, which both enforces discipline and minimises external costs; while we might not be able to achieve this ideal, there are other options that trade-off the enforcement of discipline with reducing external costs of bank failure on what I call the resolution possibilities frontier. The idea of any bank resolution reform is to push out this possibilities frontier as much as possible towards the ideal.

Let me discuss some of the options that trade-off discipline with external costs. On the one hand, the bridge bank model is close to open bank assistance, but wipes out equity claims and possible junior debt claims. On the other extreme, the partial pay-out solution is close to the liquidation option, but transfers insured deposits to another entity for pay-out to depositors, while the rest of the bank goes into liquidation. The purchase and assumption option (often used in the US for small and mid-sized banks) involves the transfer of certain liabilities (including insured deposits) and performing assets to another healthy bank, while the non-performing assets and equity claims (plus possibly junior debt claims) remain behind in the failing bank, sent into liquidation. Different legal systems undertake such a transaction in different forms, e.g., in the form of splitting the failing bank into a good and a bad bank, with the good bank being sold off. In the US, this is undertaken by the FDIC, i.e., with a direct involvement of the deposit insurer.

While one might argue that two of the three problems I have mentioned earlier, the hostage and the domino problem, are not really that relevant for small and mid-sized banks, the fridge

problem is still there. Liquidating a bank, as small as it might be, does damage the economy as borrowers lose access to funding by destroying the soft information embedded in these banks. Not all borrowers will find alternative funding sources; an expansive empirical literature has shown such negative effects stemming from liquidation of banks for borrowers and the local economy.

So, what is needed is access to all resolution tools, as I outlined them here, for all banks and therefore an extension of such a resolution framework to all banks. However, would the same resolution framework be adequate for all 27 banking markets in the European Union?

We economists always like to think in terms of tensions, so let me phrase this to say it a little bit in the form of a trilemma of a resolution (Figure 2). Here we can see three different objectives, but only two of them can be achieved at the same time: first, a level playing field across banks and banking markets; second, an efficient bank resolution framework (including resolution beyond liquidation for all mid-sized banks); third, adaptation to country-specific circumstances, including in the role of deposit insurance, as mentioned in the Italian case.

What we have right now is, as on the upper side on the triangle, minimum rules for failing banks of public interest under European resolution, but liquidation for the other ones that go to national resolution, a rather inefficient solution. We could go for a complete European resolution framework for all banks, and maybe that is the end point, but this might imply a degree of centralisation to ensure a level playing field. However, does such a European solution still allow for national variation in banking structure and for differences according to different national structures of financial safety nets, such as the role of deposit insurance schemes? So, the better solution might be a mixed system, which might somehow undermine the level playing field across the banking union, but at least takes into account national variation. And that's how I see the proposal made by the FSI paper.

Let me make a few remarks on the institutional design, something that I first took interest in some 10-15 years ago, when first working on bank resolution frameworks across different countries. One striking difference across countries is the role of deposit insurers in the financial safety net and thus resolution of failing banks. On the one hand, you have paybox models, as it used to be the case in Brazil or in East African countries, among others, on the other hand, you have systems like the FDIC that are deposit insurer, supervisor and resolver. The private German banking association used to have a very similar role, basically supervising its members and getting involved in the resolution when things went wrong. The advantage of combining these different roles is that, one, deposit insurance and resolution have the same, objective: minimising costs and enforcing discipline; two, this can be further strengthened by a role in supervision. In work with Luc Laeven, exploiting cross-country variation in the institutional structure of resolution frameworks and deposit insurance we show that there is indeed a positive relationship between combining these roles and higher bank stability, though I would like to stress that these are correlations, not necessarily implying causality.

If one translates these results from a global sample to the European context it would imply to have some kind of EDIC, European Deposit Insurance Corporation, as the FDIC or the CDIC in

Canada, as a counterweight to the SSM. Now, this might not be possible without treaty changes and might also work against the idea of taking into account country-specific differences, but maybe there are ways to get closer to this structure, both in terms of resolution options and institutional structure, as discussed so far.

What does all of this imply for the conclusions and recommendations the three papers put forward. First, we have to extend the resolution options to all the institution, independent of a public interest assessment. While the public interest assessment makes sense, it should not prevent authorities from expanding resolution options beyond liquidation. Second, we need another push to move towards a euro area structure in terms of resolution, similar to supervision: harmonisation at a European level, but with local implementation and the SRB as a coordinating body for all bank failures. Third, deposit insurers should be involved where it is possible, feasible, and advisable, like in Italy for example. A European deposit insurer (EDIS) could work as a reinsurer, at least at the beginning, while still seeing the EDIC as a possible end-point.

There are a lot of issues to be worked out, in politics, concerning the bank-sovereign link, the question of national champions and of course there are important legacy problems to be addressed. But let me end on a positive note and draw one final comparison between the US and Europe. The FDIC was established 87 years ago. Over the 87 years of existence, it has undergone lots of changes, institutional changes, legal changes etc. These changes can be seen as reaction to their experience over these almost nine decades, partly reflecting the conflicts between legislators (representing taxpayers), banks, and regulators. Maybe one important lesson to take away is that we should not expect that the BRRD and the SRM is something set in stone forever, it's a starting point, from which further reforms have to be designed, as Europe gains experience and banking market structures change.

Figure 1

Trade-offs in bank resolution

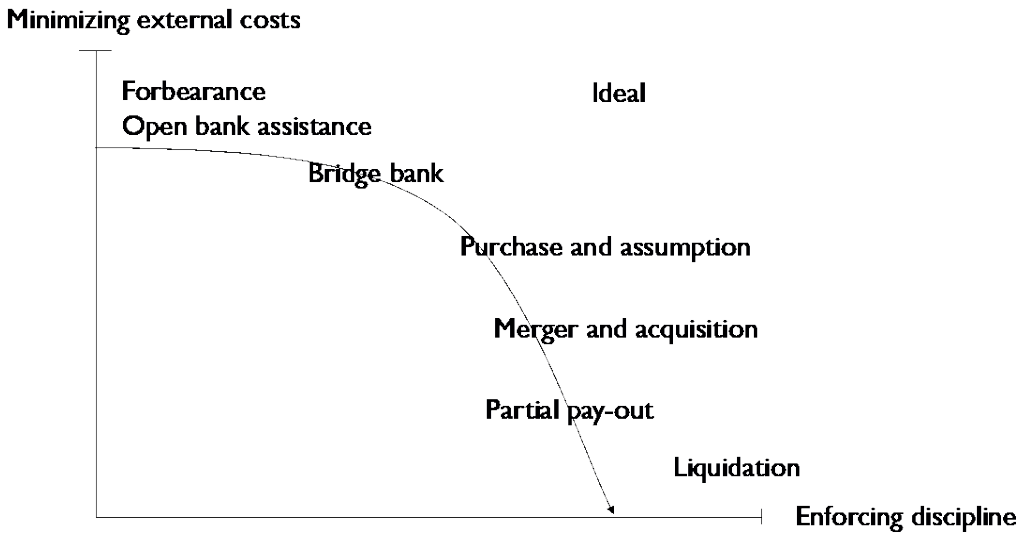
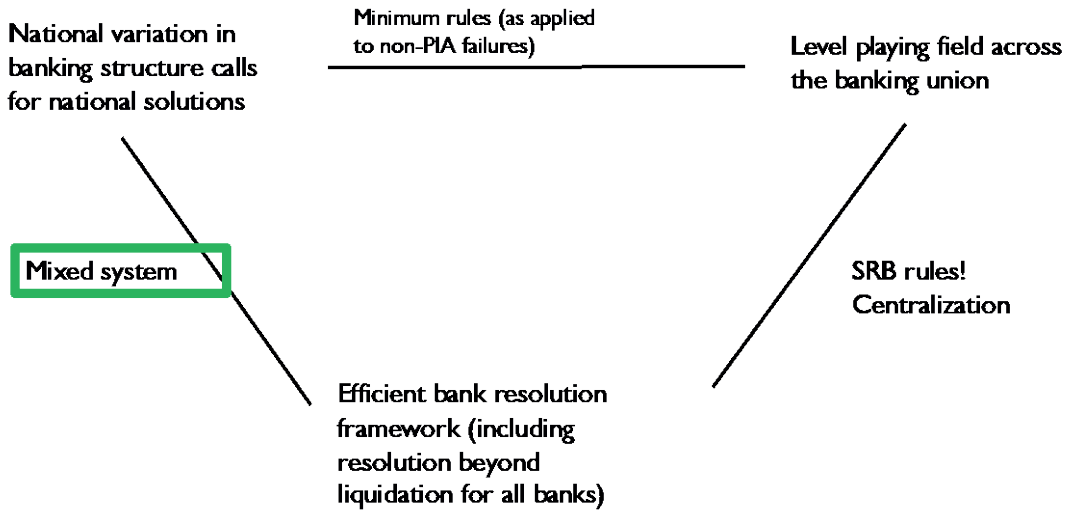


Figure 2

The Trilemma of European solutions to bank resolution challenges



Reference

Beck, Thorsten and with Luc Laeven (2008): Resolution of Failed Banks by Deposit Insurers: Cross-Country Evidence" (joint), in Asli Demirguc-Kunt, Ed Kane and Luc Laeven: *Deposit Insurance around the World, Issues of Design and Implementation*, Cambridge, MA: MIT Press, 2008.

The crisis management framework for banks in the EU: what can be done with small and medium-sized banks?

Elke König

I want to look at a two main areas in my speech today.

– The first: The role of the SRB in ensuring financial stability across the system.

– The second: The potential issues with the small and medium-sized entities in the financial sector because of the current framework, and what solutions might be put forward to improve the situation.

1. The role of the SRB / When do we resolve?

So, to the first part of my speech – a look at the SRB's job in ensuring financial stability.

The SRB's role is to develop resolution plans and ensure they are ready to be put into action at very short notice, for the banks under its remit. At present, the SRB covers 128 banking groups within the Banking Union – this includes the largest banks, that is to say, those under SSM supervision as well as certain smaller cross-border groups. The logic for this by legislators in framing the BRRD and the SRMR was simple – the largest banks in each member state when getting into trouble can create problems across Europe, so they should be managed at EU level. Many of them are active cross-border in Europe or internationally.

There is sound logic to this. It made sense to ensure a strong European regulatory framework for these banks, since the economy and thus also smaller banks rely heavily on stability in larger banks, too. Incidentally, this is also the reason why every institution – even the smaller ones – must pay a contribution to the Single Resolution Fund. All institutions benefit from the additional stability the fund – and soon its backstop – provide and so this is why everyone contributes.

The plan for almost all banks under the SRB remit is resolution and not insolvency. I have said in the past that resolution is 'for the few and not for the many'. This is correct,

since the SRB deals with 128 banking groups out of the more than 3,000 banks across the Banking Union. For the banks under the SRB's remit, in general, we expect and plan for the use of resolution tools. Even for those banks where we firmly believe that national insolvency procedures would be the solution in case of failure, we have to ensure their resolvability.

The decision to put a failing institution into resolution depends on the outcome of a "public interest assessment" or PIA, determining in particular if the preservation of a bank's critical functions is required to maintain financial stability. If the PIA's outcome is negative, a failing bank will be sent into national insolvency, and I'll come back to this in a moment.

Resolution is not a magic wand – losses will still be inherent in any resolution, it's just that they will be distributed more fairly than before and that there is less uncertainty or ambiguity and thus less risk to financial stability. Please let us keep in mind that in any failing business in a market economy it is for equity and creditors to foot the bill.

Banks whose failure poses much less of a risk to financial stability can be dealt with under national insolvency proceedings, however the basic rule holds that banks need to be resolvable and have enough loss-absorption capacity to avoid any adverse effects. This is the argument for MREL – in case of banks that go into resolution to allow the necessary funds for loss absorption and recapitalisation; in case of banks that can be put into insolvency there is still the need to set an adequate amount for loss absorption.

2. Challenges and possible solutions for small and medium-sized banks

This brings me to the second part of my speech this afternoon: the challenges and possible solutions for dealing with small and medium-sized banks.

I suppose the first thing to say is that in Europe, we have no common definition as to what 'mid-sized' or 'middle-class' bank actually means. There is a huge variation across the 21 Banking Union states. A mid-sized bank could be a Less Significant Institution, but it might also be a Significant Institution. However, for the purposes of the discussion today, I think we can say that a mid-sized bank is a bank of small to medium-size in relation to the market it operates in, heavily reliant on deposit funding. No matter what the size of the bank, and what tier we might have it categorised in, to ensure financial stability, there is need for an implementable solution should that bank get into difficulty.

Of course, our immediate concern at the SRB is for those banks that must become resolvable, that is the 128 banking groups I mentioned. These are the largest banks, but within those 128, we have a huge variety of shapes and sizes, and as I said, these 'mid-sized' or 'middle class' banks can be SIs, which is where I will turn my attention now.

I want to state clearly that there is no easy way out: all Significant Institutions have to become operationally resolvable and need to build the necessary MREL to allow a resolution scheme to be executable.

Resolution tools vary and in particular, 'Sale of Business' and 'Asset Separation' tools might be best suited for these banks. However, they come at a cost, as they need to be prepared and made implementable.

MREL in these banks might often mean equity only. This provides an added challenge, because we are faced with the risk that this might have been, or rather most likely has been, depleted at the point of FOLTF leaving little room for resolution.

At the same time, it is absolutely clear that we cannot have a layer of banks that is considered too big for one of the Banking Union's twenty-one plus national insolvency procedures but making it resolvable is considered unfeasible. This could mean these banks get a free ride in 'going concern' and possible manage to distort competition, and in a 'gone concern' situation they end up with the taxpayer or the industry footing the bill.

Just to avoid a misunderstanding: Supervision and resolution planning have to be proportional, and we take this very seriously. But at the same time the old argument of same business, same risk, same rules also implies that for example access to funding, be it from the DGS or the SRF cannot be different for small and mid-sized and large financial institutions.

The completion of the Banking Union through implementation of a Common European Deposit scheme, or the 'third pillar' of the Banking Union, with sufficient powers, in particular transfer tools, is a major part of the solution in order address the challenges around the failures of these banks.

The lack of a harmonised EU liquidation regime is a major obstacle towards a fully-fledged Banking Union. When we are looking at whether or not to resolve a bank, the SRB's assessment of the no-creditor-worse-off principle seeks to ensure that the treatment of creditors in resolution is not worse than the one they would have received under normal insolvency proceedings.

Currently, with twenty-one plus different insolvency frameworks in the Banking Union, the analysis of the insolvency counterfactual for a cross-border bank in resolution is a challenge, and results in diverging outcomes depending on the home country of the institution. Moreover, the 'failing or likely to fail' assessment is not always aligned to the criteria for liquidation at national level and may similarly lead to different conclusions.

Bank insolvency procedures should be subject to common standards and practices at EU level. This would solve the problem when larger banks are not to be resolved, but it would also solve problems when dealing with smaller banks. The best solution would be EU-wide administrative rules on insolvency proceedings for the banking sector. This harmonisation would have five distinct advantages for all sizes of banks:

- First, it would facilitate resolution planning for cross-border banking groups;
- Second, it would level the playing field and eliminate wrong incentives;

– Third, it would provide the industry and investors with the same level of certainty in liquidation as in resolution;

– Linked to that third benefit is number four: a stronger CMU, since investors would have more certainty when investing cross-border. For example, no matter if they invest in a medium-sized bank that then grows and falls under the SRB, or suddenly has its home in another state, the rules (and thus the risk) in regulation terms remain the same.

– Fifth, an efficient and effective insolvency framework would also help addressing legacy assets and avoiding the build-up of new non-performing loans, which by the way as we try to emerge from Corona, are only going to grow, but that is an aside and I won't dwell on this point this afternoon.

These ideas are not new. Way back in 2010, the European Commission's Communication on an EU Framework for Crisis Management called for "further harmonisation of bank insolvency regimes, with the aim of resolving and liquidating banks under the same procedural and substantive insolvency rules". Unfortunately, not much has changed eleven years on.

In the interim, while waiting for the Holy Grail, the SRB developed National Handbooks to define how to implement resolution schemes in each country, as well as national implementation steps for a decision not to adopt resolution. This was a step in the right direction, but is only a 'second best' option and not comparable to a harmonisation of bank insolvency procedures – something only legislators can deliver.

Proposals for harmonisation across the board will inevitably be fraught with political perils and resistance. An incremental approach – such as the one we saw in the harmonisation of the ranking of unsecured debt instruments in insolvency – may be a more pragmatic solution. The ultimate goal, however, must be to put in place an EU liquidation regime alongside an EU resolution regime, something akin to a European FDIC. Indeed, I will be interested to hear Art's insights from the FDIC later this afternoon.

3. Conclusion

Ladies and gentlemen, I am coming to a close. What is clear, is that the current resolution framework, for significant banks in Europe, is working. It is contributing to financial stability and it is helping to protect the taxpayer from future bail-outs, by ensuring more responsible management of risk in individual banks from the outset. What is also clear, is that the framework is set up to ensure that while all of the major banks – those ones under SRB remit – must be resolvable, the fact remains that resolution is for the few, not the many. And so, there is a gap in our financial stability framework that certainly does need to be plugged.

I thank all of you for your work on the various papers being discussed today. It is important we have research and reflection in this area in order to develop solutions capable

of dealing with the "middle class" of banks. I am sure there are many ideas and solutions that are worth mulling over, and hopefully some of them may even be the basis for future legislative reforms in the EU. I can assure you that our team will look at them carefully.

Time really is of the essence, especially since I am more than aware of the pace of EU decision making. Lest there be any doubt, it is a long process! And yet, while this process is going to take time, it is vital. Vital to the success of our Banking Union, and vital to ensuring financial and economic stability right across Europe and further afield.

And I think that stability is something all of us can agree would be welcome in our world at this time.

Session II

Proposals and experiences from EU countries

A PROPOSAL TO FUNDING CRISIS MANAGEMENT IN DEPOSIT TAKING INSTITUTIONS

Francisco Sotelo[1]

1. Introductory remarks, presenting the issue

One of the most compelling gaps that remains open in crisis management framework is that of institutions whose funding model mostly relays on retail deposits. For those, the new international *Loss Absorption and Recapitalization Paradigm* does not fit very well, as their business model can't reasonably meet fully fledged default MREL requirements[2], both because of their limited access to markets[3] and negative impact of high priced eligible instruments on their interest margin. Obviously, this is an issue of relevance to the EU, as opposed to the US where not every single institution is burdened with similar requisites.

Some argue that a bond funding structure is inherently superior to a deposit funding one, because of the market discipline it elicits, but such argument can be easily contended by looking back to the recent Spanish crisis, as saving banks had issued to the markets and no such benefits were observed. To the contrary, as *de facto* pressing needs for MREL have led in many cases to more severe requirements for medium or small sized institutions than TLAC imposed for GSIBs (Restoy, 2018), those could even represent an incentive to assume risk in an attempt to increase profitability, thus achieving the opposite effects to those intended (Restoy, Vrbaski and Walters, 2020).

The ability of banks to issue instruments at reasonable costs without undermining their medium-term viability depends on access to developed markets, and on the evolution of

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2 As set forth in article 45c BRRD, in combination with article 16a BRRD.

3 EBA quantitative MREL report (2020) illustrates the differences in the funding structure and instruments within groups depending on their size. Thus, GSIIs and OSIIs Top Tier have liabilities that can easily be adapted to count towards the MREL requirement in the range of 43% and 58% of their MREL target, while this percentage falls to between 5% and 23% for groups under EUR 100 bn.

these conditions going forward. The high volume to be issued is incompatible with the limited capacity of the local markets and the difficulty for traditional deposit taking institutions to access international markets, where they are not generally known to investors. Investor´s pricing expectations will not only be driven by their loss-absorbency quality but also by the relatively illiquidity of small tickets issued by unknown names, which would intensify the increase of the funding cost. Relevant investors, e.g. investment funds managers, insurance companies, or pension funds, among others, show limited appetite for such issuances and would only be comfortable with high interest rates. Moreover, recent miss-selling experiences have taught us all that local non-sophisticated retail investors should not be admitted to invest in these risky and complex instruments.

Annex 1 analyzes the interest rate at issuance of a sample of MREL eligible bonds. The aim of the analysis is to study the drivers of the cost of issuing these instruments and, in particular, whether the size of the bank is a determinant of its cost and funding model. We can summarize as follows the main results obtained from this study.

- There are three main drivers of issuance costs: 1) the amount of each individual ticket, 2) the presence of the bank in the market (proxied by the number of pre-existing MREL issuances), and 3) the rating of the issuer/bank. In particular, banks pay higher premiums when the issued amount is low, when they have little presence in the market and when their rating is lower.

- The above elements are inherently connected to the size of the institution and their geography. Small institutions tend to issue bonds with lower amounts. Besides, these institutions have lower presence (are less known) in the markets, and are assigned poorer ratings when compared to big institutions. Therefore, when small banks issue MREL bonds, they tend to pay more than big banks (once we control for different bond characteristics and the issuance date of the bond).

- There are some caveats which make this analysis even more pressing, due to the fact that the size of small institutions in the sample is indeed relatively large (see Annex 1 for more details). Since the size of the set of "observed" small banks is somewhat elevated, and the factors related to size seem to be the key, we can arguably infer that the spread at issuance for smaller peripheral banks might be actually greater than what our empirical analysis evidences.

On the other hand, while there is the possibility for these entities to be liquidated, which implies lower MREL requirements, ordinary national insolvency regimes may not be adequate to deal with bank failure, as they might not be able to ensure the continuity of functions that are important at a regional level or for a particular market segment (Restoy, 2020). As BRRD[4] already noted in its recital 4: "*the financial crisis has exposed the fact that general corporate insolvency procedures may not always be appropriate for institutions as*

[4] Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions.

they may not always ensure sufficient speed of intervention, the continuation of the critical functions of institutions and the preservation of financial stability".

In 2017, the resolution model established in BRRD and SRMR[5] was put to test for the first time in the cases of Banco Popular, Veneto Banca, Banca Popolare di Vicenza (Veneto banks) and Monte dei Paschi di Siena (MPS). The case of NordLB, in 2019, should also be noted. The solutions adopted to solve each of those situations were different – despite being all under the same regulatory umbrella –, raising doubts about the consistency of the model.

Only Banco Popular was resolved by the *Single Resolution Board* (SRB), following a positive *Public Interest Assessment* (PIA), deciding the absorption of losses by holders of ordinary shares, Additional Tier 1 and Tier 2 capital instruments prior to the transfer of the new shares to Banco Santander. No public aid was used.

However, in the Veneto banks the PIA was negative and a specific insolvency procedure was presented as the residual avenue for their liquidation. The impossibility to submit both banks to ordinary *National Insolvency Procedures* (NIP) became evident forcing the Italian Government to upgrade the insolvency framework to a quasi-resolution framework with public aid in order to ensure the transfer of assets to Intesa Sanpaolo. The burden sharing borne by shareholders and subordinated creditors of both banks was less strict than the rules provided for in resolution scenarios.

In the case of MPS, no *failing or likely to fail* (FOLTF) was declared and its rescue was conducted through the precautionary recapitalization with injections of public funds. In this case, the Commission approved the State aid, imposing a burden sharing to shareholders and junior bondholders and a severe adjustment plan in order to ensure its long-term viability. Similarly, in 2019, the case of the public-owned NordLB also put to test the resolution framework, with measures taken to recapitalise the bank on market terms, to carry out the necessary structural changes and downsizing of the bank. The Commission found that those measures were carried out under the same conditions a private owner would have accepted, although no third party seemed willing to participate to the deal.

2. Proposals already on the table, missing bits

The previous precedents reveal not only different approaches to the concept of public interest, but also illustrate the wide range of domestic remedies adopted by authorities to avoid impact on senior creditors and depositors, likewise preventing much feared negative impacts on real economy. They prove that even though the European legislators aimed for a framework applicable to all banks – regardless of their size – the funding scheme does not seem to be a suitable standard for certain institutions.

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5 Regulation (EU) 806/2014 of the European Parliament and of the Council of 15 Juy 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund.

It is evident by now that the legislative framework does not suffice to provide harmonization. Several outcomes are possible due to the so-called "*limbo situation*" which allows leeway for different insolvency or liquidation regimes. In order to complete the Banking Union – or at least its second pillar – we find there is a need to reach adequate and common solutions for these institutions, whose crisis will otherwise be dealt through national channels relying on public support, as opposed to what was intended by BRRD, exacerbating market fragmentation, moral hazard and an unleveled playing field.

We are particularly conscious of middle class institutions (Restoy, 2018), not necessarily all that small, whose insolvency could lead to financial instability but whose business model has apparently not been properly taken into account by policy makers and practitioners.[6] Fortunately, consensus is surfacing on the need to move to a more homogeneous scenario.

Some argue that the MREL problem will be overcome in due course by the so-called regulatory-driven consolidation of the banking sector, claiming that bigger institutions resulting from consolidation should be able to tap the markets at reasonable pricing.

However, we believe we cannot rely solely on such a premise, dependent on managerial decisions, without getting ready for the worst-case scenario. The more so if we consider, from a legal view point, that such movements could eventually find certain limits connected to market competition. Thirdly, as it is well known, there is theoretical and empirical basis to believe that an inverted U relation exists between financial stability and market competition. This implies that after a certain point further consolidation is detrimental for financial stability. Besides, we should also keep in mind that one of the main objectives of the current framework was to avoid the too-big-to-fail problem, and the problem shall not be solved by creating a bigger one. Although macroprudential instruments have been developed to mitigate this problem, they have not been tested yet and there is certain evidence they are not compensating the implicit subsidies these big institutions have.

Two other recent proposals are supported on the common assumption that the solution to this issue rests mostly on the use of transfer tools (i.e. sale of business or bridge bank). We refer to two non-papers recently distributed to policy makers in the European fora.[7] Such proposals either intend to regulate one common liquidation regime with those two tools available, when an institution is declared FOLTF without a positive PIA; or are alternatively intended to secure the extension of the scope of positive PIA results to a wider array of institutions, keeping most of them under the umbrella of the resolution aegis.

We will argue in this paper that the antidote to the problem cannot remain that simple, it needs to be more ambitious. We concur that the solution must involve an orderly exit of the market by means of a transfer tool. It truly makes little sense to revive a bank with a failed business model in a way which would most likely affect commercial and business relationships, should a bail-in be applied. But it should also be acknowledged that something

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6 Pablo Hernández de Cos (2020), *Single Resolution Board Annual Conference* 08.10.2020.

7 Meeting of the *Working Party on Financial Services of the EU Council* of 4 September 2020 and meeting of the *Expert Group on Banking, Payments and Insurance of the Commission* (EGBPI) of 28 September 2020.

is missing in terms of funding to make transfer strategies workable. A source of funding is needed to: (i) compensate an eventual acquirer where the liabilities to be assumed in the transaction (deposits) are larger than the value of the assets transferred, (ii) and to confront the reorganization that will most likely be needed. Therefore, the question remains: where should such support come from?

Certainly not public sources, in the first place.

Secondly, we have already recalled evidence that, in the absence of subordinated instruments, bail-in is not a palatable option and has been discarded, probably for very good reasons. The fact is that despite the current SRB MREL rebates for smaller significant institutions (SI) with transfer strategies,[8] MREL requirements could still be demanding for many banks.

But the way in which bail-in has been designed cannot be claimed to be the sole problem. Such inability to allow proper functioning of resolution strategies is also connected to the fact that, even when the MREL requirement can be calibrated by resolution authorities to accommodate specificities, the inexistence of other elements in the funding scheme limit its efficiency. We refer, thirdly, to the practical absence of any source of coinsurance, be it by the SRF or DGSs.

On the one hand the 8% bail-in requirement to access alternative financing arrangements, resolution funds (RF) such as the *Single Resolution Fund* (SRF),[9] which may make it necessary to bail-in even deposits before accessing the Fund, causing a high risk of contagion. All this, together with the underlying idea that the SRF should not be accessible to all, has made it necessary in the past to escape resolution. On the other hand, there is the inability to use DGS resources, primarily driven by the super preference of deposits and DGSs and the least cost test. It is noticeable how in other jurisdictions, such as USA, the use of DGS funds has proved to function satisfactorily.[10] In most cases, sales in form of purchase and assumption transactions entailed some form of financial support for the acquirer, either in form of a cash compensation or loss-share arrangements. That financial support was provided by the Deposit Insurance Fund, that only pays off depositors in the absence of less costly alternatives, including transfer and bridge banks. Why is it then that the EU has completely sterilized collective industry contributions in its resolution scheme?

3. A principle-based alternative to funding crisis management

With this broad picture in mind, we present for discussion an alternative to depart from both public bail-outs and deposit write-downs, which are socially costly options. And also from high MREL levels, so expensive to achieve for most institutions that could

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8 SRB MREL Policy under the banking package https://srb.europa.eu/en/file/srb-mrel-policy-under-banking-package-2020.

9 Articles 37(10), 44(5) and 44(8) BRRD.

10 Bolton Cecchetti, Danthine and Vives, 2019.

become self-defeated. We argue that a balance should be sought to avoid the recklessness of assuming that there will always be a suitable acquirer in the absence of financial support, and imposing banks the internalization of all the potential funding needed to back such transfers. No matter how challenging the modification of the current regime may seem, a credible alternative must be put in place in order to comply with our mandate of "ensuring that resolution is a credible option for all institutions (…) irrespective of their size, complexity and interconnectedness" (Council of the European Union, 2010).[11]

In this paper we would like to present a principle-based approach to funding crisis management which could be tailored to accommodate an expanded resolution regime or a new liquidation one. To do so, we suggest looking for the right balance between the internalization of losses above capital requirements, on the one hand, and, a more extensive use of collective industry funding on the other, eventually including the collective capacity to issue this kind of bailinable instruments.

From an individual perspective the proposal we are putting forward reduces the costs related to resolution requirements without harming the resolvability of institutions, at a time when the profitability of the sector, even in the pre-pandemic Europe, is shrinking, and will undoubtedly remain under pressure. From a macro perspective the proposal intends to balance market discipline, using minimum MREL and collective suasion, by introducing some sectoral discipline derived from coinsurance.

Please note that, for the sake of simplicity, and as we consider it a more likely approach, we will discuss funding assuming a liquidation procedure activated when an institution is deemed to be FOLTF (instead of the extension of institutions with positive PIA). This approach seems to be favored by some within EU Council. Should the alternative route be preferred, the references made to the contributions of the DGS mandatory sub-fund should be understood as referring to the SRF. In both cases we would be dealing with ex-ante collective contributions by the industry.

As regards the use of collective funds, we note that some relevant actors suggest that SRF funds should be preserved for the few, what would lead to the exclusion of most banks despite having made contributions. We consider such leveraging of bigger institutions on the shoulders of smaller ones could work against inclusion, and would suggest that contributions already made by institutions outside the scope of resolution should be transferred for the benefit of those who made them, for instance by transferring them to an EDIS capable of supporting liquidations or, if not agreeable, increasing funding in the respective national DGSs. But we will also leave EDIS and the return of contributions from smaller institutions aside in the current paper.

Finally, when seeking to find a workable solution to the problem described in section 1 we also considered the option of increasing MREL availability through the grouping of issuers in an attempt to achieve greater marketability. Certain jurisdictions are particularly

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[11] Luis Garicano (2020), *Single Resolution Board Annual Conference* 08.10.2020.

familiar with this approach by way of creating IPSs, and their experience in creating them could certainly complement this proposal.

But such option has been disregarded in this note considering the following:

- Such initiative primarily involves private sector decision makers, and therefore it seems less relevant to public policy discussants. The only precedent we found was that of "*cedulas multicedente*", which experience was eventually dropped by a similar cohort of institutions.
- In the absence of public support, we couldn't find evidence of credit enhancement to the joint issuance, nor any other positive effect in terms of pricing.
- In case some institutions intent to pursue this approach we understand that certain pending arrangements in terms of quantity, homogenization and responsibility would be key.

4. Specific elements in our proposal: a mix of internalization and coinsurance

We claim that authorities will only be able to move forward with the design of the legal features of a more harmonized solution once a balanced funding methodology, agreeable to all, has been determined. It is not our intention to present final figures as much as to kick-off a constructive discussion. The references we suggest are a starting point and they directly connect with existing elements in the current resolution framework. The guiding principles could be summarized as follows:

1 The proposal might seem primarily intended to cover institutions for which resolution authorities determine that there is no public interest and therefore should go into liquidation according to art. 32b BRRD. But it is important to note that many SIs might be eligible for liquidation in case such an Orderly Liquidation Tool framework is upgraded. Therefore, arbitrage against resolution requirements should be avoided. That is why it is worth considering the extension of the new funding regime to all institutions where open-bank bail in seems impracticable.

2 Internationalization of losses should always be applied to some extent, i.e. write down of capital instruments and a certain level of bail in. Competition rules could remain applicable as they are, at the level of subordinated debt. The specific level of MREL to secure internalization would be dependent on each institutions business model and risk profile. It would follow a declining pattern depending on its size and market access, for instance two benchmarks at the level of SIs and small non-complex institutions seem reasonable.

3 A compulsory use of collective resources (RFs or DGSs) should be introduced once losses and restructuring costs exceed a predetermined level. This feature represents a condition to internalization and would be the same for all institutions subject to the same rule-book and supervision, i.e. Banking Union or other Member States.

4 The difference between the costs covered internally, according to principle 2, and the threshold where compulsory collective contributions start, principle 3, would be covered by either additional MREL or additional voluntary contributions to alternative funding arrangements. The latter would represent a coinsurance system, similar in functioning to IPSs or the voluntary scheme of the Italian Interbank Deposit Protection Fund, and compatible with art. 100[12] and 102[13] BRRD.

Most of these principles fit in perfectly well with already existing elements of the current BRRD, and therefore little changes would be necessary if a policy consensus can be reached. Let us review them in greater depth.

Principle 1, scope of the proposal

When the BRRD framework was established back in 2014 as a response to the financial crisis and the significant lack of tools to deal effectively with ailing institutions, the objective was to create a regime that provided for sufficiently early and quick intervention in order to ensure the continuity of the institution's critical functions and the preservation of financial stability[14]. This idea stemmed from the well-known fact that, whenever the national insolvency regime only allows for a plain piecemeal liquidation of the bank, such regime it is likely to result inappropriate to deal with any failing institution, since the required speed of intervention cannot be ensured.[15] The BRRD framework left margin for discretion regarding the extension of the resolution scope, and in fact, there is little resemblance between the narrow approach to PIA by the SRB and others such as the Danish authorities which have established that the resolution strategy is the preferred one for all the banks of their financial system.

It is not the purpose of this note to discuss PIA, but a key element for consideration when determining the scope of any proposal in this area is the need to compare results between resolution action and an eventual new liquidation regime. Let us recall that it is their respective ability to protect resolution objectives what determines the PIA outcome. If tools happen to be the same, and are deployed in a financially sound way, this would certainly condition a negative PIA for most banks, as no difference would exist in case of transfer strategies. The least we should bear in mind is that certain indetermination or grey area may remain if the PIA rule stands as it is.

Considering the BRRD preference for insolvency proceedings,[16] it is important to note that consistency has to be built to secure a sound transition from BRRD to liquidation rules. Let us recall that BRRD rules will still govern highly sensitive issues for the subject under

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12 "…establish one or more financing arrangements for the purpose of ensuring the effective application by the resolution authority of the resolution tools and powers".

13 "…the available financial means of their financing arrangements reach at least 1 % of the amount of covered deposits…" (note this minimum 1% is the one transferred to the SRF, but not a cap).

14 Recital 5 BRRD.

15 Recital 4 BRRD.

16 Recital 49 BRRD.

consideration, such as resolution planning (determination of tools, strategies and removal of impediments), MREL determination and the formation and usage of the SRF. Whilst the new liquidation regulation would just govern the exiting of the market of an institution. This necessary continuum is probably the strongest argument backing those who advocate for extending the scope in art. 32 BRRD rather than developing a specific liquidation regime. Importantly, the absence of consistency would undoubtedly open the door to perverse arbitrage: institutions could prefer to be liquidated to reduce MREL and resolution authorities might choose to reduce reputational risk by denying public interest.

Finally, a question might remain on whether a bank category such as a "*too small to be resolved and too irrelevant to be liquidated*" should exist. Is there such thing as the smallest of the small? Is it worth leaving aside such small institutions which would be the easiest to deal with?[17]

Having all the above in mind we argue that it is worth considering extending the new funding regime to all institutions where open-bank bail in seems impracticable, whether subject to resolution or liquidation procedures. And to do it in a sort of continuum, covering with BRRD rules the development of resolution plans for all institutions, the reduction of impediments to resolvability and the determination of MREL on a consistent methodology.

Even if the final option is to move for a liquidation regime, resolution authorities in pursue of financial stability preservation, cannot afford an inadequate treatment of a failing institution. A narrow scope approach is a naïve interpretation of the risks that not having a suitable strategy for all banks might mean. An abrupt interruption in the activity of any bank could always represent a potential risk of contagion and rapidly interrupt the ordinary course of the economic activity, having a negative impact on the real economy.

Principle 2, internationalization of losses and MREL determination

The BRRD requires the resolution authority to adjust the recapitalization component of the MREL to adequately reflect the asset reduction and the different risk profile of the institution following the application of resolution tools. In the case of institutions with a liquidation resolution strategy, MREL is expected to be set above the LAA, unless proven unnecessary to cater for additional liquidation costs.[18] Considering that it is not evident whether certain institutions will undergo transfer strategies executed by resolution authorities or will be left to liquidation following a negative PIA, our proposal deals with funding in a similar way, whenever transfer strategies are expected to be used.

Under the assumption that capital requirements reflect the losses the bank will incur in resolution, the key to determining an appropriate MREL requirement for transfer strategies is to ensure that there is a "buffer" available on the capital requirement which, together with

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17 In this regard, BRRD communication (2012): "Since the risk posed by any individual bank to financial stability cannot be fully ascertained in advance, these powers should be available to the relevant authorities in relation to any bank, regardless of its size or the scope of its activities".

18 Article 45(c)2 BRRD.

the contributions from the DGS (or RFs), can be used to make the sale (or, alternatively, the bridge bank) feasible and credible covering additional restructuring costs that the acquirer could not be expected to bear on its own.

Such MREL buffer for entities with transfer strategies should ideally be calculated on a case-by-case basis based on a selection of parameters that best capture the specificities of the entity.[19] This could be similar to the approach currently used by the SRB in its policy for transfer strategies, which we suggest further exploring with the proper scale to target all institutions and not just SIs. To kick-off the debate we would argue that such scaling should include a specific size benchmark at the SIs level, similar to what is already envisaged in the case of top-tier institutions, to capture their greater relevance and complexity, and consistently with the distinction introduced by the Single Supervisory Mechanism. This split should allow for a more stringent internalization and lesser reliance on DGSs (or RF) contributions in the case of SIs. At the other end of the scale, a flat contribution could be envisaged for the smallest institutions (e.g. below 5.000M € total balance sheet). This approach would seek consistency with the concept of small, non-complex institutions, and the precedent of flat contributions to the SRF.

As an additional element to the calibration in this proposal, back testing analyses could be performed, to test:

- The impact on the interest margin of a sample of entities.
- The sufficiency of the proposed MREL requirements to incorporate a bridge institution, if necessary.

Principle 3, compulsory use of the DGS[20]

As mentioned before, DGSs and RFs play a limited role so far in managing bank failures. Their practical function is limited to an eventual and very unlikely payout of covered deposits (notwithstanding their extremely high combined target levels, well above 100 billion €). The DGS Directive contains other options but always limited by the net costs of paying out covered deposits. As a consequence, DGSs have no effective possibility of financially supporting the sale of business and bridge bank tools.

The super-priority of covered deposits in the creditor hierarchy is at the base of the financial cap, and to overcome such limit some proposals have been put forward to make all deposits pari-passu. This is certainly an interesting avenue we would agree to, but it seems to us that it lacks political support from a majority of Members in the EU for fear of deposit runs.

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19 As set forth in article 45.c BRRD (i.e. the size, the business model, the funding model and the risk profile of the institution).

20 Or RF (SRF) should an integrated resolution avenue be finally chosen, instead of the liquidation avenue on which basis we are discussing this paper.

We will not therefore argue in this paper in favor of such possibility, regardless of its merits. Instead we advocate for a simpler approach: the introduction of a compulsory and unconditional contribution by national DGSs (or preferably EDIS or the SRF) once internalized losses and restructuring costs meet an 8% TLOF and all MREL has been exhausted.

This option is supported in several considerations:

- It sets a simple and transparent rule, likewise promoting greater legal certainty than the current reference to "equal to an amount not less than 8 %",[21] particularly when the Least Cost Test would need to be reframed as no liquidation counterfactual might continue to exist.
- It does not require additional calculations as those connected to indirect costs or an eventual increase in the coverage levels of deposits (mirroring US levels).
- It limits the burden of excessive MREL requirements, to all institutions alike, and it does so at a sufficiently high level to claim that something went wrong with supervisors, and burden should also be shared with someone outside the institution.
- It entails a limited risk to DGSs, EDIS or SRF, as the use of this resources would never start before full depletion of the MREL, most likely to provide capital rather than absorb restructuring costs.
- Such level was also understood as intentional to a similar end by some delegations when drafting the BRRD.
- And, it puts a huge amount of money to work, rather than just serve to support debt issuers, without affecting depositor run concerns expressed by some delegations, as there would be no need to eliminate the super-preference rule.

When considering the proposed 8% TLOF level it is relevant to consider the new drafting in the BRRD, which already clarifies that all CET1 and AdT1 count towards the target, and that the reference is made to liabilities including own funds,[22] without the latter in the denominator. Obviously, the possibility to establish a different threshold, or even several, to access collective funds, could be explored. But we would argue that certain connection to the MREL minimum contribution as determined following Principle 2 should remain.

To be able to sustain this proposal DGSs (eventually EDIS or SRF) might need to reach higher targets. We would propose to perform an impact assessment in order to suggest a specific amount. Such assessment should consider:

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21 Art. 44.5.a BRRD.

22 Q&A 37, BRRD-2 Transposition Workshop Questions, 2nd TW circulated to MS.

- The scope of entities for which a transfer tool is foreseen in the resolution plan, and the minimum losses to be absorbed by MREL instruments before the compulsory contribution.
- The option to return to the DGSs (or EDIS) the amounts already contributed to the RFs (SRF) by the scope of institutions to be left out of its use.

As a reference, the FDIC Deposit Insurance Fund (DIF) balance was $110.3 billion as of December 31, 2019, representing 1.41% of insured deposits, as of September 30 2019. Its minimum level is set at 1,35% of insured deposits as from 20.09.2020 and its long term goal would be 2%. Which compares reasonably to the 1,8% targeted in the EU for the combined DGS and resolution funds.

Principle 4, establishment of a voluntary resolution vehicle

In Principle 2 we have discussed the need for minimum levels of MREL, declining with size and access to markets. In principle 3, we presented the case to reintroduce a compulsory contribution from a collective funding source (i.e. DGS) once MREL has been fully used and a minimum 8% TLOF internalization has been secured.

Our Principle 2 proposal should accommodate such an MREL calibration that in the case of SIs the compulsory bail-in of the minimum MREL would most likely exceed the amount needed to allow triggering DGSs (or RFs) contributions. But it is also true that for smaller institutions such overlap would not always be secured, and that bailinable instruments other than deposits might not exist. For such cases we argue that individual institutions should be allowed to choose between: either increasing their MREL levels to the minimum entrance level of the DGS (or RFs), or voluntarily contributing to special resolution vehicle, such as the national resolution fund,[23] which would cover the gap. This voluntary scheme should be pre-funded and immediately available both in resolution and liquidation, playing a role in providing financial support in crisis situations. Eventual net losses would be shared by all participants, as in any other coinsurance system (e.g. IPS). The specific characteristics of the proposed resolution vehicle, such as the target size, its accounting treatment or the compatibility with State aid rules deserve a more in-depth analysis.

[23] Or eventually the national bucket in the SRF.

Annex 1. Determinants of the interest rate at issuance of MREL bonds

This section aims to study the determinants of the interest rate at issuance of MREL bonds, i.e. bonds eligible to meet MREL requirements. For this purpose, we propose an empirical econometric exercise to disentangle whether the size of the bank (together with other bond and bank-level variables) matters for the cost of issuance of these bonds. The analysis is still preliminary, as time should allow for greater observable inputs, but offers some interesting insights on the cost of issuance of MREL instruments and its drivers.

We draw data on MREL issuances from a dataset of banks´ issuances compiled by Refinitiv, a private provider of market data and financial information. In order to identify, with the information available in the dataset, the MREL-eligible instruments and focus our study on these instruments, we restrict the analysis to a sample of Additional Tier 1 (AT1), Tier 2 (T2) and senior non-preferred (SNP) bonds denominated in EUR and issued by credit institutions based in the euro area. While these bonds are inherently different, they share a common feature grounded on their loss-absorption capacity during bail-in processes, which should make them a good proxy for capturing the actual issuance cost of MREL bonds. The final sample comprises 510 instruments (60 AT1 bonds, 178 T2 bonds, and 272 SNP bonds) issued by 92 banks.

MREL bonds are risky and typically pay a premium over other banks´ securities (e.g. covered bonds). This is certainly the case of AT1 and T2, which are capital instruments and make up the "first line of defense", together with other equity instruments, in the event of resolution. To analyze the drivers of the cost of issuance of these bonds, we propose the following general specification:

$$interest\_rate_{i,b,t} = F(\beta X_{i,b,t} + \propto_t + \varepsilon_{i,b}),$$

where interest_rate is the yield-to-maturity at issuance of MREL bond i issued by credit institution b in quarter t, and it is expressed in percentage. On the other hand, X is a vector of issuance or bank-level controls. Specifically, X includes the natural logarithm of the amount issued (in euros). It also includes a set of dummies related to: (i) the coupon type, (ii) options embedded in the bond, (iii) whether the issuer bank is based in peripheral countries (Spain, Italy, Portugal, Greece) or not, (iv) whether the bank is listed or not and, finally, (v) a dummy to control for banks´ size. The maturity of the bond (in years, when available), the number of references issued in each segment (before a new bond is issued) and the rating of the issuer (a numerical variable bounded between 1 and 14, in which each unit represents one notch and in which higher values imply higher risk – or poorer ratings –) completes the vector of controls. Finally, α_t refers to time fixed effects and controls for (observable and unobservable) shocks that are common to all issuances at a particular date (e.g. changes in market sentiment or monetary policy rates around the issuance date). The model is fitted using OLS and errors are robust clustered at the issuer level.

Table 1 describes these variables and provide further information on their construction. In particular, the variable labelled SMALL is particularly relevant in this exercise. This is a dummy variable, which equals one for small institutions and it is zero otherwise. To make sure that there is a sufficient number of issuances in the former group, small institutions (SMALL=1) are defined as those with total assets below the percentile 75th value of the distribution of this variable. As a result, small banks are indeed somewhat *large*, with average consolidated total assets (using the most recent balance sheet information available) slightly above EUR 50 billion, vs. average assets for the group of big banks (i.e. SMALL=0) of ca. EUR 800 billion. This underrepresentation of small-sized banks may be explained either because smaller institutions do not issue many of these bonds or because there are data quality issues.[24]

Table 1

Summary statistics

	# obs	average	sd	p25	p50	p75
Dependent variable						
interest_rate	510	2.5	2.1	0.9	1.7	4.0
Explicative variables						
amount	510	641	1,040	100	500	1,000
coupon: fixed	510	0.8	0.4	1.0	1.0	1.0
callable: YES	510	0.3	0.5	0.0	0.0	1.0
peripheral: YES	510	0.3	0.4	0.0	0.0	1.0
listed: YES	510	0.6	0.5	0.0	1.0	1.0
SMALL	510	0.4	0.5	0.0	0.0	1.0
#_issuances	510	8.9	12.7	2.0	4.0	10.0
rating	479	6.5	2.2	5.0	6.0	7.0
maturity	444	9.5	5.1	7.0	10.0	10.0

Notes: interest_rate is the yield-to-maturity at issuance of the "MREL" bond; amount stands for the issued amount in EUR bn; coupon: fixed is a dummy equal to one for fixed coupon bonds and zero for other coupon types; callable: YES is a dummy equal to one if the bond has call options; peripheral: YES is a dummy equal to one for issuances of banks based in Spain, Italy, Portugal or Greece; listed: YES is a dummy equal to one for listed banks; SMALL is a dummy equal to one for institutions with total consolidated assets below the percentile 75th value of the distribution of this variable; #_issuances refers to the number of issuances of the same instrument (AT1, T2 or SNP) by the same bank before the issuance date; rating collects the rating of the issuer (from S&P and Moody´s) at the time of issuance and it is bounded between 1 and 14, each unit corresponding to one notch, being 1 the highest credit quality, and 14 the poorest credit quality; maturity is the time to maturity at issuance in years.

The estimation results are presented in Table 2. Columns 1 to 3 run independent regressions for each market segment (AT1, T2 and SNP bonds). Column 4 excludes some small German institutions from the sample of SNP issuances, as these banks dominate issuance activity in this segment, which could distort results. Column 5 covers AT1 and T2 bonds jointly, while column 6 further incorporates SNP notes. In these two latter columns, a new dummy is included to capture the differential issuance costs of T2 and SNP over AT1 instruments, which is the baseline, and a-priori riskier category (i.e. AT1 should offer higher rates at issuance than the other bonds).

[24] Some robustness tests have been performed using different definitions of SMALL, in particular choosing lower percentile values in the distribution of total assets to define small versus big banks (this comes at the cost of losing observations/issuances in the former group), or replacing the dummy SMALL with the natural logarithm of banks´ assets. The main results of this analysis remain broadly unchanged in all these alternative specifications. They are available upon request.

Regarding the regressions with the largest samples, shown in columns 5 and 6, the amount issued (*amount*) is negatively related to the cost of issuance, i.e. small issuances pay more at issuance than large issuances (controlling for other bond characteristics). The presence of the institution in the market through other issuances appears to be an important driver of issuance costs: the sign of *#_issuances* is negative (more issuances before a new bond is issued imply lower cost) and the point estimate is statistically significant. The rating of the issuer (*rating*) is positively and strongly correlated with the interest rate paid at issuance, as expected. T2 and SNP debt pay less than AT1 as confirmed by the dummy *instrument*.

Table 2

Regression results

dependent variable: interest-rate	AT1	T2	SNP	SNP ex small DE banks	AT1 + T2	AT1 + T2 + SNP
	(1)	(2)	(3)	(4)	(5)	(6)
amount	1.287	-0.196	-0.0148	-0.0323	-0.205*	-0.117**
	(0.777)	(0.119)	(0.0243)	(0.0193)	(0.121)	(0.0456)
coupon: fixed	-1.231	0.238	0.247**	0.589***	-0.0980	0.229
	(0.815)	(0.426)	(0.118)	(0.0716)	(0.374)	(0.146)
callable: YES	-0.696	-0.353	0.255	0.762***	0.203	0.292
	(0.621)	(0.256)	(0.184)	(0.124)	(0.339)	(0.192)
peripheral: YES	-0.196	-0.267	-0.0811	-0.0211	0.266	0.0410
	(0.539)	(0.303)	(0.122)	(0.145)	(0.315)	(0.184)
listed: YES	-0.0728	-0.275	0.324***	0.258**	-0.274	0.0743
	(0.499)	(0.228)	(0.101)	(0.101)	(0.171)	(0.143)
SMALL	0.519	0.0876	0.0927	0.0895	0.0469	0.0748
	(0.440)	(0.366)	(0.105)	(0.132)	(0.352)	(0.174)
maturity		0.0541*	0.0948***	0.129***		
		(0.0292)	(0.00880)	(0.0108)		
#_issuances	-0.213**	0.00104	-0.00769***	-0.00858	-0.0464	-0.0123***
	(0.0861)	(0.0483)	(0.00224)	(0.00724)	(0.0366)	(0.00341)
rating	0.250**	0.498***	0.113**	0.113**	0.275***	0.217***
	(0.113)	(0.0991)	(0.0409)	(0.0500)	(0.0919)	(0.0564)
instrument: T2					-2.405***	-2.180***
					(0.280)	(0.215)
instrument: SNP						-3.856***
						(0.258)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.783	0.815	0.699	0.759	0.762	0.884
Observations	55	149	269	162	210	479

Notes: this table study the determinants of the interest rate at issuance of MREL bonds. It includes the same variables than table 1. Columns 5 and 6 include the dummy "instrument" to identify T2 and SNP issuances (instrument: T2 and instrument: SNP respectively) The base category are AT1 bonds. The coefficient associated with maturity is not estimated in these columns as AT1 bonds are perpetual (maturity is not defined for these bonds). Errors are robust clustered at the issuer level. * p<0.10; ** p<0.05; *** p<0.01.

With regard to the coefficient associated with *SMALL, the sign* is positive, which suggests higher costs for these institutions. However, the point estimate is not statistically significant (this same result applies to "peripheral: YES"). We argue that this might be because rating agencies take into account the size of banks when they assign ratings,

which potentially reflects the "too-big-to-fail" problem in credit assessments.[25] At the same time, banks´ rating are likely to depend on the credit quality of the sovereign.[26] Therefore, *rating* may already capture both size and geography effects. We have indeed run this exercise without the rating parameter and, interestingly, it results in a clear increase of significance for SMALL and "peripheral: YES", particularly in AT1 and T2 markets (Table 2.bis).

Table 2 bis

Regression results

dependent variable: interest-rate	**AT1**	**T2**	**SNP**
	(1)	(2)	(3)
amount	0.489	-0.307***	0.0158
	(0.714)	(0.110)	(0.0226)
coupon: fixed	-1.208**	0.0996	0.280*
	(0.571)	(0.453)	(0.141)
callable: YES	-0.736	0.293	0.256
	(0.609)	(0.262)	(0.209)
peripheral: YES	0.540	0.882***	0.236*
	(0.503)	(0.257)	(0.126)
listed: YES	0.126	0.125	0.384***
	(0.375)	(0.241)	(0.106)
SMALL	1.215*	0.890***	0.0810
	(0.630)	(0.251)	(0.0944)
maturity		-0.00614	0.0875***
		(0.0247)	(0.00749)
Time FE	Y	Y	Y
R-squared	0.728	0.733	0.621
Observations	60	172	272

Notes: this table study the determinants of the interest rate at issuance of MREL bonds. It includes the same variables than table 1 but excludes the rating of the issuer as it might be capturing size and geography effects.

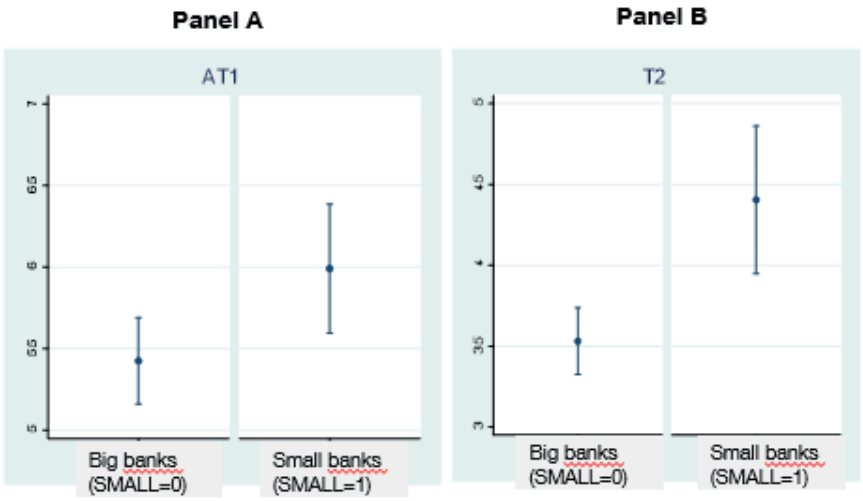
For the sake of clarity and to gain further insights on the economic significance of these results, Figure 1 collects an estimation of the theoretical interest rate that each bank type would pay when accessing the MREL bond market, together with confidence intervals (at 95%). Panel A refers to the cost of issuance in the AT1 market, while Panel B refers to T2 bonds (we omit SNP debt due to the particular composition of banks in this segment). To estimate this cost, we take the "representative" issuance of small vs. big banks in each segment.

25 See, for instance, Hau et al. (2012): Bank ratings. What determines their quality. Economic Policy, Volume 28, Issue 74, Pages 289-333.

26 For more on the sovereign-bank nexus, see Castro and Mencía (2014), Sovereign risk and financial stability, Financial Stability Review (Banco de España), No 26.

Figure 1

Theoretical interest rate at issuance of MREL bonds, by type of bank and market segment



Notes: using the specification of column 6 in Table 2, these panels show estimations of the interest rate at issuance (in %) of a "representative" MREL bond in each market segment and by each type of bank (small or big). The representative issuance is defined by the average amount issued, the average number of references before a new bond is issued and the average issuer rating for each type of bank, leaving other covariates unchanged.

More specifically, the exercise takes into account the average amount issued, the average number of issuances and the average rating of the issuer when SMALL is zero and when SMALL is one, leaving unchanged other covariates. These estimations are obtained with the sample and the specification of column 6 of Table 2. Our results confirm that smaller banks seem to face higher interest rates when they issue MREL debt.

Credibility of the crisis management for institutions: guiding principles for reform opportunities

Sven Balder and Margit Vanberg*

1. Introduction

The crisis management framework for credit institutions and investment firms ('institutions') is currently under review. Potential reform opportunities discussed in this context relate to a wide range of issues, pertaining to the situation of institutions both before and after the point of failure. This paper focuses on crisis management at the point of failing or likely to fail.

The financial crisis of 2007/8 was resolved by a widespread use of public funds to rescue failing banks. In reaction to this, the post-crisis regulatory reforms focused on building a resilient financial system, adequately capitalized, and less prone to the need for public bail-outs. To prepare for the failure of institutions, one element of these reforms has been the adoption of the Bank Recovery and Resolution Directive (BRRD[1]) in Europe.

The BRRD addresses two fundamental concerns which, in the financial crisis, caused government bail-outs: (1) the "too big to fail" problem, i.e. that an unforeseen market exit of an institutions that offers critical financial and economic functions can cause severe repercussions for the real economy or other institutions, and (2) the "too interconnected to fail" problem, i.e. that the market exit of a large systemic bank can give rise to contagion in financial markets and thus endanger financial stability. The BRRD gives instruments and

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1 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. The BRRD is transposed into national law in all member states of the EU. For the Banking Union, the Single Resolution Mechanism Regulation is applicable: Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010.

competences to designated resolution authorities which can use their powers when public interests are at stake, i.e. when it is necessary to resolve a failing institution and safeguard critical functions and/or financial stability.

If a resolution authority intends to intervene through taking resolution actions, it needs to demonstrate the public interest in the resolution. A public interest in the application of resolution tools requires that one or more of the resolution objectives are at risk and that these objectives cannot be achieved to the same extent in insolvency proceedings[2]. Where the public interest is not confirmed, the BRRD assumes that the failing institution will be liquidated in a normal insolvency proceeding (NIP) and that market discipline will thus be upheld[3].

Despite the introduction of the BRRD, national differences in handling the failure of financial institutions remain, as NIPs are not harmonised across the EU[4]. This explains the growing dissatisfaction with the crisis management framework in the EU, which is perceived as distorting the level playing field in the European Union. Much has already been done to mitigate the impact of diverging NIPs (e.g. harmonized measure to ensure swift market exit, harmonization of substantial parts of the creditor hierarchy). Still, an encompassing harmonization of the crisis management for institutions deemed for insolvency is missing. This paper adds to the debate on enhancing the crisis management system by defining fundamental objectives that the crisis management for failing institutions should respect and deriving necessary properties of reformed NIPs.

Section 2 explains current approaches for handling failing institutions in the existing crisis management system and why the divergences among member states pose a problem. Section 3 derives objectives that a reform of the crisis management framework should meet. Section 4 assesses existing reform proposals against the stated objectives.

2. Options currently available to handle the failure of institutions

The BRRD framework for dealing with a failing institution applies to EU institutions of all sizes and all geographical extension. The regime is based on the premise that institutions can be categorized into those that need to be put into resolution upon failure and those that can exit the market under normal insolvency proceedings without causing detrimental effects. The legal framework and the accompanying standards give guidance to authorities on how to sort institutions into one or the other category.

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2 The resolution objectives are: (a) to ensure the continuity of critical functions; (b) to avoid significant adverse effects on the financial system; (c) to protect public funds by minimizing reliance on extraordinary public financial support; (d) to protect covered deposits and covered investors; (e) to protect client funds and client assets. (Art. 32 (5) BRRD and Art. 31 BRRD). Resolution action is in the public interest when it is necessary for the achievement of and is proportionate to one or more of the resolution objectives and winding up of the institution under NIP would not meet those objectives to the same extent.

3 The BRRD thereby implements a central demand of the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions, which state that resolution regimes shall "ensure that non-viable firms can exit the market in an orderly way" (compare preamble xiii in FSB, 2011).

4 See BRRD, recital 4.

Resolution under BRRD

As stated above, resolution is chosen when the public interest assessment (PIA) comes to a positive conclusion. While the final and definite public interest is determined at the point of failure, (in BRRD terms "failing or likely to fail" or FOLTF), the responsible resolution authority already conducts an "anticipated PIA" for each individual institution as part of resolution planning. The anticipated PIA compares the hypothetical resolution outcome to the expectation of how the resolution objectives would be met by winding up the institution under NIP.

This anticipated PIA is fundamental for setting the future course, because the available resolution strategy options at the time of failure depend on whether resolution authorities and institutions have prepared for a resolution. With a positive "anticipated PIA", an institution must work towards meeting the conditions of resolvability in the course of resolution planning in order to make a resolution execution feasible.[5] Perhaps the most central of the resolvability requirements is the requirement to build and maintain sufficient loss absorbing capacity beyond own funds requirements. This loss absorbing capacity is intended to allow a re-capitalization of the going concern business after the implementation of resolution actions. Further resolvability requirements that follow from a positive anticipated PIA relate to data requirements. In the course of resolution planning institution must regularly report resolution data to the resolution authority. They must also set up a management information system, which includes, among other data, continuously updated information necessary to conduct a valuation at short notice.

For some institutions, the responsible resolution authority will come to a clear decision that there is a public interest in resolution, for instance, because the institution has critical functions. For other institutions, the resolution authority might be certain that due to the small size and substitutable business and low interconnection of the institution, a market exit through piecemeal liquidation is possible. Of course, options and tools available in national insolvency proceedings make the assessments of the public interest more difficult and lead to different results in the member states of the EU. If there are more options available in an NIP, then, in particular circumstances, it becomes less likely that a resolution will meet the resolution objectives to a greater extent than a winding up of the institution.

The particular challenge for authorities lies with the institutions that are right at the boundary of thresholds currently used to determine the public interest during the planning stage for two reasons:

1 Such institutions may not be as interconnected with the financial system as large systemic banks are and therefore do not meet the threshold for systemic impact. Nevertheless, the specific economic conditions at the point of failure

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5 It is possible to resolve an institution for which resolution plan did not foresee the application of resolution tools. However, the realm of possibilities is limited, when the institution cannot make updated resolution specific data available and does not have enough loss absorbing capacity to support the application of resolution tools.

could change initial classifications of institutions. Especially a situation of broader financial instability or system wide events could be such that the marginal impact of institutions originally deemed eligible for insolvency might become a concern for financial stability.

2 Although there is no clear evidence of contagion effects resulting from the failure of the institution, there might be hidden variables, which are only observable when they materialize and which result in joint failures of many similar banks. In sum, the joint failure of these banks would destabilize the financial system.

Liquidation Aid under NIP

The simple schematic depiction of the PIA as resulting from a comparison of a resolution by the application of resolution tools and powers to a piecemeal liquidation does not reflect reality. In the recent past there have been instances in which the resolution authority negated the public interest in a resolution of a particular institution where this institution was subsequently not liquidated in a piecemeal liquidation. Rather, member states deemed that financial stability concerns surrounding these failures called for public aid. The Commission's state aid framework has allowed the use of (public) liquidation aid to mitigate the effects of an institution's failure on financial stability. Concretely, public funds have been deployed to support the pro-longed existence of a failing financial institution outside of the resolution regime. The continuation was argued to reduce the overall liquidation costs and facilitate the sale of the assets or parts of the business in a competitive process (European Commission, 2013, para. 67). Such measures are, to a certain degree, similar to the sale of business tool in resolution under the BRRD regime – but with the important difference of the use of public support.

The assessment conducted by the European Commission when deciding on the approval of state aid on the basis of Article 107(3)(b) of the TFEU[6] is not fully aligned with the "public interest assessment" for resolution purposes. This explains why the public interest assessment of the resolution authorities can come to a negative conclusion, while the "public interest" in granting state aid to finance a liquidation may be confirmed.

Alternative measures under the DGSD

A further possibility to use resolution-like tools in insolvency is foreseen in the Deposit Guarantee Schemes Directive (DGSD[7]). The DGSD provides member states with the option to transpose into national law rules on DGS financing of alternative measures in the event of a failure of a credit institution. Article 11(6) DGSD specifies that national DGSs can use their financial means to support a sale of assets and liabilities of a failing institution to an acquiring institution in order to preserve the access of depositors to, at minimum, their

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6 Treaty on the functioning of the European Union.

7 Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.

covered deposits. Here again, the effect is to continue at least parts of the business of the failing institutions. The costs for the DGS to facilitate such a transaction must remain below the net amount of the costs that the DGS would have incurred for compensating covered depositors of the failing institution ("*least-cost principle*").[8]

Financing means as unintended drivers for the selection of crisis management tools

As stated above, the BRRD philosophy is to categorize institutions clearly into those to be resolved and those that can exit the market upon failure under NIP. It was argued above that the existence of resolution-like tools in NIP feeds back to the outcome of the PIA. A fundamental principle of the BRRD regime is that government bail-outs are to be avoided in order to ensure market discipline and align incentives for risk taking with return on investment. Regardless of whether the institution is wound up in national insolvency proceedings or resolved by the application of resolution measures, losses should be borne primarily by shareholders and creditors. The use of public funds, in particular, taxpayer money, to help ailing banks, should be limited to the greatest possible extent.

This fundamental rule is strictly followed in the resolution regime where, importantly, losses may have to be borne by non-subordinated creditors, including holders of ordinary senior unsecured liabilities, as well as by uncovered deposits from natural persons and micro, small and medium-sized enterprises. Loss participation can even include DGS resources, on behalf of covered depositors. Contributions to loss absorption and re-capitalisation from industry financed resolution financing arrangements are possible only after a minimum loss contribution of an amount equal to 8% of total liabilities, including own funds, from shareholders and creditors is reached and then only under very strict conditions.[9]

In a piecemeal liquidation, losses are distributed in the reverse order of the insolvency creditor hierarchy. Only covered depositors are protected from having to suffer losses. However, if alternative measures are applied in liquidation or if liquidation aid is deployed, in order to support the sale of parts of the institution, then industry funds or public funds may absorb some of the losses. Liquidation aid is considered compatible with the rules of the single market already when only the shareholders and holders of hybrid capital and subordinated debt have fully contributed to offset any losses. Senior creditors may be spared from having to suffer losses.[10] In the event that alternative measures are financed by DGS, the possibility to access the industry financed DGS fund depends on the design of the least cost principle. The current interpretation of the least cost principle is very strict in most member states. However, making DGS funds more accessible for alternative measures by the DGS is one cornerstone of discussions on reforms of the crisis management system (see section 4).

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8 CEPS (2019, p. 139) lists the following countries as those in the EU, which transposed Article 11(6) DGSD into national law: Belgium, Denmark, Finland, Greece, Ireland, Italy, Luxembourg, Lithuania, Malta, Poland and the UK.

9 Compare Articles 27(6) and 76 SRM-R on the permitted uses of the resolution fund.

10 European Commission (2013, para. 77).

When similar tools are available in resolution and liquidation, then the assessment whether to apply resolution tools or to liquidate the institution under NIP might be primarily driven by the availability of financing. Currently, this creates a moral hazard problem. Depending on the insolvency regime of the Member State concerned or depending on the particularities of the specific situation, some institutions might have to undergo the process of making themselves resolvable (e.g. via building loss absorbing capacity and advanced management information systems) while other institution, despite having similar relevant characteristics, can benefit from liquidation aid or DGS support. The fact that different burden-sharing rules apply in resolution and liquidation has already strained the credibility of the resolution regime.[11] Aside from the moral hazard issues, the different outcomes for creditors in NIPs are an issue also for the harmonization of quantifying NCWO risks.[12]

3. Objectives of an enhancement of the crisis management framework

Any reform of the crisis management framework must be aware of the described interdependencies between resolution and liquidation. To overcome issues of moral hazard, the reform of the crisis management framework should fulfill the following objectives:

- *Level Playing Field*: Institutions with similar characteristics should be subject to the same treatment. Furthermore, the same or similar rules should be applicable in all Member States.
- *Avoid moral hazard*: System selection by the authorities should not be driven by the applicable burden-sharing rules. Conditions for the use of public funds should be aligned.
- *Preparedness and proportionality*: The level of preparation necessary for meeting the requirements of either system should be proportional to the need for achieving their intended results. Preparation is a key building block of a credible crisis management. While erring on the side of too much preparation triggers avoidable

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11 See Kenadjian (2019, p. 31 et seq.) and Restoy et al. (2020, p. 13): "This potentially creates distorted incentives for authorities and perpetuates the bank-sovereign link that the resolution framework and the banking union is intended to address."

12 Even without different propensities to use resolution-like tools in liquidation, also the standard insolvency by liquidation of assets and subsequent re-imbursement of creditors is different across member states. The DGSD ensures that in liquidation, consumer confidence in the financial system is safeguarded by protecting covered deposits equally and reliably across the EU. But beyond the pay-out of covered deposits, there are divergences in how long it takes to realize the value of the assets of a failing institution and to reimburse non-covered depositors and investors and the DGS. The less effective an NIP, the more strain on the credibility of the DGS and the heavier the burden on the financial system. Especially when cross-border groups fail, this can become a problem and lead to significant divergences in the NCWO comparison (Restoy et al (2020, p. 13)). The present paper does not go into this discussion at length. A future project worth to consider is the development of "Key principles for national insolvency proceedings", in order to achieve a harmonization in the effectiveness of NIPs in the EU.

costs for the institutions concerned, erring on the side of too little preparation might lead to costs for the financial system and the taxpayer.

4. Options for insolvency proceedings

To reduce the existing divergences in national insolvency proceedings all member states of the EU could introduce a harmonized tool available in insolvency proceedings. One reform option under consideration is the introduction of a liquidation tool which could rely, at least to some extent, on DGS funds for financing.

The authors' thoughts on this reform proposal are presented below, with a focus on the objectives set out in section 3, especially on (1) how the costs of realizing the option are distributed among different stakeholders, (2) whether it provides a credible way forward in case of failed institutions and (3) how much burden it places on institutions and authorities to operationalize this option. Given that this reform proposal is intended to be an addition to the resolution regime, the issues that arise from the side-by-side existence of resolution and such a liquidation tool need to be addressed as well.

Tools under NIP

Standard "winding up under national insolvency proceedings" with piecemeal liquidation provides for a payout of covered deposits by the DGS, while an insolvency administrator is charged with the realization of the assets of the failed institution and settling creditor's claims against the proceeds from the liquidation. The DGS is subrogated to the claims of the covered depositors in insolvency. Usually the business of the failed institutions ceases to exist and all customer relationships need to be resolved.

An alternative liquidation tool, could provide for a sale of viable parts of the business to a purchaser in combination with the purchaser's assumption of some of the liabilities of the failing institution. Such a transaction could be beneficial to preserving franchise value by upholding continued business relationships. The following tool could be employed to this purpose:

- *P&A tool*: A purchase & assumption transaction combines a sale of assets to a competitor with the competitor's assumption of the covered deposits, and potentially other deposits and liabilities (as long as the least cost test is passed). The competitor's interest in acquiring a mix of assets and liabilities derives from the franchise value of taking over entire customer relationships. The price offer of the purchaser could therefore exceed the hypothetical liquidation proceeds in a piecemeal liquidation. Such a P&A transaction could be beneficial for the DGS, which avoids the payout of the covered deposits. Creditors beyond covered depositors can benefit if their deposits and liabilities are transferred (even in part) to the acquiring institution and they retain a higher value than they would have received in a liquidation of the assets.

Financing

To introduce such a P&A tool into the European Crisis Management Framework, Article 11(6) DGSD is a natural anchor point to start from. Where member states have transposed Article 11(6) DGSD into national law, the support of alternative measures becomes an option apart from the pay-out function of DGS. The DGS may use funds to support a P&A transaction subject to a financial cap based on the *least-cost principle*: The cost of the intervention must not exceed "the net amount of compensating covered depositors at the credit institution concerned". This is understood as a comparison of the net cost of the alternative measure with the net cost that the DGS would have incurred in paying out covered deposits, in consideration also of the recoveries it would have received from the insolvency estate, by subrogation to the depositors' claims ('least cost test'). A P&A transaction with support from the DGS to the acquiring institution can pass the least cost test whenever the DGS's payment to the purchaser is less than the loss that the DGS would have been exposed to in hypothetical liquidation.

The "super-priority" status of covered deposits in the insolvency creditor hierarchy currently significantly reduces the risk that covered deposits will suffer losses in the event of a failure. In most failures, the role of the DGS is to pay out the covered deposits within the legally determined time period. The DGS has a very low risk of actually taking losses in failure, because it can expect to regain its disbursements from the insolvency estate, against which it registers its claim in subrogation of the covered depositors. As a result, with the application of the least cost test, the capacity of a DGS to contribute to funding a P&A transaction is limited or even zero.

Two possibilities to increase the capacity of the DGS to finance alternative measures are most often put forward:[13]

a) Replacing the super-priority of covered deposits by a "general depositor preference", where at least covered deposits and eligible deposits (above the coverage level) rank pari passu.

b) Keeping the super-priority of covered deposits, but increasing the coverage level (from the current level of EUR 100,000).

Options a) and b) could significantly increase the costs entering into the least cost test, thereby increasing the opportunity for alternative measures. Variations of these two options for increasing the DGS`s capacity to contribute to alternative measures build on the possibility to include indirect costs in the least cost test. Restoy et al. (2020, p. 17) suggest, for instance, to include costs from contagion effects that would have hit other institutions in a payout event. Contagion could result from diminished market confidence or from the fact that other institutions are burdened by ex-post contributions to re-fill the DGS funds.

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13 See, among others, de Aldisio et al. (2019, p. 8).

What these options have in common is that they would increase the ultimate costs borne by the DGS. This is undesirable insofar as the DGS funds derive from industry contributions and any additional uses of DGS funds must translate into higher levies from the industry. A membership in a DGS is mandatory for institutions. To keep the costs of the system in check while at the same time ensuring safety to the covered deposits, the super-priority and the current coverage level correspond with each other. This was a balancing act of offering protection to the most vulnerable creditors of financial institutions while not increasing the costs to the deposit taking institutions excessively. In fact, mainly senior creditors have borne the costs for the protection of covered deposits, as they take on losses beforehand.

Below we consider a third option to finance the P&A tool which would allow both the super-priority of covered deposits and the current coverage level of EUR 100,000 to remain intact:

c) Claim of recourse for the DGS

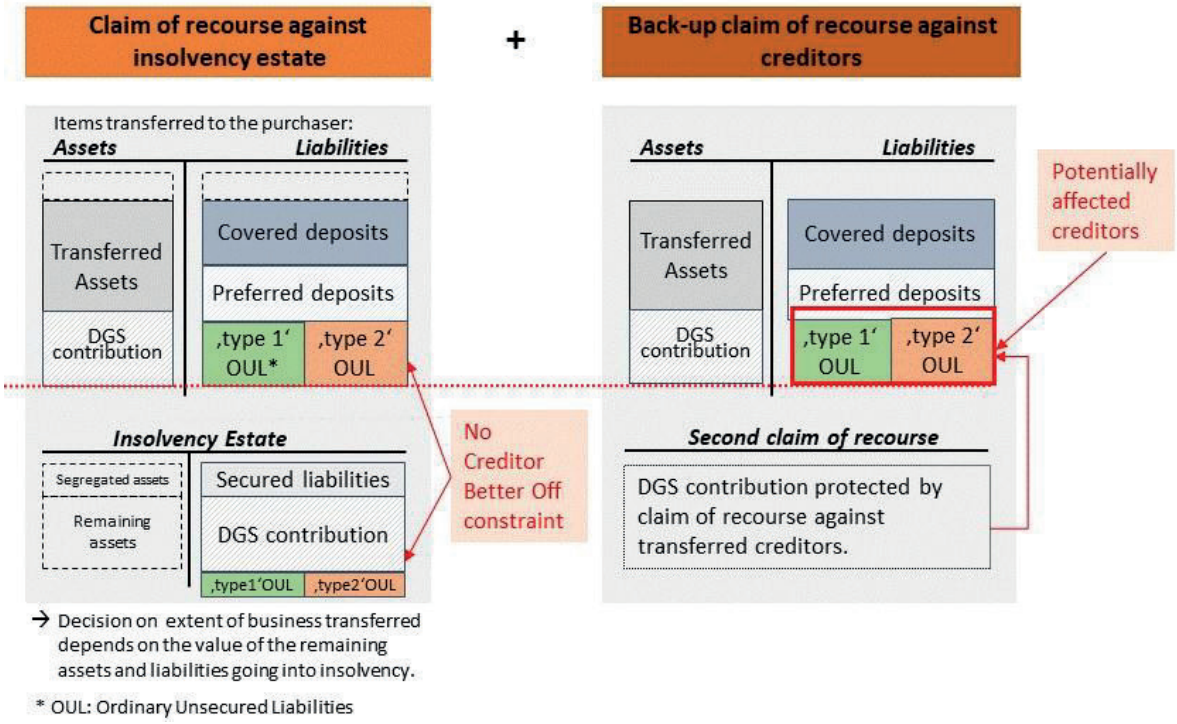
When a bank fails, the DGS could be allowed to provide financing to support a P&A transaction, independent of the LCT which is linked to its own loss probability. Instead, the contribution should be linked to the expected worth of the remaining assets of the failing institution. The immediate benefit of allowing this support is that viable assets can be transferred in a short period of time, and that the purchaser will assume deposits and perhaps some of the senior liabilities. Because the transaction can take place quickly, the uninterrupted continuation of the vulnerable customer relationships is secured. Figure 1 shows the balance sheet of the purchasing institution where the transferred assets together with the DGS contribution offset the transferred liabilities of the failing institution.

For the amount of its contribution paid to the purchaser, the DGS will receive a claim of recourse against the failed bank in the insolvency estate. This procedure would be similar to the claim of recourse provided for in Article 9(2) DGSD in case of BRRD/SRM-R resolution. That claim of recourse should rank at the same level as covered deposits and, thus, would benefit from the super-priority.

For the event that the remaining assets of the failed bank are not of sufficient value to satifsfy the DGS claim, then this claim would be secured by a second claim of recourse against the creditors of the liabilities that were transferred in the P&A transaction (other than covered deposits). This is shown in the right column of Figure 1 by identifying the creditors that may have to reimburse the DGS for its contribution ex-post. So, in effect, the second claim against the transferred creditors would economically be the same as if an asset/liability transfer had been realized in the resolution framework and been supported by a bail-in to absorb losses. Hence, this option would contribute to a harmonized treatment in terms of burden-sharing under both the resolution and the liquidation regime.

Figure 1

Stylized illustration of the „claim of recourse"– option



There are at least two important difficulties with this option:

1 In insolvency, the administrator of this tool has to observe the pari passu principle that all insolvency creditors of the same rank have to be treated equally (for instance type 1 and type 2 creditors of ordinary unsecured liabilities, as depicted in Figure 1). It is therefore not possible to transfer particular creditors and leave others behind. In resolution, in comparison, the resolution authority can use its resolution powers to exempt particular liabilities from the bail-in, as depicted in the right-hand column of Figure 2. This power is not available to an insolvency administrator because the public interest, for instance in preserving financial stability, is not met.

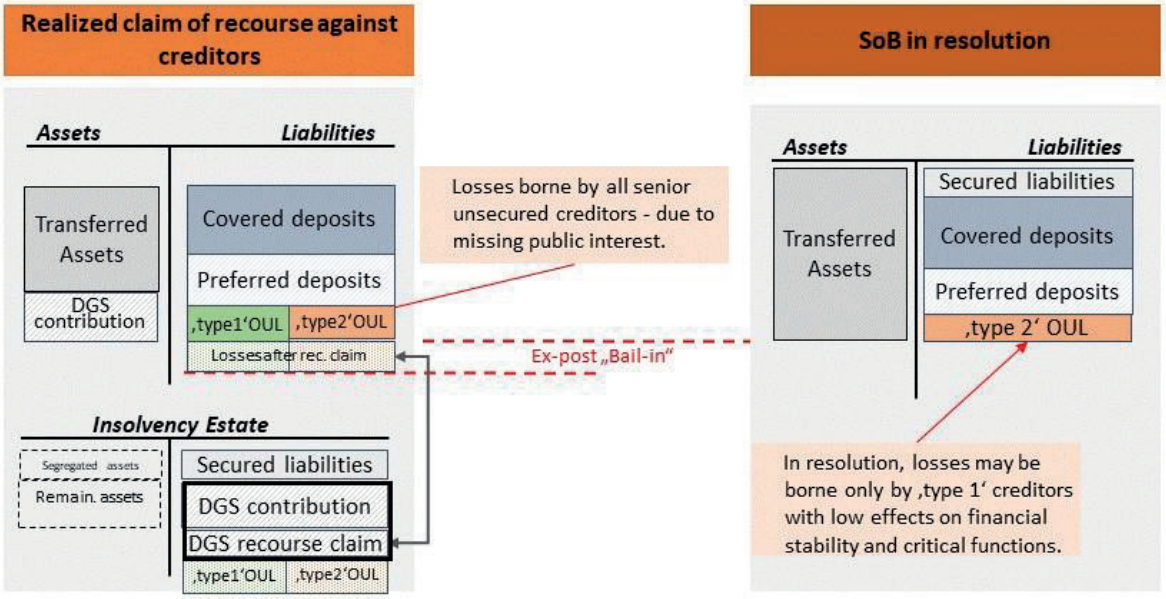
2 If the second claim of recourse against the creditors is to be secure, then it must be ensured that the creditors transferred to a purchaser do not have the right to terminate their contracts until the potential claim of recourse is valued. [14]

Due to these difficulties, the claim of recourse option is not easily operationalized. But it meets the objective of keeping the DGS affordable.

[14] A question that will need to be solved is how to make sure that creditors transferred to a purchaser do not "run", i.e. move their deposits/terminate bonds, as long as the potential claim of recourse is still an issue? (IMF p. 54, discusses this risk in relation to the bridge bank tool).

Figure 2

Comparison of the "claim of recourse" option to a Sale of Business in resolution



The least-cost test in the context of the claim of recourse option would allow the DGS to fund a transaction, as long as its ultimate costs – after recoupments from the claim of recourse – do not exceed the ultimate costs of a payout event. Sufficient amounts available for such recoupments would come from liabilities which can suffer losses before depositors. Therefore, a P&A tool will have better chances of realization if authorities could require institutions to have sufficient amounts of liabilities subordinated to deposits. Institutions would not need to issue these liabilities directly on capital markets. For example, even smaller banks can issue private placements. In line with the Commission launched action plan on Building a Capital Markets Union it seems reasonable to assume that the market for private placements in the EU will increase and could mitigate the problem of appropriate financing.[15] In contrast to normal depositors, such investors will also enforce market discipline. In addition, the IMF considers holders of specific high-value deposits capable of assessing the bank's risk and not requiring particular protection such that their deposits could also be available for loss absorption.[16]

Operationalisation

The operationalisation of the P&A tool in NIP depends to a large degree on which of the above-described financing options prevails. If a general depositor preference or a higher coverage level is put into practice, the DGS can dispose of more funds. This might facilitate the task of finding a purchaser to take over the viable business of the failing institution together with, at least, the covered deposits, preferably also the eligible deposits and even more liabilities.

15 For an overview of private placements and their suitability for medium-sized firms cp. COM (2017b).

16 See IMF (2020, p. 15).

The US Federal Deposit Insurance Corporation (FDIC) approach to winding down institutions through the transfer of performing assets and related liabilities to a competitor can be considered as the model for this option. The US system is based on a general depositor preference. The FDIC considers P&A transactions as the standard tool for handling the failure of small institutions. To this effect, the FDIC has playbooks for individual banks. In the final months of an institution's downturn, the FDIC, which, together with local banking authorities, also has supervisory responsibilities for the institutions, begins preparations for the transaction. This includes preparing a virtual data room with updated information on the institutions assets and liabilities and starting a marketing process. The FDIC allows at least around 90 days for a competitive bidding process for small institutions. If time pressure does not allow proper preparations, the FDIC will resort to a bridge bank solution, a simpler transaction, involving only the transfer of insured deposits to another institution, or a simple payout of the covered deposits. [17]

The burden on the executing authority is thus relatively heavy in the months leading up to a transaction. For an institution with a relatively simple business model, the burden to comply with the preparatory measures is relatively low. The costs to finance this system are borne by the financial industry through mandatory contributions to the deposit guarantee fund.[18]

The US system may not be easily transferred to the European market as there are US specific market characteristics, which may have no equivalence here. The business of the small US commercial banks and savings banks typically consists of loans to single families, commercial real estate and installment loans.[19] Market estimates for such loan portfolios are far easier to gather than accurate valuations for more complex institutions with financial assets such as derivatives, debt securities, equity investments and loans to larger corporates. This facilitates an execution of the P&A tool in the final months leading to the institution's failure.

The US system might not place that much burden on the typical small institutions to prepare for a potential P&A. But for the mid-sized institutions in focus of the European debate, the requirements to prepare for a competitive bidding process on all assets and liabilities at time of failure would place high demands on the data available – basically comparable to the valuation framework that lists the data needs for a resolution valuation.

Treatment of shareholders and creditors

As mentioned above, the FDIC type of financing which is based on the general depositor preference would increase the costs of the DGS system. The financing of a new tool in insolvency could alternatively be aligned to the resolution framework via the "claim

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17 See FDIC (2019, p. 10).

18 It should also be noted, that the US system may not be easily transferred to the European market where the DGS is not always a public authority and therefore lacks corresponding powers. It needs to be discussed if similar powers can be granted to private DGS or which adjustments are needed.

19 See FDIC (2019, p. 11).

of recourse" option. The operationalisation of the "claim of recourse" requires a competitive bidding process and, depending on the circumstances, it could depend on the existence of appropriate loss taking liabilities. In this respect, it would not offer a solution that is less demanding than the resolution framework.

The reform based on the recourse claim option would meet the objectives listed in section 3. Under the prerequisite of a strict least cost assessment the financing of the additional tools could be useful to achieve higher value preservation and protect more creditors than just the fully covered depositors. The covered depositors and any other creditors transferred to an acquirer receive an uninterrupted service. Especially when creditors of eligible deposits do not have to await a lengthy liquidation process to have their savings at their command, this is a valuable improvement. Creditors may even realise more value in a P&A transaction than in a liquidation, because an acquirer could be willing to pay a premium for the combination of entire customer relationships beyond the net worth of the assets.[20] If more than the covered deposits are transferred to a purchaser, then the institution must either have sufficient valuable assets to off-set these liabilities or a hair-cut to the liabilities would be necessary in the form of an "ex-post bail-in".

In this context, NCWO risks remain an issue. The pari passu principle must be observed. Creditors not transferred to the acquiring bank as part of the transaction must not receive a less favourable treatment than the transferred creditors. There is, indeed, a discussion in the U.S about the discretion at the hands of the FDIC in treating similarly situated unsecured senior creditors differently. The U.S. Treasury (2018, p. 33) has argued that: "Were the FDIC to use this authority to privilege short-term unsecured creditors over long-term unsecured creditors, it would arguably be providing the short-term creditors with a bail-out at the expense of the long-term creditors. [...] Such preferential treatment would not only be inconsistent with the rule of law but also would weaken the ability of creditors to properly price and monitor risk."

Lastly, even when financing issues are resolved, caution is still in order, because a separation of a package of particular assets and liabilities from an institution is not possible without proper preparation. A P&A transaction pre-supposes updated information on the value of assets and liabilities. In sum, the analysis shows that the operationalization of a P&A tool according to the objectives formulated in section 3 leads to comparable burdens placed on authorities and institutions as in the resolution regime.

5. Conclusion

With the introduction of a harmonized additional tool in NIP, as described above, the European liquidation regimes would offer a resolution-like tool to banks that would otherwise enter piecemeal liquidation. The alignment of financing conditions of this tool and

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20 See IMF (2020, p. 52).

the resolution framework, as described by the recourse claim option, avoids any incentives regarding the determination of the PIA at FOLTF and ensures market discipline.

Under the conditions determined above, operationalisation burdens are present in both the liquidation regime and the resolution regime. Burdens are possibly very similar as the tools are, in the end, almost the same. As the overall costs will also be similar, the question which regime is applied boils down to the public interest assessment. This assessment will have implication for which authority is responsible for the implementation of the described measures and how preparedness for application of the measures can be achieved.

Sufficient planning that ensures the preparedness for the harmonized liquidation tool would be necessary. In particular, data for valuation and separation purposes must be available at short notice. In addition, as mentioned above, own funds and eligible liabilities would be needed to finance the tool without recourse to public funds. This is independent from whether creditors of the institution will bear losses directly (e.g., as for a bail-in in resolution) or afterwards (e.g. when affected by recourse claims of the DGS). To sum up, for the application of a P&A tool in liquidation, planning for insolvency will approach planning requirement for resolution.[21]

[21] Diverging normal insolvency proceedings in the EU would still continue to exist, after introducing the new tool. Such proceedings would likely consist of winding down by an insolvency administrator through selling of the assets and reimbursing creditors.

References:

CEPS (2019), CEPS Report for the European Commission on "Options and national discretions under the Deposit Guarantee Scheme Directive and their treatment in the context of a European Deposit Insurance Scheme". Brussels.

De Aldisio, A., Aloia, G., Bentivegna, A., Gagliano, A., Giorgiantonio, E., Lanfranchi, C. and Maltese, M. (2019) Towards a framework for orderly liquidation of banks in the EU. Banca d'Italia Notes on Financial Stability and Supervision, No. 15.

Deslandes, J., Magnus, M. and Dias, C. (2019) Liquidation of Banks: Towards an 'FDIC' for the Banking Union? European Parliament In-Depth Analysis.

European Commission (2013), Communication 2013/C216/01. Communication from the Commission on the application, from 1 August 2013, of State Aid rules to support measures in favour of banks in the context of financial crisis ('Banking Communication').

European Commission (2016), Commission Delegated Regulation EU 2016/778. Official Journal of the European Union L131/41.

European Commission (2017a), State Aid Decision C(2017) 4501 final. State Aid SA. 45664 (2017/N) – Italy – Orderly liquidation of Banca Popolare di Vicenza and Veneto Banca - Liquidation aid.

European Commission (2017b), Identifying market and regulatory obstacles to the development of private placement of debt in the EU.

European Stability Mechanism (2019), Completing Banking Union to support Economic and Monetary Union. Discussion Paper Series/7.

Federal Deposit Insurance Cooperation (2019), Resolutions Handbook, revised January 15 2019.

Financial Stability Board (2011), Key Attributes of effective resolution regimes for financial institutions. www.fsb.org.

International Monetary Fund (2020), Managing Systemic Banking Crisis: New Lessons and Lessons Relearned. Monetary and Capital Markets Department Paper Series No. 20/05.

Kenadjian, P. (2019), Open questions on bank resolution in Europe. In: Dombret, A. and Kenadjian, P. (eds.), Resolution in Europe: The unresolved questions. Berlin: De Gruyter.

König, E. (2020), Paths towards a clear and predictable liquidation regime. SRB Blog post, Brussels, 9 September 2020.

Restoy, F., Vrbaski, R. and Walters, R. (2020), Bank failure management in the European Banking Union: What's wrong and how to fix it. Financial Stability Institute Occasional Paper No. 15.

Single Resolution Board (2017), SRB Decision SRB/EES/2017/11. Decision of the Single Resolution Board in its executive session of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Veneto Banca S.p.A.

Single Resolution Board (2018), Critical Functions: SRB approach.

Single Resolution Board (2019), Public Interest Assessment: SRB approach.

U.S. Department of the Treasury (2018), Report to the President of the United States: Orderly Liquidation Authority and Bankruptcy Reform.

How to deal with weak financial institutions experiences and lessons from a non-euro area country

Jens Verner Andersen and Mathias Semay Hovedskov[1]

1. Resumé

For obvious reasons, bank resolution frameworks have seen large global attention since the inception of the global financial crisis (GFC) in 2007-08. Both the IMF and G20 have published reports and recommendations in the area and new legislation has been adopted in the EU with the implementation of the BRRD and the subsequent transposition in EU member states. Nevertheless, much of the work has – given the nature of the problem – been focused on the G-SIB and D-SIB. On the contrary, resolution of small and medium sized banks has seen more a moderate level of interest. However, a European survey[2] disclosed that among the various models that have been applied in the process of winding down weak financial institutions in EU, the more dominant schemes have been targeting small and medium sized banks as opposed to the very large institutions.

In this paper, the Danish experience on how to resolve small and medium sized banks is portrayed. Since 2008, a dedicated company – Financial Stability Company (FSC) – has been winding down and overseeing the resolution of more than 15 banks. More than EUR 17 bn in gross loans and 3000 employees have been taken over and wound down by the company as part of resolving weak financial institutions in Denmark. The activities have all been associated with small and medium sized banks. Two banks have been managed under the BRRD framework which was transposed into Danish

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[2] World Bank (2016): Bank Resolution and Bail-in in the EU: Selected case studies pre and post BRRD.

legislation in 2015. The applied models have facilitated a system, where customers can continue to have access to critical functions, and therefore avoid risk of contagion, not only into other financial institutions but also to the real economy such as the real estate market.

More importantly, in all the cases that have been managed by FSC since 2008, the holders of equity capital and subordinated capital have faced losses – in line with previous practice. Since the inception of Bank Rescue Package III legislation in 2011, which was later substituted with the BRRD transposition, also senior claimants – including bond holders and uncovered depositors have realized losses in connection with banks that have been resolved by FSC. Thus, the risk of contribution from Danish taxpayers, has been reduced considerably since the start of the Great Financial Crisis (GFC), where Danish taxpayers via the Danish Government had guaranteed all senior claims in Danish banks which totaled almost twice the Danish GDP.

This paper further elaborates on the framework for resolution of small and medium sized banks. In addition, the paper illustrates the positive externalities of applying tools in the case of resolution of weak financial institutions. Based on anecdotal evidence, it can be further assumed that establishing well-known resolution systems of small and medium sized banks would strengthen the bank consolidation process.

Going forward, the Danish authorities have clearly stated to relevant counterparties, including all the stakeholders in the banking sector, that subordinated creditors and senior claimants face the risk of write down and losses in case of a situation where the bank is failing or likely to fail. The statement has been conveyed in a concise format, leaving no doubt among the stakeholders about the determination not only to state it as an intention but of doing it in practice. Two banks have already been resolved under the BRRD.

Moreover, the strategy has been supplemented by requirements for the small and medium sized banks to hold eligible liabilities (MREL) that are sufficiently greater than the capital adequacy levels. After the MREL levels have been reached, the small and medium sized banks are effectively more resolvable.

2. Background

a. Learning points during the financial crisis

In the wake of the GFC, several wide-ranging initiatives were taken in Denmark in order to combat its repercussions, cf. Box 1. Since the epicenter for the crisis was the financial sector, obviously these initiatives were targeted the enforcement of a stronger liquidity and capital position in the viable parts of the banking sector. The purpose was therefore twofold; on the one hand the initiatives should ensure and strengthen provision of credit to viable investment projects that in normal business cycle would receive finance and on the other hand the initiatives should limit the risk of contagion so that the fallout of the crisis could be controlled.

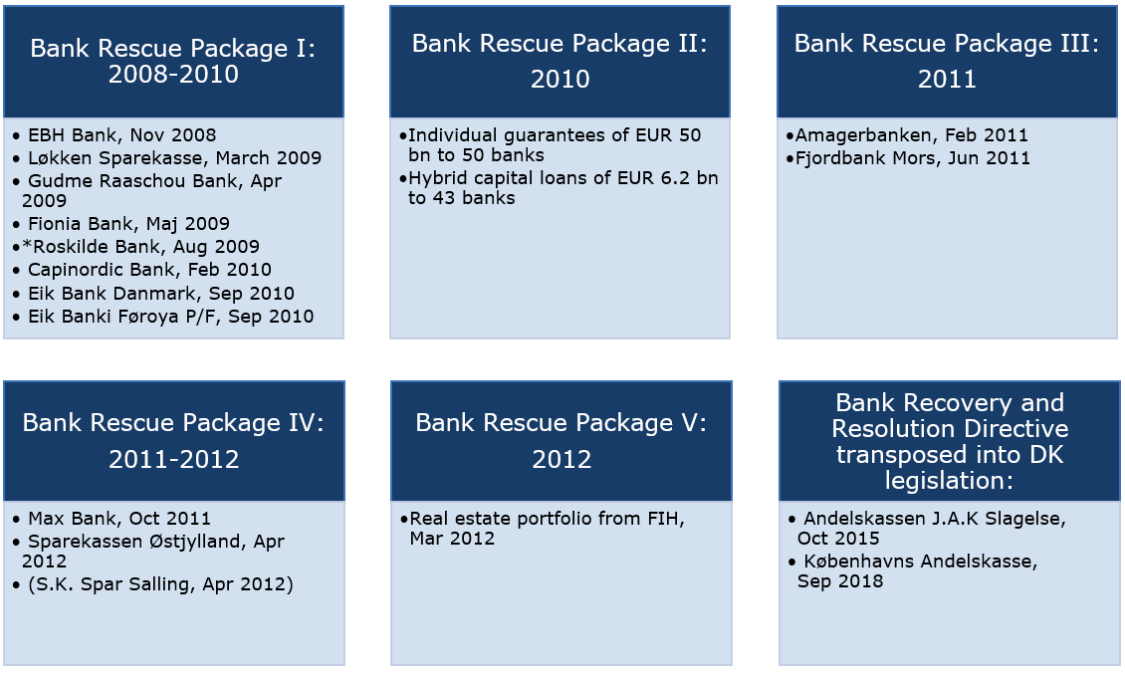
In that perspective, one of the key measures was the establishment of a restructuring process so that only the long-term viable credit institutions could access the government guaranteed facilities whereas institutions with a high proportion of non-performing loans, an erased capital base and a challenged business model were destined for a controlled liquidation process. In hindsight the situation was managed in a way where banks were divided into three layers. Top tier banks that were able to survive without any interference from the public sector, second tier banks with a sound business model but struggling due to devastating consequences of the crisis and, finally, banks in the lower tier where both the business model and the capital adequacy levels were challenged.

As a result of the situation and based on the politically accepted fact that a thorough clean-up was necessary, a dedicated entity – Financial Stability Company (FSC) – was established with the mandate to ensure a controlled winding down procedure of weak and failing financial institutions.

During the GFC, more than fifteen banks were taken over by the FSC as part of the process of cleaning up the banking sector, cf. Figure 1. Generally, some of the banks were of considerable size (EUR 5 bn) compared to national standards (in top 10 level but not D-SIFI) but some banks were also operating with small balance sheets of approximately EUR 100 million.

Figure 1

FSC activity – takeovers and initiatives since 2008



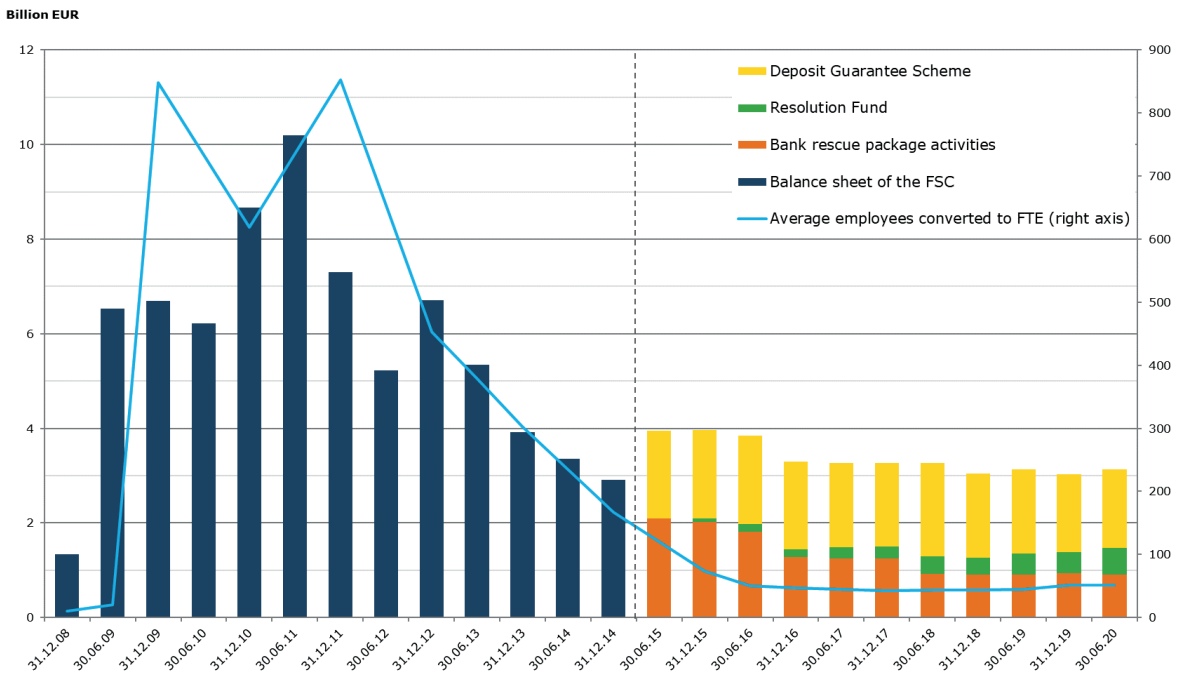
* Roskilde Bank was in fact taken over by the Danish Authorities before the inception of FSC but the ownership and management of the winding down process was later in 2009 transferred to FSC. Canto Bank was another bank where FSC monitored the downscaling process. (S.K. Spar Salling) was not directly taken over by FSC but FSC operated on behalf of the Danish Deposit and Guarantee Fund as a mediator and secured a least cost solution.

The common principle for all takeover cases were the notion that subordinated capital including equity capital should always take the first hit. During the Bank Rescue Package I, the government had in addition guaranteed senior creditors, and thus the government assumed the losses if the write down of the equity and subordinated capital was not enough to absorb the losses. In that respect it needs to be said that the government issuance of the general guarantee on all senior banking claims was established on the basis of a limited guarantee from the banking sector[3]. To qualify for the government support scheme, the banks had to establish a resolution fund such that losses up to EUR 5 bn were basically covered by the banking sector. Therefore, the government's risk from taking over the claims was basically supported by a buffer of EUR 5 bn plus the subordinated capital including equity capital in the failed banks.

As can be seen from the chart in Figure 2, the winding down of the assets that were assumed during the Bank Rescue Package I phase were almost complete in 2014. Close to EUR 20 bn in assets have been wound down and more than 3,000 employees have been assumed and managed as part of the downsizing process. The economic result for the Danish government has so far shown a total surplus of the Bank Rescue Packages of close to EUR 2,5 bn.

Figure 2

FSC balance sheet development



This process involved a rather smooth transition of the viable banking activities from those banking institutions that failed into the viable banks. Subsequently, the non-viable banking activities were wound down as part of a controlled exercise having in mind the

3 This initiative was organized by the Private Contingency Association.

detrimental effects and repercussions for related sectors such as the real estate market, certain corporate sectors such as agriculture and farming etc.

One important element was the political decision to introduce Bank Rescue Package III which in essence was an introduction of the bail-in rules that were later being adopted by the EU. During this scheme, two banks were managed; Amagerbanken and Fjordbank Mors.

In both cases the simple creditors, including deposits above the limit for covered deposits, and senior bond holders accepted a haircut on their claims of approximately 15 percent. The bail-in approach was not exactly similar to existing BRRD models due to lack of resolution tools in the legislation that prevailed but the model which essentially was an economic bail-in approach could be described as a combination of the bail-in tools and the bridge bank model. Basically, at the point of failure, a prudent valuation of the assets of the failing financial institutions determined the level of liabilities that could be assumed by the newly established bank, and all the assets and an equivalent part of the liabilities were transferred to the new bridge bank institution. The remaining liabilities, that were not covered by assets, would be left in the bankruptcy estate and would perhaps receive an additional pay-out if the winding down of the continuing entity would lead to a better result than determined by the prudent valuation.

In the financial press, the first case with Amagerbanken was referenced as the Armageddon bank[4] and it is true that this was a vital test for the bail-in model. If the bank in a counterfactual scenario had been bailed out by the government, it is likely that the broad support for the bail-in scheme of not only systemically important institutions but also the small and medium sized institutions would have evaporated.

BOX 1 – BANK RESCUE PACKAGES

In the fall of 2008, Bank Rescue Package I introduced a 2-year general state guarantee for all deposits and other senior unsecured claims on banks, offering a safety net and preventing any potential bank runs, with small savers queuing to withdraw their money. It likewise established a dedicated company to handle the winding down of distressed financial institutions; Finansiel Stabilitet A/S (FSC). Owned by the Danish State through the Ministry of Business and Growth, this allowed for a controlled process of winding down failing banks' assets during which costumers could continue to access critical functions. By approving Bank Rescue Package I, the Danish government guaranteed timely payment of approximately EUR 500 bn or the equivalent of twice the Danish GDP level.

Bank Rescue Package II provided for individual state guarantees, as from October 2010 when the general state guarantee expired, increasing the ordinary deposit

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4 Financial Times: Armageddon Bank, 17 February 2011 (https://ftalphaville.ft.com/2011/02/17/490921/armageddon-bank/).

guarantee to cover up to EUR 100.000. It also led to the government making available up to EUR 13,4 billion in so called hybrid capital injections out of which EUR 6,2 billion was drawn by 43 financial institutions to reinforce their capital base. In addition, the credit institutions could apply for individual government guarantees on senior loans. The applications were reviewed by FSC as part of normal credit review process. Out of a total amount of almost EUR 50 bn which were approved, EUR 26 bn were drawn by 50 credit institutions.

Bank Rescue Package III saw the general state guarantee removed and creditors could be expecting bearing the risk of the failure of a financial institution as an incentive to reinvigorate the market mechanism and the pricing of risk. During the prevalence of the general state government guarantee various bizarre market events took place. For instance, anecdotal evidence suggested that large corporate companies were able to provide deposits in small and medium sized banks gaining a return of up to 30 bp compared to interbank rates or more than 50 bp above government bonds with the same maturity.

Bank Rescue Package IV sought to create a greater incentive among viable financial institutions to take over, wholly or partially, engagements from distressed financial institutions. It included a process to adjust the resolution of distressed banks after the failure of two banks in the first half of 2011 resulting in losses for senior creditors. It provided for: i) a consolidation process with the possibility of compensation (a "dowry") from the State and the guarantee fund as an insurance scheme with fixed ex ante annual payments (from March 30, 2012); and iv) the designation of national SIFIs (Systemically Important Financial Institutions).

Bank Rescue Package V aimed to ensure that businesses could access financing, including increasing available growth and export financing, and establishing an agricultural financing institution for viable farmers.

Later the Bank Rescue Package III model was supplemented with a dowry scheme which has many things in common with the least cost principles applied by the Deposit Guarantee Funds in other jurisdictions and now also discussed in a European context. But the essential elements of the model are unchanged meaning that creditors of financial institutions face the risk of loss if the bank is failing or likely to fail.

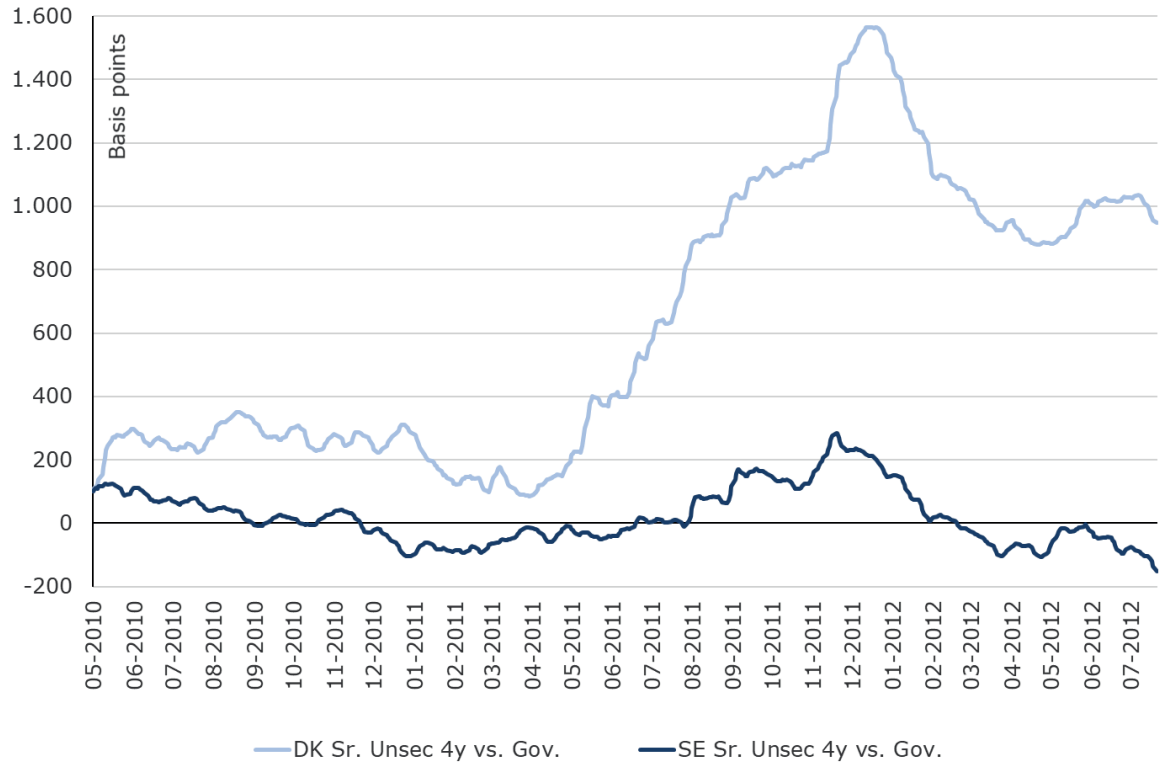
Therefore, the principles of Bank Rescue Package III model created the foundations for future bank failure solution models which essentially secured that the taxpayers would not from the outset be supporting banks coming into trouble. This fundamentally changed the bank failure solutions that were pursued during the Nordic banking crisis during the 1990s.

During the GFC, the Danish government managed to keep its triple A rating with all the major rating agencies and despite the intertwingling of the government finances

with banking liabilities during Bank Rescue Package I phase, the Danish government was able to migrate out of the often described banks-sovereign doom loop where the government assumes the risks of the banking sector. However, this had the implication that senior bonds issued by banks had a tendency to widen subsequent to application of Bank Rescue Package III following the takeover of Amagerbanken February 5th 2011, cf. Figure 3. In particular, it is noticeable that the spreads widen more when compared to Swedish senior unsecured spreads. Naturally the Euro crisis of 2011 is also a part of this story, however the difference in spreads between the two countries is still significant prior to the debt crisis in southern Europe, and comes from the same level in mid-2010.

Figure 3

Average government credit spread between Danish and Swedish senior unsecured bonds with 4-year maturity



Source: Bloomberg

b. Current situation

Following the GFC, the structure of the Danish banking sector[5] changed considerably. In the run-up to the crisis, the sector was very fragmented with many small institutions. Coming out of the crisis, the sector was far more consolidated and even though the change

[5] As of late 2011, Danish mortgage credit companies (MCIs) lent out a total of EUR 335 billion (only slightly lower than banking sector lending). MCIs are left out of this analysis of the industrial organization. The number of MCIs have in practice remained constant during the GFC.

of the business structure could directly be related to the banks assumed by FSC, there is clearly evidence that a more dominant factor was the indirect effect coming from the consolidation process in the private market.

Since 2010, the number of Danish banks has more than halved by 2019 with smaller LSIs seeing the largest decline. What is interesting is, however, that the amount of total bank assets and total lending have in the same period stayed somewhat stable. Denmark has not seen an overall decline in credit, however we have seen a reallocation and a wider distribution of market shares indicating a reasonable level of competition among the remaining institutions. Hence despite a large consolidation, competition as measured by the HHI-index has increased. This is likely due to the fact, that market shares have been distributed evenly between the remaining banks, see Box 2 and Figures 4-7.

BOX 2 – MARKET CONCENTRATION OF THE DANISH BANKING SECTOR

In 2010 the Herfindahl-Hirschman index of the total Danish banking sector amounted to 1,418 whilst having decreased to 1,250 by 2019.

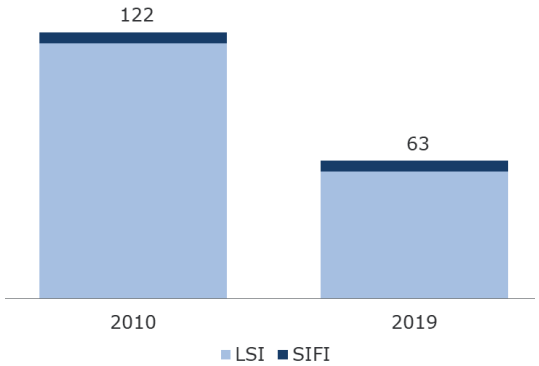
The Herfindahl-Hirschman index is a common measure of market concentration and therefore used to determine market competitiveness. The HHI index is calculated as the summed squares of each firm's market share.

$$HHI = \sum_{i=1}^{N} S_i^2$$

A market with an HHI of less than 1,500 is a competitive marketplace. HHI values of 1,500 to 2,500 is moderately concentrated and an HHI of 2,500 or greater is a highly concentrated marketplace.

Figure 4

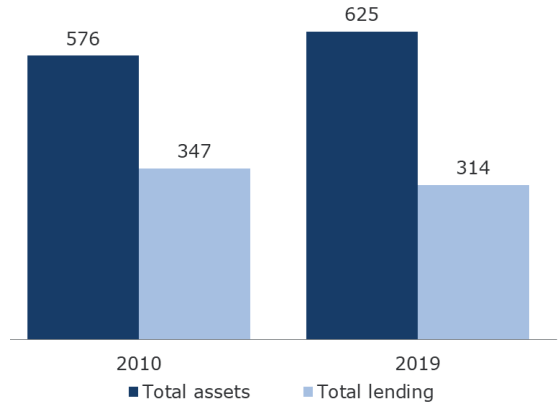
Development in number of Danish banks



Source: Danish Financial Supervisory Authority and own calculations

Figure 5

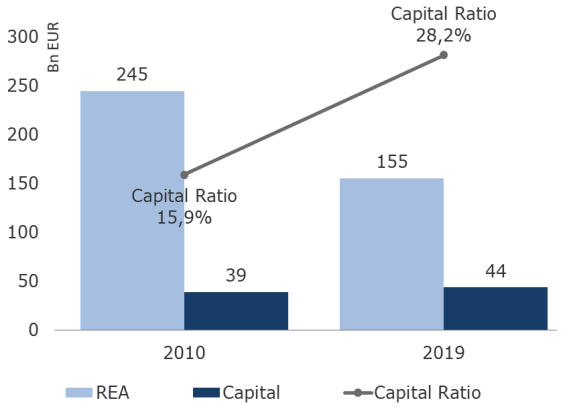
Development of total assets and lending



Source: Danish Financial Supervisory Authority and own calculations

Figure 6

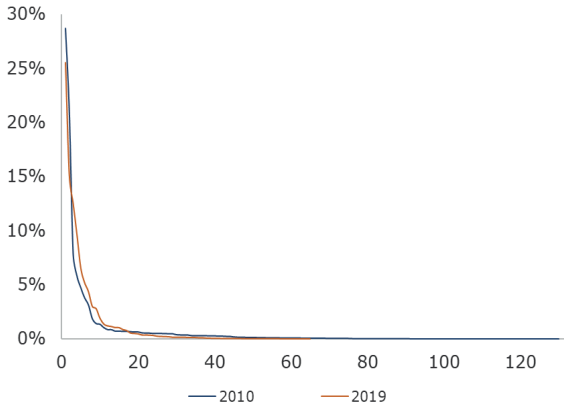
Development of Solvency



Source: Danish Financial Supervisory Authority and own calculations

Figure 7

Market concentration of the Danish banking sector, in 2010 vs. 2019



Source: Danish Financial Supervisory Authority and own calculations

3. Resolution scheme for small and medium sized banks in Denmark

Legislation implementing the BRRD was approved by the Danish Parliament in March 2015 and entered into force on June 1, 2015. The powers allocated to the resolution authority in the BRRD are divided between the Danish Financial Supervisory Authority (DFSA) and the Financial Stability Company. The DFSA acts as the competent resolution authority until a distressed institution meets the resolution conditions. The DFSA decides if an institution is failing or likely to fail and if there is any private sector solution. The DFSA and the Financial Stability Company cooperate on the preparation of resolution plans. The DFSA is responsible for the final approval including orders to remove the impediments to resolvability and determining MREL. The FSC assesses whether the public interest test is fulfilled, cf. Box 3. When resolution conditions are met, the FSC is granted resolution powers and is responsible for applying resolution tools in specific resolution situations, cf. Figure 8.

BOX 3 – PUBLIC INTEREST ASSESSMENT

Pre-BRRD it was a high priority to ensure customers' access to their deposit, credits and payments services on an uninterrupted basis in case of a failing institution. In Denmark use of payment cards, electronic payments and payment through internet banks are widely used. Further, credit facilities are commonly used both for businesses (big as well as small) and households. There is no protection, in the form of DGS or similar, that ensures that access to these will be restored within a short timeframe. When the use of cash is decreasing, up to 7 days without access to DGS covered deposits will create disturbance. Previous resolution schemes ensured customers' access to mentioned accounts etc.

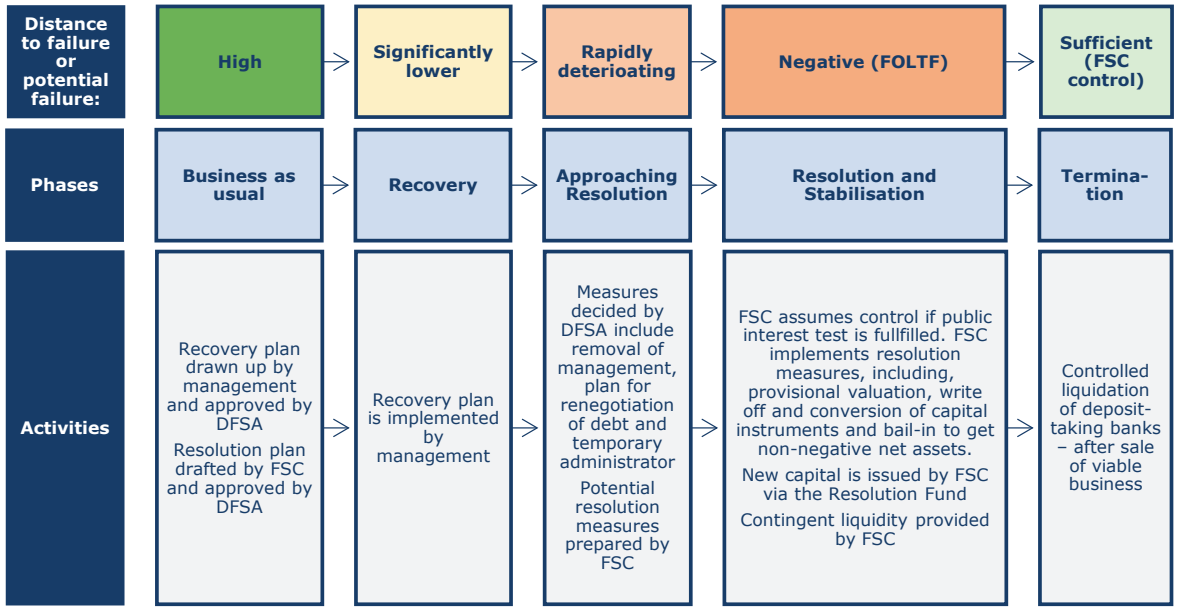
The pre-BRRD approach is still the basis for assessing critical functions and thus public interest in small and medium sized banks. All Danish banks are as a starting point considered to have critical functions, because:

- First, consumers and enterprises are highly dependent on their primary bank for everyday transactions
- Most payments are made through electronic transfers
- Public institutions make payments and deposits to costumers' primary bank account
- Access to credit lines for both consumers and enterprises would be unavailable
- The ability to quickly establish new banking relations is only available to consumers and enterprises with a high credit rating
- The Danish bankruptcy procedure does not adequately ensure continuance of these functions

Therefore, even smaller and medium sized banks are as a starting point expected to be wound down through BRRD resolution.

Figure 8

The Danish resolution strategy of small and medium sized banks



Due to the business structure of the Danish financial sector, it is generally viewed that the predominant part of Danish banks would be captured by the public interest assessment, and thus winding down plans have been drafted for those institutions. Only for a few number of banks the assessment is that they could be wound down under normal insolvency regulation. To a large extent the initiatives that were applied in the aftermath

of GFC in Denmark mirror those that are now transposed into legislation across the EU based on the Banking, Recovery and Resolution Directive[6].

a. Preferred resolution model for small and medium sized banks in Denmark

Banks with a balance sheet below EUR 3 billion will as a starting point be resolved through the resolution strategies that follow from BRRD principles. This entails a resolution of the bank with the purpose of passing on the healthy parts as quickly as possible through outright sale. The FSC seizes control with the bank and its activities through a bridge holding construction.

The strategy entails that all losses are born by the owners and creditors of the bank by writing down liabilities to the extent necessary. From the outset none of the resolution plans would consider using the power to extraordinarily exempt certain liabilities from bail-in.

Possible remaining activities that are not suitable for sale are resolved by the FSC in the bank itself. The bank will not be brought back into the market as an independent bank but can be continued as a bank for a given period until termination of the resolution process. The banking license is cancelled, when there are no more activities that require a banking license. Meanwhile recapitalization would normally be executed with capital from the Resolution Fund – that is being managed by FSC – through the bridge-bank under the assumption that the subordinated capital plus MREL is expected to be written down as part of the valuation process, cf. Box 6. Deployment of the Resolution Funds capital within the described scope is preapproved by the EU Commission in the context of the state aid rules for institutions with a balance sheet below EUR 3 billion[7].

b. Application in practice – case studies

Denmark was one of the first European nations to force losses onto senior bank claimants after Amagerbanken collapsed in February 2011. The bank's failure led to a dividend payout of 84.4 percent to unsecured senior creditors, sparking a Europe-wide debate on the pros and cons of burden sharing in the process of resolving weak financial institutions.

BOX 4 – AMAGERBANKEN

During the years ahead of the financial crisis, Amagerbanken reported strong lending growth, particularly within property financing. At end-2010, Amagerbanken held a 1.6 percent market share of total bank lending in Denmark, ranking 9th among Danish banks in terms of lending.

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6 BRRD II is currently being transposed into the Danish legislation and was adopted as of 1 January 2021. The amendments are not further discussed in this article.

7 Denmark has a preapproved state aid for financial institutions with a balance sheet of up to EUR 3 bn. The approval from the DG-COMP has a duration of 6 months and has so far been rolled over several times.

Attention was already focused on Amagerbanken when the financial crisis escalated in the autumn of 2008. Shortly before the adoption of Bank Rescue Package 1, the bank had been allowed to withdraw liquidity from the Danish Central Bank for a limited period. When Amagerbanken was included in the general government guarantee under Bank Rescue Package I, the bank repaid the liquidity to the Danish Central Bank.

Amagerbanken was among the banks that made use of Bank Rescue Package II and applied for a government capital injection. The Danish Financial Supervisory Authority carried out an inspection of the bank, showing that the need for solvency reservations and write-downs was so pronounced that the bank had to raise new capital. Amagerbanken raised just under EUR 130 million in capital, after which it once again met the solvency requirement. Against this backdrop, it obtained an agreement for a government capital injection of EUR 140 million in December 2009.

In June 2010, Amagerbanken entered into an agreement with the FSC on an individual government guarantee totaling EUR 1.8 billion. According to the agreement, the bank had to register a EUR 100 million increase of its capital base by 15th of September 2010 (of the guarantee roughly EUR 277 million were eventually a loss for the Danish State). Moreover, two members with special powers and appointed by the FSC were to be elected to the Board of Directors. The conditions stipulated by the FSC were met by Amagerbanken's capital increase in September 2010 when the bank announced that it had raised almost EUR 120 million in capital. At an extraordinary general assembly meeting in November 2010, the bank's shareholders elected a new Board of Directors. In the same month, a new CEO was appointed. The new management immediately instigated a detailed review of the bank's exposures. The review unveiled a need for further write-downs, which meant that Amagerbanken no longer met the solvency requirement. As a consequence, the bank agreed with the FSC to transfer its activities to a new bank set up by the FSC (Amagerbanken af 2011 A/S) on 6 February 2011. Before the transfer to Amagerbanken af 2011, potential private solutions were discussed with various banks with a view to continuing Amagerbanken's activities in the private sector. However, no bank was willing to buy the bank in its entirety.

The purchase sum for Amagerbanken's assets was preliminarily set at EUR 2.5 billion. The new bank, Amagerbanken af 2011, paid for the assets by taking over exposures of Amagerbanken worth EUR 2 billion. At the same time, an intermediate outstanding balance of EUR 440 million was established. The bridge bank took over liabilities equivalent to 58.8 per cent of the non-subordinated claims of Amagerbanken. This meant that non-subordinated creditors had their claims reduced by 41.2 per cent in so far as they were not covered by the Guarantee Fund for Depositors and Investors. More than 99 per cent of all depositors had their bank deposits covered, while the shareholders and the owners of subordinated capital were written down entirely.

During spring 2011 the bank was split into two: a green and a red part. The green part of the bank was primarily composed of retail customers with less than EUR 100,000 in deposited capital and consumer loans. In May 2011, the green part of the bank with a balance sheet of approximately EUR 1 bn was sold including all retail customers and minor corporate customers to the Faroese bank P/F BankNordik. Subsequently, the remaining lending book of Amagerbanken of 2011 (red part) amounted to EUR 1.75 billion distributed on around 200 large exposures were wound down under the monitoring of FSC.

In June 2011, the FSC announced the auditors' valuation of Amagerbanken. Their valuation initially provided the basis for increasing preliminary dividend payout rate from 58.8 to 84.4 percent. Due to the continuation of the resolution process the dividend ratio is currently expected to increase to approximately 90 percent.

The FSC has twice used its revised resolution power and tools and therefore tested the new resolution framework that was adopted in 2015. Both resolutions were rather small institutions in the form of cooperative banks with total deposits under EUR 50 million which were wound down in line with Denmark's preferred resolution strategy after they passed the public interest test. The FSC determined that resolution instead of bankruptcy was in the public interest because of depositors' need to access their deposits and the payment system without any interruptions, as most payments in Denmark are made through electronic transfers.

BOX 5 – THE TWO COOPERATIVE BANKS

In October 2015, the DFSA determined after recovery measures had been unsuccessful that the J.A.K. Slagelse was failing or likely to fail because of a lack of capital. The cooperative had less than 4,000 depositors with total deposits below EUR 45 million. FSC implemented the following resolution measures: it exercised control over the bank and replaced its Board of Directors and management with its own staff. FSC then created a new subsidiary in form of a bridge bank holding, Broinstitut ("bridge institution") I A/S, which assumed ownership of the cooperative. The bank remained open to the public and services were not interrupted, but immediately steps were undertaken by FSC with a view to wind down the activities.

Based on the provisional valuation done by the FSC and before the transfer to the bridge, all cooperative members', subordinated creditors' and ordinary unsecured creditors' claims were written down entirely. The Danish Deposit Guarantee Scheme had to contribute to the losses instead of protected depositors who are in general excluded from bail-in. All resolution measures were implemented within a day (takeover of management, set-up of bridge bank holding and execution of bail-in). The mandatory ex-post valuation confirmed the provisional valuation and thus the subordinated capital and the simple claims were written down.

FSC concentrated on winding down the activities which required a banking license first, after which the license was revoked in May 2017. An open bidding process for a sale of the institution was unsuccessful undertaken in 2016. Currently, FSC is dealing with the remaining assets of the failed institution.

In September 2018, the Danish FSA determined that another cooperative bank, Københavns Andelskasse, was failing or likely to fail. The determination was made on the basis of an on-site inspection which revealed a significant breach of financial regulation as well as an unsustainable business model. At the point failure, the cooperative had around 1,940 depositors with deposits in the amount of EUR 46 million. FSC saw the conditions for resolution fulfilled on the same grounds as with J.A.K. Slagelse (public's interest in the continuity of deposit and payment functions). The resolution strategy followed the agreed approach (bail-in, assuming control of management, transferring the ownership of the institution under a new subsidiary in form of a bridge bank holding, Broinstitut II A/S). The resolution was covered under the pre-approved EU state aid scheme.

In the interest of time, FSC made a temporary financial valuation of the cooperative in order to determine the amount of losses. On the basis of this valuation, the contributed capital of members was cancelled, and subordinated creditors and unsecured creditors, including uninsured depositors and insured depositors with deposits above the insurance level of EUR 100,000 saw their claims written down (bail-in). After the resolution the bridge bank holding became the only member of the cooperative. After bail-in, new capital was injected from the Resolution Fund (Afviklingsformuen). The final valuation by an independent auditor was completed in March 2020 increasing the preliminary dividend payout rate to simple creditors to 34%. The banking license was revoked in June 2019 after banking activities requiring a license had been terminated. Remaining assets are being wound down by FSC in a controlled liquidation process managed by FSC.

BOX 6 – THE DANISH MREL MODEL

The Restructuring and Resolution of Certain Financial Undertakings Act allows for controlled resolution of small and medium-sized banks, where viable activities are sold, whereas the remaining activities are temporarily continued and resolved under FSC. The MREL for small banks will therefore be lower than for SIFIs, but greater than the MREL that would otherwise apply if a bank was resolved through bankruptcy.

Loss absorption add-on

The Loss absorption amount is as a starting point equal to the solvency need and the combined buffer requirements. Experience with resolution of failing banks have in the meantime shown, that the losses in connection with resolution often

considerably exceed the banks' capital requirements. Therefore, the DFSA adjusts the loss absorption amount with a loss absorption add-on, making it larger than the capital requirements.

It is not possible to say with certainty how large the losses in resolution are expected to be, and hence also difficult to determine the need of eligible liabilities in order to engage in resolution without e.g. deposits are affected. The DFSA has in the determination of MREL in 2017 and 2018 assessed that the loss absorption add-on should be set to 3.5-4 percent of risk exposure amount (REA).

Recapitalization amount

The size of the recapitalization amount is determined on the basis of what FSC expects can be sold in the resolution. The point of departure is that all loans to private and corporate customers below a certain threshold, as well as bond portfolios etc., can be sold quickly. Furthermore, it is assumed that larger corporate loans cannot be disposed of but will be part of the activities that are gradually discontinued. The recapitalization amount must adequately capitalize the remaining portfolio, which cannot be divested.

Capital adequacy for the remaining part can be calculated according to existing solvency regulations, though without a pillar-2 addition and without a capital buffer. Based on reported figures, the expected divestment can be estimated to reduce risk weighted exposures by 60-80% for a typical bank. Consequently, the recapitalization amount is the remaining 20-40%, multiplied by the pillar-1 requirement of 8% of risk-weighted assets, i.e. between 1.6% and 3.2% of risk-weighted assets. As mentioned previously, the exact figures will depend on the balance sheet composition of each individual bank. The capital requirement is only the pillar-1 requirement, and consequently includes neither the pillar-2 requirement, nor the recapitalization buffer, since the objective is a wind-down.

Phase-in

The total MREL add-on (ie the level above the solvency need and capital buffers) for small and medium sized bank will on the basis of the above principles be in the interval of 3½-6% of the total risk exposure amount (REA) and will average 4.7%.

Initially, most small and medium-sized banks met their MREL with capital which they gradually accumulated by retained earnings as the MREL increases until 1th January 2023. The phase-in was determined based on assumptions about the banks' profitability and that banks should be able to meet the requirements through retained earnings.

According to the FSA's principles on MREL for small and medium-sized banks, the phase-in period can be extended by 1–2 years if earnings at sector level are lower

than assumed. In June each year, the FSA determines whether, based on the annual accounts from the previous year, there is a basis for extending the phase-in period.

However, it is already clear that the banks' earnings will be adversely affected by the COVID-19 crisis. The FSA has therefore extended the phase-in period for MREL by six months for small and medium-sized Danish banks.

Source: Input from The Danish Financial Supervisory Authority, ftnet.dk (https://www.dfsa.dk/News/Press-releases/2017/Resolution_strategy_and_MREL_for_small_and_medium-sized_banks).

4. Perspectives on the resolution schemes applied in Denmark for small and medium sized banks

In the wake of GFC, a need for a deeper restructuring of the European banking sector emerged. Significant amounts of taxpayers' money were deployed in the aftermath of the GFC. But the much-needed consolidation to remove excess capacity and foster a radical refocusing of business models, did not materialize. The result has been a rather challenged EU banking sector, where risks seem to dwarf its earnings, as also reflected in equity valuations.

By contrast, resolution authorities can combine support with appropriate conditionality to banks saddled with NPLs, bringing much needed improvements to the same banks' business models. In order to mitigate inefficient business models, and impaired loan portfolios, resolution might not have to be a 10-year phenomenon, but rather a continuous activity for banks of all sizes.

The idea of having active state - "asset management" companies to clean up proactively, and thereby restore banks' ability to lend, was also recently suggested by the ECB[8].

In that perspective some analysts have the view that small and medium sized banks in the European landscape are less susceptible to bail-in due to the lower risk of contagion. As reflected in the Danish public interest test, it is argued that due to payments and deposits, even small and medium sized banks can have contagious effects at a local level. And due to the lack of MREL requirements and winding down procedures, these institutions tend to go under the radar when resolutions plans are drafted.

The experiences gathered in Denmark during the previous banking crisis (See chapter 2) were applied when solutions were established under the GFC. In that perspective, it was important that the general government guarantee led to unhealthy risks for the Kingdom of Denmark, and thus it was important to demonstrate to the market players that once calm was established in the financial market space, the government would be very reluctant

[8] Hearing at the European Parliament's Economic and Monetary Affairs Committee, 27 October 2020 (https://www.bankingsupervision.europa.eu/press/speeches/date/2020/html/ssm.sp201027~d284d6d6c8.en.html).

to interfere and also once again use unconventional measures. The introduction of the Bank Rescue Package III and the introduction of FSC was a game changer as the market participant subsequent to the failure of Amagerbanken and the solution sought, realized that the government now had another toolbox and one of the measures that could be applied was bail-in of senior unsecured creditors.

Anecdotal evidence suggested that the change of regime led the healthy banks consider whether a take-over target (i.e. a weak financial institution) after the balance sheet had been cleaned by FSC was a better solution as opposed to taking over the bank before other competitors thought of a take-over. In that respect it was a learning process where the players in the beginning thought it would be better to take over a clean balance sheet, but later discovered that the open and transparent sales process applied by FSC had the flip side as this could also lead to a winner's curse situation.

As a consequence, the number of cases where the FSC was directly involved was reduced considerably after 2012 whilst the number of private solutions increased. It is of course difficult to distinguish whether this outcome was led by more risk appetite in the sector or whether it was a result of the new equilibrium that was established subsequent to the establishment of the new model for controlled liquidation where the government was no longer providing any support.

5. Concluding remarks

The Danish measures on bank resolution have in general been shaped over more than two decades but in particular the GFC has formed the thinking in a consistent way. Two features come out as the most predominant elements: firstly, the risk takers in the banking sector should like in all other industries accept the premise that higher expected returns also involve the risk of significant losses if the bank goes into default; Secondly, given the nature of banks, even small and medium sized banks embed critical functions and thus it is important to have resolution tools that are applicable if small and medium banks are failing or likely to fail.

By imposing the losses on shareholders and subordinated capital and eventually, if the losses are substantial, also on the creditors including the MREL would give the government a credible alternative to bail-out. This has contributed to breaking the sovereign doom-loop and securing that Danish government bonds has maintained its AAA rating during GFC and lately been perceived as a safe haven asset.

One of the important core elements was the establishment of a winding down company under the auspices of the Danish Government. This led to the creation of a company with dedicated employees that could oversee and control the winding down process. In that respect, one of important features was to gather high performance teams with skills and know-how within banking, bankruptcy laws, credit management, M&A, corporate finance, valuation, etc.

Setting up a dedicated bank resolution company would at the same time always give the government an option in case the Financial Supervisory Authority would reveal that a bank was on the brink of bankruptcy. For the market this had the implications that the old way of managing bank defaults was off the table and the government could always play hard ball. This have been a game changer and based on anecdotal evidence has had a positive impact on the bank consolidation process caused by the financial crisis.

In that respect it is also important to use this solution if the terms are fulfilled and not apply other optimized models which in the short run could be seen as a better alternative. The credible solution would lose value in the long run if it is watered out by short term optimization.

Discussion

Emiliano Tornese[1]

1. Review of the PIA? A clarification is welcome

First, it can be inferred from the three articles presented in the session[2] that the public interest assessment (PIA) under Article 32 of the Bank Recovery and Resolution Directive (BRRD)[3] seems to leave too much discretion to resolution authorities. In particular, F. Sotelo raises doubts about the consistency of the resolution model referring to how it has been applied to the cases of Banco Popular, Veneto Banca, Banca Popolare di Vicenza, Monte dei Paschi di Siena, and NordLB.[4] The consistency of the application of the PIA is certainly one of the issues, which deserve further reflection in the context of the review of the crisis management and deposit protection framework (crisis management framework). The European Commission referred to it in its report on the application and review

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1 This contribution was provided in the context of the Workshop of 15 January 2021 of the Bank of Italy on "The crisis management framework for banks in the EU. How can we deal with the crisis of small and medium-sized banks?" and reflected a discussion on the papers proposed for the Session "Proposals and experiences from EU countries". It was prepared by Emiliano Tornese in his personal capacity. The opinions expressed in this article are the author's own, do not reflect the view of the European Commission, and are without prejudice to the European Commission's review of the crisis management and deposit insurance framework. Emiliano Tornese is Deputy Head of the Resolution and Deposit Insurance Unit at the Directorate General for Financial Stability, Financial Services and Capital Markets Union, of the European Commission, Visiting Professor at the College of Europe in Bruges, and Part-time Professor at the School of Banking and Finance at the European University Institute.

2 F. Sotelo, "A proposal to funding crisis management in deposit taking institutions", 2021. S. Balder and M.Vanberg, "Credibility of the crisis management for institutions: guiding principles for reform opportunities", 2021. J. V. Andersen and M. S. Hovedskov, "The future of the European crisis management framework for banks - how can we deal with the crisis of small and medium-sized banks?", 2021.

3 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council (OJ L 173, 12.6.2014, p. 190).

4 See F. Sotelo, page 2.

of the BRRD and the Single Resolution Mechanism Regulation (SRMR),[5] and in its targeted consultation on the review of the crisis management framework.[6] This is particularly relevant to ensure the orderly winding up of small and medium-sized banks. Now, independently from the policy debate, and choice, about extending the PIA or not, there seems to be a broad agreement that the PIA requires in any case a clarification for legal certainty purposes.

2. No to plain piecemeal liquidation!

Second, the three articles seem also to agree that, absent a positive PIA, ordinary national insolvency procedures (NIP), and in particular a plain piecemeal liquidation, may not be appropriate to deal with the failure of any bank, because such type of liquidation cannot ensure the required speed of intervention[7] and the continuity of critical functions that are important at a regional level or for a particular market segment.[8] However, as mentioned by F. Sotelo and M. Vanberg, the current legislative framework does not seem to clearly provide any harmonization for the so called "middle class banks" whose insolvency would or could lead to financial instability. The impossibility to submit banks to NIP has led in some cases to the development of national quasi-resolution regimes, which apply quasi-resolution tools with alternative sources of funding and with burden sharing conditions less strict than the rules provided for in resolution scenarios.[9] In Denmark, as mentioned by J.V. Andersen, all banks are as a starting point considered to have critical functions. Thus, even smaller and medium sized banks are expected to be wound up through the use of resolution tools.[10] Hence, the call for the need to provide adequate and common solutions also for small and medium sized banks to avoid market fragmentation, moral hazard and an unlevel playing field, and taking into consideration the principle of proportionality.

3. Resolution v. liquidation: need to ensure an orderly market exit

Third, as suggested by the three articles, consensus is surfacing on the need to move to a more homogenous scenario to deal with the "orderly market exit" for the middle class banks. This is the core of the current discussions around the review of the crisis management framework. As advocated by some, this could be achieved by developing a common specific liquidation regime, when the PIA is negative; or alternatively extending the scope of the PIA

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5 See page 9 of COM(2019) 213 final: report of 30 April 2019 from the Commission to the European Parliament and the Council on the application and review of Directive 2014/59/EU (Bank Recovery and Resolution Directive) and Regulation 806/2014 (Single Resolution Mechanism Regulation).

6 See page 4 of the targeted consultation: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2021-crisis-management-deposit-insurance-review-targeted-consultation-document_en.pdf.

7 F. Sotelo, page 2.

8 F. Restoy, R. Vrbaski, and R. Walters, Bank failure management in the European banking union: What's wrong and how to fix it, Occasional Paper No 15, Financial Stability Institute, July 2020, page 15.

9 F. Sotelo, pages 2 and 3, and M. Vanberg, page 2.

10 J.V. Andersen, page 10.

and of the resolution model to all banks. "Liquidation v. Resolution" may be just a semantic dispute. As explained by the three articles, what really matters when dealing with failing small and medium sized banks are (i) the transfer tools which are needed to ensure an orderly market exit; (ii) the sources of funding (internal and external); and (iii) the conditions to access them. As mentioned by F. Sotelo, policy makers will finally move forward with the design of the legal features of a more harmonized solution only once a balanced funding methodology agreeable to all will be determined.[11] Those policy decisions will also determine the authority ultimately responsible for the orderly market exit procedure – question which is particularly relevant and politically sensitive within the banking union.

4. The transfer tools (i.e. sale of business or bridge bank): the importance of the franchise value!

Fourth, as for the tools, the three articles agree that the harmonized solution must involve an orderly market exit by means of a transfer tool (i.e. sale of business or bridge bank). As mentioned by M. Vanberg, a sale of viable parts of the business, together with related liabilities, to a competitor could also mitigate financial stability concerns by preservation of business relationships. In fact, a purchase & assumption transaction, which is the most common and preferred method used by the Federal Deposit Insurance Corporation (FDIC) to deal with insured deposit taking institutions,[12] would combine a sale of assets to a competitor with the competitor's assumption of the covered deposits, and potentially other deposits and liabilities. Acquiring a mix of assets and liabilities can be especially attractive from the perspective of a potential buyer, as entire customer relationships are preserved. This transaction can be beneficial not only for the Deposit Guarantee Scheme (DGS),[13] which can avoid payouts, but also for other creditors, because a potential acquirer has greater financial leeway, as compared to a liquidator in insolvency proceedings, because the franchise value of taking over uninterrupted customer relationships could be higher. However, where there is no immediate purchaser, selected deposits and liabilities, backed by assets, could be transferred to a bridge bank. This would preserve access to deposits until a purchaser can be found.[14] Both tools might fulfil the purpose of safeguarding critical functions and financial stability. Whereas, as F. Sotelo writes, it would probably make little sense to revive a bank through the application of an open-bank bail-in.[15]

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11 F. Sotelo, page 6.

12 In the United States, all insured deposit taking institutions are resolved or liquidated under the Federal Deposit Insurance Act (FDI Act) that provides the FDIC with "resolution" powers (purchase and assumption transaction or P&A), and bridge, and liquidation powers. Only financial holding companies, which offer a range of non-banking financial services, are governed by Dodd-Frank, which has introduced a special resolution framework. They are resolved by the FDIC only if a financial stability test indicates that proceedings under the US Bankruptcy Code would pose a problem to financial stability. Where that is not the case, financial holding companies will be subject to bankruptcy proceedings. The two different procedures are backed by two different sources of funding: the Deposit Insurance Fund and the Orderly Liquidation Fund.

13 F. Sotelo, page 9.

14 M. Vanberg, page 6.

15 F. Sotelo, page 4.

5. Minimization, if not exclusion, of the use of taxpayers' money

Fifth, as for the sources of funding, all three articles agree on the minimization, if not exclusion, of the use of taxpayers' money – in line with the original objectives of the BRRD and the SRMR. However, they also mention the limited role that coinsurance/ collective industry funds, like DGSs and resolution funds, have played so far in managing bank failures. All their proposed policy options rely on the assumption that their practical function cannot be limited to an eventual and very unlikely payout of covered deposits, but that they should be used more efficiently, subject to clear conditions, to finance the orderly market exit of failing banks.[16]

6. Does the Loss Absorption and Recapitalization Paradigm apply to senior creditors and depositors?

Sixth, as for the "Loss Absorption and Recapitalization Paradigm", for traditional deposit taking banks, the three articles take different approaches. While the article of F. Sotelo seems to refer to the need to avoid any impact on senior creditors and depositors and therefore on the real economy,[17] the article of J. V. Andersen recalls that Danish authorities have clearly stated to all stakeholders in the banking sector that all creditors, including depositors, face the risk of write down and losses.[18] This is a very delicate policy choice, which can certainly be addressed through enhanced disclosure and communication[19] and the application of enhanced consumer protection safeguards[20] – and the current BRRD (different from the EU State aid framework) does not exclude them from losses. However, some prior cases have proven that their write-down, in particular of deposits and retail investors, remains challenging.

7. The right mix of internalization and coinsurance

Seventh, all three articles concur on the need to accommodate an expanded resolution regime, or a new liquidation one, with the internalization of losses above capital requirements, on the one hand, and, a more extensive use of collective industry funding on the other (DGSs or resolution funds): a mix of internalization and coinsurance. However, how to strike the right balance?

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16 F. Sotelo, page 9.

17 F. Sotelo, page 3.

18 J. V. Andersen, page 2.

19 See for example the Statement of the EBA and ESMA on the treatment of retail holdings of debt financial instruments subject to the BRRD (ESMA71-99-991).

20 Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU Text with EEA relevance (OJ L 173, 12.06.2014, p. 349).

8. The MREL requirements

Eight, concerning "Loss Absorption and Recapitalization Paradigm", F. Sotelo states that it does not fit very well with the business model of banks whose funding model mostly relays on retail deposits. Those banks cannot reasonably meet fully fledged default MREL requirements both because of their limited access to the markets and pricing expectations by investors. F. Sotelo explains that the size of a bank is determinant of its cost and funding model. He does not believe that the MREL problem will be eventually overcome by the so called regulatory-driven consolidation of the banking sector, also because one of the main objectives of the current framework was to avoid the too-big-to-fail problem, and the problem should not be solved by creating a bigger one. He also recalls that in the United States not every single deposit taking bank is burdened by MREL requirements, and he praises the current SRB MREL rebates for smaller Significant Institutions with transfer strategies.[21] However, the MREL requirements could still be demanding for some banks.[22] Instead, M. Vanberg considers reasonable to assume that in the context of the Capital Markets Union the market for private placements in the EU will increase and could mitigate the problem of appropriate financing.[23] And, under the Danish model, the MREL requirements are phased in for small and medium sized banks with capital which is gradually accumulated by retained earnings.[24] Under the BRRD, the MREL is bank specific, and no automatic subordination requirement applies below the 100 billion threshold. However, as the MREL requirements seem to remain challenging for banks whose funding model relies on deposits, any review of the crisis management framework should indeed assess the advantages and limits of this business and funding model, and consider possible options, including enhancing the efficiency of, and the synergies with, coinsurance/collective industry funding.

9. Possible synergies with complementary coinsurance/collective industry funding

Ninth, the calibration of any MREL requirement will also have to take into consideration the possible synergies with coinsurance/collective industry funding. In fact, the three articles agree that once internalized losses and restructuring costs meet a certain threshold,[25] coinsurance/collective industry funding should intervene to facilitate, under certain conditions, transfer strategies thereby unlocking greater franchise value to the benefit of creditors but also of those coinsurance/collective industry funds (for example, in this way the DGS would avoid an expensive payout). In fact, one of the criticisms of F. Sotelo is that even when the MREL requirement can be calibrated by resolution authorities to accommodate bank specificities, the inexistence of other elements in the funding scheme limits the

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21 SRB MREL Policy under the banking package: https://srb.europa.eu/en/file/srb-mrel-policy-under-banking-package-2020.

22 F. Sotelo, page 1-4.

23 M. Vanberg, page 8.

24 J. V. Andersen, page 14.

25 F. Sotelo, page 10.

efficiency of the resolution model (i.e. the practical absence of any source of coinsurance be it by the resolution funds or the DGSs).[26] In particular, DGSs play a limited role so far in managing bank failures, be it in resolution or liquidation (i.e. to cover potential gaps in the loss absorbing capacity of the bank, or to facilitate or guarantee transfer strategies). Their practical function is limited to a very unlikely payout of covered deposits. The other options under the DGS Directive[27] are also limited by the net costs of paying out covered deposits. As a consequence, DGSs have no effective possibility of financially supporting transfer strategies. This is mainly due to the super-priority of covered deposits in the creditor hierarchy and the definition of the least cost test.[28] This issue could be addressed by making all deposits *pari passu*[29] and/or increasing the coverage level and/or including indirect costs in the least cost test.[30] Instead, F. Sotelo advocates for the introduction of a compulsory and unconditional contribution by DGSs (or preferably by the European Deposit Insurance Scheme (EDIS) or the Single Resolution Fund (SRF) for the Banking Union) once internalized losses and restructuring costs meet a certain threshold and all MREL has been exhausted. This option addresses some of the disadvantages related to the other options described above, it certainly provides legal certainty to the benefit of financial stability, and deserves further assessment. However, as mentioned by F. Sotelo himself, it might require higher targets for DGSs or possible synergies with the resolution funds. In this respect, within the Banking Union, the functions of the SRF could be extended to allow a loan or transfer, under certain conditions, to the DGSs, if the required financing exceeds their target levels. Moreover, in particular for smaller banks, bailinable instruments, other than deposits, might still not exist or be sufficient. For such cases, F. Sotelo proposes that banks should be allowed to choose between either increasing their MREL levels to the minimum entrance level of the DGS, or voluntary contributing to special resolution vehicle such as the resolution funds, which would cover the gap. An alternative could be to allow those banks to contribute more to the DGSs, as an enhanced insurance. The merit of these proposals is that they would ensure the resolvability and orderly market exit (in resolution or liquidation) of even the smallest banks, filling potential gaps, when and if needed for financial stability purposes, between the loss absorption capacity (or the MREL requirements) of the failing bank and the usability of the coinsurance/collective industry funds. This approach would be consistent with the idea, proposed by some, that smallest banks pay less to the resolution funds and more to DGSs (or alternative funding schemes) as an insurance which would replace too demanding MREL requirements. The alternative presented by M. Vanberg (i.e. *ex post* claim of recourse

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26 F. Sotelo, page 4.

27 Directive 2014/49/EU of the European Parliament and of the Council of 16 ril 2014 on deposit guarantee schemes Text with EEA relevance (OJ L 173, 12.6.2014, p. 149).

28 F. Sotelo, page 10, and M. Vanberg, page 7.

29 The United States have a general depositor preference. This means that insured depositors rank *pari passu* with uninsured depositors and that the Deposit Insurance Fund and uninsured deposits would potentially suffer an equal amount of losses in case of restructuring. This was probably a political compromise between insuring all deposits, which would have created an incentive for moral hazard, and protecting only insured deposits, which could have been detrimental for financial stability. See also M. Dobler, E. Emre, A. Gullo and D. Kale, The Case for Depositor Preference, Monetary and Capital Markets and Legal Departments, IMF (2020).

30 F. Sotelo, page 10, and M. Vanberg, page 7.

for the DGS against the failed bank) would certainly ensure a harmonized treatment in terms of burden sharing under both the resolution and the liquidation regimes.[31] It would be similar, but *ex post*, to the approach presented by J. V. Andersen. Therefore, it is worth assessing its operational challenges, if any, compared to the Danish model.

10. Conclusions: Which tools? Which sources of funding? Under which conditions? Which authority?

To conclude, any review of the crisis management framework for small and medium-sized banks will have to answer four questions. What are the best tools to deal with them? With which sources of funding? Under which conditions? By which authority?

The merits of the proposals presented by F. Sotelo are that they seek to balance the need to avoid the recklessness of assuming that there will always be a suitable acquirer in the absence of financial support, and imposing banks the internalization of all the potential funding needed to back such transfer. It would depart from both public bail-outs and deposit write-downs which seem to be socially costly, and also from high MREL levels, which seem to be expensive for banks with deposit funding model. It seems to balance market discipline, by way of minimum MREL, and collective suasion, by introducing some sectoral discipline stemming from coinsurance.[32] However, as mentioned by M. Vanberg, any enhancement of the crisis management framework should rely on the principles of (i) the level playing field, (ii) the objective of avoiding moral hazard, (iii) preparedness and (iv) proportionality.[33] The Danish model seems somehow to achieve most of those objectives.

Ultimately, any review of the crisis management framework for small and medium sized banks will have to rely on a solid transfer tool (i.e. sale of business or bridge bank) be it under the resolution or a new liquidation chapeau. But once again the key policy choices, which will have to be made, concern the sources of funding and the conditions to access them. It will be important to find the right and proportionate balance between the need to ensure a minimum loss absorption capacity, and the accessibility of the sources of funding to facilitate the implementation of such transfer strategy. But it will be equally important to avoid any funding gap between internalization and coinsurance, and to avoid a piecemeal atomist liquidation which seems to be detrimental to financial stability and the (local) economy. Policy makers will finally move forward with the design of the legal features of a more harmonized solution for small and medium size banks only once a balanced funding methodology agreeable to all will be determined. Those policy decisions will also determine the authority ultimately responsible for the orderly market exit procedure – question which is particularly relevant and politically sensitive within the banking union.

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31 J. V. Andersen, page 10.

32 F. Sotelo, page 5.

33 M. Vanberg, page 6.

The FDIC approach over time to the crisis management of small and medium-sized banks

Arthur J. Murton

I would like to thank the Bank of Italy for inviting me to join you today. My colleagues and I at the FDIC have enjoyed exchanging views with you and many of your colleagues over the past few years on resolution and deposit insurance matters. My remarks today contain my personal views, which may not necessarily reflect those of the FDIC.

I will focus most of my remarks on the topic of the workshop: small and medium-sized banks. Let me first spend a minute or two talking about the fact that, in the United States (US), there are two resolution regimes. The first is the longstanding resolution authority for insured depository institutions, or IDIs, under the Federal Deposit Insurance Act (FDI Act), and the second is the resolution regime for systemically important financial institutions that was put in place under the Dodd-Frank Act after the global financial crisis.

I will not go into the particulars of our systemic resolution authority. I'll just point out that, over the past decade, the US, the EU, and the UK have had similar experiences with respect to systemically important financial institutions and the resolution regimes applicable to them, not only similar, but perhaps shared, experiences, as we've worked together closely to implement the new authorities.

Your audience is familiar with the Single Point of Entry strategy, TLAC, and so forth. I will make, however, one point about the systemic resolution authority under the US regime, which is that, while it is patterned largely after the FDIC's longstanding FDI Act resolution authority, it does not have an analogue to the Deposit Insurance Fund. In other words, there is no funding mechanism provided for the guarantee of claims of certain depositors, and losses are to be borne by shareholders and creditors alone.

Having said that, while we have a shared experience on systemic resolution among the jurisdictions, there are some differences with respect to small and medium-sized banks.

As some people have pointed out, the FDIC has had this authority for 80 plus years and has some experience with handling small and medium-sized bank failures. Naturally, our

experience has changed over the years, so we have had different iterations and different approaches to this authority, and it is understandable that there would be differences across jurisdictions, as we have seen over time in the US.

As I turn to discuss our experience under the FDI Act, I would like to make it clear that I understand that different jurisdictions face different challenges; my description of the FDIC experience is not intended to be a prescription for what the EU may or may not do.

I will mostly skip the first 50 years of the FDIC's history. I am sure you are aware that the FDIC was created after the Great Depression, when thousands of banks failed, and I will fast forward to the early 1980s. By that time, the FDIC had been in operation for 50 years and failures were relatively infrequent. Up to that time, there had been periods when bank failures were handled in different ways and the FDIC had been given the authority as deposit insurer and resolution authority for all IDIs. There was one insolvency regime for IDIs, and the FDIC had access to funding resources, which were funded by assessments on the banking industry that built up the Deposit Insurance Fund. The FDIC also had a liquidity facility with the US Treasury.

As we entered the 1980s, problems begin to emerge in the banking and savings and loan industries. Prior to the 1980s, the FDIC had taken the posture of providing protection beyond just insured depositors, possibly to uninsured other creditors, and, in some cases, shareholders. There was a reaction to that as this was undermining market discipline, and so the FDIC's Chairman in the early 1980s, William Isaac, put in place a policy by which the resolution of banks typically would involve, for the most part, losses being imposed on uninsured depositors, so that not all depositors would be protected. This is known as the modified payout arrangement.

This was the approach taken for the banks that failed in the early 1980s, and then Continental Illinois, the 7th largest bank in the US, experienced severe funding difficulties. Out of concern for systemic stability, the FDIC, the Federal Reserve, and the Treasury implemented essentially a bailout of Continental Illinois, which protected not just all depositors and creditors of the bank itself, the IDI, but also of the holding company as well.

In the wake of that, the notion of too big to fail emerged, which allowed for differential treatment between what may occur in the case of smaller banks versus what happened in Continental. The FDIC Board post-Continental basically used discretion that it had in resolution to effect resolutions where typically all depositors were protected. They typically found an acquirer to purchase the bank and assume the liabilities and passed all of the deposits. That could be done even though we had a cost test in effect at that time. The cost test at the time was not the least-cost test used by the FDIC today. The test at the time was simply that the transaction or resolution had to be less costly than a payout in liquidation, which was a lower bar than our current least-cost test.

Our statute at the time also provided for what was known as the "essentiality test," which allowed a decision to step outside the cost test if the failing bank was deemed essential to

the community. A decision on that basis didn't even require systemic implications; it just required some importance in the community.

So, during the 1980s, typical transactions protected more than just insured depositors, and there was a backlash to that approach, particularly as the savings and loan industry experienced grave difficulties and its deposit insurer (FSLIC) became insolvent and had to be bailed out by the taxpayer. The concerns about moral hazard became much more pronounced and the FDIC suffered losses. The Deposit Insurance Fund was depleted, and there was concern that the FDIC would go the way that the FSLIC had gone, and might require taxpayer funding.

In 1991, the US Congress adopted the FDIC Improvement Act (FDICIA) to put in place a number of things you are probably familiar with: prompt corrective action, risk based premiums, and a greater requirement for the industry to stand between losses to the taxpayer.

But, for today's discussion, perhaps the most important change was the least-cost test, and the impetus for the least-cost test was that concern that I had mentioned, that the FDIC was using its discretion to cover all deposits in a typical resolution, and critics wanted to constrain the agency's ability to do so.

There were some proposals to put an outright prohibition on the agency's ability to have a transaction that covered all depositors. However, William Seidman, the Chairman of the FDIC at the time, proposed that, instead of a prohibition, it actually could be less costly to the Deposit Insurance Fund to have a transaction by which all deposits were protected, for example, with all deposits being assumed by the acquiring institution in a purchase and assumption transaction.

That was the reform that was put in place, to require the least costly resolution, which did constrain the FDIC's discretion, but still allowed some room for exceptions. In addition to the least-cost test, FDICIA also put in place what is known as the "systemic risk exception," which allowed the FDIC to step outside of the least-cost test and protect depositors, creditors, and shareholders. However, the ability to do that was constrained. It was not just the decision of the FDIC's Board, but it also required a super-majority of the Federal Reserve Board making a recommendation to the Secretary of the Treasury who, in consultation with the President, would have to approve it. At the time, it was viewed as a very significant hurdle to doing anything beyond the least-cost test.

In the post FDICIA period, for the next few years, there continued to be some failures and a greater proportion of them were handled in a way under the least-cost test that imposed losses on uninsured depositors. Eventually, within a matter of a few years, bank failures subsided and we went through a fairly long period during which there weren't many failures, and the policy was not really tested to any great degree for quite some time.

Fast forward to the mid-2000s, the beginning of the global financial crisis, the banking industry in the US had experienced 10 to 15 years of record profits, very few failures, a lot of changes, consolidation in the industry, financial engineering, and so forth. A lot of changes

had occurred, but it was relatively quiet from the perspective of deposit insurance and resolution.

By the time we got to 2008, problems start to emerge. The first was the failure of IndyMac in July 2008, which was the most costly failure in FDIC history by far. By the fall of 2008, credit markets had seized up and you know all of the concerns and measures taken to address that both in the US and globally.

From the FDIC's point of view, the systemic risk exception, which was supposed to be a high hurdle to taking actions beyond the least-cost test, was invoked several times within a matter of a few months, starting in September of 2008. It was used in one case that eventually had a private sector solution; it was used to guarantee the debt of the banks for the first time; and it was used in the government support of some of our US GSIBs.

Putting aside what was happening in the systemically important arena, I'll turn back to talk about what followed for the next two to three years, which was a banking crisis for small and medium-sized banks in the US.

The FDIC handled approximately 500 failures during that period. The typical failure during that time was a purchase and assumption transaction and, in probably 90 percent of those transactions, all depositors were protected and transferred to the acquiring institution. Again, this was done under the least-cost test where we were able to find an acquirer who would assume all of the deposits. The result of all these failures was that the Deposit Insurance Fund once again was depleted. We reported a negative balance: We had started the period with a balance of roughly $53 billion in the Deposit Insurance Fund, and by the end of 2010, we reported a negative balance of roughly $20 billion. What that meant was that we had to significantly raise premiums (assessments) on the banking industry when their earnings and capital were under great strain, which was a difficult time to be putting an additional assessment burden on them. We eventually got through that, the failures subsided, and we rebuilt the Deposit Insurance Fund through the assessments on the industry.

There were again reforms following the crisis. The most significant was the Dodd-Frank Act, which focused on systemic resolution, and there were some reforms under the FDI Act with respect to our deposit insurance and resolution authorities. Significantly, the deposit insurance limit was raised from $100,000 to $250,000 and the assessment base that we used to charge the industry for deposit insurance was expanded from domestic deposits to essentially all liabilities. That had the effect of shifting the burden of funding deposit insurance toward the larger banks and away from the smaller community banks. There also were some other measures to strengthen the Deposit Insurance Fund.

That has been our experience and I should note that what I described generally was for small banks, while the topic of this workshop is small and medium-sized banks. Let me talk for a minute about regional banks in the US and resolution. We have not had as much experience there. As I said, IndyMac was a $30 billion institution, and in some respects, it

was unique in ways that I will not go into today. But, we do recognize that there are some challenges that would be associated with a large regional bank failure. I will cover just a couple of them.

One is that their funding base, like their larger counterparts, is probably more market-sensitive. It may be that liquidity is the trigger for resolution to a greater extent than the typical community bank and we may have less time to prepare for resolution.

Because of their size, there may not be as many potential acquirers, so we may not be able to effect the purchase and assumption transaction.

Further, regional banks tend to fund themselves to a greater extent with uninsured deposits, which may make it less likely that under the least-cost test we would have a transaction where all deposits are protected. That could cause concerns about the impact on, for example, large corporate accounts, if they would not be transferred to an acquiring institution in resolution.

Those are some of the challenges that we are working on. There are some mitigants to each of those. In terms of liquidity being a trigger, more effective supervision helps, including having a better understanding of the condition of the firm, getting ahead of that, and getting resolution planning started earlier. We do have bridge bank authorities, so even if we do not have an acquirer for purchase and assumption, we can have continuity of operations through a bridge bank. In terms of uninsured depositors, while they may be exposed to loss, we do have the ability to provide an advanced dividend, which is essentially a situation in which we liquefy their claim on the receivership. So, while they may lose 10 cents or 20 cents on the dollar, they could receive up to 60-70 percent of their claim immediately in the form of liquidity, which in turn could help minimize the disruption.

Thinking back, I remember, perhaps in 2013 or 2014 at a Eurofi conference in Milan, the first time I heard about MREL. I had heard about TLAC, but it was confusing to distinguish MREL and TLAC. And, I remember being asked what the FDIC does for MREL. The answer largely is that the Deposit Insurance Fund has been our MREL for small to medium-sized banks.

Session III

The FDIC regime for non-viable banks: considerations for EU reform

An effective regime for non-viable banks: US experience and considerations for EU reform*

Nicolas Veron and Anna Gelpern

Executive summary

- The US regime for non-viable banks is centralized in one institution, the Federal Deposit Insurance Corporation (FDIC). The FDIC's focus on deposit protection and its responsibility for the Deposit Insurance Fund have shaped its approach to bank supervision and handling non-viable banks.
- The FDIC has transformed since its establishment in 1934 to reflect the growing complexity of the US financial system, as well as shifting political expectations and demands for public accountability. In a succession of learning experiences, which included high-profile failures, the US regime has developed an elaborate system of checks and balances to help minimize public costs and moral hazard, while maintaining predictability and credibility for deposit protection.
    - Among the regime's achievements, smaller non-viable banks are routinely closed by the FDIC, without any public protection of creditors (let alone shareholders) and without disrupting the US financial system. The FDIC won praise for its smooth handling of many small bank failures and several larger ones in the crisis of 2007-2009. No one has lost money on insured deposits since the FDIC's establishment. Uninsured depositors of failed banks have periodically incurred losses, though more often in non-crisis times than during systemic turmoil.
    - The regime's effectiveness has been called into question repeatedly when it comes to handling large non-viable banks and banking groups. The 2007-2009 crisis revealed particularly troublesome gaps in dealing

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with large failing non-banks, with knock-on effect on the banking sector. The Dodd-Frank Act of 2010 affirmed corporate bankruptcy as the default framework for such firms, but gave the FDIC authority in exceptional circumstances to close them in process akin to the one it uses for banks. This feature of the US regime is still untested, as is its counterpart in the EU.

– Given the depth and breadth of the US experience, EU policymakers would be remiss not to consider it as they design their own reforms. The current EU regime for non-viable banks was substantially shaped by legislation adopted in 2014 on bank recovery and resolution and, for the euro area, a "single resolution mechanism" anchored in a new EU agency, the Single Resolution Board (SRB). While this legislation signalled a central role for the new EU resolution regime, its application in practice has revealed gaps and distortions that make the EU resolution framework much less central than heralded.

  • National bank insolvency proceedings remain the default option for non-viable banks;

  • In combination with the current European Commission stance on state aid control, these national proceedings leave significant space for national governments to use public funds to compensate a wide range of claimants against failed banks;

  • Conversely, the EU resolution regime has hardwired requirements to impose losses on claims against failed banks, potentially including uninsured depositors;

  • As a result, the SRB has powerful disincentives against taking resolution action, and indeed has exhibited a greater reluctance to do so than had been generally anticipated;

  • Mutual support arrangements among groups of banks in member states offer additional opportunities to circumvent the strictures of the EU resolution framework. Such arrangements may benefit from a perception that they would be ultimately rescued by the national government if they became non-viable, like "too big to fail" banks.

– Consequently, the EU regime for non-viable banks appears to be much less conducive to market discipline than its designers had advertised, and less so than the US regime, at least for all but the largest banks. The expectation of public financial intervention that persists in the current EU regime, moreover, perpetuates the bank-sovereign vicious circle that nearly broke up the euro area in 2011-2012.

– EU reformers should take a holistic view of the regime for non-viable banks, and consider how its constituent parts might evolve to create a system of checks and balances conducive to its effective operation. Recent EU experience seen in light of the longer US history militates against discrete tweaks to the EU resolution process that may leave intact the distortions and arbitrage.

– The US experience provides powerful arguments in favour of a unitary regime with ultimate responsibility lodged in a single agency (presumably the SRB, relying on outposts in member states), with a mandate covering the entire regime, including deposit protection, resolution and liquidation/insolvency proceedings, with a residual role for the European Commission's state aid control. A key consideration is regime predictability and the operational credibility of the agency in charge. To that end, centralization would facilitate effective marketing of a non-viable bank's franchise and assets on a cross-border basis, contributing to greater efficiency of the regime and to cross-border banking system integration at the same time. A correspondingly upgraded SRB should be equipped with the necessary tools to implement asset and liability transfers, burden-sharing and liquidity support as necessary, with clear operational principles and accountability channels.

– A regime for non-viable banks reformed along these lines would be helpful but not sufficient to break the bank-sovereign vicious circle. It would fit well within a broader policy package to complete the banking union. Such a package should also include limits on concentrated sovereign exposures, centralized tools to manage system-wide fragility, and an end to the intra-banking-union ring-fencing of capital and liquidity for cross-border banks.[1]

1. Introduction and Semantics

The European Union was poorly prepared for the severe financial crisis that started in the summer of 2007 and climaxed in September-October 2008, before morphing into a joint crisis of euro area banking and sovereign finances in the ensuing years (e.g. Wolf, 2014; Bastasin, 2015; Bayoumi, 2017). As the crisis progressed, it exposed a particularly important vulnerability: the absence of an effective policy regime to deal with non-viable banks in most member states and at the EU level. The crisis prompted the EU to introduce elements of an ambitious new regime with EU legislation enacted in 2014: the Bank Recovery and Resolution Directive (BRRD, 2014/59/EU) and, for the euro area, the Single Resolution Mechanism (SRM) Regulation (or SRMR, (EU) 806/2014), complemented by less foundational though still important legislative acts such as the third EU Deposit Guarantee Scheme (DGS) Directive (or DGSD, 2014/49/EU).

This new regime has been barely tested so far, with only few cases since its entry into force in 2015-16, and cannot be viewed as having reached a steady state. It is also more complex and path-dependent than often perceived. The resolution regime of BRRD is explicitly designed as an exception to the default option, namely national bank insolvency proceedings (NBIPs). NBIPs are defined by national legislation, with barely any EU-level harmonization so far – a key component of the political compromise that shaped the EU legislation of 2014. They are supported by national DGSs, which are only partly

[1] The recently published conclusions of a high-level working group set up by the Eurogroup in December 2018, available at https://www.consilium.europa.eu/media/39768/190606-hlwg-chair-report.pdf, have echoes of this framing of the policy agenda to complete the banking union.

harmonized by the DGSD. The handling of non-viable banks is materially constrained by the pre-existing EU framework for state aid control, enforced by the European Commission through its Directorate-General for Competition. In several member states, mutual support arrangements among financial institutions play a critical role at the point of non-viability for some or all of the country's banks. Such mutual support takes a range of binding or non-binding forms, including voluntary deposit guarantee schemes, institutional protection schemes, and other arrangements at the national or sub-national level.

It is natural to compare this complex and fledgling EU regime with its more established US counterpart.[2] The US regime has been tried and tested more than any other in the world since its inception in 1933 with legislation that authorized the FDIC. Before the FDIC's founding, the United States had a fragmented system that relied on multiple state-level and federal authorities to deal with bank failures. State-level experiments with bank note and deposit guarantees and mutual support arrangements first took hold in the 1830s, and returned to popularity several times in the 20th century, but ultimately failed en masse during banking panics. Since the establishment of the FDIC in 1934, the US regime has changed dramatically, accumulating operational experience, and adapting to many swings of the political pendulum. During the five years 2008-2013, the FDIC closed nearly 500 banks, including a handful of very large institutions, without destabilizing the market (FDIC, 2017).

Although the US regime has shown dynamism and resilience, it is not a model for the EU to replicate. The two jurisdictions have different legal, political, and banking structures and histories; they also came to design their respective regimes from very different starting points. The United States in the early 1930s had a weak, fragmented public safety net for banks that failed on a large scale. In contrast, the EU in the 2000s boasted a constellation of robust if implicit member-state guarantees. Such structural differences would make it impossible for the EU to use the US experience as a template to be copied; however, it can help inform institutional experimentation and occasionally serve as a cautionary tale to help avoid mistakes.

Structure of the study and limitations of scope

Section 2 of the study provides a summary overview and assessment of the US regime for non-viable banks. Section 3 similarly describes and assesses the EU regime as shaped by the legislative package of 2014, and how it has played out in cases since mid-2015. Section 4 discusses possible objectives of further EU regime reform, and how corresponding policy options may be informed by observations from the US experience. Section 5 concludes.

Institutional designs for dealing with non-viable banks are a matter of considerable complexity, combining many legal, financial and operational considerations. We inevitably had to make a number of choices to restrict the scope of the study.

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[2] Other jurisdiction-specific regimes for non-viable banks are either as fledgling and untested as the EU's, and/or (as in Japan) less based on the principle of private-sector burden-sharing and thus not immediately comparable (see S&P Global Ratings, 2019).

– First, the study is only about banks and banking groups, excluding other financial firms, notably credit unions (in the United States),[3] non-bank "fintech" (financial technology) firms, investment services firms, insurers, and financial market infrastructures.

– Second, the study starts at the point of acknowledged non-viability – or, in the EU parlance, when a bank is determined to be failing or likely to fail (FOLTF) – and does not examine tools that may be wielded at an earlier stage with "problem banks". Such tools include emergency liquidity assistance and central banks' lender-of-last-resort functions; supervisory actions such as prompt corrective action (US) and early intervention (EU); and crisis-related financial intervention such as temporary guarantee programs for banks, or the US Troubled Asset Relief Program of 2008 and its functional equivalent in the EU, known in BRRD as precautionary recapitalization. Resolution planning is likewise beyond the scope of this study.

– Third, while deposit insurance is included in the study's scope to the extent it is part of the process of dealing with non-viable banks, it is not analysed in full. We focus on ex-post insurance payouts, and ways in which the protection of deposits and of deposit insurance funds interacts with the broader task of managing entire non-viable bank balance sheets. We avoid ex-ante design questions, such as options for insurance fee-setting (known in US practice as "assessments") or for the specific design of a future European deposit insurance scheme.

– Fourth, on the EU side the study is predominantly (though not exclusively) focused on the euro area. More generally, this study does not address issues of cross-border coordination in any depth, and emphasizes domestic considerations from a US and euro-area perspective respectively. Thus, widely-discussed models for resolving cross-border banking groups, known as single-point-of-entry and multiple-point-of-entry approaches, are for the most part beyond the scope of our analysis.[4] We also leave aside any specific discussion of the United Kingdom.

– Fifth, we stop short of designing or even sketching a blueprint for EU reform. Our focus is on identifying gaps in the existing framework and a menu of possible solutions, for use as part of a reform of the EU regime, which may itself be part of a broader effort to complete the European banking union.

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[3] US credit unions are in many way comparable to cooperative banks as exist in a number of European countries. But while the latter are included in the EU banking regulatory framework defined by the fourth Capital Requirements Directive (CRD4, 2013/36/EU; with minor exceptions such as Irish credit unions – see CRD4 Article 2(5)), US credit unions retain a regulatory, supervisory and resolution framework separate from that for banks as briefly described in Section 2 below.

[4] We correspondingly do not assess the compatibility, or lack thereof, of the respective US and EU regimes to handle possible cases of non-viable banks with operations in both jurisdictions. We also give only limited attention to standards issued by global bodies on resolution, deposit insurance, and related concerns (FSB, 2011).

Semantics

Semantics is a particular pitfall. The same words are used in different ways on the two sides of the Atlantic and occasionally also in different contexts inside the EU. This can easily lead to misunderstandings, or to misleading characterizations. This observation applies with special force to key terms, such as resolution, liquidation, and insolvency. We have tried, as much as practical, to define and use words that may be understood the same way by both European and US readers with an open mind. We made an exception, however, for "resolution", because this word is currently used very differently in the United States and the EU (see below): we thus use it according to US practice in Section 2, and according to EU practice in Sections 3 and 4.

The study refers repeatedly to "non-viable" banks, an adjective we use as shorthand for "failing or likely to fail" as defined by the BRRD. This phrase has no perfect US equivalent; it captures a range of bank conditions and actions that may be deemed so "unsafe and unsound" by regulators as to justify bank closure and the appointment of a receiver. Apart from making the study's title and content more accessible to readers on either side on the Atlantic, our choice of "non-viable" also echoes Basel Committee language referring to the "point of non-viability" (BCBS, 2010).

Terms such as resolution, liquidation and insolvency continue to cause confusion:

- In the United States, "resolution" is an umbrella term that covers all modalities of dealing with a non-viable bank – whether through liquidation with depositor payoff (or "payout", in EU parlance); purchase and assumption of the bank's franchise by another bank and disposition of the residual assets and any liabilities under FDIC receivership; or "orderly liquidation" of large financial firms under new and still-untested modalities set by the Dodd Frank Act (DFA) of 2010.[5] In the EU, "resolution" only refers to the process defined by BRRD, which may be viewed as the functional equivalent of US-style orderly liquidation authority,[6] especially in the euro area, given differences in banking group structures[7] and the restrictive early practice of public-interest assessment (see Section 3).[8]
- In the United States, "insolvency" (like illiquidity) usually denotes a state, not a process: a bank is insolvent if its liabilities exceed its assets, or insolvent in

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5 Since orderly liquidation is governed by Title II of the DFA, it is sometimes referred to metonymically as "Title II authority". Title II OLA authority serves as backup to the default option of federal bankruptcy for non-bank financial firms. Somewhat confusingly, Section 165(d) under Title I of DFA refers to "resolution planning", even as it actually requires planning for bankruptcy. Such bankruptcy plans are sometimes (and in our view, imprecisely) referred to as "Title I resolution plans".

6 In the United States, "authority" often refers to a power granted by law to an agency, while in the EU that word is functionally equivalent to "agency" itself.

7 In the EU, a large financial group's holding company is typically also a licensed bank that may be subject to resolution, while US law stipulates that it be always a non-bank – see Section 2.

8 At the global level, the Financial Stability Board (FSB)'s use of "resolution" is similar to the EU practice, but in the EU context the FSB's concept of resolution may also apply to certain national bank insolvency proceedings and not only to the EU resolution procedure defined by BRRD, as further explained in Section 3 (FSB, 2011).

the regulatory sense if it is deemed to be critically undercapitalized. The same use exists in the EU, but in addition, and specifically in the context of BRRD, "insolvency proceeding" refers to the process of closing a non-viable bank that does not go through EU resolution (Article 2(1)(47) BRRD). In the context of non-banks or individuals, what EU practice refers to as insolvency proceedings (often shorthanded "insolvency") is generally called "bankruptcy" in the United States.[9]

– In the United States, "liquidation" refers to asset disposition, often implicitly coupled with deposit payoff. Liquidation and payoff are often used interchangeably when describing an FDIC resolution method. "Orderly liquidation" is a new term introduced in the Dodd-Frank Act (see Section 2) and is functionally equivalent to resolution in the EU practice, as noted above. In the EU, liquidation is the asset disposition process that results from insolvency proceedings if no reorganization is achieved. The European Commission and others also refer to "orderly liquidation" or simply "liquidation" for cases of (national) insolvency proceedings which are functionally equivalent to a resolution (in the FSB's sense).[10]

Other terms are used on one side of the Atlantic, but not the other. For example, "bail-in" is a legal concept in BRRD, and is often used in the EU more broadly to refer to any forced imposition of losses, also referred to as "burden-sharing".[11] US usage tends to avoid the term "bail-in", except occasionally for practitioners working on cross-border matters. US participants might rather refer to "haircutting" creditors or uninsured depositors. Conversely, references to "open-bank" and "closed-bank" resolution – where the non-viable bank remains in operation and is rehabilitated, or ceases to exist – are fairly common in the United States, but not so much in the EU.

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9 The word "bankruptcy" does not appear to be used in EU law. Colloquially in the EU, and depending on context, "bankruptcy" may be use as synonym either to liquidation or insolvency.

10 See e.g. "State aid: Commission approves aid for market exit of Banca Popolare di Vicenza and Veneto Banca under Italian insolvency law, involving sale of some parts to Intesa Sanpaolo", European Commission press release, Brussels, 25 June 2017. Available at http://europa.eu/rapid/press-release_IP-17-1791_en.htm. See also the case reference at http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_45664, referring to "orderly liquidation".

11 In Italy, "bail-in" has entered vernacular language, with sharply negative connotations of ruining the savings of modest households. Somewhat ironically, however, none of the cases to which that discourse refers – e.g. those of four small banks resolved in late 2015, two Veneto banks closed in June 2017, and Monte dei Paschi di Siena (see Subsection 3.3), involved bail-in as defined in BRRD.

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2. The US Regime and Recent Developments

Whereas the interplay between state and federal authority defines the US regulatory experience, in the area of bank resolution it has resulted in a highly centralized regime. That centralized approach, which covers banks of all sizes, stands in contrast to the historically fragmented US approach to bank chartering (broadly equivalent to licensing in the EU) and supervision. For all practical purposes, federal law and the federal safety net determine the process for handling non-viable banks and Bank Holding Companies (BHCs, which stand at the top of banking groups as explained below), as well as securities firms.[12] This section, like the entire study, focuses on banks – known as Insured Depository Institutions (IDIs) in US regulatory parlance – and BHCs. Regimes applicable to other firms are covered in a more limited fashion, with features relevant to the EU policy debate highlighted as appropriate, or not at all.

As noted in the introduction, specialized US institutional arrangements for non-viable banks are quite elaborate and mature by comparison with their counterparts in other jurisdictions including the EU, and with arrangements for other kinds of financial institutions. BHCs, however, had no access to a specialized resolution regime – they would have to reorganize or liquidate in bankruptcy, a federal judicial proceeding, much like manufacturing or retail firms – until the Dodd-Frank Act of 2010 introduced Orderly Liquidation Authority (OLA) for systemically important financial companies.[13] OLA is meant to function as a backup option to bankruptcy, which remains the default process for non-viable BHCs. At this writing, OLA is untested.

Focusing on non-viable banks and BHCs helps flesh out long-running policy arguments that have shaped generations of institutional reforms, resulting in today's elaborate bank resolution regime anchored in the FDIC and its Deposit Insurance Fund (DIF). Arguments about political capture, moral hazard, and "taxpayer bailouts" – and countervailing concerns about systemic risk, access to banking services, and deposit protection – animate current debates in the EU and in the United States, albeit in very different institutional contexts.

2.1 US institutional architecture basics

The regulatory and supervisory architecture relevant to non-viable banks in the United States reflects its complex history of state and federal oversight, and more than two centuries

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12 Insurance firms, by contrast, continue to be chartered, regulated, supervised, resolved, and backstopped by individual states.

13 Dodd-Frank Act, Sec. 203(b)(2).

of dynamic adaptation between the financial industry and its regulators (Gelpern & Véron 2018). This summary description is not comprehensive, and only intended as a primer for unfamiliar EU readers.

The term "bank" in the United States does not consistently describe the same set of institutions it does in the EU. The term generally refers to state and federally-chartered banks whose deposits are insured by the FDIC, and to any state or federally-chartered institutions that accept demand deposits and make commercial loans.[14] This definition importantly excludes credit unions (see Section 1), savings and loan associations (traditionally, housing lenders, also called thrifts), and US branches of foreign banks, even if they take FDIC-insured deposits.[15] Parallel and distinct oversight, insurance, and resolution regimes have historically applied to credit unions and thrifts. Distinctions between bank and thrift regimes, however, have been gradually eliminated between the early 1990s (following the so-called savings and loan crisis during the 1980s) and 2010 (enactment of the DFA). As a consequence, we frequently use "banks" thereinafter as shorthand for "banks and/or thrifts", and synonymous to IDIs. Credit unions, by contrast, continue to be supervised separately by the National Credit Union Administration (NCUA), which also administers the National Credit Union Share Insurance Fund.[16]

Unlike in the EU, in the United States a bank is a distinct legal form, which may be established either by state or by federal charter. The charter operates both as a constitutive document (functionally equivalent to an EU's bank incorporation, if it has a corporate legal form) and a banking license. The Office of the Comptroller of the Currency (OCC), an independent regulatory agency within the US Treasury Department, issues all federal bank charters. State regulatory agencies issue state bank charters under individual state laws. Federally-chartered banks must obtain FDIC insurance to take deposits, and must become members of the Federal Reserve System. State-chartered banks are not required to become Federal Reserve members, but must normally obtain FDIC insurance, which justifies their federal oversight.

State bank charters predominated in the United States through the 19th century, save for the two early and limited US experiments with central banking, the First and Second Banks of the United States, which ended in 1836. National (i.e. federal) bank charters were introduced under the National Banking Acts of 1863 and 1864, primarily to help finance the Union in the US Civil War. This legislation also established the OCC

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14 Under the US Bank Holding Company Act of 1956, as amended (12 USC §1841(c)(1), internal references omitted): "[T]he term "bank" means any of the following: (A) An insured bank as defined in section 3(h) of the Federal Deposit Insurance Act [...]. (B) An institution organized under the laws of the United States, any State of the United States, the District of Columbia, any territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands which both – (i) accepts demand deposits or deposits that the depositor may withdraw by check or similar means for payment to third parties or others; and (ii) is engaged in the business of making commercial loans." The Federal Deposit Insurance Act separately defines "bank" by reference to charter form – in other words, a bank is that which is chartered as a bank under applicable state and federal laws; an "insured bank" under section 3(h) of the act is a bank whose deposits are insured by the FDIC (12 U.S.C. §1813(h)).

15 12 USC §1841(c)(2); the statute contains additional exclusions immaterial to this study.

16 Credit unions are usually not referred to as IDIs, even though their deposits are insured (by the NCUA).

and gave it chartering and supervisory authority. The system operated without a central bank until the Federal Reserve System was established in 1913. The new central bank initially had only limited and indirect regulatory authority. Until 1980, access to Federal Reserve liquidity was conditional on membership of the Federal Reserve System, which is optional for state-chartered banks.[17]

Federally-chartered ("national") banks hold the bulk of US bank assets. At the end of 2018, 866 federally-chartered banks held $11.3 trillion in assets, compared to $2.9 trillion for 793 state-chartered Federal Reserve member banks, and $2.6 trillion for 3,140 state-chartered non-member banks.[18]

Virtually all US IDIs are owned by BHCs (Avraham, Selvaggi & Veckery 2012),[19] which are not themselves chartered banks but ordinary business corporations.[20] The dominance of this holding-company form partly reflects the long legacy of strict limits on banks' geographic expansion and non-bank activities in the United States. Holding companies started as a way to circumvent these limits; the BHC Act of 1956 was partly an effort to regain control over geographic and commercial expansion, and gave the Federal Reserve regulatory and supervisory authority over BHCs (Omarova & Tahyar 2011). To control a bank no matter how small, a company must get approval from the Federal Reserve, and submit to a host of activities and affiliation restrictions.[21]

Each US IDI has a "primary federal regulator" responsible for its prudential regulation and continuous supervision. The following is a summary of primary federal prudential oversight responsibilities over banks:

- The OCC charters, regulates, and supervises all national (federally-chartered) banks, which must be members of the Federal Reserve System.
- Each of the 12 Federal Reserve Banks that comprise the Federal Reserve System supervises state-chartered member banks within its geographic Federal Reserve District.

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17 The Federal Reserve could regulate by imposing conditions on membership; however, stringent conditions threatened to dissuade potential members from joining, while the benefits of access to Fed liquidity were uncertain in the early years.

18 Source: Federal Financial Institutions Examination Council Annual Report 2018, available at https://www.ffiec.gov/PDF/annrpt18.pdf.

19 When the IDI is a thrift, the holding company is known as a savings and loan holding company.

20 In 2017 and 2018, three mid-size regional banks merged their holding companies into their IDI subsidiaries, shedding the BHC designation. The largest was federally-chartered Zions Bank, with $66 billion in assets and 433 branches in western United States. The banks cited their desire for streamlined regulation as the main reason for the mergers. To date, these remain rare exceptions, and the costs and benefits of giving up the BHC status continue to be debated. *See* V. Gerard Comizio and Nathan S. Brownback, "Shedding the Status of Bank Holding Company," Harvard Law School Forum on Corporate Governance and Financial Regulation, 11 August 2018, available at https://corpgov.law.harvard.edu/2018/08/11/shedding-the-status-of-bank-holding-company/; Thomas Homburg, "Bank Holding Companies – The Case for Not Firing the Federal Reserve," American Bar Association Banking Law Committee Journal, 2 July 2019, available at https://www.americanbar.org/groups/business_law/publications/committee_newsletters/banking/2019/201904/fa_3/.

21 This requirement does not apply to an individual or a government, neither of which is a "company" within the meaning of the BHC Act.

– The Federal Reserve Board supervises BHCs on a consolidated basis, with authority typically delegated to the geographically relevant Federal Reserve Bank. The Federal Reserve Board approves applications for BHC status. Financial Holding Companies (FHCs) are a subset of BHCs that meet more stringent regulatory criteria to engage in an expanded range of financial activities.[22] The Federal Reserve Board is also responsible for approving foreign bank entry in the United States, and for supervising Foreign Banking Organizations (FBOs).[23]

– The FDIC supervises state-chartered banks that are not members of the Federal Reserve System; it also has "backup" supervisory authority over all IDIs as described below (subsection 2.2).

In addition to prudential oversight at the federal level, consumer-facing aspects of banks' business conduct fall within the purview of the Consumer Financial Protection Bureau (CFPB), an independent bureau within the Federal Reserve established under the DFA. The Federal Reserve, FDIC, NCUA, OCC, and CFPB coordinate oversight through a federal body called the Federal Financial Institutions Examinations Council (FFIEC). State bank regulators coordinate through the Conference of State Bank Supervisors. Other aspects of business conduct, including Anti-Money Laundering (AML) oversight, fall under the authority of separate federal agencies.

By comparison with the EU, the US banking system is characterized by the multiplicity of prudential oversight authorities: state and federal chartering authorities, the Federal Reserve, and the FDIC all have prudential regulatory and supervisory mandates. Most large banks and all BHCs fall entirely under federal oversight; small banks tend to be state-chartered and thus supervised by both state and federal authorities.[24] In contrast, the European Central Bank (ECB) is the only licensing authority for all banks in the euro area, including "less significant institutions" with less than EUR 30bn in total assets. For the latter, some "day-to-day" supervisory responsibilities are assigned to national authorities, but not the key decisions about licensing or qualifying holdings (i.e. change of controlling ownership).

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22 Historically and with few exceptions, banks in the United States were not allowed to underwrite or sell insurance. The Banking Act of 1933 also barred banks from the securities business. The Gramm-Leach-Bliley Act of 1999 permitted banks to affiliate with insurance and securities firms as part of an FHC.

23 FBOs with US assets of more than $50 billion are required to form an intermediate holding company and to submit to enhanced prudential supervision by the Federal Reserve (Federal Reserve Regulation YY, 12 CFR 252 (2012)). Foreign banks generally operate in the United States through subsidiaries, branches, and offices. Subsidiaries are US banks controlled by foreign owners. Branches are extensions of the foreign bank, and do not have separate capital in the United States. Since 1991, foreign banks in the United States must establish as subsidiaries – not branches – to take insured deposits from the public; a small number of "grandfathered" foreign branches remain. Also beginning in 1991, foreign banks must obtain Federal Reserve approval to establish in the United States, and must be supervised at the federal level.

24 As of 2018, 79 percent of all banks in the United States were chartered and supervised by state authorities. Source; Conference of State Bank Supervisors Annual Report 2018, available at https://www.csbs.org/system/files/2019-03/CSBS_AR2018_FINALproof.pdf. As noted earlier, most of these banks are also subject to FDIC and/or Federal Reserve oversight.

Critically for this study, however, the United States has a much more centralized and thoroughly integrated framework for dealing with non-viable banks, with the FDIC exercising substantial practical control, and other authorities playing more limited parts. In the EU, as described in the next section, responsibility for non-viable banks is distributed among the SRB, national resolution authorities, other national judicial and/or administrative bodies that may be involved in NBIPs and DGSs, and the European Commission as the enforcer of state aid controls. Even for resolution action inside the euro area, the SRB is only one of many players – the European Commission and Council play roles in the decision on the resolution scheme, and then (per SRMR) the "execution" of the scheme is the responsibility of national resolution authorities, not the SRB.

2.2 Historical Context

The FDIC was established in 1934 after a wave of bank failures, and after decades of unsuccessful attempts to establish federal deposit insurance. Over the same period, ad hoc state and federal receiverships for non-viable banks were prone to political capture, and lacked resources and professionalism. The failure of smaller-scale state and mutual guarantee arrangements for banks created an opening for the FDIC, which combined insurance and resolution functions. The FDIC's initial design gave it limited tools to execute its resolution objectives.

Until the establishment of the FDIC, chartering authorities were responsible for handling bank failures. Receivers were often private individuals; they were appointed ad hoc by the chartering authorities, which also functioned as the banks' primary regulators, and reported to them. Receivers did not have independent budgets or borrowing authorities.

Public and private mutual support arrangements, liability guarantee and liquidity backstop schemes varied among states (Calomiris & Haber 2014, pages 174-175; Weber, 2014; Golembe & Warburton, 1958).[25] Researchers have identified two general types of schemes prevailing in the United States between 1829 and the start of the Civil War: private, unlimited mutual liability arrangements where banks had the authority and incentives to screen members and monitor one another, and state-sponsored insurance funds financed by bank assessments, with broad-based membership and limited screening and oversight. Most of the guarantee schemes became insolvent after banking panics in the late 1830s and again in the 1850s; a handful lapsed with the onset of federal bank charters. However, limited-membership, unlimited-liability private schemes did better at controlling bank risk-taking and losses to creditors (Calomiris 1990, Weber 2014).[26]

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25 In the 19th century, the emphasis was on guaranteeing bank notes, which functioned as money in the absence of a national currency before the Civil War.

26 Amid bank failures in 1931, President Herbert Hoover encouraged the creation of the National Credit Corporation, a private corporation meant to serve as an industry self-help vehicle for strong banks to lend to their weak brethren, without resort to public funds. The initiative failed in a matter of weeks, as the strong refused to lend or demanded high-quality collateral from the weak (FDIC 1984, page 36, Lamke & Upham 1934, pages 6-7).

Figure 1

Summary of US banking history

Source: authors, based on Gelpern and Véron (2018).

The establishment of the national bank charter and of the OCC during the Civil War ushered in federally-guaranteed uniform bank notes and more rigorous, professionalized bank supervision. However, it also launched intense competition for bank charters between states and the federal government, and led to the rise of deposit banking. National bank deposits, unlike bank notes, were not guaranteed. In the spirit of competition, state deposit guarantee schemes proliferated beginning in 1908. Most collapsed with a wave of regional bank failures in the 1920s; none were left after 1930 (Warburton, 1959).

Both federal and state receivership practice had fallen into disrepute by then. Receiverships were notoriously corrupt and politicized in some areas, and overwhelmed in all. A 1934 Brookings Institution report is worth quoting at length for a sense of the context for the FDIC's establishment:

> The appointment of receivers is the source of much difficulty, and has given rise to many allegations of political pressure and irregularity. Should the receiver be a local resident or would a stranger be more disinterested? [...] Before the creation of a corps of specialists in liquidating closed banks, the office of the Comptroller of the Currency accepted Congressional suggestions as to receivership appointments, always with the understanding, of course, that a person with the necessary qualifications was proposed. This practice has been revived recently since the bank fatalities have been so numerous that the professional staff of the Comptroller cannot handle them all. It would be too much to hope that this system is free

> from abuse, and there has been much criticism in the press of appointments smacking of political favoritism. […] Bank supervisors in a number of states in recent years have been indicted for maladministration. Sometimes these indictments are for failure to close banks, sometimes for closing them without cause, and sometimes for the manner in which the assets are administered in receivership. An investigation and report made in 1930 by the Attorney-General of South Dakota charged neglect and loss as a result of the methods employed by the State Banking Department in managing the affairs of closed banks. Legislative investigations are now in progress in Pennsylvania and Ohio. […] Some students of the subject charge that the entire bank receivership system is wasteful and inefficient. They blame in part the fact that receiverships have been doled out as political "plums," the recipients of which attempt to make as much commission as possible, and to keep the job going as long as possible. It must be admitted that, except where liquidation is a regular function of an agency with established personnel, such charges have frequently been substantiated. […] Some states have not had a sufficient number of bank failures to justify the elaborate system of supervised liquidation which exists in the national system. (Lamke & Upham 1934).

The passage highlights persistent challenges in pre-FDIC ad hoc receiverships that – while not directly applicable to the EU – may have relevance beyond the narrow historical context. Most important among these are vulnerability to political influence, lack of professionalism, and inadequate resources. Some but not all could be attributed to limited scale and lack of diversification.

The history of state guarantee arrangements and ad hoc receiverships supplied arguments both for and against federal deposit insurance and centralized resolution authority. The FDIC's establishment was controversial. The US Congress had rejected 150 bills to establish federal deposit insurance between 1886 and 1933 (FDIC 1984, Calomiris & Haber 2014). Semantics were weaponized, most notably the choice between calling the new scheme "insurance" and "guarantee." Advocates of the new law stressed "the insurance principle" for its business-friendly risk-diversification association, and the distance it put between the FDIC and its undiversified state antecedents. Antagonists used "guarantee" to highlight government backing for small, presumably uncompetitive banks and the link to prior state scheme failures (Flood 1992). Giving due credit to the long history and fraught political economy of the legislative battles (e.g. Calomiris 1990), as a practical matter, the field had been largely cleared of competition both in the insurance and resolution spaces by 1933. By the time of its establishment, the FDIC was the only game in town.

The FDIC's authorization under the Banking Act of 1933 lists its resolution function before deposit insurance.[27] The initial of the resolution mechanism is worth considering

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[27] Banking Act of 1933, Section 8, inserted a new Section 12B in the Federal Reserve Act, which began as follows: "(a) There is hereby created a Federal Deposit Insurance Corporation (hereinafter referred to as the 'Corporation'), whose duty it shall be to purchase, hold, and liquidate, as hereinafter provided, the assets of national banks which have been closed by action of the Comptroller of the Currency, or by vote of their directors, and the assets of State member banks which have been closed by action of the appropriate State authorities, or by vote of their directors; and to insure, as hereinafter provided, the deposits of all banks which are entitled to the benefits of insurance under this section." Digitized by FRASER, the Federal Reserve Bank of St. Louis, available at https://fraser.stlouisfed.org/title/466/item/15952.

to appreciate the extent of its transformation. At the outset, the only way the FDIC could resolve failing institutions was to establish temporary Deposit Insurance National Banks (DINBs, discussed below) to pay off deposits. Authorities to pay off deposits directly, and to buy and sell assets did not come until 1935. The Banking Act of 1933 also legislated insured depositor preference, which was repealed in 1935. Between 1935 and 1993, all depositors and the FDIC as subrogee were put on the same footing as general unsecured creditors in federally-chartered bank resolution. For state-chartered banks, distribution priority was governed by state law. Thirty states had enacted depositor preference before 1993 federal depositor preference legislation (see below); some had done so as early as 1909, but most in the 1980s (Marino & Bennett 1999).

2.3 What the FDIC does

Over its 85-year history, the FDIC has developed a broad range of approaches for dealing with non-viable banks. It uses a variety of transaction structures to transfer the assets and liabilities of non-viable banks back to private ownership and to limit the cost of receivership to taxpayers. Crises and waves of bank failures have periodically exposed gaps in the toolkit and led to administrative and legislative innovation. Although the FDIC became adept at resolving smaller banks in good times and even in crisis, it often had trouble closing and resolving large, complex institutions, which came to benefit from authorities originally granted to support smaller community banks. Over time, the FDIC established predictable routines and methodologies for dealing with non-viable banks, including asset valuation, confidential franchise marketing, and liquidity support. It also instituted accountability mechanisms in response to demands from US Congress.

A non-viable bank fails[28] when its chartering authority revokes its charter and appoints the FDIC as receiver. The bank's assets and liabilities are transferred to a dedicated legal entity, known as the receivership. There is one receivership for each failed bank. The process typically begins up to 90 days beforehand (Figure 2.1), when the bank's primary regulator, in coordination with the FDIC, notifies it that it is "critically undercapitalized or insolvent." The time frame is embedded in federal legislation, which requires a bank's primary federal regulator to appoint a receiver no later than 90 days after it becomes critically undercapitalized under FDIC regulations. Once bank management are notified, FDIC staff meet with them to begin due diligence and marketing of bank assets and liabilities, subject to strict confidentiality commitments on the part of all involved.[29]

After bank closure, the process of winding up the receivership may take years, although the FDIC typically sells most marketable assets within 90-120 days

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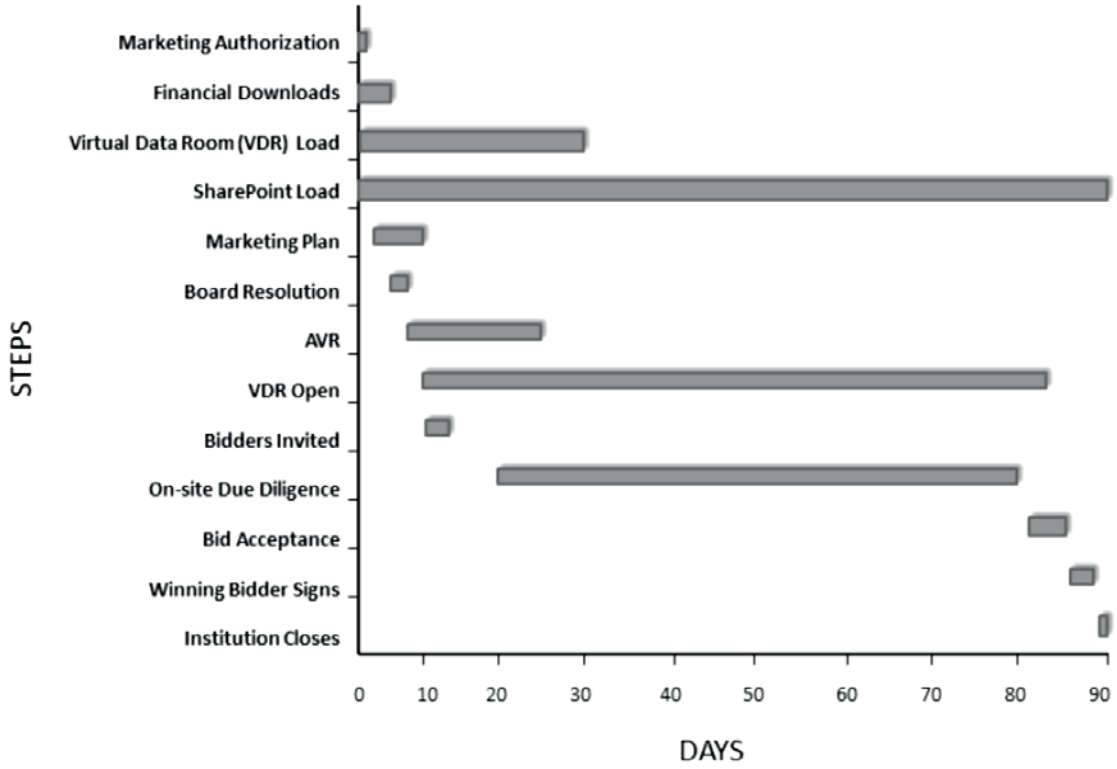
[28] We use "failure" and "closure" interchangeably in this section. Historical sources also use "suspension" to mean the same thing. All three terms connote revocation of the banking charter.

[29] We are not aware of any cases of confidentiality breaches during this period.

of closure.[30] In other words, roughly half of the FDIC's most intense resolution work is done confidentially before bank closure, with the other half done in public after the proverbial "resolution weekend."[31] By its end, the FDIC-administered receivership will have disposed of the bank's assets and paid its remaining liabilities in the prescribed order of priority.

Figure 2

FDIC Actions Taken before Bank Closure



Source: FDIC Resolutions Handbook (2019). AVR stands for Asset Valuation Review.

30 For instance, in 2018 the FDIC started no new receiverships, but continued to administer 272 active receiverships at the end of that year, most of which were created during the crisis years 2007-13. It had terminated 66 receiverships over the course of the year. According to its annual report, "For 95 percent of failed institutions, at least 90 percent of the book value of marketable assets is marketed for sale within 90 days of an institution's failure for cash sales, and within 120 days for structured sales." Source: FDIC Annual Report 2018, page 48, available at https://www.fdic.gov/about/strategic/report/2018annualreport/2018ar-final.pdf.

31 FDIC outreach and media treatment of resolution emphasize the fact that banks are usually closed on a Friday, so that depositors may access their funds on Monday, creating the impression that all resolution work is done in two days. The FDIC Resolutions Handbook, in contrast, describes the weekend as the start of the last step of the process: "The final step of the resolution process begins when the institution closes, and the assets and deposits are transferred to the [acquiring institution]. The chartering authority closes the institution and appoints the FDIC as receiver. This event usually occurs on a Friday at the end of the business day, which gives the FDIC time to work over the weekend." FDIC Resolutions Handbook (2019), page 14, available at https://www.fdic.gov/bank/historical/reshandbook/resolutions-handbook.pdf.

The FDIC's Dual Role

Outside resolution, the FDIC acts as insurer and backup prudential supervisor for insured banks. During the resolution process, the FDIC acts as insurer and, simultaneously, as receiver.

As insurer, the FDIC is responsible for paying off insured deposits from the DIF. Once deposits are paid off, the FDIC assumes their place in the claims distribution process, "stepping into their shoes". Through this mechanism, known as "subrogation", the FDIC typically becomes the largest and one of the most senior creditors of the receivership.

As receiver, the FDIC has broad powers to dispose of assets, assume or repudiate contracts, recognize ("allow") and pay or reject claims.

Some financial industry observers have expressed concern about inherent conflicts in such an arrangement (e.g., Douglas & Guynn 2009). Insurance and receivership functions were separate before the FDIC's establishment and in several instances since; however, the dual role has become entrenched and continues unchallenged for all practical purposes.

The FDIC as insurer is in charge of the DIF, which is funded in advance with supervisory risk-based assessments on IDIs. The FDIC's financial resources include: its own operating budget; DIF borrowing authority of $100 billion from the US Treasury; and a note purchase agreement for $100 billion for the DIF with the Federal Financing Bank, a specialized government corporation under the US Treasury. The FDIC is subject to a statutory maximum cap on its obligations, which stood at $201.8 billion at the end of 2018.[32]

The FDIC's access to financing from the DIF gives it considerable flexibility as receiver. A standalone receiver would need to secure outside funding to manage and dispose of assets, much like a bankruptcy trustee – except that a receiver's task is likely to be harder because bank failures tend to come in waves and are more likely to coincide with credit contractions. Access to the DIF and the attendant borrowing and lending authority relieve the funding pressure (Carnell et al. 2017, pages 410-411), but fuel moral hazard concerns that periodically animate US banking legislation.

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[32] FDIC Annual Report (2018), available at https://www.fdic.gov/about/strategic/report/2018annualreport/2018ar-final.pdf. The FDIC frequently states, that FDIC insurance is "backed by the full faith and credit of the US government", and FDIC-insured banks are required by federal law to display the FDIC logo including that statement. The backing derives from the FDIC's borrowing authority and the accompanying appropriation; from 1987 legislation expressing the "sense of the [US] Congress" to that effect; and from 1989 legislation requiring that insured banks display the logo containing "full faith and credit" language.

The FDIC's appointment as receiver is mandatory for all federally-chartered IDI.[33] Appointment criteria are broad, and for the most part are functionally equivalent to BRRD criteria for declaring a bank FOLTF (summarized in Box 1). State chartering authorities may appoint the FDIC as receiver for state-chartered insured banks. Immediately after the FDIC's establishment, state appointment practice varied; however, the FDIC has progressively taken over the receivership business in the second half of the 20th century, and now acts as receiver for virtually all state – and federally – chartered banks and thrifts. The FDIC as receiver does not report to the chartering authorities that appointed it.[34] As part of the US legislative response to the failure of 1,617 banks and 747 thrifts in the 1980s and 1990s, the FDIC secured authority to appoint itself receiver under certain conditions. The change reflected concern that chartering authorities lacked necessary independence to close a failed or failing institution quickly enough to minimize losses to the DIF.

Although the FDIC prefers to have chartering authorities close insolvent banks and appoint it as receiver, it has the ability to terminate or suspend insurance coverage under the FDIA, so long as it gives advance notice to the bank's primary regulator and to the bank itself, no less than 30 days before closure. Insurance termination forces the bank into receivership. Grounds for insurance termination are similar to the grounds for appointing a receiver, comprising unsafe and unsound activities, unsafe and unsound conditions, and violations of the law including money laundering. Insurance termination is rarely used: it was introduced as a supervision and enforcement tool, but it quickly proved to be "inflexible and impractical" as such (Curry et al. 1999). It remains an important component of the US regime, however, as it gives the FDIC leverage in its interactions with the bank's chartering authorities and other regulators that may be inclined to engage in regulatory forbearance.[35]

The FDIC's expansive authority to terminate insurance and appoint itself receiver has two important implications: it incentivizes other regulators (including the bank chartering authorities) to cooperate, and puts the objective of minimizing losses to the DIF at the heart of the resolution process.

BOX 1 – GROUNDS FOR APPOINTMENT OF A RECEIVER

Any of the following conditions can give rise to the appointment of FDIC as receiver:

– Regulatory insolvency (bank is under-capitalized under the prompt corrective action framework).

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33 In 1989, the Financial Institutions Reform, Recovery, and Enforcement Act established that the FDIC is not appointed as receiver for uninsured institutions. The last receivership for an uninsured federal institution occurred during the Great Depression. In anticipation of issuing federal "fintech" charters, the OCC promulgated a new rule in 2017 implementing its authority to appoint a receiver for uninsured federally-chartered firms under the National Banking Act, which preceded the establishment of the FDIC. Reference: 12 CFR Part 51 (Receiverships for Uninsured National Banks).

34 In contrast, before FDIC receivership, the receiver reported to the appointing authorities.

35 The Federal Reserve's ability to deny banks access to emergency liquidity serves a similar function, as part of the broader system of checks and balances.

- Balance sheet insolvency (liabilities exceed assets).
- Inability to pay obligations or meet depositors' demands in ordinary course (illiquidity).
- Unsafe or unsound condition.
- Wilful violation of a cease-and-desist order.
- Concealment of books, papers, records, or assets.
- Violation of anti-money laundering laws and regulations.

This list is not exclusive. In general, grounds for appointment – like grounds for termination of insurance – include a range of unsafe and unsound conditions, unsafe and unsound activities, and violations of the law, including statutes, regulations, regulatory settlements and enforcement orders.[36]

2.4 FDIC Resolution Toolkit

Except as noted otherwise, this subsection follows the descriptions and usage in the FDIC Resolutions Handbook (2019).[37]

The FDIC uses variations on two resolution methods in dealing with non-viable banks: liquidation (often called payoff, or deposit payoff), and purchase and assumption (P&A). These methods can be used alone or in combination. In addition, the FDIC as receiver can form a bridge bank to facilitate resolution using one or more of these methods over time.

Liquidation

The FDIC as receiver may pay off uninsured depositors and other claimants from the proceeds of bank asset sales, or in advance, based on its asset recovery estimates.

- In "straight deposit payoff", the FDIC as insurer pays insured depositors. The FDIC as receiver gathers and sells bank assets, and remains responsible for paying all of its liabilities and the administrative costs of resolution.
- "Insured deposit transfer" allows the FDIC to transfer insured deposits to a healthy bank, usually in the same community or region as the failed bank, to effect payoff. The healthy bank functions as the FDIC's agent.
- When the FDIC cannot effect deposit transfer quickly, it may form a Deposit Insurance National Bank (DINB) to maintain continuous access to insured funds for depositors, "particularly in underserved areas." A DINB is a temporary special-purpose bank that has no capital, specifically formed to pay off insured

[36] 12 USC §1821(c)(5).

[37] Some terms relevant to bank resolution are not used consistently in the literature and over time.

deposits. As mentioned earlier, DINB was the sole resolution method available to FDIC between 1933 and 1935. Recent DINBs have typically remained open for 30 days, although FDIC has the authority to operate them for up to two years.

Purchase and Assumption

P&A covers a wide range of transactions between the FDIC and acquiring institutions, typically other banks. The basic idea is to have a healthy institution assume some or all assets and liabilities of the failed bank, with or without financial support from the FDIC.

P&A can be tailored to the characteristics of the institutions involved. The FDIC's approaches to P&A have changed dramatically over time. For instance, limits on bank geographic expansion under state and federal banking laws constrained early use of P&A. The FDIC has had the authority to engage in P&A since 1935, but did not begin to emphasize the practice until the late 1960s. Between 1935 and 1966, the FDIC avoided closure and receivership, preferring to find an acquirer for the non-viable bank's good assets and liabilities while the bank was still open. It used its authority to buy and manage problem assets. When it could not find acquirers, it used payoff in other cases, most of which were in states with branching restrictions (FDIC 1984, page 82). Since 1966, the FDIC has used competitive bidding to select the acquiring institutions.

- In a "Basic P&A" transaction today, an acquiring institution typically takes over all insured deposits and may take over uninsured deposits of the failed bank, along with its most liquid assets (this is sometimes called "Clean Bank P&A"). The acquirer has the option to buy loan pools or individual loans at book value within 30 days. Acquirers normally assume deposit liabilities at a premium (as cheap and stable funding), lowering the cost of resolution for the FDIC compared to payoff. The FDIC as receiver usually liquidates the bulk of the failed bank's assets and pays claims against the receivership. Because the acquirer does not normally take over all bank assets and liabilities, basic P&A is associated with greater upfront cash outlays and administrative burdens for the FDIC than whole bank P&A, discussed next.
- "Whole Bank P&A" became the FDIC's preferred resolution method in the late 1980s, as the condition of the banking sector deteriorated and FDIC came to hold a growing volume of problem assets. Beginning in 1986, "[w]hen evaluating P&A bids, the FDIC gave priority to those transactions through which the highest volume of assets could be sold" (FDIC 1998, vol. 1, page 89). The transfer of assets and liabilities sometimes enabled the non-viable bank to bypass receivership altogether (GAO 1994). Although whole bank P&A requires less cash and administrative expense upfront for the FDIC, it typically costs the DIF more over time. Acquirers can and do submit negative bids. According to an FDIC review, at the peak of whole bank P&A activity, "[w]hole bank bids were almost always offered on an all-deposit basis," protecting both insured and uninsured deposits. This approach raised moral hazard concerns and political exposure for the FDIC.

From 1986 to 1991, uninsured deposits were protected in 72-88 percent of bank failures each year (FDIC 1998, vol. 1, pages 88, 94). As discussed in more detail below, the FDIC Improvement Act of 1991 (FDICIA) made it much harder for FDIC to use whole bank P&A and compensate uninsured depositors.

As part of a P&A transaction, the FDIC may agree to share prospective losses on transferred assets with the acquirer using a negotiated formula. In a loss-sharing agreement, the FDIC would typically absorb 80 percent of the losses, up to a cap, and may provide higher "catastrophic coverage" in selected cases. Acquiring banks may also offer to split the gains on transferred assets by issuing value recovery instruments to the FDIC. The FDIC developed loss-sharing in 1991 to reduce its asset management burden. The stated goal was to transfer as many non-performing assets as possible to private sector acquirers "in a manner that aligns the interests and incentives of the acquiring bank and the FDIC" (FDIC 1998, vol. 1, page 96). While efficient private sector asset management was and continues to be an important driver of the FDIC's P&A methodologies, the development of loss-sharing was motivated in important part by the problems it encountered in resolving large banks with complex commercial and real estate loan portfolios, where potential acquirers had limited time to perform due diligence. Between 1991 and 1994, FDIC entered into loss-sharing agreements for sixteen banks that covered over $41 billion in assets; resolution costs ranged from zero to more than 25 percent of total assets (Id., page 97).

The FDIC has the authority to charter a bridge bank to facilitate P&A. Bridge banks are used rarely, notwithstanding the recent high-profile case of IndyMac, resolved with a bridge bank during the financial crisis. A bridge bank buys the receiver time for due diligence and marketing, and entails substantially more administrative work for the FDIC. If the bridge bank is followed by P&A, the receiver transfers bank assets and liabilities twice: first, to the bridge bank, and second, to the eventual acquirer. However, forming a bridge bank does not limit the FDIC's resolution options thereafter: for instance, it may also dispose of the bank in an IPO or liquidate it. Bridge banks are used when the FDIC can show "that the franchise value of the bank is greater than the marginal costs of operating the bridge bank".[38]

In FDIC payoff practice for much of the 20th century, uninsured depositors did not get paid until after asset liquidation. As discussed below, the FDIC has the authority to advance funds based on its asset recovery estimates. Delays can still happen, particularly when the FDIC cannot readily estimate recovery values. In July of 2008, uninsured depositors did not get immediate access to their funds after the sudden failure of IndyMac, which had an unusually large stock of uninsured deposits. Even after the FDIC established a bridge bank to manage the resolution, but deposit withdrawals continued for several weeks (FDIC 2017, page 197).

The extent to which P&A may be used for large institutions and in future financial crises is uncertain. The FDIC detailed the challenges of using P&A to resolve larger IDIs ("large

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[38] FDIC Resolutions Handbook (2019), page 19.

regional banks" in US regulatory parlance) in a recent rule proposal.[39] Washington Mutual (WaMu) is the only contemporary precedent in that category; its assets stood at $307 billion when it failed in September of 2008; the next largest case, IndyMac, involved $30 billion in assets and was resolved using a bridge bank, as noted above. WaMu resolution caused substantial losses for its creditors and for the DIF, and also generated significant legal liability for its acquirer JP Morgan Chase, to an extent that had not been anticipated at the time of acquisition.[40] It is uncertain whether this experience would deter future cases like WaMu. The Chief Executive of JP Morgan said publicly in mid-2018 that he "would do WaMu again" even with the benefit of hindsight.[41] We return to the WaMu case later in our assessment of the US regime at the end of this section.

Banking groups

To limit the scope for asset concealment and balance sheet manipulation by insolvent bank owners, 1989 legislation gave the FDIC authority to call on solvent banks within the same banking group to make up for any losses to the DIF in connection with the failed bank's resolution.[42] Banks thus "cross-guarantee" the FDIC's exposure to their affiliates. In effect, all IDIs within the holding company are treated as if they were one bank for purposes of compensating the DIF. If the receivership recovers sufficient assets to repay the guarantors, they are entitled to sixth-priority distribution, as discussed later in this subsection. However, in practice, the FDIC's invocation of cross-guarantee liability triggers failure of the guarantor (e.g. Carnell et al. 2017, page 417-418).

Least-cost test and national depositor preference

Between 1951 and 1991, the FDIC had discretion to use any resolution method that was less costly than straight liquidation.[43] FDICIA substantially constrained this discretion in 1991 by requiring the FDIC to use the resolution method least costly for the DIF. FDICIA also required the FDIC to develop a more rigorous cost assessment methodology, projecting loss to the DIF "on a present-value basis, using a realistic discount rate," to document its

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39 See section II.D of FDIC advanced notice of proposed rulemaking, "Resolution Plans Required for Insured Depository Institutions with $50 Billion or More in Total Assets", Federal Register, 22 April 2019, available at https://www.govinfo.gov/content/pkg/FR-2019-04-22/pdf/2019-08077.pdf.

40 JP Morgan Chase went as far to sue the FDIC, a case that was eventually settled in 2016. See Jonathan Stempel, "JPMorgan ends WaMu disputes with FDIC, to receive $645 million", *Reuters*, 19 August 2016, at https://www.reuters.com/article/us-jpmorgan-settlement-washing-mut-bk/jpmorgan-ends-wamu-disputes-with-fdic-to-receive-645-million-idUSKCN10U28M.

41 See Matthew Kish, "Jamie Dimon on the economy, trade and whether he'd by WaMu again", *Portland Business Journal*, 30 July 2018, at https://www.bizjournals.com/portland/news/2018/07/30/jamie-dimon-on-the-economy-trade-and-wamu-deal.html.

42 FDIC Cross Guaranty Program, FDIC Press Release, last updated 30 October 2009, available at https://www.fdic.gov/news/news/press/2009/pr09195b.html. Banks that control, are controlled by, or are under common control with the bank in receivership are subject to cross-guarantee liability. 12 USC §1815(e).

43 The FDIC first agreed to apply a cost test to its resolution practice in response to congressional pressure in 1951. A test incorporating the liquidation cost ceiling was formalized as part of the Garn-St. Germain Depository Institutions Act of 1982 (FDIC 1984, page 87).

reasoning and assumptions, and to undergo annual reviews of its resolution practice by the GAO, which functions as the investigative arm of the US Congress.[44]

The least-cost requirement led to a sharp decline in the number of whole-bank P&A transactions and substantial increase in uninsured depositor losses. The number of whole-bank transactions fell from a peak of 69 in 1988, to 24 in 1991 and only five in 1992 (FDIC 1998, vol. 1, page 88). According to the GAO, uninsured depositors incurred losses in 14 percent of FDIC resolution cases in the three years before FDICIA, and in 49 percent of the cases in the year following enactment (GAO 1994). Uninsured depositors accounted for approximately 3 percent of all deposits throughout that period.

The expectation that the least-cost requirement would result in losses for uninsured depositors was made explicit in public discussions surrounding the passage of FDICIA, and fuelled fears of runs. The FDIC as receiver made an effort to expedite the payment of uninsured deposit claims before it liquidated failed bank assets in cases where it could estimate asset recovery with reasonable confidence. The task was complicated by FDICIA's new and relatively stringent data and valuation requirements, which required FDIC staff to develop new methodologies in a hurry.[45] In the event, the runs did not materialize (GAO, 1994).

Uninsured depositors, and the FDIC itself, also benefited from the enactment of national depositor preference in 1993. That year, federal budget legislation formally put all deposit claims – including those of the FDIC as insurer, standing in the shoes of insured depositors – ahead of general unsecured creditor claims against the receivership. Apparently motivated by Congressional interest in generating cost savings for the FDIC, depositor preference legislation did not occasion much public debate at the time of its passage (Marino & Bennett, 1999) – nor was tiered depositor preference actively considered in policy debates before or after the 1993 legislation. There is little evidence that the expected cost savings materialized in the years after enactment of depositor preference; however, the FDIC has found depositor preference useful savings materialized but has proven useful for the FDIC's for its management of bank receiverships. We further elaborate on claim priorities later in this subsection.

Systemic Risk Exception and Open-Bank Assistance

FDICIA's least-cost requirement contained an important exception for cases in which closing a bank "would have serious adverse effects on economic conditions or financial stability," as determined by the Secretary of the Treasury in consultation with the President based on recommendations of two-thirds supermajorities of the Federal Reserve Board and

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44 At the time, the agency was called the General Accounting Office. It has since been renamed Government Accountability Office. The acronym has not changed.

45 Separating insured and uninsured claims was a particular challenge. Under US deposit insurance legislation, the insurance coverage limit applies per institution, per depositor, per account category. Determining coverage for joint accounts was particularly time-consuming early on (GAO 1994); however, it remains a challenge to this day (FDIC 2017).

the FDIC Board of Directors. Such a determination would trigger a "systemic risk exception", which gave the FDIC authority to manage a non-viable bank using tools and methods that were not least costly to the DIF.

So-called "open-bank assistance" – using FDIC lending authority to prevent, rather than to manage, bank closure – became one of the most controversial FDIC tools made possible by the systemic risk exception.

Congress first granted the FDIC open-bank assistance authority in 1950 in response to concerns that the Federal Reserve might not be a reliable source of liquidity support, particularly for the smaller state-chartered non-member banks (FDIC 1984, page 94; FDIC 1998, vol. 1, pages 152-153).[46] The authority was limited to cases where the FDIC determined that keeping a troubled bank open was "essential" to maintain banking services in the community. The "essentiality" constraint left the FDIC plenty of discretion to define what was essential and what constituted a community. The constraint was relaxed further in 1982, to apply only where the cost of assistance exceeded the cost of liquidation.

The FDIC did not use this lending authority at all until 1971, and used it only four times in the 1970s. Open-bank assistance skyrocketed in the 1980s, when it was used in 127 cases to facilitate bank mergers and famously to save banks deemed "too big to fail," such as the Continental Illinois National Bank and Trust Company in 1984 (FDIC 1998, vol. 1, pages 82-83). While the FDIC developed successive policies to mitigate the risk of moral hazard, diluting shareholder interests and replacing management, it failed to dispel the perception of bailouts. Although the average cost of open-bank assistance transactions between 1980 and 1992 was 6.15 percent of the recipient bank assets, they peaked at over 40 percent for a single institution in 1989 (FDIC 1998, vol. 1, page 103).

Under FDICIA, open-bank assistance would have to comply with the least-cost test unless it qualified for the systemic risk exception. The new hurdle was high to reflected perceptions that bank shareholders benefited from government aid, which FDIC disputed. Nonetheless, the FDIC did not use the authority again after 1992, until the 2008 crisis, when a SRE determination was made for three big banks even as the FDIC was closing dozens of small institutions:

- In September of 2008, the US federal authorities made a systemic risk determination for Wachovia, a $782 billion BHC whose real estate assets were rapidly deteriorating in crisis. To support Citigroup's proposed acquisition of Wachovia, the US government assembled a financial assistance package, including FDIC guarantees against losses on asset pools potentially exceeding $300 billion. However, the guarantee was never extended thanks to a subsequent offer by Wells Fargo to acquire Wachovia without recourse to FDIC support.

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[46] The Federal Reserve opposed FDIC authority as an infringement on its own lender-of-last-resort function.

– In November of 2008, Citigroup received government assistance following the collapse of its Wachovia acquisition and further deterioration in Citigroup's financial condition. The assistance package included FDIC guarantees for a $306 billion asset pool, made pursuant to the FDIC's open bank assistance authority and the systemic risk exception to least-cost resolution.

– The FDIC, the Federal Reserve, and the US Treasury also went through the systemic risk determination process for Bank of America in anticipation of large losses from its acquisition of Merrill Lynch. In January 2009, the US government announced an assistance package that would have included US Treasury and FDIC protection against losses on a $118 billion asset pool. The announcement turned out to be enough to restore market confidence, and the Secretary of the Treasury never finalized the systemic risk determination for Bank of America (FDIC, 2017).

Controversially, the FDIC also used the systemic risk exception to support the establishment of the Temporary Liquidity Guarantee Program (TLGP), a fee-based program to guarantee transaction accounts and certain new debt issued by struggling (though possibly viable) banks and BHCs (GAO, 2010). Together with a higher deposit insurance ceiling (raised from $100,000 to $250,000 in crisis, with retroactive effect, and maintained at that level ever since), these programs kept uninsured depositor losses to a minimum during the financial crisis.[47] In response, the Dodd-Frank Act of 2010 eliminated the systemic risk exception for open-bank assistance to individual institutions and severely constrained FDIC emergency lending authority (Box 2).

BOX 2 – LIMITS ON FDIC EMERGENCY AUTHORITY UNDER THE DODD-FRANK ACT

The FDIC committed over $1 trillion in guarantees at the height of the crisis.

The DFA eliminated the FDIC's authority to provide emergency financial support to individual institutions, except as part of a liquidation process: "[T]he [Federal Deposit Insurance] Corporation may take other action or provide assistance under this section for the purpose of winding up the insured depository institution for which the Corporation has been appointed receiver as necessary to avoid or mitigate such effects." (12 USC §1823(c)(4)(G)(i)(II) (Our emphasis)

FDIC retained authority to provide guarantees that are "widely available," not targeted at individual institutions. Using this authority requires a determination of a "liquidity event" with a two-thirds supermajority approval by the FDIC and the Federal Reserve Board, consent of the Secretary of the Treasury, and – unusually – a joint resolution of both houses of the US Congress. The FDIC has the authority to borrow from the US

[47] For a contemporary illustration of the effect on IndyMac, see e.g. Jim Puzzanghera and E. Scott Reckard, "Congress retroactively raises FDIC deposit insurance limits, aiding IndyMac account holders," *Los Angeles Times*, 16 June 2010, at https://www.latimes.com/archives/la-xpm-2010-jun-16-la-fi-fdic-indymac-20100616-story.html.

Treasury to fund its emergency support, the cost of which must be recouped from industry assessments. (12 USC § 5612)

The DFA similarly limited the Federal Reserve's emergency liquidity authority for nonbanks to programs with "broad-based eligibility."

The recent experience with the systemic risk exception and open-bank assistance may be unprecedented in scale, but it is not unique.[48] The FDIC has a history of creative crisis interventions using authority granted decades earlier in very different circumstances. For instance, open-bank assistance was initially authorized as a way to help smaller banks, but ended up at the center of the too-big-to-fail controversies. Creative use of old authorities to support big banks revives perennial concerns about taxpayer subsidies, regulatory forbearance, and moral hazard; the powers granted by law become political liabilities, and are severely limited or discontinued.

Contracts

The FDIC as receiver has broad authority to enforce or walk away from the failed bank's contracts. Its authority is more robust and subject to fewer outside controls (including judicial review) than a trustee's authority in corporate bankruptcy proceedings under the US Bankruptcy Code.

For instance, the FDIC may terminate contracts that are not completely performed at the time of the receivership if, within a reasonable time, it finds their performance "burdensome" and if doing so would promote orderly administration.[49] Although it becomes liable for damages to the contract counterparty, its liability is more limited than it would be under contract doctrines that would apply outside the receivership.[50] Critics of the receivership pproach to bank insolvency have highlighted the receiver's ability to "cherry-pick" contracts as unfair and potentially distortive.[51]

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48 See the speech by FDIC Chief Operating Officer John F. Bovenzi, "Remarks on The Role of Deposit Insurance in Financial Crises: Past and Present", given at the International Association of Deposit Insurers's 7th Annual Conference, 29 October 2008, at https://www.fdic.gov/news/news/speeches/archives/2008/chairman/spoct2908.html.

49 12 USC §1821(e)(1)-(2).

50 For example, the receiver would not be liable for consequential damages and certain penalty provisions.

51 Qualified Financial Contracts (QFCs) are treated differently from other contracts in FDIC bank receivership, as well as under FDIC Orderly Liquidation Authority and in bankruptcy, as discussed later in this section. The category of QFCs covers most derivatives, repurchase (repo) agreements, and a range of other short-term funding instruments that get similarly special treatment in bankruptcy motivated by the desire to maintain market liquidity. (But see Morrison, Roe & Sontchi (2014), arguing that excluding such contracts from the bankruptcy process exacerbates systemic risk.) When the FDIC as receiver repudiates an ordinary contract, damages are measured as of the date of the FDIC's appointment, even though the receiver might take six months to decide whether to repudiate. When it repudiates a QFC, damages are measured as of repudiation date, and may include the counterparty's cost of replacing the QFC. The stated objective of different treatment is "to protect US financial markets." FDIC Resolutions Handbook (2019), pages 28-29.

The FDIC may raise the bar for enforcement beyond ordinary contract law requirements, for instance, rejecting oral contracts and contracts that are not proven with sufficient certainty. On the flipside, the FDIC can insist on enforcing contracts that by their terms give the counterparty the right to walk away if the bank is insolvent or is put in receivership.

Claims

The FDIC has broad authority to administer claims against the receivership. In its capacity as receiver, it solicits and reviews proof of claims (subject to judicial review) and, for claims in litigation at the time of the bank's failure, it can avail itself of procedural tools unavailable to other parties.

Receivership assets do not belong to the FDIC. Each claim recognized as valid by the FDIC is entitled to its share of the receivership liquidation proceeds, consistent with priorities summarized in Box 3 below. However, the FDIC may pay claims out of its own funds before liquidating receivership assets, and even before the deadline for filing proof of claims has passed, for instance, to discourage an uninsured depositor run. It may pay some creditors more than their likely share of the estimated liquidation value of the receivership, for instance, if it expects higher recovery from P&A. The US Congress clarified that the FDIC had no obligation to use its own funds – as distinct from receivership funds – to pay all similarly-situated creditors a *pro rata* share of its ultimate recovery, so long as creditors are paid at least what they would receive in liquidation (payoff).[52]

BOX 3 – LIQUIDATION PRIORITIES

The FDIC as receiver must first determine whether a claim is valid and allowed based on proof of claim presented before its deadline. If FDIC determines that the claim is allowed, it is paid from the assets of the receivership in liquidation in the following order:

1. Secured Debt (up to collateral value; remaining portion is paid with general unsecured, unsubordinated claims below)
2. Administrative Expenses of the Receivership
3. Depositors, Insured and Uninsured (includes FDIC, stepping in the shoes of insured depositors)
4. General Unsecured, Unsubordinated Claims
5. Subordinated Debt
6. Cross-Guarantee Claims
7. Equity

[52] 12 USC §1121(d)(10)(B).

Lower-priority claims are not paid until claims senior to them are paid in full. If the receivership does not have enough assets to pay lower priority claims (e.g. if there is only enough to pay insured depositors), the FDIC does not need to determine the validity of the claim. The FDIC's maximum liability as receiver is limited to what the claim would have received in liquidation; it may, but has no obligation to, use its own funds to share some of the higher recoveries from P&A transactions with claimants against the receivership. Creditors have no claim against the FDIC's own funds in excess of what they would have received in liquidation, even if similarly situated creditors may receive more as a consequence of P&A. This is the functional equivalent to the BRRD's no-creditor-worse-off principle.

The DFA similarly limited the Federal Reserve's emergency liquidity authority for nonbanks to programs with "broad-based eligibility."

2.5 Orderly Liquidation Authority

As we highlight at the start of this section, virtually all US banks are owned by nonbank BHCs. The prevalence of the BHC structure has helped shape the US approach to non-viable banks in many ways.[53] However, while non-viable banks could be put in an FDIC receivership, their parent BHCs could only liquidate or reorganize under the US Bankruptcy Code, a federal judicial process.

A BHC bankruptcy filing triggers the creation of a bankruptcy estate overseen by a bankruptcy trustee, and launches a public liquidation or reorganization proceeding before a bankruptcy court staffed with specialist judges. Creditors can and do challenge pre-bankruptcy transfers, and have the right to vote on reorganization plans. Counterparties under Qualified Financial Contracts (QFCs), such as swaps and repurchase agreements, can immediately terminate their contracts and seize collateral when the debtor files for bankruptcy. A debtor in bankruptcy has no access to government liquidity, although it may borrow from private lenders with court approval, and offer them distribution priority. Bankruptcy court procedures include notice, disclosure, and confirmation requirements that can extend for months. For a large firm, bankruptcy reorganization can easily take several years.

Many commentators have observed that this process as it stands is ill-suited to the operation of BHCs and other diversified financial conglomerates. The public nature of the proceeding, the long time frames, the uncertainty surrounding the fate of pre-bankruptcy contracts and transfers (including among affiliates) can easily hurt confidence and lead to runs on bank subsidiaries. Diversified conglomerates face the additional challenge of regime fragmentation, since in the United States, banks, securities broker-dealers, and insurance firms, are all subject to different federal, and in the case of insurance firms, state, regimes for

[53] Among the long-established implications of the holding company form, BHCs are required to serve as a "source of strength" for their IDI (bank) subsidiaries, and IDIs within the same holding company are liable to the FDIC for losses associated with resolving affiliated IDIs.

handling non-viability, with different safety nets and accountability channels. Fragmentation and conflicts are further magnified for global diversified conglomerates.

The Lehman Brothers bankruptcy filing in September of 2008 shocked global markets. Together with the US government rescue of the insurance conglomerate AIG the next day, the Lehman episode prompted the US Congress to establish Orderly Liquidation Authority (OLA) under the Dodd-Frank Act of 2010 for non-bank firms whose bankruptcy would pose a systemic risk. Congress responded to federal officials' contention that they had no authority to address the crises at Lehman Brothers and AIG without causing large-scale damage. The stated objective of OLA therefore was to avoid the binary choice between disruptive bankruptcy and taxpayer "bailout," and to create an incentive-compatible process suited to large financial conglomerates. The result is a hybrid, melding features of US-style bank resolution and corporate bankruptcy – but ultimately much closer to resolution (Scott & Gelpern, 2018). OLA has similarities with the EU resolution process under BRRD, which it predates.

Bankruptcy remains the default option for non-viable nonbank financial firms, including BHCs. The language of Title II of the DFA establishing OLA, and all the official pronouncements surrounding the legislation and subsequent regulation, emphasize that OLA is an alternative only available in cases where the supermajorities of the FDIC and the Federal Reserve boards, and the Secretary of the Treasury in consultation with the President, publicly certify that putting the financial firm through bankruptcy would threaten the system. The credibility of this bankruptcy-first commitment is untested.

Also untested is OLA's commitment to liquidation, which is part of its name, but stands in some tension with its other stated objectives. On the one hand, OLA creates the possibility of FDIC receivership for nonbanks, largely preserving the administrative flexibility the FDIC enjoys as receiver for IDIs. This is consistent with the objectives of preserving continuity in systemically important activities, including payment processing, clearing, and consumer activities (for example, ATM withdrawals), preserving the value of the firm, and minimizing the spillover effects of firm failure on asset prices and institutions. On the other hand, the explicit requirements of liquidating the firm in OLA, penalizing its management, and ruling out any losses to taxpayers complicate the path to achieving continuity.

Invocation of OLA

Under OLA, the FDIC may be appointed receiver for the liquidation of a "covered financial company." Covered firms are broadly defined to include BHCs, broker-dealers, insurers, systemically important nonbank firms designated for enhanced federal supervision, and others predominantly engaged in activities "financial in nature" – covering an expansive range of financial services. The definition excludes IDIs. Unlike "systemically important financial institutions" designated under the DFA, covered financial companies are not designated in advance – it is possible for a firm to be systemically important in death, even if it had not been recognized as such in life.

To invoke OLA, the Secretary of the Treasury, in consultation with the President, and two-thirds of then-serving members of each of the Federal Reserve and FDIC boards must independently determine, among other criteria: that the firm is in default or in danger of default; that its failure and resolution under other available authority, such as bankruptcy, "would have serious adverse effects on the financial stability in the United States"; that the effect of OLA on creditors would be appropriate in light of the threat to financial stability; and that no viable private sector alternative is available to prevent default. Neither the firm nor its creditors know until the eve of resolution whether they would be subject to OLA or bankruptcy, and the rules of these procedures differ.

Section 165(d) of DFA required bank holding companies with consolidated assets of more than $50 billion, and systemically important nonbank firms designated for enhanced federal supervision, to submit to the Federal Reserve Board and the FDIC plans for their "rapid and orderly resolution" (see Section 1 on semantics) under the US Bankruptcy Code, without recourse to government financial support. Such plans require fairly detailed assessment of firm structure, operations, and financial exposures, which should help make both bankruptcy and OLA proceedings more efficient and less disruptive. Regulatory relief legislation in 2018 raised the mandatory resolution planning threshold to $250 billion, and left resolution planning requirements for banks with $100-$250 billion in assets to the discretion of the Federal Reserve Board. Between October 2018 and April 2019, the Federal Reserve and the FDIC proposed a series of measures to relax bank regulatory burdens, particularly for large and mid-size regional bank and BHCs. The proposals include completely eliminating resolution planning for banks and BHCs with under $250 billion in assets, and reducing the frequency of full resolution plan submissions from yearly to once every six years for banks with assets over $250 billion that are not global systemically important banks, as defined by the FSB. These actions could have implications for a substantial portion of the US banking sector and the US regime for non-viable banks in the next financial crisis. Firms exempted from resolution planning would include BB&T, Sun Trust, American Express, and M&T Bank. For comparison, as mentioned above, the largest FDIC resolution case during the crisis of 2002-2009 was WaMu, a thrift with $307 billion in assets at the time of its failure, which accounted for 45 percent of all assets resolved by the FDIC during the crisis and caused substantial losses to the DIF (FDIC 2017, page 199).[54]

The OLA Receivership Process

OLA imports many of the core features of the US system of IDI resolution. For instance, it gives the FDIC broad discretion, including capacity to discriminate to some extent among similarly situated creditors, and limiting judicial review. Bankruptcy-like features in

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[54] For background on the proposal and the list of institutions expected to be covered, see Memorandum for the Board of Governors of the Federal Reserve from Governor Randal K. Quarles, Vice Chairman for Supervision, 24 October 2018, available at https://www.federalreserve.gov/aboutthefed/boardmeetings/files/board-memo-20181031.pdf. For criticism of this and related proposals, see Letter from the Systemic Risk Council to Federal Reserve Chair Jerome H. Powell and FDIC Chair Jelena McWilliams, 16 July 2019, available at https://www.systemicriskcouncil.org/2019/07/systemic-risk-council-urges-federal-reserve-and-fdic-not-to-relax-resolution-planning-requirements-for-large-us-regional-banks/.

OLA include a recovery floor (creditors must receive no less than bankruptcy liquidation) and more favourable treatment of contingent claims and certain contracts.

Derivatives and certain other QFCs continue to benefit from special exemptions in OLA as they do in bankruptcy and in IDI receiverships, but the treatment in OLA is different. In bankruptcy, a QFC counterparty may close out the contract and seize its collateral notwithstanding the freeze on creditor enforcement ("automatic stay") triggered by the bankruptcy filing. While QFC counterparties in OLA might face a one business-day delay in terminating and collecting on their contracts, the FDIC has the option of transferring all QFCs with a given counterparty to a solvent entity, which could be a bridge bank. The FDIC must either transfer or repudiate the entire book of QFCs with a single counterparty, it may not pick and choose among the failed firm's contracts. In the event of a transfer, the counterparty should recover in full.[55] Apart from QFCs, FDIC retains the authority to select ("cherry-pick") contracts, including financial contracts, assumed by the surviving firm, similar to its cherry-picking authority in bank resolution.[56]

The Dodd-Frank Act establishes an Orderly Liquidation Fund (OLF), which unlike the DIF, is not pre-funded with fees from participating firms. The OLF has borrowing authority from the US Treasury, which is limited to 10 percent of the book value of total consolidated assets of the firm in receivership during the 30-day period after the FDIC's appointment, and to 90 percent of the fair (market) value of the firm's total consolidated assets thereafter. The Secretary of the Treasury must approve FDIC borrowing for the OLF. The FDIC must determine that OLF funding is in the interest of US financial stability; prepare an orderly liquidation plan that accounts for the funding; and, if the funding exceeds 10 percent of the covered company's assets, it must agree on a repayment plan with the US Treasury. OLF has repayment priority ahead of all unsecured creditors of the receivership. If receivership proceeds are not enough to repay OLF in full, it is compensated with *ex post* levies on institutions receiving emergency assistance and/or systemically important institutions.[57]

Following DFA adoption, the FDIC gradually developed its framework for resolving a systemically important firm under OLA, which later became the Single Point of Entry (SPOE) Resolution Strategy. Under SPOE, the FDIC would intervene at the holding company level, preserving operating subsidiaries as going concerns. Loss-absorbing capital and liabilities at the holding company level, consistent with Total Loss-Absorbing Capacity (TLAC) requirements as defined by FSB standards, would be used to ensure the survival of its subsidiaries. In receivership, the FDIC would establish a bridge financial company to take over most of the holding company's assets, including its equity in the operating subsidiaries. If a firm is resolved in OLA rather than bankruptcy, its management must be removed.

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55 12 USC §1821(e)(8), (9), (11).

56 The US Treasury proposed limiting and clarifying this authority in its February 2018 report on OLA; the report also proposed shifting substantially from public to private funding for the resolution process (US Treasury, 2018).

57 DFA Sec. 210(n). Pre-funding proposals in the US Congress were defeated on moral hazard grounds.

The bridge financial company would be capitalized by bailing in the shareholders and creditors of the holding company. The bridge company would eventually be sold to private creditors. The FDIC expressed its intent to rely on private funding for liquidity in the SPOE framework, but would have the ability to advance short-term liquidity from OLF and provide guarantees to private creditors for the bridge company.

In contrast to the BRRD framework, "bail-in" under OLA and SPOE does not take the form of a pre-determined haircut for shareholders and creditors of a non-viable but still-open firm. Instead, shareholders are the first in line to absorb losses from the receivership, followed by creditors, who are expected to become shareholders in the bridge company. Thus "bailed-in," the creditors would be paid later from the eventual proceeds of the sale of the company. The amount of losses to be absorbed depends on the sale price of the firm or its assets. The availability of OLF liquidity and FDIC guarantees for creditors of the bridge financial company represent another point of distinction.[58]

The SPOE approach suits the BHC form that prevails in the United States. At least in theory, it can maintain continuity of functions for the operational subsidiaries, and the franchise value of the group. However, SPOE has been criticized as a backdoor bailout for large firms in contravention of the spirit of OLA authority, since the bridge financial company essentially preserves the failed group – albeit under different management. In addition, OLA's dependence on having sufficient TLAC at the holding company level continues to elicit scepticism.[59] The identity of TLAC investors and their ability to absorb losses without triggering contagion magnifies such concerns. Industry critics and policy makers have also criticized FDIC's broad discretion as OLA receiver, and its ability to treat similarly-situated creditors differently (subject to the liquidation recovery floor), much as it does in IDI receiverships, with limited scope for judicial review (US Treasury 2018). Concern about administrative discretion and accountability has animated proposals to add dedicated provisions for bank bankruptcy to the US Bankruptcy Code.

2.6 "Chapter 14": Bank Bankruptcy Proposals

A dedicated US Bankruptcy Code chapter for financial institutions, Chapter 14 (currently unclaimed), would address concerns about FDIC administrative discretion and doubts about the viability of existing bankruptcy laws as the default option for BHCs under the DFA.[60] Early Chapter 14 proposals argued for eliminating OLA. Most recently, legislative proposals and the US Treasury report on OLA reform issued in February 2018 supported the bankruptcy proposal, but argued against repealing OLA.

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58 A 2018 US Treasury report describes the operation of the current US OLA and SPOE framework in detail. US Department of the Treasury (2018), pages 8-12.

59 e.g. Lubben & Wilmarth (2017), and Simon Johnson, "The Myth of a Perfect Orderly Liquidation Authority for Big Banks," *New York Times*, 16 May 2013, available at https://economix.blogs.nytimes.com/2013/05/16/the-myth-of-a-perfect-orderly-liquidation-authority-for-big-banks/.

60 e.g. Mark J. Roe and David A. Skeel, Jr., "Bankruptcy for Banks: A Sound Concept that Needs Fine-Tuning," The New York Times, 16 August 2016, available at https://www.nytimes.com/2016/08/17/business/dealbook/bankruptcy-for-banks-a-sound-concept-that-needs-fine-tuning.html.

As embraced by the U.S Treasury report, Chapter 14 would move away from the purely administrative process overseen by the FDIC, severely limiting its ability to "cherry-pick" among similarly situated creditors, introducing procedural constraints and transparency requirements, and opening up the process to judicial review (albeit endorsing the idea of specialized bankruptcy judges with expertise in the financial industry). Critics of Chapter 14 argue that bankruptcy proposals for large, systemically important financial institutions ignore financial and political realities. Dealing with distress in such an institution would require large-scale funding, which would have to be mobilized quickly, and which would most likely come from the public sector (e.g. Levitin, 2018). Chapter 14 proposals debated in the US Congress have not included access to OLF, relying instead on priority private sector lending; however some Chapter 14 supporters have spoken in favour of OLF access (e.g. Skeel, 2018). Public funding would come with strings attached as a matter of political accountability. In 2008-2009, government intervention came in conflict with contractual priorities.

The Trump administration and some members of the US Congress have expressed support for Chapter 14 legislation; however, it remains technically and politically contentious, and is unlikely to be adopted soon.

2.7 Summary assessment

As noted in the introduction, this study stops well short of a comprehensive assessment of the US regime. The following points, however, strike us as particularly relevant for EU policymakers.

The FDIC's public-facing activities are the tip of the resolution iceberg

The public communication of the FDIC centers on the retail account-holder experience. That priority enhances the salience of the "resolution weekend" during which a bank is closed, its business is sold to a peer, and the customers maintain continuous access to banking services and to their deposits. This section illustrates that the FDIC's work long before that weekend, typically three months ahead – and possibly earlier when it comes to assessing the bank's soundness under the FDIC's backup supervisory mandate. The FDIC's work also continues afterwards, for as long as it takes to unwind the receivership. The intervention weekend is the central point of reference in the resolution process, but not necessarily when the most critical decisions are made.

Ahead of bank closure, franchise marketing and due diligence by the prospective acquirer(s) is especially critical. The FDIC's experience of franchise marketing, developed over decades, is one of the agency's critical skills. Equally important is FDIC staff experience at valuing and disposing of a wide array of assets in the receivership process, which can happen over moths or even years, but can also involve difficult trade-offs, especially in times of market turmoil, of selling early and possibly at a distressed price, versus holding for longer with further downside risk. Legislative interventions since the 1950s have prompted the FDIC to become more rigorous and accountable in its valuation and asset management.

In sum, the FDIC's public image is primarily of a crisis manager, but its actual professional identity is very largely that of an asset manager – selling bank franchises (at the time of closure, following the weeks of franchise marketing) and rump assets (from the receivership) at the best possible price under the least-cost requirement.

The FDIC has credibility in both its deposit-protection mandate and in fostering market discipline

This section shows that there have been multiple debates over the years in the United States, just as in the EU, about the moral hazard involved in banking rescues. The FDIC's mandate and tools have been fine-tuned over 80 years. The least-cost test under FDICIA in 1991 was a key milestone, supported by the introduction of national deposit preference in 1993. Overall, this framework has passed the test of the 2007-2009 crisis with considerable success, especially for small and medium-sized banks, and the FDIC has emerged from the crisis with its mandate expanded to OLA receiverships, and with its public stature elevated. The FDIC has been unfailing in its core role of protecting deposits, creative in crisis, and at the same time steadfast in its promotion of market discipline under legislatively mandated least-cost requirement.

This credibility means different things in normal times and in times of systemic turmoil. In normal times, the FDIC is able to apply its burden-sharing framework, all the way to imposing losses on uninsured depositors to minimize costs to the DIF. The (relatively few) cases of idiosyncratic bank failures it had to handle between 1993 and 2007, and since the financial crisis, attest to this proposition. In times of system fragility, the balance is inevitably different, but the principle of fostering market discipline remains. At the height of the financial crisis in 2008, the FDIC effectively extended protection to all deposits, but imposed losses on Washington Mutual (WaMu)'s senior unsecured creditors against the advice of the Federal Reserve as vividly recounted by the principal actors (Bair, 2012; Geithner, 2014).

WaMu's creditor losses sent a signal to investors that they could not take for granted that senior bank debt would be repaid, even at the worst of times. This stands in vivid contrast to the EU, where no losses have been incurred by senior bank creditors in any but very tiny or very rare and atypical cases that generally involve severe misconduct (such as Hypo Alpe Adria in Austria, or Laiki Bank in Cyprus).

The OLA framework offers plausible responses to the challenges of bail-in and of liquidity in resolution

Unlike the BRRD framework, which mandates creditor haircuts and requires pre-positioned liquidity to keep the large firm open, the US OLA regime starts with the presumption of liquidation. Although SPOE may not deserve the label "liquidation" chosen by the DFA's drafters – it looks more like open-bank resolution – it can offer a streamlined approach to burden-sharing, if implemented to that end. When the non-viable company's assets are transferred to the bridge company, shareholders

presumptively take first losses, and creditors take on the risk that remaining assets will not be enough to repay them in full. There is no US equivalent to the possible contribution of a resolution fund in "solvency support" after bailing in 8 percent of own funds and eligible liabilities. While some in the United States view the bridge company as circumvention of the DFA's liquidation mandate, in the EU context, which has no liquidation mandate, it may turn out to be simpler than the BRRD's method of bailing in the failing bank's shareholders and creditors.

The availability of OLF liquidity combined with the conditions on its use – in particular, the link between the eventual sale price of non-viable company assets and the FDIC's lending and borrowing authority – reduce the pressure to find private sector liquidity, and may ultimately make it easier for the bridge company to secure liquidity in the private markets. Whether the current TLAC requirements at the BHC level will suffice for effective future resolution remains to be seen. Nonetheless, combining FDIC receivership authority with access to US Treasury liquidity through OLF, as with the combination of receivership with insurance functions in the case of IDIs, goes a very long way to addressing the challenge of liquidity in resolution, in contrast to the current situation in the EU.

The FDIC is still untested on the Too-Big-To-Fail side of its mandate

OLA, however, like its EU counterpart, is untested – in contrast to the FDIC's tried and tested playbook for small and medium-sized banks. In 2011, the FDIC published research suggesting OLA would have allowed it to handle the Lehman case with some success (FDIC, 2011), but this remained very much a paperboard exercise. The FDIC approach has evolved since, not least with the SPOE resolution strategy. There has been no actual case of OLA yet.

3. The EU Regime and its Early Experience

3.1 Development during the crisis

Pre-crisis development of national regimes for non-viable banks in EU member states followed many diverse paths, and is beyond the scope of this study. At the EU level, there was no meaningful framework before the transatlantic financial crisis erupted in mid-2007.[61]

Events unfolded gradually from the start of crisis in mid-2007, in four partly overlapping phases: first, ad hoc national rescues, with generous use of public money;[62] second,

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61 The main exceptions were a 1994 directive on DGSs (94/19/EC) and a 2001 directive on the reorganization and winding up of credit institutions (2001/24/EC). But the former left almost all modalities of deposit insurance at the discretion of member states, and the latter was mostly limited to assigning jurisdiction to individual national authorities in the case of a non-viable cross-border bank.

62 A choice was explicitly made at the highest political level, at the climax of the financial crisis in early October 2008, to keep bank crisis management at the national level and not seek an integrated approach at the European level: see Bastasin (2015), Chapter 1.

uncoordinated national legislation on resolution regimes;[63] third, catching up belatedly with the latter, an attempt at EU harmonization resulting in the European Commission's proposal for BRRD published in early June 2012 (on which more detail below); and fourth, the banking union sequence (Gordon and Ringe, 2015). The latter started with the landmark euro area summit of 28-19 June 2012, that memorably affirmed "It is imperative to break the vicious circle between banks and sovereigns" and decided on the creation of the Single Supervisory Mechanism (SSM) and the direct bank recapitalization instrument of the European Stability Fund (ESM, see below). The eventual outcome was the SSM Regulation of October 2013, creating a centralized prudential supervisory framework controlled by the ECB;[64] the legislative elaboration of the DGSD and BRRD, enacted respectively in April and May 2014; and the SRMR of July 2014.

The euro area had created the ESM as a quasi-fiscal instrument for mutual assistance, established in Luxembourg in 2012 with €500 billion lending capacity. The early decision to empower the ESM to recapitalize banks directly was quickly watered down, however, and more recently reversed. The ESM is nevertheless to act as a financial "backstop" to the Single Resolution Fund (see below) on the basis of a political decision made in late 2013.

The legislative history of BRRD is particularly relevant to this study, and started several years before banking union. Its inception can be traced to a European Commission communication of October 2009 (COM (2009) 561), partly inspired by the UK Banking Act of the same year. In May 2010, the Commission recommended the establishment of national bank resolution funds (COM (2010) 254), and in October 2010, it outlined a framework of resolution powers and tools at the national level that prefigures the BRRD proposal (COM (2010) 579). In the meantime, the vicious circle between banks and sovereigns gradually became evident for all to acknowledge,[65] and that gradual realization directly led to the major political breakthrough that gave birth to banking union in late June 2012. As a consequence, the legislative discussion of the BRRD happened in parallel with that of the two founding texts of the banking union, the SSM Regulation and the SRMR. These three legislative acts proceeded in quick succession, and are often perceived as part of a single coherent banking union agenda, even though the BRRD's conception predates that of the banking union by several years. The initiation of banking union was followed by significant changes in BRRD through the legislative discussion, however, including the eight-percent bail-in condition for intervention of a (national or European) resolution fund as explained below, and the decision to bring forward the date of applicability of bail-in from 2018 (as initially proposed by the European Commission) to 2016.

The BRRD is a product of distinct political choices on the part of EU policy makers, drawing on a multiplicity of international influences. Its resolution model took direct inspiration from the UK and from work developed at the global level under the aegis of the FSB that culminated

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63 Prominent examples included the UK Banking Act 2009 and the German Restructuring Act of December 2010.

64 The description and assessment of the SSM is outside the scope of this study.

65 See e.g. Véron (2016) for an analysis of the gradual recognition of the bank-sovereign vicious circle.

in the "Key attributes of effective resolution regimes for financial institutions" (FSB, 2011). The key attributes also drew significantly on the FDIC's experience. The decision to leave NBIPs untouched came both as a choice of priorities (focusing on the larger banks) and as a political compromise (leaving the framework unchanged for most banks, including all small local ones). After the start of banking union and the political decision to create an SRM, the concern to minimize the use of European-level funds, entailing the possibility of asymmetric distributional effects among member states, gained salience. That concern drove some of the choices eventually made, including the emphasis placed on administrative bail-in at the point of non-viability. Some of the legislation's provisions, including the 8-percent bail-in condition, resulted from last-minute negotiated compromises that were not subjected to an extensive process of policy assessment. The SRMR's legislative history, not detailed here, is briefly presented in Véron (2019).

In May 2019, the European Union enacted changes to BRRD and SRMR, respectively Directive (EU) 2019/879 and Regulation (EU) 2019/877, mostly about adopting the FSB's standards on TLAC and correspondingly elaborating the "minimum requirements for own funds and eligible liabilities" (MREL) in BRRD. These were part of a broader "banking package" whose main thrust was the adoption of the Basel III accord on the prudential regulation of banks. An earlier amendment to BRRD adopted in 2017 (Directive (EU) 2017/2399) had introduced some modest steps of harmonization in the ranking of unsecured debt instruments in insolvency. In April 2019, the European Commission adopted a report on the BRRD and SRMR (COM(2019) 213), which concluded that "it is premature to design and adopt legislative proposals at this stage" that would go beyond the changes introduced by the banking package, even as it suggests more analytical work to come in this area.

Aside from the SRM and BRRD, the other key component of the EU regime for non-viable banks that is enshrined in EU law is the state aid control framework. In this area, the legislation has remained constant – it is simply the Treaty on the Functioning of the European Union (TFEU), and specifically its Article 107(3) as explained in the next subsection. What has evolved, however, is the European Commission's enforcement doctrine and case law. The first landmark case of state aid control in the banking sector was the European Commission's actions in the late 1990s and early 2000s, following complaints by the Association of German Private Banks and the European Banking Federation, which led to the abolition by the German government of pervasive explicit government guarantees on publicly-owned regional banks known as *Landesbanken* (Moser, Pesaresi and Soukup, 2002). From there, the Commission has developed its state aid control practice, and from 2008 it published several successive indicative documents (known as Banking Communications, the most recent in July 2013) setting out its approach to state aid control in the banking sector in the specific context of the financial crisis. The Banking Communication 2013 is further analysed below.

The three other components of the EU regime, namely, bank insolvency proceedings, deposit insurance, and mutual support arrangements, remain essentially at the national level, even after the partial harmonization of deposit insurance by the DGSD of 2014. There

have been multiple changes in these components since the crisis started in 2007, but the corresponding country-specific developments are beyond the scope of this study.

3.2 The current EU regime in brief

Our analysis of the EU regime for failing banks identifies five main components: national bank insolvency proceedings; the EU resolution framework, including the SRM in the banking union; deposit insurance; state aid control; and national mutual support arrangements. This taxonomy is relevant for a holistic assessment of the EU regime, attempted below in Subsection 3.4. The rest of this subsection is descriptive and primarily intended at non-EU readers. It will presumably be familiar material for experienced EU practitioners.

National Bank Insolvency Proceedings

Before the enactment of BRRD, the regime for non-viable banks in the EU fell entirely within member state purview, and thus consisted of a collection of diverse NBIPs. BRRD complements but does not supersede NBIPs, referring to them as "normal insolvency proceedings" ("normal" refers to their default status), while defining resolution as an exception to be justified by public-interest considerations (see below). A detailed description of NBIPs is forthcoming in a separate study commissioned by the European Commission.[66] In the meantime, only partial comparative surveys are available: Baudino, Gagliano, Rulli and Walters (2018) review Greece, Italy, Ireland, Luxembourg, Slovenia, the UK, and several non-EU jurisdictions including the United States;[67] Binder, Krimminger, Nieto and Singh (2019) mainly review Germany, Spain, the UK, and the United States.

In line with established EU practice, and as explained in Section 1, in this portion of the study we reserve the word "resolution" (sometimes "EU resolution" for clarity) for the process established by BRRD under EU law. But it is important to keep in mind that NBIPs in several member states provide for a substantially similar administrative procedure, typically with less stringent requirements for burden-sharing among liability holders. For example, the Italian procedure known as *liquidiazione coatta amministrativa*, translated as Compulsory Administrative Liquidation (CAL) by the SRB, "provides for an administrative procedure quite close to resolution" (Kenadjian, 2019). In its landmark decisions in late June 2017 not to trigger resolution action in the cases of Banca Popolare di Vicenza and Veneto Banca (see below), the SRB concluded that CAL proceedings can achieve the objectives of protecting depositors, investors, client funds and client assets, as set in EU law, "to the same extent" as resolution would have.[68]

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66 Study on the differences between bank insolvency laws and on their potential harmonization: tender available at https://etendering.ted.europa.eu/cft/cft-display.html?cftId=4021. One of the authors (Véron) participates on behalf of Bruegel in the team that is working on the Commission study.

67 Restoy (2019) adds France, Germany and Spain to that analysis.

68 Decisions SRB/EES/2017/11 (Veneto Banca) and SRB/EES/2017/12 (Banca Popolare di Vicenza): Section 4.2 of the non-confidential versions, both available at https://srb.europa.eu/en/content/banca-popolare-di-vicenza-veneto-banca.

NBIPs are subject to national legislative change in the respective national jurisdictions. Unlike EU law, for which the legislative cycle typically takes at least a year and often much longer, national legislation in most EU member states can be passed in a matter of days in response to an emergency situation.

Bank resolution: BRRD and the SRM

The BRRD applies to the entire European Internal Market comprising the EU and other countries of the European Economic Area (EEA), beyond the banking union's geographical scope which is currently limited to the euro area.[69] It stipulates that a national resolution authority must exist in each EU/EEA member state, backed by national resolution financing arrangements, e.g. a resolution fund. It establishes, among other things, processes for resolution planning; criteria and procedures for "early intervention" by supervisors on fragile but still viable banks; criteria for aid to such banks such as liquidity guarantees and "precautionary recapitalization"; the "public interest" criteria and process under which a supervisor (or resolution authority) may declare a bank FOLTF; and the criteria and process under which resolution authorities may place a FOLTF bank under resolution, in which case they must decide on a "resolution scheme" that makes "no creditor worse off" than they would have been in a hypothetical NBIP scenario (assuming no state aid in the latter).

Importantly, the BRRD imposes a condition that 8 percent of a bank's own funds and "eligible" liabilities (under criteria detailed by the BRRD) should be bailed-in before resolution funds could be mobilized for support. This clause is referred in this study as the BRRD's "8-percent bail-in condition". Correspondingly, the BRRD enjoins resolution authorities to set MREL requirements to make the bail-in condition more credible and operable in case of resolution. As Subsection 3.3 below illustrates, this framework of bail-in and MREL remains almost entirely untested, however, and largely unpredictable (Huertas, 2019).

The SRM only applies to the countries of the banking union. It is composed of the SRB and of the relevant national resolution authorities. The SRB was established by the SRMR as an autonomous EU agency, and became operational in 2015-16. Its direct remit ("SRB banks") includes all euro-area banks with more than €30 billion of total assets, plus some more under criteria set by the SSM Regulation and SRMR. The SRB is the primary resolution authority for SRB banks, in the sense that it leads their resolution planning; decides on whether to take resolution action if an SRB bank is declared FOLTF (either by the ECB or by the SRB itself), following its Public Interest Assessment (PIA) based on criteria set by the BRRD/SRMR; and if resolution action is undertaken (i.e. a positive PIA), decides

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[69] At the time of writing, the EU comprises 28 member states, including the United Kingdom whose future continued membership is uncertain. The European Economic Area (EEA) includes three additional member countries of the European Free Trade Association, namely Iceland, Liechtenstein and Norway. The euro area comprises 19 countries, all EU member states. Two additional countries, Bulgaria and Croatia, have started a process to adopt the euro as their currency, which will first entail voluntarily joining the banking area through a procedure set in the SSM Regulation as "close cooperation". Other EU member states may apply for close cooperation in the future, be it or not as part of a process to adopt the euro.

on a resolution scheme, which however can be challenged or modified by the European Commission and/or the Council (which brings together all EU member states) before being implemented. The SRMR also stipulates that the "execution" of the resolution scheme is carried out by the relevant national resolution authority or authorities. The resolution of non-viable smaller banks (i.e. those that are not SRB banks) remains the responsibility of the relevant national resolution authorities, but the SRB has a coordinating role within the banking union area.

Under conditions, the SRB can use the Single Resolution Fund (SRF), financed by a levy on banks collected by the national resolution authorities. The SRF is established by the SRMR, but its assumption and mutualization of national funds are set in a separate Inter-Governmental Agreement (IGA) that is formally outside of the EU legal framework.[70] The national resolution funds of euro-area countries, as defined by the BRRD, are being gradually mutualized within the SRF, a process that is scheduled for completion in 2024.

The SRB has had a somewhat difficult start (ECA 2017; Véron 2019) even though it had a broadly successful first resolution decision with Banco Popular Español in June 2017 (see below). The SRF is in the process of being built up, and had reached nearly €25 billion as of mid-2018.[71]

The SRM still has a number of loose ends, even apart from the fact that the scope of resolution in the euro area has turned out to be significantly more limited than initially envisaged (see below). The backup supervisory mandate of the SRB, which the BRRD and SRMR establish as similar in scope to that of the FDIC in the US (including the authority to conduct inspections and to declare a bank FOLTF), does not appear to have been operationalized yet (IMF 2018, Véron 2019). The SRF in principle will be "backstopped" by the ESM, by 2024 at the latest; but arrangements negotiated in 2018-19[72] make this support more conditional and quantitatively limited than the FDIC's expansive borrowing authority from the US Treasury, which underpins the US DIF and OLF. Furthermore, the SRB, unlike the FDIC with the DIF and especially the OLF, still lacks sufficient formal arrangements to provide liquidity to banks in resolution, a matter which is currently being actively discussed.[73] There are also diverging views as to the ultimate decision-making autonomy of the SRB (e.g. Lintner 2017). In particular, it remains somewhat unclear whether the SRB is independent enough for the EU regime to be compliant with the key attributes of effective resolution regimes set at the global level by the Financial Stability Board (IMF 2018, paragraph 34, and FSB 2011, paragraph 2.5).

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70 The SRF IGA is available at http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208457%202014%20INIT.

71 Source: SRB website, at https://srb.europa.eu/en/content/single-resolution-fund.

72 See ESM press release, "Explainer on ESM reform and revisions to the ESM Treaty", 24 June 2019, available at https://www.esm.europa.eu/press-releases/explainer-esm-reform-and-revisions-esm-treaty.

73 See e.g. Deslandes and Magnus (2018).

Deposit insurance

With the implementation of the DGSD of 2014, each EU member state has a compulsory DGS that insures deposits up to a harmonized limit of €100,000. In some member states, several DGSs coexist, covering different categories of banks.[74] In addition, some member states, such as Italy and Germany, have "voluntary" or "top-up" deposit insurance covering all or a subset of banks, which are private-sector arrangements not covered by the DGSD – we include them below in what we call mutual support arrangements.

Article 108 of BRRD stipulates that insured ("covered") deposits have priority over other deposits in resolution. Within the latter category (non-covered deposits), an additional distinction is made for deposits "from natural persons [i.e. individuals] and micro, small and medium-sized enterprises," which have priority over other deposits or, for that matter, other creditors. This stands in contrast with general depositor preference, as it has existed in the United States since 1993, under which all deposits have preferred status relative to other creditors and rank equally among themselves.

In some (not all) member states, the national DGS can provide support for the restructuring or closure of troubled banks beyond the mere insurance of covered deposits. This is enabled on a broad basis by Article 11(6) of DGSD, which states that "Member States may decide that the available financial means may also be used to finance measures to preserve the access of depositors to covered deposits, including transfer of assets and liabilities and deposit book transfer, in the context of national insolvency proceedings, provided that the costs borne by the DGS do not exceed the net amount of compensating covered depositors at the credit institution concerned." The status of such "alternative measures" under state aid control is not settled. In March 2019, the Court of Justice of the European Union ruled, against an earlier decision by the European Commission, that financial support by the Italian DGS may not be considered state aid.[75] This ruling, however, has been appealed by the Commission.[76] Restoy (2019) compares the scope for alternative measures in ten EU/EEA member states, and also discusses the consequences of above-mentioned "tiering" of deposits by Article 108 of BRRD and especially of the "super-priority" granted to covered (insured) deposits.

In November 2015, the European Commission has published a legislative proposal for a European Deposit Insurance Scheme (EDIS; COM (2015) 586). This proposal has been blocked so far in the legislative process. We come back to EDIS, and its current absence, later in this study.

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74 The full list and key statistics are available on the European Banking Authority's website at https://eba.europa.eu/regulation-and-policy/recovery-and-resolution/deposit-guarantee-schemes-data.

75 General Court of the EU, "The General Court annuls the Commission's decision that support measures adopted by a consortium governed by private law for the benefit of one of its members constituted 'aid granted by a State'", Press Release 34/19, Luxembourg, 19 March 2019, available at https://curia.europa.eu/jcms/upload/docs/application/pdf/2019-03/cp190034en.pdf.

76 See Francesco Guarascio, "In blow to Italy, EU's Vestager appeals ruling over bank rescue", *Reuters*, 29 May 2019, available at https://www.reuters.com/article/us-italy-banks-tercas/in-blow-to-italy-eus-vestager-appeals-ruling-over-bank-rescue-idUSKCN1SZ25U.

State aid control

State aid control is another core component of the current EU regime for non-viable banks. Its only legal basis is the TFEU, and specifically its Article 107(3) on categories of state aid that "may be considered to be compatible with the internal market", supplemented by case law and the European Commission's own public guidance, namely the Banking Communications.[77] In particular, Article 107(3)(b) TFEU mentions as one of the acceptable categories "aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State". Most banking-sector aid that has been authorized (with conditions) by the European Commission falls under this primary objective "to remedy a serious disturbance in the economy".

Paragraphs 5 and 6 of the Banking Communication 2013 (2013/C 216/01), whose full title is "Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks *in the context of the financial crisis*" (our emphasis), are worth quoting in full:

> "5. The persistence of tensions in sovereign debt markets forcefully illustrates the continued volatility in financial markets. The high level of interconnectedness and interdependence within the financial sector in the Union continues to give rise to market concerns about contagion. The high volatility of financial markets and the uncertainty in the economic outlook and the resulting persistent risk of a serious disturbance in the economy of Member States justifies maintaining, as a safety net, the possibility for Member States to grant crisis-related support measures on the basis of Article 107(3)(b) of the Treaty in respect of the financial sector.
>
> 6. In those circumstances of persisting stress in financial markets and given the risk of wider negative spill-over effects, the Commission considers that the requirements for the application of Article 107(3)(b) of the Treaty to State aid in the financial sector continue to be fulfilled. *The application of that derogation remains, however, possible only as long as the crisis situation persists, creating genuinely exceptional circumstances where financial stability at large is at risk*." (Our emphasis.)

Under this umbrella assessment, the Communication lists several types of measures:

- "Recapitalisation and impaired asset measures", also referred to in the Communication as "restructuring aid" and known more colloquially as solvency support,[78] for which the Communication imposes conditions that include burden-sharing by the bank's shareholders (typically wiped out) and subordinated creditors (typically converted to equity with an initial loss); the

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77 The validity of the Banking Communications as guidelines for the Commission's state aid control has been tested and confirmed in court: Court of Justice of the EU, "The Communication from the Commission on aid to the banking sector is valid", Press Release 80/16, Luxembourg, 19 July 2016, available at https://curia.europa.eu/jcms/upload/docs/application/pdf/2016-07/cp160080en.pdf.

78 We generally avoid in this study the even more colloquial term "bail-out", which is used too loosely in public debates to be associated with a specific category of public financial support.

Communication, however, does not impose burden-sharing on senior creditors, let alone depositors.

- "Guarantees and liquidity support outside the provision of central bank liquidity", which are considered "rescue aid" (a broader category than "restructuring aid") and constrained by the Communication but don't entail burden-sharing. Unlike restructuring aid, this kind of state aid is only available for "banks without a capital shortfall".
- "Provision of liquidity by central banks and intervention of deposit guarantee schemes" which are typically not considered state aid, under conditions specified by the Communication.
- "Interventions by a resolution fund" which are presumed to be state aid, without further elaboration in the Communication.
- "Liquidation aid" to facilitate "the exit of non-viable players" and entail the same burden-sharing conditions as restructuring aid.

In addition, in the case of the two Veneto banks (see below, Subsection 3.3), the Commission has recently come to the conclusion that member states may offer compensation to retail victims of misselling by their bank; subject to conditions, it does not consider such compensation to be state aid.[79]

It may be debated to which extent the Commission's overall crisis assessment, explained in the Banking Communication 2013 as quoted above, still applies under current market conditions and thus still supports the authorization of state aid "to remedy a serious disturbance in the economy". Should the Commission revise it, the scope for state aid in the banking sector would be considerably reduced. The European Commission has given no indication of its future stance in this respect.

As things currently stand, the burden-sharing conditions of BRRD resolution are more onerous than those of state aid control, since they include the 8-percent bail-in threshold that may imply losses imposed on unsecured creditors and even possibly uninsured depositors. But should the European Commission (or for that matter, hypothetically, the Court of Justice ruling on a Commission decision) determine that the financial crisis is over and thus that Article 107(3)(b) TFEU no longer applies, then the BRRD's 8-percent bail-in condition would no longer be, as now, more stringent than state aid conditions – unless other clauses of Article 107 TFEU may be invoked, but that is unlikely in most cases.[80]

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79 See Francesco Guarascio, "EU, Rome agree draft deal to soften bail-in rules on Italy banks: source", *Reuters*, 5 April 2019, at https://www.reuters.com/article/us-eu-banks-regulations/eu-rome-agree-draft-deal-to-soften-bail-in-rules-on-italy-banks-source-idUSKCN1RH1UC.

80 Indeed it is not clear that, in the absence of the need to "remedy a serious disturbance in the economy", state aid control could authorize any intervention of a resolution fund, even after 8-percent bail-in.

National mutual support arrangements

By national mutual support arrangements, we refer loosely to diverse schemes that exist in a small number of member states, most prominently in Germany and Italy.[81] Such schemes may cover some or all domestic banks, and may be binding or non-binding, temporary or permanent.[82] National mutual support arrangements include "institutional protection schemes" (IPSs), which get specific recognition in the EU Capital Requirements Regulation; voluntary deposit insurance schemes that come on top of mandatory DGSs; and various ad hoc arrangements. The IPSs of Germany's public banks and cooperative banks, respectively, are major pillars of the German banking sector. The voluntary ("top-up") deposit insurance operated by the German private bank association (known by the German acronym BDB) is another significant example. Italy's ill-starred Atlante fund of 2016 was a case of ad hoc arrangement, technically voluntary but explicitly sponsored by the national government.[83] A voluntary component of the Italian DGS was also set up in 2016.

Mutual support arrangements typically allow for financial assistance to one bank from its peers without that assistance being subject to state aid control. On the face of it, this is appropriate since these are voluntary arrangements among commercial entities.[84] What is unclear, and so far untested, however, is what would happen if the entire arrangement were to come under financial strain. There may be a widespread presumption that, at least in some cases, the national government would come to the rescue. Thus, not only are mutual support arrangements part of the regime for non-viable banks in those member states where they exist; they may also benefit from a perceived national public guarantee, even as this is difficult to quantify – and is also arguably not certain enough to be viewed as state aid, or to justify a ratings uplift.

As we note in Section 2 and have elaborated in earlier work (Gelpern & Véron 2018), a number of US states experimented with formal and informal mutual support arrangements in the 19th century, and again between 1908 and the Great Depression. While limited-membership, unlimited-liability schemes were more effective at containing bank losses and controlling risk-taking, most failed, and in some cases, contributed to contagion (e.g. Calomiris & White 1994, Vickers 1994). Federal deposit insurance became politically palatable in the early 1930s partly owing to the perception that

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81 In other member states, e.g. Austria and Spain, mutual support arrangements exist but cover a smaller share of the national banking sector.

82 No such schemes currently exist on a cross-border basis, unless of course the SRF is viewed as a mutual support arrangement. By convention, we also exclude mandatory DGSs (as defined and harmonized by DGSD from this category.

83 See Rachel Sanderson and Martin Arnold, "Italian banks: The rescue mission", *Financial Times*, 15 April 2016, at https://www.ft.com/content/f52f1ca6-02ec-11e6-af1d-c47326021344.

84 In the case of an IPS, the incentives to provide mutual support to a non-viable member go beyond consideration of an arm's-length transaction. This is because IPS membership entails derogations from prudential requirements under EU law, such as exemptions of intra-IPS exposures from credit risk-weighting and from leverage ratio calculations, and discounted contributions to the SRF. A failure to provide support would entail a risk of derecognition of the entire IPS and therefore loss of these derogations.

smaller-scale, undiversified alternatives were doomed to fail, inflicting large losses on depositors and creditors. We are not aware of US state (let alone federal) rescues of failing mutual support arrangements since the Civil War. However, the fact that such failures did entail what might be considered under TFEU as "serious disturbance in the economy", combined with the greater propensity in the EU to provide financial support to protect systemic stability, gives plausibility to the expectation that failing mutual support schemes in the EU would receive national government assistance, at least for the largest ones.

3.3 Application of the EU regime since 2014

As always with crisis management arrangements, the EU regime for non-viable banks has to be judged on practical experience and not only on intent and statements of principle – even those that are enshrined in law. Since we view the BRRD and SRMR as important components of the regime, however, the relevant cases are only those that came after the BRRD's entry into force in mid-2015. Earlier cases of bank rescues or restructuring have only limited precedent value to help investors and other stakeholders anticipate future decisions, including those that were completed after the entry into force of BRRD but had started before.[85] Because our analysis focuses on non-viable banks, it also leaves aside cases of interventions in banks that were not deemed to have reachedthe point of non-viability, irrespective of whether state aid was granted.[86]

With this in mind, all relevant EU cases of which we are aware are listed below. Of these, only Popular, the two Veneto banks and ABLV were SRB banks.

- Banks that were resolved by national authorities in the second half of 2015, after BRRD's entry into force but before its 8-percent bail-in condition became applicable on 1 January 2016: Jadranska Banka Sibenik (Croatia, October 2015); Banca delle Marche, Banca Popolare dell'Etruria e del Lazio, Cassa di Risparmio di Ferrara, CariChieti (Italy, November 2015); Cooperative Bank of Peloponnese (Greece, December 2015); and BANIF (Portugal, December 2015).
- Andelskassen JAK Slagelse and København Andelskasse: deemed FOLTF by the Danish Financial Supervisory Authority in January 2016 and in September 2018 respectively, and resolved by the Danish resolution authority (Finansiel Stabilitet) following positive PIA. The resolution involved, respectively, a sale of business

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85 These cases include Banco Espirito Santo / Novo Banco in Portugal, Cooperative Bank in Cyprus, Hypo Alpe Adria / HETA in Austria, and HSH Nordbank in Germany.

86 Such cases of banks that were troubled but deemed viable include those of National Bank of Greece and Piraeus Bank in late 2015 (Greece, both precautionary recapitalizations); Monte dei Paschi di Siena in July 2017 (Italy, precautionary recapitalization); and Carige in early 2019 (Italy, early intervention). At least in the case of Monte dei Paschi, there have been suggestions that the bank benefited from supervisory forbearance, namely that the ECB should have declared it FOLTF in 2016. See Elisa Martinuzzi, "What the ECB Didn't Say About Monte Paschi's Bailout", *Bloomberg*, 30 June 2019, at https://www.bloomberg.com/graphics/2019-opinion-monte-paschi/.

(to Netfonds) and the creation of a bridge bank (FS Finance VI). No state aid was involved in either case.

- Banco Popular Español: deemed FOLTF (for illiquidity) by the ECB, and resolved by the SRB in June 2017 following positive PIA. The bank was sold to Santander for a nominal price of one euro. No state aid was involved. Multiple lawsuits are ongoing.
- Banca Popolare di Vicenza and Veneto Banca (known as the "Veneto banks"): deemed FOLTF (both for insolvency) by the ECB in June 2017, with a negative PIA by the SRB resulting in their treatment through the Italian NBIP known as compulsory administrative liquidation (see above). Most operations of the two banks were taken over by Intesa Sanpaolo, which associated liquidation aid in the form of nearly €5 billion in cash injections and €12 billion (maximum) in government guarantees, backed by the Italian State's senior claims on the assets in liquidation.[87] In addition, retail former shareholders and creditors that are deemed victims of past misselling by the two banks will be partly compensated.
- ABLV: deemed FOLTF (for illiquidity following the publication by the US government of findings deeming it "of primary money laundering concern") by the ECB in February 2018, with a negative public interest assessment by the SRB. The group's parent entity was liquidated under the Latvian NBIP. The Luxembourg affiliate was found by a local court not to meet the criteria for liquidation under Luxembourg's NBIP, then continued to operate for some time as a consequence (under the name ABLV Bank Luxembourg SA), but has eventually entered a process of liquidation.[88]
- Smaller (non-SRB) banks that were handled through NBIPs: Maple Bank (Germany, liquidated by BaFin in February 2016); Trasta Komercbanka (Latvia, license withdrawn by the ECB in March 2016); Nemea Bank (Malta, put under public administration in April 2016); Banka Splitsko-Dalmatinska (Croatia, license withdrawn by the Croatian resolution authority in May 2016); several Polish credit unions liquidated by the Polish Financial Supervision Authority in 2016-17; several Lithuanian credit unions liquidated by the Bank of Lithuania in 2017-18; Tesla Stedna Banka (Croatia, license withdrawn by the Croatian resolution authority in February 2018); Dero Bank (Germany, liquidated by BaFin in March 2018); Versobank (Estonia, license withdrawn by the ECB in March

87 European Commission press release, "State aid: Commission approves aid for market exit of Banca Popolare di Vicenza and Veneto Banca under Italian insolvency law, involving sale of some parts to Intesa Sanpaolo", Brussels, 25 June 2017, available at http://europa.eu/rapid/press-release_IP-17-1791_en.htm.

88 See ABLV announcement, "To minimise further losses ABLV Bank Luxembourg, S.A. has agreed to the start of the judicial liquidation process", 26 June 2019, at https://www.ablv.lu/en/press/2019-06-26-to-minimise-further-losses-ablv-bank-luxembourg-s-a-has-agreed-to-the-start-of-the-judicial-liquidation-process; and Laura Fort, "La mise en liquidation d'ABLV prononcée", *Paperjam*, 2 July 2019, at https://paperjam.lu/article/mise-en-liquidation-ablv-luxem.

2018); Banca Sviluppo Economico (Italy, liquidated in April 2018); Pilatus Bank (Malta, license withdrawn by the ECB in November 2018).[89]

It is noteworthy that almost none of these cases are in the EU's three largest economies and banking systems, namely France, Germany and the United Kingdom (namely, two cases of German private banks). This may be related to the highly concentrated structures of the banking sectors in France and the UK, with few small or medium-sized banks left following extensive consolidation in recent decades (including the first few years of the crisis); and to the "three-pillar" structure of the German banking system, with many small banks in the public and cooperative pillars but covered by mutual support arrangements,[90] and a fairly concentrated private pillar broadly as in the British and French cases.[91]

Inevitably, some cases have been more controversial than others. In some member states, e.g. Austria and Germany, there are widespread perceptions that the granting of state aid without 8-percent bail-in, for example in the two Veneto banks' case, represented a breach of BRRD. This opinion, however, fails to recognize the fact that BRRD only governs EU resolution, not NBIPs, and grants wide discretion to the SRB for its public interest assessment. Conversely, the *de facto* exemption from BRRD resolution strictures for banks that participate in IPSs is often perceived, in member states were IPSs are not much or at all developed, as a damaging distortion and a breach of market discipline.

3.4 Summary assessment

The following observations are intended to highlight selected salient features of the EU regime for non-viable banks, as informed by the summary description above.

In the euro area, NBIPs are emerging as the rule and resolution as the exception

The first observation that leaps from the cases since 2016 is the fact that the SRB made a negative public-interest assessment in several cases involving sizeable banks, particularly the two Veneto banks (each of them with total assets around €30 billion), thus directing

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89 See EBA website at https://eba.europa.eu/regulation-and-policy/recovery-and-resolution/notifications-on-resolution-cases-and-use-of-dgs-funds for relevant public notifications.

90 The number of German cooperative and public (savings) banks has declined regularly over recent years, but the operation of the respective IPSs makes it hard to determine from outside which if any of the disappearing (merged) banks were non-viable.

91 Even in Germany's private-sector "pillar", mutual support arrangements are more developed than in France or the UK. For example, in March 2015, troubled Düsseldorfer Hypothekenbank was rescued and taken over by the BDB's deposit guarantee fund, which also compensated the depositors of Maple Bank and Dero Bank well above the EU's €100,000 minimum. See Hanno Mussler, "Bankenverband übernimmt Bank in Not", *Frankfurter Allgemeine Zeitung*, 16 March 2015, https://www.faz.net/aktuell/wirtschaft/bankenverband-uebernimmt-duesseldorfer-hypothekenbank-13486643.html; Georgina Prodhan, "Germany's BaFin declares Maple Bank an indemnification case", *Reuters*, 12 February 2016, at https://www.reuters.com/article/maple-bank-bafin/germanys-bafin-declares-maple-bank-an-indemnification-case-idUSL8N15R26D. Also in Germany, the state aid control decision on the proposed rescue of NordLB, a regional public bank (*Landesbank*), is still pending at the time of writing.

them to the relevant NBIPs. This decision, taken together with the SRB's positive PIA on Banco Popular Español (whose assets at the time of resolution were close to €150 billion) a few weeks earlier, gave the first concrete indication of the actual scope of resolution in the euro area and suggested it might be restricted to fairly large banks, typically with total assets above €100 billion[92] – even as other criteria than size are expected to be taken into account in future PIA decisions. As the then chair of the European Banking Authority,[93] Andrea Enria, commented, "the decision that there was no EU public interest at stake in the crises of two ECB-supervised banks that were hoping to merge and operate in the same region with combined activities around €60 billion sets the bar for resolution very high".[94] The SRB decision is made more striking by the contrasting stance of the Danish FSA, which made a positive PIA despite the two above-listed banks' tiny size.

On the face of it, the SRB's decision to set a "high bar" for resolution is aligned with BRRD, which states that "A failing institution should in principle be liquidated under normal insolvency proceedings" (recital 45).[95] It stands in contrast, however, with the public rhetoric that accompanied BRRD, which had tended to highlight the EU resolution process as the solution to future banking crises and especially as the device that would avoid future use of taxpayers' money for bank rescues. In this regard, there is an inherent tension in the current regime. On the one hand, when the SRB makes a public-interest assessment by comparing a resolution scenario with a NBIP scenario, the latter must assume no state aid (and similarly, no state aid is assumed in the NBIP side of the no-creditor-worse-off determination). On the other hand, state aid may be provided in NBIP, to a greater extent than in resolution given the European Commission's current state aid control stance as described in the previous subsection. This, combined with the significant litigation risk associated with resolution (as illustrated by the case of Banco Popular Español, which generated scores of lawsuits), creates powerful incentives for the SRB to lean on the side of a negative PIA. In other words, in theory the SRB must assume no state aid in its public interest assessment, but in practice, the prospect of state aid may influence its decision. Similarly, in theory the no-creditor-worse-off principle is applied assuming no state aid in NBIP, but in practice, the prospect or likelihood of such aid may influence the SRB's stance. Future developments of SRB practice will depend on the gradual build-up of MREL buffers, on the evolution of the state aid control stance, and on the evolving features of NBIPs and propensity of

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92 Based on *The Banker* data, there are fewer than 40 euro-area banking groups with total assets above €100 billion, and an additional 20-odd with assets between €60 billion (combined assets of the two Veneto banks) and €100 billion. SRB banks are about twice as numerous: they include around 114 "significant institutions" directly supervised by the ECB, (as of 1 June 2019, list at https://www.bankingsupervision.europa.eu/banking/list/who/html/index.en.html), plus 11 "cross-border groups" added by the SRB's own determinations (as of 12 June 2019, list at https://srb.europa.eu/sites/srbsite/files/12_june_2019_list_of_other_cross-border_groups.pdf).

93 The European Banking Authority is an EU agency that was established in 2011 and plays a coordinating role on banking regulatory matters in the EU/EEA, including the regime for non-viable banks. It has no direct authority on individual bank cases, however, except in highly restrictive conditions of crisis that have never been activated so far.

94 See Silvia Sciorilli Borrelli, "Europe's top bank watchdog makes case for optimism", *Politico*, 5 July 2017, at https://www.politico.eu/article/europes-top-bank-watchdog-makes-case-for-optimism/.

95 The SRB has further explained its approach to PIA in a brief document published in July 2019, available at https://srb.europa.eu/sites/srbsite/files/2019-06-28_draft_pia_paper_v12.pdf.

individual member states to grant state aid and/or to encourage or discourage mutual support arrangements.

The latter point deserves further elaboration. Past cases suggest that several, perhaps most, individual member states have a preference for public support over fostering market discipline (or in colloquial terms, "bail-out over bail-in") in actual cases, even when their general rhetoric leans towards the protection of taxpayers' money. A case in point was the reported (though unconfirmed) German government plan to acquire a 25 percent equity stake in Deutsche Bank when its soundness was questioned by investors in 2016.[96] Motivations may include a combination of "banking nationalism", or the propensity of national governments to protect or promote national banking "champions" in the EU competition; and "financial repression", or a government' propensity to leverage the domestic banking sector to direct credit towards itself (e.g. through "captive" purchases of domestic government bonds) or towards preferred borrowers or sector for motives of social, industrial, or other policies. Surely, there are also cases that point in the opposite direction of no appetite for state aid, such as Banco Popular Español, ABLV, or the smaller Danish banks; but these are not prevalent enough to indicate a sense of direction.

As for the European Commission's future stance on state aid control in the banking sector, there is an evident disconnect between public perceptions in several member states, which view the Commission as excessively strict in its enforcement practice, and our reading of the Banking Communication 2013, which is that its assessment of a general state of financial crisis (allowing for claims that state aid may "remedy a serious disturbance in the economy") may render the whole stance more permissive than suggested in the Treaty. That stance could be challenged from a political and/or a legal perspective, and may evolve with new leadership at the European Commission. If the assumption of crisis and the corresponding reference to Article 107(3)(b) TFEU is removed, then the balance between resolution and NBIPs could shift significantly. Conversely, if the current stance is extended, more member states might optimize their NBIPs to facilitate the treatment of future cases of bank non-viability with state aid, and that could lead the SRB to further "raise the bar" for its public-interest assessment.

A somewhat vexing consequence of the current situation is the contrast between what may be respectively termed the ex-ante and ex-post public-interest assessment. A significant number of EU banks are subject to resolution planning and, as a consequence, to MREL requirements that go beyond their minimum capital requirements (in the euro area, these include all SRB banks). Demanding MREL requirements could generate potentially crippling challenges for those banks which have been described as the "middle-class", too large to escape them but too small to issue subordinated debt instruments on attractive terms (Restoy 2018). If it turns out that such "middle-class" banks are not likely to receive a positive PIA in case of non-viability, as the case of the Veneto banks suggests, then the wisdom of this framework must be questioned. The recently adopted revision of BRRD (new

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[96] See Arno Schuetze, "German government prepare Deutsche Bank rescue plan: Die Zeit", *Reuters*, 28 September 2016, at https://www.reuters.com/article/us-deutsche-bank-bailout-idUSKCN11Y0XI.

Article 45c BRRD, in Directive (EU) 2019/879) attempts to address this issue by prioritizing so-called "top-tier" banking groups, those with consolidated assets above 100 billion euro, plus so-called "fished" banks designated by national authorities, for stringent requirements on subordinated MREL. It remains to be seen, however, to which extent this category will remain aligned with positive PIA decisions by the SRB in future cases of bank non-viability.

The current regime perpetuates the bank-sovereign vicious circle

As described above, implicit national public financial commitments are pervasive in the current regime, well beyond the obvious point that deposit insurance remains national in the absence of EDIS. Many (though not all) member states have exhibited a propensity to use the leeway for public support to the maximum extent allowed by BRRD and/or state aid control; NBIPs potentially offer a lot of space for public financial support, even as the BRRD resolution framework does not. Thus, the observed wide preference for NBIP over resolution in the euro area contributes to the perpetuation of large implicit national guarantees on domestic banking sectors, and as a consequence, to the bank-sovereign vicious circle which the banking union was intended to break.

As observed above, mutual support arrangements also participate in the same dynamic even if no state aid is involved, to the extent they may be perceived as implicitly guaranteed by the national government – at least for the larger ones. (Mutual support arrangements that in aggregate don't cover a significant share of the national banking sector, such as Spain's *cajas rurales* or Italy's *banche di credito cooperativo*, may not be viewed as benefiting from such implicit guarantee.)

Anticipations of government support, of course, can only be amplified by situations of actual systemic fragility. Thus, if the NBIP allows for greater public financial intervention than resolution, there should be no expectation that, in a crisis, the boundary between resolution and NBIP would shift in favour of resolution. On the contrary, it is plausible that crisis-related legislative changes would make NBIPs more flexible so as to escape the tight structures of BRRD (and of the SRM regulation and intergovernmental agreements on the SRF, which also refer to the 8-percent bail-in condition). In a new systemic crisis situation, moreover, the state aid stance may be further relaxed by the European Commission.

4. EU Reform Objectives and Policy Options

The dust has not settled yet on the EU regime for non-viable banks as framed by the legislation adopted in 2013-14. While the previous section suggests that NBIPs play a larger role than envisaged by many reformers at the time, this may still evolve, not least if the European Commission tightens its state aid control stance, and also with the gradual build-up of additional MREL buffers. Even so, there is a case for proactive consideration of further reform to address the regime's apparent flaws. Given the severity of the last crisis, it is not self-evident that the EU can weather the next one (if and when it erupts) with its current lopsided policy framework.

The following points on possible reform are made in that proactive spirit. Here again, no attempt is made at exhaustive coverage of all issues, let alone at providing a comprehensive reform blueprint. This section only aims to highlight selected elements that appear relevant in light of the analysis presented in the two previous sections.

The successes and failures of the evolving US regime for non-viable banks can usefully inform EU choices, but the respective historical paths of the EU and the US are also fundamentally different. The US started with political and (to a large extent) fiscal union, and took a long time to build its banking union. Safety nets for the banking system were patchy to non-existent for a long time. In the EU, by contrast, the banking union is ahead of fiscal let alone political union. National safety nets for banks are generally strong, so strong in some cases that they leave too little room for market discipline – but also potentially undermined by doubts about sovereign creditworthiness, which has not been an issue for the US federal government as the backstop funder of the FDIC's DIF. Despite the differences, however, the US experience is useful in shedding light on some of the costly pitfalls of managing bank distress and bank failure against the background of two centuries of institutional experimentation.

4.1 Countering forbearance

The introduction in BRRD of an explicit, harmonized process to pull the proverbial trigger on a non-viable bank represents significant progress compared with antecedent frameworks in most EU member states. It clarifies the responsibility of bank supervisors and strengthens the overall market discipline in the system. The collapse of banks such as IKB, RBS or Dexia in 2007-08 prompted governments or their agencies to buy these banks' shares at unrealistically high prices. Such a blunt form of rescue intervention has become unthinkable. Even so, the temptation of forbearance still exists for supervisors.

In the United States, the primary and backup supervisory authorities of the FDIC play an essential part in the system of checks and balances that make the regime reasonably effective. The FDIC, motivated by its responsibility for the DIF, provides a fairly effective check on any primary supervisors' propensity towards forbearance. This mechanism does not appear to go too far in the opposite direction of premature intervention: there is no compelling evidence of any US authority moving too precipitously to close a bank – whereas forbearance has always been, and remains, a pervasive challenge. Further consolidation of FDIC authority to include savings and loan (thrift) institutions between 1989 and 2010 was in important part a response to thrift regulators' forbearance propensities and reputation for political capture, and the insolvency of both state and federal thrift insurance schemes.[97]

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97 The Office of Thrift Supervision, formerly a separate prudential supervisor, was merged into the FDIC by the Dodd-Frank Act.

Empowering the SRB on FOLTF determination independently from the ECB was thus a wise choice on the part of EU legislators. It still needs to be put into practice, however (Véron 2019). The ECB is unsurprisingly wary of having its assessments second-guessed by an independent SRB, but that would enhance the effectiveness of the regime as a whole.

4.2 Protecting deposits

The creation of the FDIC following the bank runs and national banking holiday episodes in 1933 was the foundational act of the contemporary US regime for non-viable banks. Although many of the tools used by the FDIC throughout its history predate its establishment, that establishment shifted the emphasis dramatically. It is highly significant that deposit protection is central to the name (and the mandate) of the authority which is itself central to the whole US regime, and has from the start combined deposit insurance with acting as receiver for non-viable banks. The balance between deposit protection and the need to limit its cost to the public has adjusted over time, for instance, when federal law expanded the scope for burden-sharing by uninsured depositors with a rigorous least-cost requirement in 1991, and restricted it again in 1993 with national depositor preference. By placing insured deposits (and by extension the DIF as their subrogee) on a par with uninsured ones in the ranking of liabilities in resolution, national depositor preference creates powerful incentives for the FDIC to minimize losses to uninsured depositors. In practice, US deposit protection is both ironclad for insured deposits, and extensive for uninsured ones. It is fair to say that enshrining deposit protection as the *de facto* organizing principle of the entire regime has served the United States well for close to a century.

Despite the disruption and suffering brought on by the transatlantic financial crisis that began in 2007, the EU has never had a traumatic collective experience that would compare with the US national bank holiday of early March 1933. The EU has gradually adopted and strengthened the principle of deposit protection, but neither wholeheartedly nor unconditionally – as illustrated by the fiasco of mid-March 2013 in Cyprus, when the European Commission, ECB and IMF endorsed a decision to breach the national deposit insurance as a condition for the assistance programme, only for it to be reversed a few days later by the Cypriot parliament.

The key missing link, of course, is EDIS – an EDIS that should provide an unconditional and unambiguous insurance of all covered deposits irrespective of location in the euro area, i.e. completely insulated from national institutions (except as automatic payoff/payout agents) and from national politics. This suggests that EDIS should be operated by the SRB. Beyond the principle of ironclad insurance and the SRB assignment, the design of EDIS, including the important question whether the insurance fees should be differentiated by country, is outside the scope of this study.[98] But as the US experience suggests, deposit protection goes beyond the scope of statutory insurance, with implications for financial stability. In its reflections on future reform, the EU should re-examine the case for adopting

[98] See Schnabel and Véron (2019) for a tentative sketch of an incentive-compatible EDIS.

the US principle of general and *pari passu* depositor preference, as opposed to its complex three-level tiering of differential seniority for covered deposits, deposits of SMEs and natural persons, and other deposits that may (depending on national law) rank no higher than senior creditors.[99]

4.3 Minimizing public cost

Among the motives for introducing the least-cost test in the United States in 1991 was the imperative to restore market discipline, perceived to be weakened in the 1980s by the practice of transferring insured and uninsured deposits in P&A transactions. The reform was supposed to ensure that neither P&A, nor any other resolution method, would amount to an improper bail-out of uninsured depositors and sometimes other creditors using DIF resources. The balance between protecting deposits and reassuring creditors on the one hand, and market discipline on the other hand, is tricky to maintain, and the application of the least-cost requirement is anything but mechanical. It rests on an elaborate set of discretions and constraints that shape FDIC practice, varies according to system-wide conditions, and has been subject to increasingly rigorous scrutiny (on both methodology and output) by the US Congress. The introduction of the TLGP in October 2008, with its two components of Debt Guarantee Program and Transaction Account Guarantee Program, revealed ample flexibility in the framework, and the way it could be adapted to crises. Similar flexibility was arguably displayed in the European Commission's successive Banking Communications on state aid control, though not in the relevant provisions of BRRD and the SRM Regulation (especially the 8-percent bail-in condition) which may appear unnecessarily rigid to veterans of systemic crisis management. (e.g. IMF 2018, Recommendation 18). TLGP also illustrates the political risk inherent in broad emergency lending authority, since the Dodd-Frank Act subsequently narrowed the scope for similar FDIC intervention in the future.

In the EU context, the objective to minimize the public cost of restructuring failed banks is undermined by the multiplicity of sources of relevant public funds, which generates pervasive unhelpful incentives, as analysed in Subsection 3.4. The establishment of the SRM and SRF has not substantially reduced this problem, and has added the possibility of trade-offs between the use of national versus euro-area (SRF) money. The onerous conditions for the use of the SRF may well result in it being underutilized (perhaps even never utilized at all), compared to what would be optimal to fulfil the intended objectives of safeguarding financial stability while minimizing (aggregate, i.e. national and mutualized) public expense. The flipside of SRF underutilization is the excessive use of national public money in bank rescues, on motives that typically combine banking nationalism and financial repression intent, even when outright capture is absent.

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[99] In an opinion on the European Commission proposal on the ranking of unsecured debt instruments in insolvency (eventually adopted in late 2017 as Directive (EU) 2017/2399 as mentioned above), the ECB wrote that it "sees merit in the introduction of a general depositor preference, based on a tiered approach, in the [European] Union." That recommendation, however, was not adopted by the EU legislators. The text of the ECB's opinion is at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017L2399&from=EN.

The compelling response to this challenge would be to eliminate the multiple potential sources of public financial support by centralizing all such support to handling non-viable banks under the SRB's authority, with a backstop from the ESM as already exists (though in limited and constrained form) for the SRF. FDIC experience suggests that the SRB should be able to wield a range of financial tools to be effective, including the current SRF and an appropriately calibrated fund for EDIS with the possibility for the latter to undertake "alternative measures" as defined in Article 11(6) of DGSD.[100] An ESM backstop to both the SRF and EDIS (or possibly, in the future, a single fund into which both would merge) would not be formally unlimited, since the ESM is itself limited in size, but could be sufficient to generate the required trust. Simultaneously, stricter state aid control should effectively deny such instruments to individual member states in the banking union. That restriction should become acceptable once member states are reassured that the central authorities (i.e. the SRB and ESM) would do what it takes to safeguard financial stability.

Centralization of authority should not imply that all activity would be located in Brussels, the seat of the SRB. On the contrary, the SRB should rely on outposts in member states, as is the case in other mechanisms such as the SSM or EU competition policy enforcement. The nature and organization of such outposts would be an important matter in the design of reform of the EU regime.

The centralization of public resources, regulated by an EU version of the least-cost requirement, would naturally eliminate multiple opportunities that may currently exist in member states for local malpractice. The central authorities, in turn, can be subjected to greater transparency and accountability to ensure unimpeachable use of the public resources granted to them. Here again, the FDIC experience suggests this is not an unattainable objective.

4.4 Franchise marketing

A key task of dealing with failed banks is to market their franchise in order to sell their business for the best possible price, generally to another bank (or to an occasional private-equity investor), managing the trade-off between swift execution and price optimization. This is an area in which the FDIC has accumulated considerable experience, from which the EU has much to learn. Contrary to the widespread but inaccurate received wisdom, and as explained in Section 2, the process of franchise marketing does not happen during the proverbial restructuring weekend, but actually takes weeks if not months *before* the supervisor pulls the FOLTF or equivalent trigger.

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100 Simultaneously, either the SRB or the ESM should be empowered to provide aid to banks in troubled conditions before the point of non-viability, i.e. precautionary recapitalization (possibly under more stringent conditions of systemic turmoil than in the current wording of BRRD) and guarantees and liquidity support to facilitate the funding of solvent banks. Such instruments, however, are outside of what this study has defined as the regime for non-viable banks, and thus not elaborated here.

The exigencies of effective franchise marketing are among of the most powerful arguments for centralization of the regime for non-viable banks in the EU, or at least in the banking union area. National authorities simply cannot be expected to have either the same capacity and willingness as European ones to seek acquirers on a cross-border basis, if at all. Conversely, pan-EEA franchise marketing would not eliminate all advantages to consolidation within a given member state, but would certainly act as a massive catalyst for cross-border purchases of assets and/or entire businesses. The centralization of the process would also entail economies of scale and facilitate the use of suitable technologies for remote due diligence and the proper handling of transaction-relevant information.

4.5 Dealing with too-big-to-fail

As is described in Section 2, the United States had no separate regime to deal with the largest banking groups until the introduction of Orderly Liquidation Authority in the Dodd-Frank Act of 2010 – corporate bankruptcy was the only option for BHCs and large nonbank conglomerates, such as Lehman Brothers. Failure to recognize expressly the challenge of institutions that were "too big to fail" did not prevent their special treatment. Instead, it led to reinterpretation and repurposing of authorities such as open-bank assistance, initially introduced for small banks, but ultimately adapted for behemoths such as Continental Illinois in 1984 and Citigroup in 2008, using the statutory systemic risk exception. This largely explains the salience of the too-big-to-fail issue in US policy and in the political debates about banking sector oversight.

Conversely, the EU has moved from a system of extensive national guarantees and bail-out practice towards an emphasis on open-bank resolution and fostering market discipline through rigid bail-in requirements, enshrined in BRRD. While the BRRD legislators' intent appeared to imply a much wider scope for BRRD resolution than OLA in the United States, the revealed preferences in the first few years of practice, as analysed above, suggest that NBIPs are the rule and EU resolution the exception, at least in the euro area. If so, the respective regimes – OLA in the US, resolution in the EU – may indeed be viewed as effectively reserved for the largest banks, more or less what the respective frameworks now call Large Banking Organizations in the US and Top-Tier Banks in the EU (Federal Reserve, 2019; Directive (EU) 2019/879). Both regimes are essentially untested, the only exception being Banco Popular Español on the EU side but with circumstances that were too idiosyncratic to have general precedent value.

4.6 Regime predictability

A running theme of this study is that the US regime is far from permanent, and indeed has been shaped by a constant process of evolution and learning. Even so, it offers a remarkable degree of predictability to investors and market participants, which in turns underpins the degree of market discipline exhibited by the US banking system, particularly for smaller banks – which is quite high compared to the EU. The key to this is the continuity

offered by the FDIC itself over eight and a half decades. While the FDIC has made mistakes and should by no means be idealized, it has endured as the central pillar of the US regime for non-viable banks, and a credible backstop for the dizzying array of financial regulators in the US system. EU policymakers should aspire to develop the SRB into a EU equivalent, and then to improve on the model.

Centralization in the context of bank failure management would foster predictability. 28 (EU) or 31 (EEA) different NBIPs with their idiosyncratic concepts and separate case law cannot offer the same wealth of comparable cases and precedents as a single regime can. They imply that the "no-creditor-worse-off" comparison in resolution is country-specific, and thus introduces competitive distortions across member states – namely, the "single resolution mechanism" is anything but single. This is compounded by the fact that, as emphasized in the previous section, in the EU context national law (including NBIP) is easier to change, including in rapid response to a crisis situation, than EU law, or than US federal law for that matter.

Beyond its designation as a central agency, the SRB should suitably be empowered and made accountable to the EU public through relevant institutional mechanisms. It should be relieved of the unnecessary current tutelage by the European Commission and Council on individual resolution decisions, which is justified neither by legal nor operational considerations.[101] A centralized framework, with a hub-and-spokes architecture (in which the frontline teams are in the member states as now, but ultimate decision-making is integrated within the SRB) would enable the SRB to foster specialist skills and experiences much more effectively than in the current scattered architecture. It would reduce the risk of dysfunction in resolution resulting from the diverging mandates and interests of national resolution authorities, sometimes separate DGSs, and the SRB. It would benefit from much more cross-border knowledge transfer. Overall, one can expect considerably enhanced operational credibility of the EU regime (and of the SRB as its central agent) as a result, and greater effectiveness and efficiency in the handling of future cases of non-viable banks.

Another dimension in which the SRB can learn a lot from the FDIC is the public provision of research, insight and data on its activity and on the scope of its mandate. The FDIC's own books on its successive experiences (FDIC 1984, 1997, 1998, 2017) are exemplary in this respect. So is much of its research on individual cases and themes.

4.7 Breaking the bank-sovereign vicious circle

There is a fundamental alignment between the above arguments to centralize the EU regime for non-viable banks, in order to make it more effective, and the objective of the banking union project itself, namely the "imperative to break the vicious circle between banks and sovereigns." Given the parallel imperative to defend financial stability,

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101 See e.g. Lintner (2017) and Véron (2019) on the respective legal and operational aspects. The European Commission and/or Council may however retain involvement in the decision-making process when SRF resources are to be used, as is the case of the US Treasury and Federal Reserve for activation of the OLF.

this cannot be achieved with state aid control alone – the possibility of public financial intervention may be restricted but should not be eliminated. Thus, centralization of the regime for non-viable banks, including its financial components such as deposit insurance (i.e. EDIS) and the already existing SRF, is a necessary, though not sufficient, condition for breaking the bank-sovereign vicious circle. (Other conditions include, prominently, capital regulations to disincentivize concentrated sovereign exposures, centrally provided funding liquidity and guarantees for viable banks in troubled times as mentioned above in Subsection 4.3, and the eventual elimination of intra-euro-area ring-fencing of capital and liquidity.)

The US has not had to deal with this problem at the national level. Its banking sector initially developed in the absence of a comprehensive financial safety net. Even in the 19th century, the bank-sovereign nexus at the state level was generally ad hoc and less solid than in most EU member states now (Gelpern and Véron 2018). The US fiscal framework came to be dominated by federal taxes and transfers level since the immediate aftermath of the Civil War, a trend that only intensified in the early 20th century and with the New Deal in the 1930s (Kirkegaard 2018). When a robust safety net, centered on deposit protection, was introduced following the crisis of the early 1930s, it was built at the federal level after the field had been cleared of competition from state schemes. As a result, that nexus did not become a vicious circle at the US state level, in contrast to the euro area. As for the national (federal) level, the creditworthiness of the US government was never materially questioned even at the peak of financial crisis in late 2008.

If and when the public safety net on banks is pooled at the European level, the role of state aid control will not disappear (if only because the banking union area is not expected to extend to the entire single market any time soon), but it will be significantly reduced. The above-outlined policy package does not necessarily imply the complete decorrelation of bank credit conditions from idiosyncratic national features, which can be expected to linger for the foreseeable features given differences within the euro area in the frameworks for taxation, corporate and personal insolvency, housing finance, pension finance, and countless other areas. But what can and should be achieved in the near term is the decorrelation of bank credit from sovereign credit. This is a realistic aim for EU reformers.

5. Conclusions

Reform of the EU regime for non-viable banks is in the air, often combined with broader discussion about the unfinished banking union. The SRB has advocated EU harmonization of NBIPs for more than a year.[102] Recent contributions that advocate further reform, with various degrees of ambition and/or specificity, include IMF (2018); Deslandes, Dias and

[102] See e.g. Elke König, "Real defragmentation of the Banking Union: the way forward", article for Eurofi, 26 April 2018, available at https://srb.europa.eu/en/node/544.

Magnus (2019); Lastra, Russo and Bodellini (2019); Restoy (2019); and last but not least, von der Leyen (2019).[103]

This study does not allow for the formulation of a comprehensive blueprint for reform of the EU regime for non-viable banks, let alone for the completion of the banking union. We also do not suggest a specific sequencing of the suggested reforms, but we believe that all the key legislative decisions could – and should – be made within the next five-year term of the incoming European Commission. The examination of the US regime supports the proposition that completing the banking union and making the EU regime for non-viable banks effective may be viewed as two facets of the same policy effort. The shortcomings of the EU status quo are most compellingly addressed through centralization and empowerment of the SRB as the decision-making hub for a unitary regime that encompasses what is currently covered in EU law by resolution, bank insolvency proceedings, and deposit insurance.

A deep understanding of the US antecedent can unquestionably accelerate the EU learning and reform process. One of our findings is that the United States has reached a reasonably appealing balance between the broad objective of protecting deposits and the need to limit moral hazard, at least for all but the largest banks. Having the European deposit insurance fund participate in the funding of P&A-type transactions, i.e. allowing a future EDIS to finance "alternative measures" as in Article 11(6) of DGSD, would appear apt in light of our analysis; so would adopting general depositor preference, implying changes to the current Article 108 of BRRD.

For the largest banks, where the regime is untested on both sides of the Atlantic, the EU could choose to keep its current preference for a resolution approach that signals a predetermined amount of bail-in (the BRRD's 8-percent bail-in condition) as opposed to the more flexible US approach under OLA. It should complement its approach with credible arrangements for liquidity in resolution. Conversely, for small and medium-sized banks, we see no compelling reason for an EU unitary regime not to adopt the defining features of the largely successful FDIC toolkit, with the economies of scale and operational efficiency that that entails.

If our suggestions sound radical, it may be worth emphasizing the core finding of our analysis of the EU regime. The EU resolution framework set by BRRD is being circumvented – one could go as far as arguing it was designed for circumvention. This state of affairs implies both that the intent of the BRRD legislators is not being achieved, and that the objective of breaking the bank-sovereign vicious circle cannot be met within the current framework. We do not believe that the future build-up of additional MREL buffers will fundamentally alter the incentives that we describe in Section 3. To change that situation, a comprehensive overhaul of the entire EU regime for non-viable banks will be needed.

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[103] In her policy manifesto published on the day of her election on 16 July 2019, the President-elect of the European Commission pledged to "focus on completing the Banking Union", adding "we need a European Deposit Insurance Scheme. […] I will also put forward measures for a robust bank resolution and insolvency framework".

References

Avraham, Dafna, Patricia Selvaggi, and James Vickery (2012). *A Structural View of U.S. Bank Holding Companies*. FRBNY Economic Policy Review, Federal Reserve Bank of New York, July. Available at https://www.newyorkfed.org/medialibrary/media/research/epr/12v18n2/1207avra.pdf.

Bair, Sheila (2012). *Bull By The Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*. Free Press, New York NY.

Bastasin, Carlo (2015). *Saving Europe: Anatomy of a Dream*. Brookings Institution Press, Washington DC.

Baudino, Patrizia, Antonella Gagliano, Edoardo Rulli, and Ruth Walters (2018). How to manage failures of non-systemic banks? A review of country practices. FSI Insights on Policy Implementation No. 10. Financial Stability Institute, Basel, October. Available at https://www.bis.org/fsi/publ/insights10.pdf.

Bayoumi, Tamim (2017). *Unfinished Business: The Unexplored Causes of the Financial Crisis and the Lessons Yet to be Learned*. Yale University Press, New Haven CT.

BCBS (2010). *Proposal to ensure the loss absorbency of regulatory capital at the point of non-viability*. Basel Committee on Banking Supervision, August. Available at https://www.bis.org/publ/bcbs174.pdf.

Binder, Jens-Hinrich, Michael Krimminger, Maria Nieto, and Dalvinder Singh (2019). *The Choice between Judicial and Administrative Sanctioned Procedures to Manage Liquidation of Banks: A Transatlantic Perspective*. Capital Markets Law Journal 14(2):178, April.

Calomiris, Charles W. (1990). *Is Deposit Insurance Necessary? A Historical Perspective*. Journal of Economic History, vol. 50(02): 283 (June).

Calomiris, Charles W., and Stephen H. Haber (2014). *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton University Press, Princeton NJ.

Calomiris, Charles W., and Eugene N. White (1994). "The Origins of Federal Deposit Insurance" in Claudia Goldin and Gary D. Libecap (eds.), *The Regulated Economy: A Historical Approach to Political Economy*. NBER/University of Chicago Press, Chicago IL.

Carnell, Richard Scott, Jonathan R. Macey and Geoffrey P. Miller (2017). *The Law of Financial Institutions*, 6th Ed. Wolters Kluwer, New York NY.

Curry, Timothy J, John P. O'Keefe, Jane Coburn, and Lynne Montgomery (1999). *Financially Distressed Banks: How Effective Are Enforcement Actions in the Supervision Process?* FDIC Banking Review, Vol 12(2):1. Available at https://www.fdic.gov/bank/analytical/banking/9910.pdf.

Deslandes, Jerôme, and Marcel Magnus (2018). *Banking Union: Towards new arrangements to finance banks under resolution?* Briefing PE 624.402, European

Parliament, Brussels, July. Available at http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/624402/IPOL_BRI(2018)624402_EN.pdf.

Deslandes, Jerôme, Cristina Dias, and Marcel Magnus (2019). *Liquidation of banks: Towards an 'FDIC' for the Banking Union?* In-Depth Analysis PE 634.385, European Parliament, Brussels, February. Available at http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634385/IPOL_IDA(2019)634385_EN.pdf.

Douglas, John L., and Randall D. Guynn (2009). "Resolution and Liquidation of US Financial Institutions," in Eugenio A. Bruno (ed.), *Global Financial Crisis: Navigating and Understanding the Legal and Regulatory Aspects*, 311. Globe Law and Business, London.

ECA (2017). *Single Resolution Board: Work on a challenging Banking Union task started, but still a long way to go*. European Court of Auditors, Luxembourg, 19 December. Available at https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=44424. FDIC (1984). *The First Fifty Years: A History of the FDIC 1933-1983*. Federal Deposit Insurance Corporation, Washington DC. Available at https://www.fdic.gov/bank/historical/firstfifty/.

FDIC (1997). *History of the Eighties: Lessons for the Future*. Two volumes. Federal Deposit Insurance Corporation, Washington DC. Available at https://www.fdic.gov/bank/historical/history/.

FDIC (1998). *Managing the Crisis: The FDIC and RTC Experience 1980-1994*. Two volumes. Federal Deposit Insurance Corporation, Washington DC. Available at https://www.fdic.gov/bank/historical/managing/index.html.

FDIC (2011). "The Orderly Liquidation of Lehman Brothers Holdings Inc. under the Dodd-Frank Act", in *FDIC Quarterly* 5:2. Federal Deposit Insurance Corporation, Washington DC. Available at https://www.fdic.gov/bank/analytical/quarterly/2011-vol5-2/lehman.pdf.

FDIC (2017). *Crisis and Response: An FDIC History, 2008-2013*. Federal Deposit Insurance Corporation, Washington DC. Available at https://www.fdic.gov/bank/historical/crisis/.

FDIC Resolutions Handbook 2019. Available at https://www.fdic.gov/bank/historical/reshandbook/resolutions-handbook.pdf.

Federal Reserve (2019). *Supervision and Regulation Report*. Board of Governors of the Federal Reserve System, Washington DC, May. Available at https://www.federalreserve.gov/publications/files/201905-supervision-and-regulation-report.pdf.

Flood, Mark D. (1992). *The Great Deposit Insurance Debate*. Federal Reserve Bank of St. Louis Review, July/August. Available at https://research.stlouisfed.org/publications/review/1992/06/01/the-great-deposit-insurance-debate/.

FSB (2011). *Key Attributes of Effective Resolution Regimes for Financial Institutions*. Financial Stability Board, Basel, October. Available at http://www.fsb.org/wp-content/uploads/r_111104cc.pdf?utm_content=VKD.

GAO (1994). *1992 Bank Resolutions: FDIC Chose Methods Determined Least Costly, but Needs to Improve Process*. GGD-94-107, Government Accountability Office, May 10.

GAO (2010). *Federal Deposit Insurance Act: R*egulators' Use of Systemic Risk Exception Raises Moral Hazard Concerns and Opportunities Exist to Clarify the Provision. GAO-10-100, Government Accountability Office, April 15.

Geithner, Timothy (2014). *Stress Test: Reflections on Financial Crises*. Crown Publishing, New York.

Gelpern, Anna, and Nicolas Véron (2018). "The Long Road to a US Banking Union: Lessons for Europe", in Jacob Funk Kirkegaard and Adam S. Posen (eds.), *Lessons for EU Integration from US History*. Peterson Institute for International Economics, Washington DC, January. Available at https://www.piie.com/system/files/documents/kirkegaard-posen_ec-report2018-01.pdf.

Golembe, Carter H., and Clark Warburton (1958). *Insurance of Bank obligations in Six States During the Period 1829-1866*. Federal Deposit Insurance Corporation, Washington DC.

Gordon, Jeffrey N., and Wolf-Georg Ringe (2015). *Bank Resolution in the European Banking Union: A transatlantic Perspective on What It Would Take*. Columbia Law Review 115, New York. Available at https://columbialawreview.org/wp-content/uploads/2016/04/Gordon-Ringe.pdf.

Huertas, Thomas F. (2019). *Will bust banks be born again by bail-in?* Butterworths Journal of International Banking and Financial Law, April. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3389276.

IMF (2018). *Euro Area Policies / Financial Sector Assessment Program / Technical Note: Bank Resolution and Crisis Management*. International Monetary Fund Country Report No. 18/232, Washington DC, July. Available at https://www.imf.org/en/Publications/CR/Issues/2018/07/19/Euro-Area-Policies-Financial-Sector-Assessment-Program-Technical-Note-Bank-Resolution-and-46106.

Kenadjian, Patrick (2019). "Open questions on bank resolution in Europe", in Andreas Dombret and Patrick S. Kenadjian (eds.), *Resolution in Europe: The Unresolved Questions*. De Gruyter.

Lastra, Rosa Maria, Costanza A. Russo, and Marco Bodellini (2019). *Stock take on the SRB's activities over the past years: What to improve and focus on?* Study PE 634.392, European Parliament, Brussels, March. Available at http://www.europarl.europa.eu/RegData/etudes/STUD/2019/634392/IPOL_STU(2019)634392_EN.pdf.

Levitin, Adam J. (2019). *Bankruptcy's Lorelei: The Dangerous Allure of Financial Institution Bankruptcy*. 97 North Carolina Law Review 243.

von der Leyen, Ursula (2019). *A Union that strives for more: My agenda for Europe*. Political guidelines for the next European Commission 2019-2014. European Commission,

Brussels, July. Available at https://www.europarl.europa.eu/resources/library/media/20190716RES57231/20190716RES57231.pdf.

Lintner, Pamela (2017). *De/centralized Decision Making Under the European Resolution Framework: Does* Meroni *Hamper the Creation of a European resolution Authority?* European Busineess Organization Law Review 18, October. Available at https://link.springer.com/article/10.1007/s40804-017-0082-2.

Lubben, Steven J., and Arthur E. Wilmarth, Jr. (2017). *Too Big and Unable to Fail*. 69 Florida Law Review 1205.

Marino, James A. and Rosalind L. Bennett (1999). *The Consequences of National Depositor Preference*. FDIC Banking Review, Vol 12(2):19. Available at https://www.fdic.gov/bank/analytical/banking/9910.pdf.

Morrison, Edward R., Mark J. Roe, and Christopher S. Sontchi (2014). *Rolling Back the Repo Safe Harbors*. 69 Business Lawyer 1015, August.

Moser, Stefan, Nicola Pesaresi, and Karl Soukup (2002). *State guarantees to German public banks: a new step in the enforcement of State aid discipline to financial services in the Community*. European Commission Competition Policy Newsletter Number 2, Brussels, June. Available at http://ec.europa.eu/competition/publications/cpn/2002_2_1.pdf.

Omarova, Saule T., and Margaret Tahyar (2011). *That Which We Call a Bank: Revisiting the History of Bank Holding Company Regulation in the United States*. 31 Review of Banking and Financial Law 113 (Fall). Boston University School of Law, Boston MA.

Restoy, Fernando (2018). *Bail-in in the new bank resolution framework: is there an issue with the middle class?* Bank for International Settlements, Basel, March. Available at https://www.bis.org/speeches/sp180323.htm.

Restoy, Fernando (2019). *How to improve crisis management in the banking union: a European FDIC?* Bank for International Settlements, Basel, July. Available at https://www.bis.org/speeches/sp190715.htm.

S&P Global Ratings (2019). *Ending Too Big To Fail: Different Journeys, Different Destinations*. April.

Schnabel, Isabel, and Nicolas Véron (2019). "Breaking the stalemate on European deposit insurance", in Jean Pisani-Ferry and Jeromin Zettelmeyer (eds.), *Risk Sharing Plus Market Discipline: A New Paradigm for Euro Area Reform? A Debate*. CEPR Press, June. Available at https://voxeu.org/content/risk-sharing-plus-market-discipline-new-paradigm-euro-area-reform-debate.

Scott, Hal S., and Anna Gelpern (2018). *International Finance: Transactions, Policy, and Regulation*, 22nd edition. Foundation Press, St. Paul MN.

Skeel, David A. (2018). *Bankruptcy for Banks: A Tribute (and a Little Plea) to Jay Westbrook*. Norton Journal of Law and Practice 27(5):584.

Upham, Cyril Brice, and Edwin Lamke (1934). *Closed and distressed banks: A study in public administration*. Institute of Economics of the Brookings Institution Pub. No. 58. Brookings Institution, Washington DC.

US Treasury (2018). *Orderly Liquidation Authority and Bankruptcy Reform*. Report to the President of the United States, February. Available at https://home.treasury.gov/sites/default/files/2018-02/OLA_REPORT.pdf.

Véron, Nicolas (2016). *The IMF's Role in the Euro Area Crisis: Financial Sector Aspects*. Background Paper BP/16-02/10, Independent Evaluation Office of the International Monetary Fund, Washington DC, July. Available at https://www.imf.org/ieo/pages/CompletedEvaluation267.aspx.

Véron, Nicolas (2019). *Taking Stock of the Single Resolution Board*. In-Depth Analysis PE 634.393, European Parliament, Brussels, March. Available at http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634393/IPOL_IDA(2019)634393_EN.pdf.

Vickers, Raymond B. (1994). *Panic in Paradise: Florida's Banking Crash of 1926*. University of Alabama Press, Tuscaloosa AL.

Warburton, Clark (1959). Deposit Insurance in Eight States During the Period 1908-1930. Washington: Federal Deposit Insurance Corporation, Washington DC.

Weber, Warren E. (2014). *Bank Liability Insurance Schemes in the United States Before 1865*. Working Paper. Federal Reserve Bank of Atlanta and University of South Carolina. Atlanta GA and Columbia SC. Available at https://www.minneapolisfed.org/research/wp/wp679.pdf.

Wolf, Martin (2014). *The Shifts and the Shocks: What We've Learned – and Have Still to Learn – from the Financial Crisis*. Penguin Press, New York NY.

FDIC RESOLUTION TASKS AND APPROACHES: A COMPARISON OF THE 1980 TO 1994 AND 2008 TO 2013 CRISES[1]

Lynn Shibut and Georges De Verges[2]

1. Introduction

As banks failed during the 1980 to 1994 crisis and the 2008 to 2013 crisis,[3] the FDIC faced the same obligations: provide depositors ready access to their insured deposits, liquidate the failed banks' assets, and resolve the liabilities of the failed banks. In both crises, the FDIC sought to accomplish these tasks as effectively and efficiently as practical, guided by its legal obligations, mission, capacity, and constraints.

The differences between the two crises, and the intervening changes in the banking industry and the FDIC's operating environment and philosophy, resulted in different approaches to bank resolution. The 1980 to 1994 crisis (the first crisis) involved large numbers of failures over many years, and the focus of the crisis shifted geographically. The 2008 to 2013 crisis (the second crisis) arrived more rapidly and had a national scope, with failing banks in smaller numbers but substantially larger asset portfolios. FDIC liquidation operations grew steadily in the first crisis, moving its focus from region to region of the country. In the second crisis, liquidation operations grew more rapidly, but the assets retained from failed banks and FDIC resolution and receivership staffing peaked at substantially lower levels as the FDIC limited the increase in permanent staff to avoid the difficulties of having to downsize after the crisis.

During and after the first crisis, legislation (a) reshaped and streamlined the FDIC's receivership responsibilities, powers, and operations; (b) mandated bank closings once

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1 The views expressed are those of the authors and do not necessarily reflect the official positions of the Federal Deposit Insurance Corporation or the United States. FDIC Staff Studies can be cited without additional permission.

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3 Throughout the paper, we use the term "bank" to include all FDIC-insured financial institutions, including banks, savings banks and, in the 2008 to 2013 crisis, thrifts. It excludes institutions that the FDIC did not insure, such as investment banks and credit unions, and depository institutions not insured by the FDIC during the first crisis, such as savings and loans.

certain capital thresholds were passed; and (c) directed that the FDIC accept the bid at failure that imposed the least cost to the Deposit Insurance Fund (DIF). These statutes led to significant changes in resolution practices and procedures between the crises.

While the causes of the banking crises are beyond the scope of this study, the regional nature of the first crisis, the continuing increase in concentration in the banking industry during and between the crises, and the unexpected loss of liquidity in the second crisis each influenced the characteristics of banks that failed and the FDIC's response. Resolution approaches were adopted, altered, and abandoned in response to the nature of each crisis and the statutory environment. Approaches to bank resolution and asset disposition, at times adopted in haste and with minimal time to prepare, remain the subject of intense review and reflection within the FDIC and among interested observers.

The FDIC attempted to return failed bank assets to the private sector more quickly during the second crisis than in the first. To increase the speed of asset disposition and to increase the appeal of problematic assets to potential buyers in the second crisis, the FDIC adopted strategies that, while achieving the desired goals of speedy sales at higher prices, exposed the DIF fund to long-term contingent liabilities as a result of commitments made as part of the sales to asset acquirers.

This study compares the FDIC's resolution function between the two crises. The analysis omits both systemically important resolutions[4] of FDIC-insured institutions and resolutions of thrift institutions by the Federal Savings and Loan Insurance Corporation (FSLIC) and the Resolution Trust Corporation (RTC).[5] It begins with a discussion of the resolution task the FDIC faced in each crisis and the characteristics of the banks that failed, including bank location, size, condition, and loan composition. The impact of fraud and the extent of liquidity problems are also examined. Second, we describe parts of various statutes enacted during and after the first crisis that most influenced the FDIC's resolution processes, including information about the problems the laws sought to address and the solutions that each law provided. These statutes included provisions that improved the FDIC's powers and resolution processes and yet sometimes restricted the FDIC's options.

Next, we review the FDIC's resolution philosophy at the onset of each crisis and how it evolved in response to changes in the financial markets and the statutory landscape. In the second crisis, statutory changes required the FDIC to abandon forbearance and open

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4 Continental Illinois (1984), Citibank (2008), and Bank of America (2009) are treated as systemic failures. Because one non-systemic failure (Washington Mutual, or WaMu) made up almost half of the non-systemic failed bank assets during the 2008 to 2013 crisis, it is sometimes excluded from tables and figures. If so, it is noted within the table or figure, and the related discussion follows the treatment in the table or figure. For a discussion of Continental Illinois and the thrift failures during the 1980 to 1994 crisis, see FDIC (1998). For a discussion of Citibank and Bank of America, see FDIC (2017), chapter 3.

5 The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) abolished the insolvent FSLIC and created the RTC, effective August 9, 1989. In addition, the FSLIC's assets and liabilities transferred to the FSLIC Resolution Fund (FRF) managed by the FDIC. The RTC Completion Act of 1993 terminated the RTC as of December 31, 1995. All remaining assets and liabilities of the RTC were transferred to the FRF on January 1, 1996. See 2016 Annual Report, *FSLIC Resolution Fund*, January 21, 2010, https://www.fdic.gov/about/strategic/report/2016annualreport/section5-02.html.

bank financial assistance[6] for non-systemic banks, and the agency used lessons learned in the first crisis to employ various forms of risk sharing to speed asset disposition and mitigate losses. This is followed by a discussion of the resolution strategies used in each crisis, including the transactions deployed, the amount of failed bank assets held by the FDIC, staff levels, the types and extent of risk-sharing methods used to facilitate asset sales, and the losses suffered by the FDIC from failed bank resolutions. The analysis ends with a few concluding remarks.

2. Characteristics of Failed Banks

Major differences existed in the characteristics of banks that failed during the crises and the way in which they failed. This section examines some of the key differences.

2.1 Location and Size of Bank Failures

Any comparison of the geographic distribution of bank failures between the two crises quickly reveals the effects of industry consolidation on the number of bank failures.[7] Of the 50 states and Puerto Rico, and regardless of the percentage of banks that failed, only 11 states had more failed FDIC-insured depository institutions during the second crisis than during the first crisis.[8]

Table 1 shows that only a few states suffered high levels of bank failures during both crises.[9] Four states (Arizona, California, Oregon, and Nevada) and Puerto Rico suffered double-digit rates of bank failures in both banking crises. Other states had widely different failure rates. Texas suffered a loss of more than 40 percent of its FDIC-insured banks to failure during the first crisis but lost only 1.7 percent of its FDIC-insured banks during the second crisis. Similarly, the neighboring states of Oklahoma, Louisiana, and New Mexico had sharply lower rates of bank failure in the second crisis than the double-digit loss rate that those states had in the first crisis.[10] Georgia had only three failures (0.7 percent of FDIC-insured Georgia institutions at the onset of the crisis) in the first crisis but 87 (24.7 percent) in the second crisis.

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6 Open bank assistance occurs when the FDIC provides assistance to a bank without closing the bank charter. When open bank assistance occurs, most or all creditors are paid in full and stockholders retain ownership.

7 The passage of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 was one contributing factor. It is discussed later in the section on significant resolution statutory changes.

8 The states were Florida, Georgia, Illinois, Maryland, Michigan, North Carolina, Nevada, Pennsylvania, South Carolina, Washington, and Wisconsin. However, many of these states had only a few failures in both crises. Those that had failure rates above 10 percent in the 2008 to 2013 crisis were Florida, Georgia, Nevada, and Washington.

9 Failure rates are calculated by dividing the total number of failed banks by the number of banks in existence at the onset of the crisis. Note, however, that there were new banks chartered during the crisis that were excluded from the total column (primarily during the 1980 to 1994 crisis).

10 For a fuller review of the first crisis, see FDIC (1997).

Table 1

Bank Failure Rate by State

State	1980 to 1994			2008 to 2013		
	Failed Banks	Total Banks	Failure Rate (Percent)	Failed Banks	Total Banks	Failure Rate (Percent)
AK	8	14	57.14	0	8	0.00
AL	9	317	2.84	7	160	4.38
AR	11	258	4.26	2	152	1.32
AZ	17	22	77.27	15	57	26.32
CA	87	242	35.95	39	320	12.19
CO	59	307	19.22	9	160	5.63
CT	32	130	24.62	1	56	1.79
DC	5	17	29.41	0	8	0.00
DE	1	20	5.00	0	41	0.00
FL	39	577	6.76	70	321	21.81
GA	3	439	0.68	87	353	24.65
HI	2	9	22.22	0	9	0.00
IA	40	651	6.14	2	393	0.51
ID	1	27	3.70	1	19	5.26
IL	32	1250	2.56	56	675	8.30
IN	10	408	2.45	3	166	1.81
KS	69	616	11.20	9	357	2.52
KY	7	342	2.05	2	207	0.97
LA	70	262	26.72	2	163	1.23
MA	44	167	26.35	1	187	0.53
MD	2	105	1.90	8	97	8.25
ME	2	70	2.86	0	35	0.00
MI	3	371	0.81	13	166	7.83
MN	38	760	5.00	22	446	4.93
MO	41	721	5.69	16	363	4.41
MS	3	182	1.65	2	97	2.06
MT	10	162	6.17	0	79	0.00
NC	2	82	2.44	7	112	6.25

Table 1 (Continued)

Bank Failure Rate by State

State	1980 to 1994			2008 to 2013		
	Failed Banks	Total Banks	Failure Rate (Percent)	Failed Banks	Total Banks	Failure Rate (Percent)
ND	9	172	5.23	0	97	0.00
NE	33	454	7.27	3	248	1.21
NH	16	104	15.38	0	24	0.00
NJ	14	196	7.14	5	128	3.91
NM	11	86	12.79	3	53	5.66
NV	1	9	11.11	12	45	26.67
NY	34	331	10.27	4	217	1.84
OH	5	407	1.23	4	267	1.50
OK	122	489	24.95	5	261	1.92
OR	17	77	22.08	6	41	14.63
PA	5	376	1.33	6	251	2.39
PR	5	12	41.67	3	10	30.00
RI	2	20	10.00	0	14	0.00
SC	1	85	1.18	9	93	9.68
SD	8	154	5.19	1	90	1.11
TN	36	350	10.29	5	203	2.46
TX	600	1422	42.19	11	661	1.66
UT	11	74	14.86	6	68	8.82
VA	7	233	3.00	4	121	3.31
VT	2	35	5.71	0	16	0.00
WA	4	110	3.64	18	97	18.56
WI	2	634	0.32	8	299	2.68
WV	5	235	2.13	1	69	1.45
WY	20	94	21.28	1	43	2.33
Others	0	1	0.00	0	9	0.00
Total	1,617	14,688	11.0	489	8,632	5.7

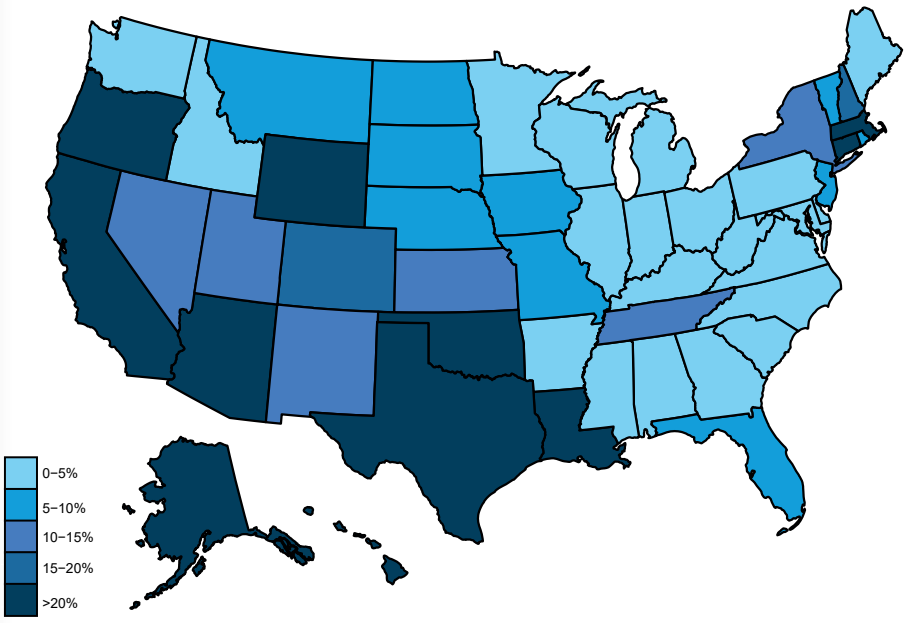
Source: FDIC.

The geographic distribution of bank failures in the first crisis generally followed the regional economic downturns from the declines in prices for agricultural products in the mid-1980s (Kansas, Nebraska, and Iowa), the declines in oil and gas prices in the 1980s (Texas and neighboring states), declines in residential and commercial property after overbuilding in New England (Connecticut, Massachusetts, and New Hampshire), and residential home price declines and reductions in the defense industry (California). During the second crisis, the geographic variation was weaker, but there were higher failure rates in California and adjoining states,[11] and in Georgia and Florida. These regional patterns can be seen in Figure 1 (first crisis) and Figure 2 (second crisis).

The average size of failed banks increased substantially from the first crisis to the second crisis. The 1,617 non-systemic banks that failed between 1980 and 1994 held $491 billion of assets at failure (in 2016 dollars), an average of $304 million in assets each.[12] During the second crisis, the 489 non-systemic failed banks held assets of $768 billion at failure (in 2016 dollars), an average of approximately $1.6 billion in assets each (Figure 3).[13]

Figure 1

Bank Failure Rate (1980–1994 Crisis)



Source: FDIC.

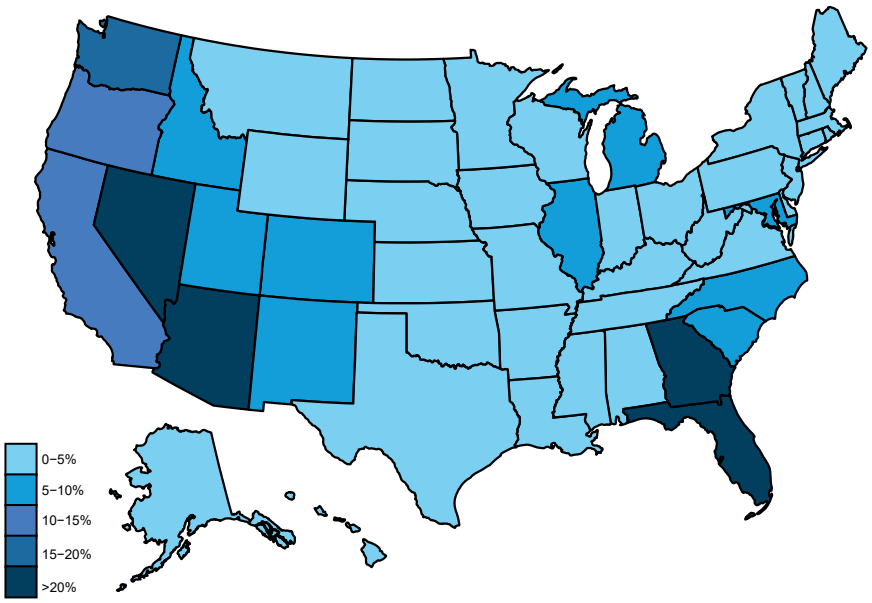
11 Nine of the 20 largest bank failures by size were headquartered in California and all failed in 2008 and 2009.

12 To remove the distortion caused by inflation between 1980 and 2013, most of the figures and tables in this document adjust the dollar amounts for infla- tion. Inflation adjustment is indicated in each table or graph that uses it. All figures cited in the text follow the treatment in the related table or figure.

13 If WaMu had been excluded, average assets for failed banks would have been $865 million.

Figure 2

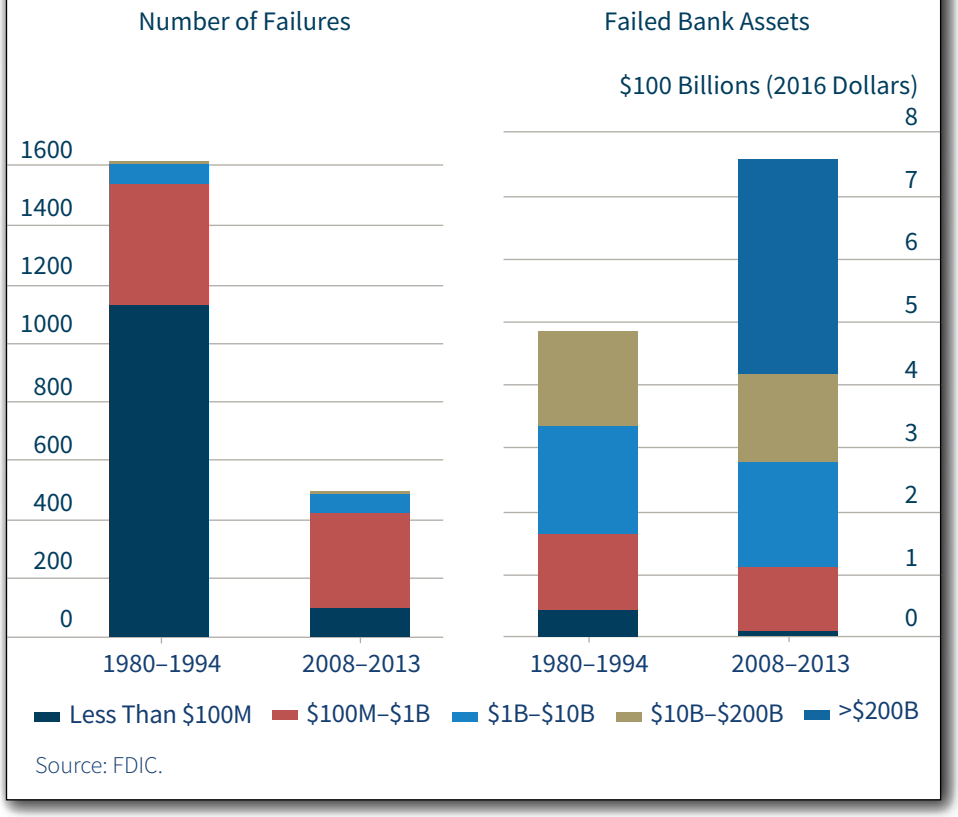
Bank Failure Rate (2008–2013 Crisis)



Source: FDIC.

Figure 3

Characteristics of Failures by Crisis and Bank Asset Size Class



Source: FDIC.

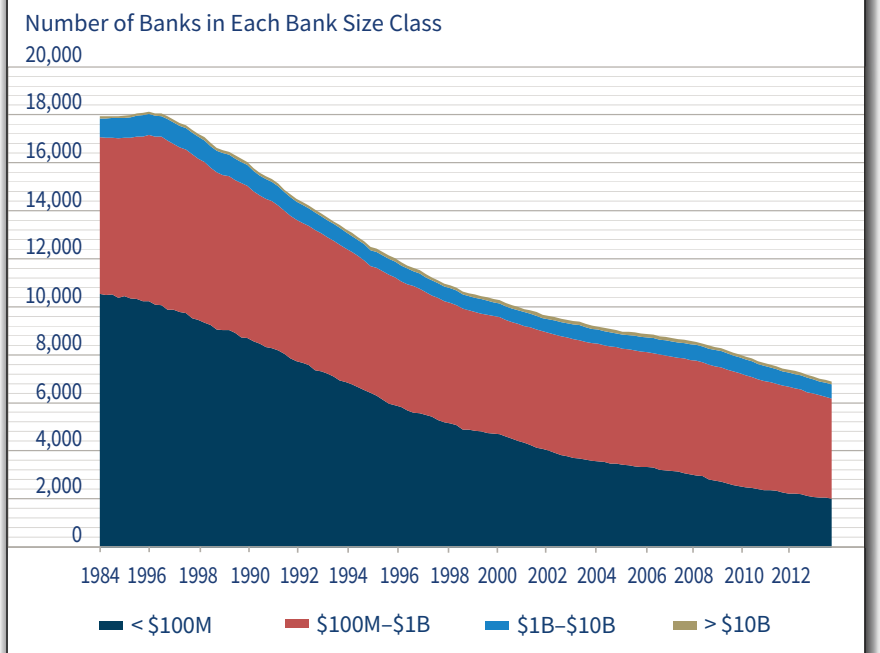
Of the 1,617 banks that failed from 1980 to 1994, 1,129 (70 percent) held less than $100 million in assets (in 2016 dollars). The next-largest asset size class, banks holding between $100 million and $1 billion in assets, constituted 26 percent of all failed banks. Banks holding $1 billion or more in assets made up 4.6 percent of the failed banks. In contrast, of the 489 bank failures during the 2008 to 2013 crisis, only 99 banks (20 percent) held less than $100 million in assets. Banks of $1 billion or more in assets comprised 14.9 percent of failures. During both crises, the assets held by banks with more than $1 billion in assets made up the bulk of failed bank assets: 66 percent for the first crisis and 85 percent for the second crisis.[14]

The large reduction in the number of small bank failures between the two crises is consistent with trends that reduced the number of insured depository institutions and increased the concentration of assets in the banking system. Figures 4 and 5 show consolidation trends in the banking industry (especially for banks with less than $100 million in assets) from 1984 to 2013.[15]

However, industry consolidation does not fully explain the large shift in the composition of failed banks. From 1984 to 1994, banks in all bank asset size classes suffered; of all the insured banks in 1984, more than 6 percent in all four asset size classes failed. However, the failure rates were highest, approximately 10 percent, among the smallest banks (under $100 million in assets) and the largest banks (over $10 billion in assets) (Figure 6).

Figure 4

FDIC-Insured Banks by Bank Asset Size Class



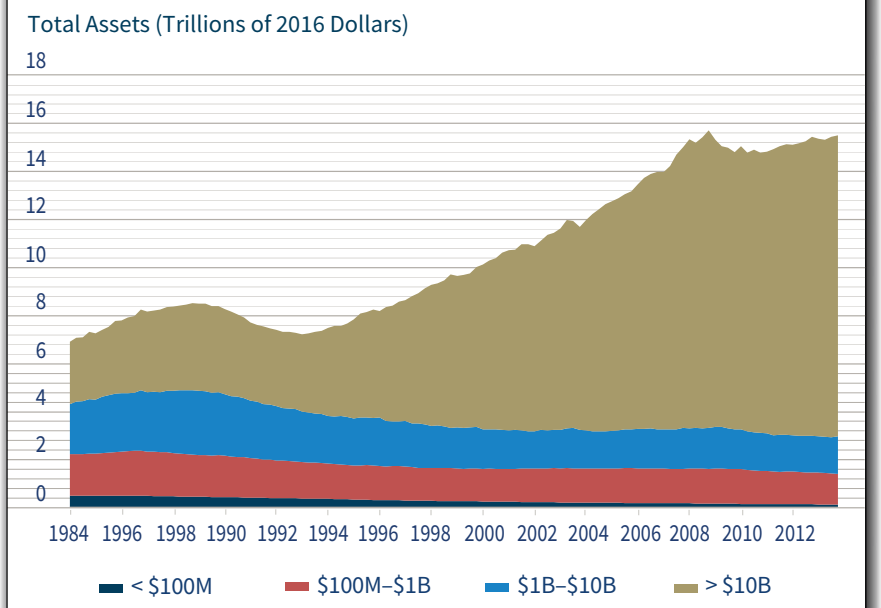
Source: FDIC.
Note: 2016 dollars.

14 If WaMu is excluded from the 2008 to 2013 crisis, the share is 73 percent.

15 The years 1980 to 1983 were omitted because data are not available for all FDIC-insured institutions before 1984.

Figure 5

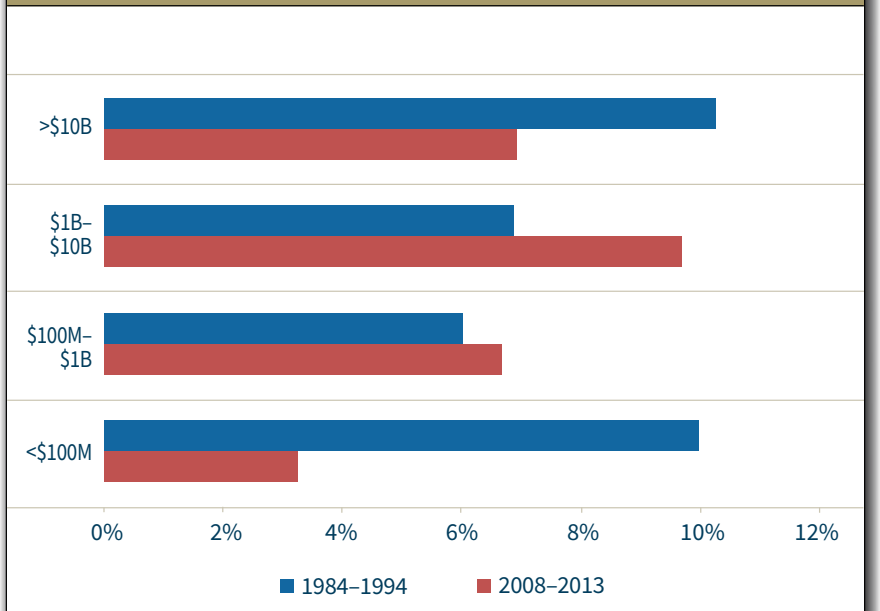
FDIC-Insured Banking Assets by Bank Asset Size Class



Source: FDIC.

Figure 6

Bank Failure Rates by Bank Asset Size Class



Source: FDIC.
Note: 2016 dollars.

During the second crisis, banks in the smallest bank asset size class suffered relatively few failures, with a failure rate of 3.3 percent. Banks with assets between $100 million and $1 billion and banks with more than $10 billion in assets suffered failure rates in excess of 6 percent. The bank asset size class holding between $1 billion and $10 billion in assets suffered the highest failure rate (nearly 10 percent).

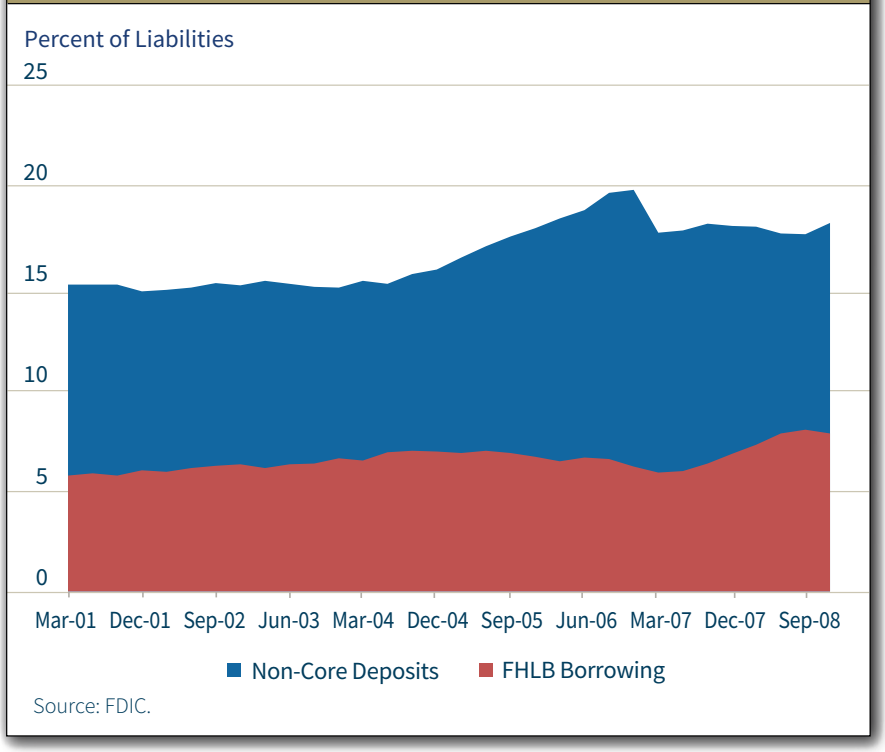
2.2 Liquidity Pressure and Fraud

During the second crisis, failed banks faced more acute liquidity problems than during the first crisis. These liquidity issues affected bank assets, traditional bank deposits, and substitutes for traditional bank deposits.

In the decade prior to 2007, bank asset growth exceeded the growth in traditional retail deposit accounts. Therefore, banks increasingly turned to other funding sources.[16] From 2001 to the beginning of the second crisis, the percentage of bank funding provided by non-core deposits and Federal Home Loan Bank (FHLB) borrowing increased from approximately 21 percent to more than 26 percent (Figure 7).[17]

Figure 7

Non-Core Funding at FDIC-Insured Institutions With Assets Below $1 Billion



Source: FDIC.

16 See McIntyre and Martino (2008).

17 Non-core deposits are defined as jumbo time deposits (that is, time deposits that exceed the insurance limit) plus estimated fully insured brokered deposits. Note that these figures may not fully capture the extent of nontraditional deposits held at the banks because of evolving deposit collection methods (such as internet) and changing customer preferences (fewer time deposits, more savings, and MMDA accounts).

At the onset of the second crisis, the financial services industry – both banks and nonbanks – suffered a major liquidity crunch.[18] At banks, the shift to less liquid assets and less traditional deposits for funding during the period between the two crises brought about unexpected problems for many community banks if creditors experienced financial distress or thought that the banks might experience financial distress. As banks found access to liquidity restricted, unexpected demands, such as public depositors demanding additional collateral for public funds, placed new strains on bank liquidity while the cost of that liquidity was rising. Uninsured depositors withdrew funds to reduce exposure.[19] Unanticipated demands on lending and interbank financial arrangements, such as draws on loan commitments, repurchase demands on securitized assets, margin calls in the derivatives market, and the withdrawal of funds from wholesale short-term financing arrangements, added to the demands on a bank's liquidity.[20] Troubled banks were especially vulnerable to these market forces; Cooke et al (2015) found that banks with a "liquidity mismatch" were more likely to fail.[21] Troubled banks suffering a decline in capital ratings faced restrictions in the interest rates that they could offer and on their usage of brokered deposits (absent a waiver from the FDIC).[22] As a bank's condition declined, the FHLBs no longer accepted a general pledge of collateral but required troubled banks to deliver physical possession of collateral. The FHLBs could also place additional restrictions on borrowing by troubled banks or demand additional collateral.[23]

The liquidity pressures influenced the characteristics of the banks that failed and the FDIC's resolution process. Table 2 provides selected financial condition indicators shortly before the banks failed.[24]

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18 A full discussion of these problems is beyond the scope of this paper. For additional information, see Financial Crisis Inquiry Commission (2010), especially chapter 20.

19 Numerous authors have confirmed this phenomenon. See, for example, Park and Peristiani (1998) and McDill and Maechler (2003).

20 Strahan (2012).

21 Cooke et al. (2015). The authors developed liquidity mismatch measure by subtracting liquidity-weighted assets from liquidity-weighted liabilities and dividing the result by total assets. Failed banks in 2008 and 2009 were found to have on average twice the liquidity mismatch of banks that did not fail.

22 12 C.F.R. § 337.6(c)(3)(i). The FDIC recently proposed changes to the interest rate and brokered deposit regulations to address technology changes and the evolving practices in collecting deposits. See Unsafe and Unsound Banking Practices: Brokered Deposits and Interest Rate Restrictions, 84 Fed. Reg. 2366 (Feb. 6, 2019); Interest Rate Restrictions on Institutions That Are Less Than Well Capitalized, 84 Fed. Reg. 54044 (Oct. 9, 2019); and Unsafe and Unsound Banking Practices: Brokered Deposits Restrictions, 85 Fed. Reg. 7453 (Feb. 10, 2020).

23 *Lending and Collateral Q & A*, Federal Home Loan Bank System, March 28, 2017.

24 CAMELS ratings for all banks, and the ratios and indicators for savings banks, were excluded prior to 1984 because of missing data.

Table 2

Bank Condition Indicators Reported Shortly Before Failure

	1980 to 1994			2008 to 2013			
	Mean	Median	Weighted Mean *	Mean	Median	Weighted Mean *	Weighted Mean no WaMu *
CAMELS Ratings							
Liquidity	3.50	4	3.64	4.41	5	3.84	4.52
Assets	4.22	5	4.00	4.89	5	4.01	4.83
Composite	4.44	5	4.68	4.92	5	4.02	4.84
Ratios and Indicators							
Cash and Treas/Agency Secs to Assets	19.4%	17.4%	17.1%	17.5%	16.4%	11.1%	15.3%
Loans to Assets	64.3%	66.3%	65.1%	70.8%	71.2%	75.0%	72.1%
Noncurrent Loans and OREO to Assets	12.9%	11.6%	14.4%	16.8%	15.2%	9.6%	14.3%
Loan Loss Reserve to Noncurrent Loans	63.2%	39.7%	56.1%	36.9%	29.5%	55.9%	33.1%
Capital to Assets	–0.5%	0.5%	–0.8%	1.3%	1.4%	4.7%	2.1%

* Weighted by assets.

Source: FDIC.

Note: CAMELS ratings for all banks, and the ratios and indicators for Savings Banks, were excluded prior to 1984 because. of missing data. WaMu is Washington Mutual, Treas is Treasury, Secs is Securities, and ORE is Other Real Estate.

The top panel reports statistics on CAMELS ratings. Banking regulators assign CAMELS ratings based on evaluations of a bank's managerial, operational, financial, and compliance performance. The six components of the ratings are capital adequacy, asset quality, management capability, earnings quantity and quality, the adequacy of liquidity, and sensitivity to market risk (CAMELS).[25] The rating scale ranges from 1 to 5, with a rating of 1 for the strongest banks and 5 for the weakest. The mean CAMELS rating for liquidity was 3.5 for failed banks during the 1984 to 1994 crisis. It was 4.4 – almost a full point worse – for the 2008 to 2013 crisis. Cash and U.S. Treasury and Agency securities comprised a smaller share of assets during the 2008 to 2013 crisis (11.1 percent for the 2008 to 2013 crisis; 17.4 percent for the 1980 to 1994 crisis).[26] Loans comprised a much larger share of assets (75 percent for 2008 to 2013 crisis; 65 percent for the 1980 to 1994 crisis). Usage of nontraditional funding sources increased. Capital was higher (4.6 percent for the 2008 to 2013 crisis; –0.8 percent for the 1980 to 1994 crisis).

The higher capital ratio during the second crisis may have been influenced by both the Prompt Corrective Action (PCA)[27] provisions introduced by the FDIC Improvement Act of 1991 (FDICIA) and liquidity problems at failing banks.[28] Under the PCA provisions, Congress required that banks with a leverage ratio of 2 percent or less be closed within 90 days.[29]

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25 The last component of the CAMELS rating, sensitivity to risk, was added in 1996.

26 The figure for the 2008 to 2013 crisis comes from the weighted average column, which provides a picture of the overall portfolio of failed bank assets. The figure cited includes WaMu. Excluding WaMu, the ratio was 15.3 percent for the 2008 to 2013 crisis.

27 12 U.S.C. §1831o (West Supp. 1992), added by Pub. L. No. 102-242, § 131, 105 Stat. 2236, 2253 (1991).

28 Excluding WaMu, the equity of failed banks during the 2008 to 2013 crisis was only 2.1 percent.

29 The PCA requirements are discussed in more detail in Section 3.4.

These differences influenced the task at hand for the resolution staff. Liquidity failures often occur quickly, allowing less time for failure preparations and marketing. FHLB advances and nontraditional deposits are less appealing to potential acquirers, thus reducing the franchise value of the banks and increasing the marketing challenges.[30] It is easier to sell Treasury and Agency securities than loans, especially noncurrent loans.

Bank fraud was a contributing factor at many bank failures in the first crisis but was less often a major contributor to failure in the second crisis.[31] A 1994 report by the General Accounting Office (GAO)[32] indicated that FDIC investigators found insider fraud to be a major cause of failure in 26 percent of a sample of 286 banks that failed from 1990 to 1991, and found insider problems (fraud, noncriminal abuses, and loan losses on insider loans) to be present in 61 percent.[33] A study by the Office of the Comptroller of the Currency (OCC) found that insider abuse, such as self-dealing, inappropriate transactions with affiliates, or unauthorized transactions involving bank management, was a significant factor leading to failure in 35 percent of failed banks.[34] While it is difficult to determine how many banks failed because of insider fraud and abuse in either crisis, it seems likely that it was more prevalent during the first crisis than during the second.

The sorts of bank fraud (self-dealing, insider abuse, undocumented loans to principals) found often in failed banks during the first crisis (although present during the second crisis) were not as often a significant factor in bank failure.[35]A GAO report from January of 2013 identified nonperforming commercial real estate (CRE) loans, weak underwriting, riskier funding sources, and inadequate management as causes of failure during the second crisis but did not identify fraud as a significant contributing factor.[36] Another study of bank failures during the second crisis identified as causes of failure an imbalance of risk versus return,

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30 Several observers have noted a positive relationship between FHLB advances and the FDIC's bank failure costs, and recommended changes. See, for example, *Hearing on Merging of the Deposit Insurance Funds Before the House Banking Subcommittee on Financial Institutions and Consumer Credit*, 106th Cong. (February 16, 2000) (statement of Gregory A. Baer, Assistant Secretary for Financial Institutions, The Department of Treasury) and *Hearing on Viewpoints of the FDIC and Select Industry Experts on Deposit Insurance Reform Before the Committee on Financial Services Subcommittee on Financial Institutions and Consumer Credit*, 107th Cong. (October 17, 2001) (statement of Richard S. Carnell). See Bennett et al. (2005) for additional discussion. Some acquirers of failed banks have expressed preferences for traditional deposits over certain types of nontraditional deposits. For additional information, see FDIC (2011) and FDIC (2017), p. 190. Because of the liens and prepayment penalties tied to FHLB advances, the FDIC almost always passes these advances to acquirers.

31 Fraud was more frequently present within failed banks during the earlier crisis. See O'Keefe (1993) for discussion.

32 Pub. L. No. 108-271, § 8(b), substituted "Government Accountability Office" for "General Accounting Office."

33 U.S. General Accounting Office, *Bank Insider Activities: Insider Problems and Violations Indicate Broader Management Deficiencies* (GAO/GGD-94-88, March 1994).

34 OCC, *Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks*, June 1988, p. 9, https://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-other-bank-failure.pdf. The study examined 171 banks that failed from 1979 to 1987.

35 For example, see "'Dead' GA. Banker Gets 30 Years for Fraud, Embezzlement," *Crimesider*, October 28, 2014, http://www.cbsnews.com/news/dead-georgia-investment-banker-gets-30-years-for-fraud-embezzlement/.

36 Government Accountability Office, "Financial Institutions: Causes and Consequences of Recent Bank Failures," GAO, 13-71, http://www.gao.gov/products/ GAO-13-71.

excessive reliance on volatile funding sources, and poor understanding and management of risks, but likewise did not identify fraud as a contributing factor.[37]

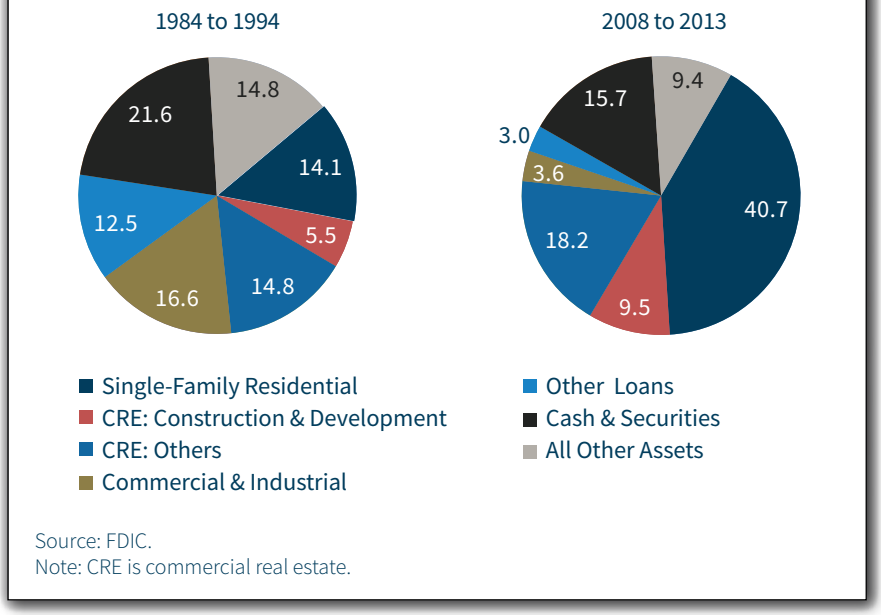
2.3 Loan Mix and Failures From Single-Family Loans

Banks closed during the first crisis failed because of losses in one or more segments of their loan portfolios, but in general an unexpectedly high default rate in the single-family residential (SFR) loan portfolio of banks was not the principal cause of failure. If failed banks during the first crisis held SFR loans, the FDIC suffered minimal losses in resolving them. Figures for the FDIC SFR loan portfolio's performance during the first crisis are not available, but the RTC's records from 1989 to 1995 show loss rates on SFR loans of 3.9 percent compared with an RTC average loss rate of 20.9 percent for other types of loans.[38]

During the second crisis, both the volume of SFR loans and the associated losses proved much more significant. Figure 8 compares the composition of assets held by failed banks in the two crises. From 1984 to 1994, SFR loans constituted 14.1 percent of all failed bank assets. In the 2008 to 2013 crisis, SFR loan concentrations were much higher, at 40.7 percent. In addition, some of the failed banks had significant exposures to single-family loans through residential mortgage-backed securities.

Figure 8

Failed Bank Asset Concentration (Percent)



Source: FDIC.
Note: CRE is commercial real estate.

37 Fuchs and Bosch (2009).

38 Calculated from RTC, *Statistical Abstract* (1995), p. 18.

After 2007, the increase of SFR loan defaults relative to all loan defaults was greatest among banks with more than $10 billion in assets.[39] Of the 489 bank failures in the 2008 to 2013 crisis, five banks – IndyMac Bank, FSB (IndyMac), Washington Mutual Bank (WaMu), Downey Savings and Loan Association (Downey), BankUnited, FSB (BankUnited), and AmTrust Bank (AmTrust) – held more than $10 billion in assets and specialized in originating, servicing, and acquiring SFR loans.[40] These banks dealt in all types of SFR loans, including adjustable-rate mortgages (ARMs) and alternative A-paper (Alt-A) mortgages.[41] Asset holdings for each of these five banks were dominated by SFR loans (Table 3). In comparison, SFR loans comprised only 17 percent of assets at the other 484 closed banks during the 2008 to 2013 crisis. These five banks also held more than half of the non-systemic failed bank assets ($416 billion of $757 billion). Even excluding WaMu, the remaining four SFR banks held approximately $48.4 billion in SFR loans, compared with $56.3 billion for the other 484 failed banks.

Table 3

Single-Family Asset Concentration of Selected Failed Banks

Failed Bank	Assets at Failure			SFR to Total Failed Bank Assets (Percent)
	SFR Assets ($ Billions)	Total Assets ($ Billions)	SFR to Total Assets (Percent)	
Washington Mutual	203.1	340.6	59.6	26.8
IndyMac	18.1	34.1	53.0	2.4
BankUnited	10.6	14.5	72.9	1.4
Downey	12.2	14.1	86.1	1.6
AmTrust	7.5	12.6	59.3	1.0
All Others (484 banks)	56.3	340.7	16.5	7.4
Total	307.7	756.6	40.7	40.7

Source: FDIC.
Note: SFR is single-family residential.

The five banks with significant SFR loan concentrations failed early in the 2008 to 2013 crisis. Of these, IndyMac failed first, on July 11, 2008. WaMu failed on September 25, 2008, and Downey on November 21, 2008. BankUnited failed on May 21, 2009. AmTrust, the last to fail, closed on December 4, 2009. After AmTrust's failure, regulators would close another 331 banks before the end of 2013.

WaMu's failure caused no loss to the DIF, but the other four SFR bank failures caused significant losses to the DIF. Estimated losses from these five bank failures total approximately $19.4 billion, or roughly 27 percent of total losses to the DIF from all bank failures during the 2008 to 2013 crisis. Excluding WaMu, the loss rate for these banks was higher than for the remaining 484 banks (29 percent versus 17 percent).[42]

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39 Davison (2020).

40 For additional discussion about problems with single-family lending that led into the 2008 to 2013 crisis, see FDIC (2017), chapter 1.

41 These are other types of home mortgages that were graded as below "prime" for investors.

42 Including WaMu, the loss rate for large single-family lenders was only 5 percent.

To mitigate losses to the FDIC and to reduce the harm of foreclosures to borrowers and affected neighborhoods, the FDIC adopted various loan modification programs where the acquiring banks modified loans to borrowers that met the required criteria. The FDIC introduced its first programs at IndyMac after it failed and was temporarily placed under FDIC conservatorship before it was resolved. Four of these five banks (all except WaMu) were resolved using strategies that required asset buyers to offer loan modification programs in the years immediately following failure. The FDIC also placed such requirements on the acquirers of 284 smaller banks.[43]

There were other differences in loan mix across the two crises. In both crises, CRE loans and construction and development (C&D) loans were associated with bank failure.[44] However, the failed banks during the second crisis were more heavily concentrated in commercial real estate lending – especially in C&D lending – than was the case in the first crisis. In the earlier crisis, many bank failures were related to serious downturns in the energy and agricultural sectors, and those banks had heavier concentrations of commercial and industrial (C&I) loans – another asset class that sometimes has high loss rates. Table 4 shows the concentration levels for various loan types for the two crises.

Table 4

Asset Class Concentration

Asset Class	Period	Percentage of Failed Banks Asset Class to Total Failed Bank Assets (%)					
		0–10	10–20	20–30	30–40	40–50	> 50
SFR	1980–94	45.0	28.7	13.8	4.2	2.1	6.4
	2008–13	32.2	26.0	19.9	9.0	4.1	8.8
CRE: C&D	1980–94	81.3	11.9	4.2	2.0	0.4	0.2
	2008–13	15.6	18.4	19.1	18.7	13.9	14.3
CRE: Others	1980–94	63.8	26.3	7.3	1.6	0.7	0.4
	2008–13	8.6	17.4	28.7	23.0	12.3	10.0
C&I	1980–94	12.4	18.1	22.7	20.5	12.6	13.7
	2008–13	50.4	29.9	13.7	4.3	1.0	0.6
Asset Class	Period	Number of Failed Banks Asset Class to Total Failed Bank Assets (%)					
		0–10	10–20	20–30	30–40	40–50	> 50
SFR	1980–94	668	423	199	58	28	90
	2008–13	157	127	97	45	20	43
CRE: C&D	1980–94	1,174	186	65	30	6	5
	2008–13	76	90	94	91	68	70
CRE: Others	1980–94	921	402	105	23	10	5
	2008–13	42	85	140	113	60	49
C&I	1980–94	174	262	327	307	193	203
	2008–13	246	146	68	21	5	3

Source: FDIC.

Note: FDIC-insured savings banks that failed prior to 1984 are omitted because of missing data. SFR is single-family residential, CRE is commercial real estate, C&D is construction and development, and C&I is commercial and industrial.

43 The requirements lasted for ten years and were part of the loss share agreements that covered SFR loans. The four largest portfolios of SFR loans covered by FDIC loss share are those that originated with IndyMac, Downey, Bank United, and AmTrust.

44 Cole and White (2012).

The top panel shows percentages within each asset concentration category, and the bottom panel shows the number of banks within each category. The left-most column shows banks that held less than 10 percent of assets in each listed asset class (very low concentration), and the right-most column shows banks with more than half of assets held in each asset class (very high concentration).

As expected, a higher share of failed banks had heavy concentrations in single-family loans during the second crisis: SFR loans comprised at least 50 percent of the loan portfolio at 8.8 percent of failed banks compared with only 6.4 percent of failed banks in the 1980 to 1994 crisis. The difference in C&D loans is striking: during the first crisis, more than 80 percent of the failed banks had less than 10 percent of assets held in C&D lending, whereas 66 percent of the failed banks during the second crisis had C&D loan exposures that exceeded 20 percent of total assets. Exposures to other CRE loans (multifamily, retail, office buildings, hotels) were also higher in the second crisis, and exposures to C&I lending were much lower. C&I loans comprised 40 percent or more of total assets at less than 2 percent of banks in the second crisis and 26 percent of banks in the first crisis.

3. Significant Statutory Changes to Resolution Authority

Congress passed several statutes relevant to banks, bank regulation, and failed bank resolution from 1980 to 2013. This section describes parts of six statutes that resulted in significant changes to the FDIC's resolution options and processes for non-systemic failed banks.[45]

3.1 Garn St. Germain Act of 1982 (Garn St. Germain)

Garn St. Germain introduced Net Worth Certificates, a form of capital forbearance available to certain savings banks insured by the FDIC.[46] This program was designed for savings institutions that were solvent, had weak capital positions, had asset portfolios that were performing, and had management that was viewed by bank supervisors as sound. The institutions were losing money because they held long-term mortgages with low interest rates funded by short-term deposits with higher interest rates. Many observers believed that interest rates on deposits would decline, thus allowing the institutions to return to good health.

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45 This is by no means an exhaustive review of the statutes; sections of the statutes not directly related to bank resolution or receiverships have been omitted from the discussion. In addition, other statutes influenced the FDIC's resolution and receivership options to a lesser degree.

46 12 U.S.C. § 1823(i), repealed by Pub. L. No. 97-320, Title II, § 206, Oct. 15, 1982, 96 Stat. 1496.

3.2 Competitive Equality Banking Act of 1987 (CEBA)

CEBA[47] authorized the FDIC to form and manage temporary "bridge banks" to aid in resolving failed banks.[48] When a bridge bank is formed, the FDIC charters a de novo bank (that is, a bridge bank) that is run by the FDIC briefly until the FDIC executes a final resolution strategy. CEBA also extended the Net Worth Certificate Program authorized in 1982 and allowed small agricultural banks to amortize loan losses over time (an accounting forbearance).[49]

3.3 Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA)

FIRREA established a comprehensive scheme granting the FDIC exclusive initial jurisdiction to resolve and dispose of all claims against a receivership,[50] with judicial review allowed only after the FDIC had determined which claims were allowed.[51] As receiver, the FDIC could transfer assets of the failed bank free of interference or oversight by any court,[52] with the assets protected while in the hands of the FDIC from judicial seizure or execution[53] and free of most forms of taxation.[54] The FDIC could enforce any bank agreement or contract even if the contract provided for termination upon appointment of a receiver,[55] while the FDIC could repudiate contracts and leases that it determined, in its sole judgment, to be burdensome.[56] FIRREA codified previous cases barring the enforcement of claims or the assertion of rights against the FDIC based on unwritten agreements.[57] Finally, FIRREA established that the FDIC could operate as receiver once appointed without having to receive authorization, oversight, or review from a state or local court.[58]

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47 Pub. L. No. 100-86, Aug. 10, 1987, 101 Stat. 552.

48 12 U.S.C. § 1821(n)

49 Pub. L. No. 100-86, Section 509, amending 12 U.S.C. § 1729, repealed by Pub. L. No. 101-73, Title IV, § 407, August 9, 1989, 103 Stat. 363.

50 12 U.S.C. § 1821(d)(3)–(13).

51 12 U.S.C. § 1821(d)(13)(D).

52 12 U.S.C. § 1821(d)(2)G)(i)(II).

53 12 U.S.C. § 1821(d)(13)(C).

54 12 U.S.C. § 1825(b)(2).

55 12 U.S.C. § 1821(e)(13)(A).

56 12 U.S.C. § 1821(e)(1). The FDIC would have to pay compensation in some cases.

57 12 U.S.C. § 1821(d)(9)(A).

58 12 U.S.C. § 1821(c)(2)(C) and (c)(3)(C). Several protections remain in place, but they typically result in the FDIC having to pay compensation rather than the FDIC being unable to administer the receivership.

The adoption of FIRREA simplified the FDIC's receivership duties and allowed for more uniform receivership procedures. It reduced time spent in court and the associated costs.[59] FIRREA also included provisions that disallowed accounting forbearance to avoid failure.[60] Such provisions had been used regularly before FIRREA was passed.

3.4 Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA)

FDICIA barred certain practices that were judged to have increased the cost of resolution of failed insured depository institutions during the 1980s. Regulatory agencies often could not close banks before the book value of capital fell below zero. Further, some regulators had hesitated to close banks even after the institutions were insolvent, hoping that the insolvent institutions would "grow out" of the problems or that improving economic conditions would restore the institution's health. To address these issues, FDICIA introduced PCA, which defined requirements for capitalization and imposed increasingly strict restrictions and penalties on banks as capital fell below statutory thresholds. When banks became critically undercapitalized (defined as tangible equity 2 percent or less of total assets), they were required to be closed within 90 days of the notice, with few exceptions.[61] The FDIC was also given authority to close a bank and appoint itself as receiver in limited circumstances. Despite the brevity of the 90-day time limit, the PCA provisions may have, on average, increased the time available for the FDIC to prepare for failure. Before FDICIA, the FDIC often had little time to prepare for failure because the chartering authority would not close the bank until the failing bank's condition was so poor that any franchise value had disappeared and the bank had to be closed immediately.

FDICIA also introduced the least cost test (LCT). Prior to FDICIA, the FDIC could accept any failed bank bid so long as it was less costly than a payout of the failed bank's insured deposits. The LCT mandates that the resolution bid accepted must be the least costly of all the available bids – even bids that do not conform to the FDIC's recommended resolution

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59 The FDIC operates in two capacities. The FDIC when it acts as an appointed receiver of a failed depository institution is referred to as the receiver. See 12 U.S.C. § 1819, § 1821(c). The FDIC in its corporate capacity administers the federal deposit insurance fund, a pool of assets used to guarantee the safety of federally insured deposits. *Bullion Services Inc. v. Valley State Bank*, 50 F.3d 705, 708 (9th Cir.1995). The FDIC when acting as a receiver has broad authority to "take over the assets ... and conduct all business of the institution," "collect all obligations and money due the institution," and "preserve and conserve the assets and property of such institution." 12 U.S.C. § 1821(d)(2)(B)(i), (ii), (iv). The FDIC as receiver may also "transfer any asset or liability of the institution in default ... without any approval, assignment, or consent ... ." 12 U.S.C. § 1821(d)(2)(G)(i)(II). Finally, the FDIC as receiver may "exercise ... such incidental powers as shall be necessary to carry out such powers," and "take any action authorized by this Chapter" which the FDIC as receiver "determines is in the best interests of the depository institution, its depositors, or the [FDIC]." 12 U.S.C. § 1821(d)(2)(J)(i), (ii), *Sahni v. FDIC*, 83 F.3d 1054, 1058 (9th Cir. 1996).

60 Regulators were no longer allowed to permit banks to use accounting methods that were less stringent than Generally Accepted Accounting Principles (GAAP) in terms of capital reporting. See *United States v. Winstar Corp.*, 518 U.S. 839, 844-859, 116 S.Ct. 2432, 2440–2448, 135 L.Ed.2d 964 (1996) for a summary of the shifts in treatment of regulatory goodwill and capital credits.

61 See 12 U.S.C. § 1831o, 12 C.F.R. § 324.401 et seq. The FDIC is permitted to extend the time frame up to 270 days if it determines that it would reduce the cost of resolution. This exception has never been used.

structure.[62] Compared with the pre-FDICIA time period, the FDIC's analysis of bids is now more complete, because every bid, even nonconforming bids, is subject to the LCT analysis and comparison. In addition, FDICIA effectively prohibited the use of open bank assistance without a systemic risk determination, thereby substantially limiting its use.[63]

3.5 The National Depositor Preference Amendment (Omnibus Budget Reconciliation Act of 1993)

The National Depositor Preference Amendment established the primacy of the claims of domestic depositors over all other classes of creditors.[64] Before this amendment was adopted, there had been a hodgepodge of state priority schemes, many of which placed deposit claims in the same priority class as general creditors. The National Depositor Preference Amendment imposed a uniform nationwide schedule of priority:

1 Secured claims (up to the value of the perfected collateral)
2 Administrative expenses of the receivership
3 Domestic deposit liabilities
4 General liabilities (including foreign deposits[65] and unsecured borrowing)
5 Subordinated obligations
6 Obligations to stockholders[66]

The National Depositor Preference Amendment allowed the FDIC to administer satisfaction of deposit and other claims uniformly, with no special requirements or varying obligations imposed on receiverships of banks chartered in specific states. In addition, since most non-deposit claims were valueless due to the priority of deposit claims, many claimants with a subordinate (that is, lower) claim status than domestic deposits elected not to pursue their claims, which reduced the FDIC's cost of administering non-deposit claims. Because some of these claims were associated with active litigation at bank failure, legal expenses were also reduced. Although the benefits associated with administering the receivership were clear, some researchers questioned whether this legislative change would result in a

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62 See 12 U.S.C. § 1823(c)(4), 12 C.F.R. § 360.1. In addition, the cost of the bid must be lower than the cost of a payout. There are two exceptions. First, the FDIC is always permitted to pay out the deposits of a failed bank. Second, under extremely limited conditions, the FDIC can invoke an exception if the least cost failure could threaten the U.S. financial system. In addition, the FDIC is not required to consider a bid if it is unable to estimate its cost or if the resulting institution is viewed as unsafe and unsound.

63 See 12 U.S.C. § 1823(c)(1). The FDIC also required several approvals before a systemic risk exception could be granted. 12 U.S.C. § 1823(a)(4)(G). The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank) included provisions that further restricted the FDIC's use of the systemic risk exception and open bank assistance.

64 Secured claimants are permitted to be paid ahead of deposit claimants to the extent that the collateral satisfies the claim, provided that the lien on the collateral is perfected under applicable law. See 12 U.S.C. § 1821(d)(5)(D)(ii).

65 On September 13, 2013, the FDIC clarified that certain foreign deposits payable in the United States will be in the depositor creditor class but are not insured deposits. See "Deposit Insurance Regulations; Definition of Insured Deposit," *Federal Register* 78, no. 178 (September 13, 2013): 56583–56589.

66 12 U.S.C. § 1821(d)(11)(A).

substantial shift in losses from the FDIC to other creditors because many creditors exited failing banks before failure (especially those that were likely to lose money if the bank failed).[67]

3.6 Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994

This act,[68] plus several changes in various state laws that preceded it, provided more flexibility to the ownership structure for banks and removed barriers to interstate and branch banking. Before its enactment, many states set restrictions on interstate banking and the number or location of branches held by a single bank, and the restrictions influenced both the size and number of banks in the industry. Because of pressure from bank owners, many states had already moved away from these types of restrictions. This act required states to eliminate almost all such restrictions unless they opted out.[69] It contributed to industry consolidation and thus contributed to the increase in the size of failed banks between the first crisis and the second crisis. The act allowed banks to consolidate operations and pursue geographic diversification through acquisitions, and it exposed formerly sheltered banks to larger and more diverse competitors.[70]

4. The FDIC's Failed Bank Asset Disposition Philosophy

This section discusses the FDIC's asset disposition philosophy during each crisis. In both cases, the FDIC's views and anticipated strategies were shaped by its experience before the crisis, and its viewpoints and related strategies changed as the crises played out. This review of the FDIC's evolving strategies is followed by a brief section about changes in the FDIC's information technology infrastructure during the period between the crises, which also influenced the FDIC's practices in the second crisis.

There are natural tradeoffs when the FDIC considers its options for the disposal of the assets of failed institutions. The FDIC can sell assets quickly despite the downward pressure on asset values that such a distressed sale could entail. Or the FDIC can sell assets gradually, which would ideally mitigate the risk that a sale would trigger large price drops and potentially undermine a local economy or put significant downward pressure on the price of an asset class.[71] In practice, the FDIC's choices fall along a continuum between a quick sale and longer-term ownership. Another tradeoff relates to risk retention: buyers usually pay higher asset prices if the FDIC retains some or all of the risk associated with the assets, but consequently the FDIC retains the risk of declining asset prices. In addition, risk retention by the FDIC may reduce or distort the incentives of the buyers to minimize

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67 See Marino and Bennett (1999).

68 Pub. L. No. 103-328, Sept. 29, 1994, 108 Stat. 2338, codified as 12 U.S.C. §§ 43, 215a-1, 1831u, 1835a.

69 States were given multiple options for opting in early or opting out. At this point, all states have opted in. For more information, see Johnson and Rice (2007).

70 Jones and Critchfield (2005).

71 Bovenzi (2015), p. 48.

asset losses, and the risk retention strategies could be subject to poor contract design or administration that might increase asset losses or operating costs.

Likewise, there are tradeoffs associated with the treatment of creditors at failing banks. Imposing losses on uninsured depositors and other unprotected creditors when banks fail can reduce the FDIC's losses at failure (because other creditors absorb some of the losses at the bank), can encourage unprotected creditors at banks to exert discipline on banks that take excessive risks, and may encourage banks to limit risk-taking in response to creditor concerns. However, if the FDIC imposes such losses during crisis periods, then depositors and other creditors at other financial institutions may panic and thus harm both the banking system and the general economy. In addition, in most cases, resolution methods that impose losses on uninsured depositors and other creditors are operationally more complex for the FDIC to execute.

4.1 Viewpoints and Anticipated Strategies at the Onset of the 1980 to 1994 Crisis

From 1943 to 1979, the average number of bank failures per year was only five, and the total of assets of failed banks per year averaged merely $1.1 billion (in 2016 dollars). Thus, FDIC staff began the first crisis with no recent crisis experience to draw from in crafting its resolution and receivership strategies. Even so, the FDIC tried to improve its resolution processes in the years preceding the first crisis. In the mid-1960s, the FDIC's preferences shifted from payouts to Purchase and Assumption (P&A) agreements, where another bank acquires some or all of the assets and then assumes the deposits and sometimes other liabilities.[72] As the crisis began, P&A agreements were viewed as generally more efficient than payouts and less disruptive to the depositors and local community.[73] All P&As at that time passed both insured and uninsured deposits to the acquirer. Often, the FDIC offered P&A bidders a short-term option to purchase the failing banks' loans at book value – an offer that was more often declined than accepted. The FDIC attributed those declinations to the poor quality of the loans, the limited information available to bidders, and the tight timelines for resolution.[74]

For assets retained in receiverships (that is, not sold to an acquiring bank when the bank was resolved), the FDIC focused on recovering as much of the total book value of the assets as possible and placed less emphasis on the cost of holding the assets. Thus, assets tended not to be sold during recessions, and asset holding periods were often long.[75] FDIC staff levels and receivership asset balances reflected this philosophy. As of year-end 1979,

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72 For more information about the resolution options used by the FDIC, see FDIC (2014) or FDIC (1998), especially chapter 3.

73 FDIC (1984), p. 86.

74 FDIC (1977), pp. 9-10. Other reasons included loans with below-market interest rates and better lending opportunities elsewhere.

75 Seidman (1993), pp. 99-100.

the FDIC's Division of Liquidation had 432 employees, and $5 billion (in 2016 dollars) in failed bank assets remained to be liquidated.

At the onset of the crisis, as interest rates soared to record highs, the FDIC anticipated an increased workload and planned to accommodate it. The introduction to its 1980 Annual Report stated, "The FDIC plans to intensify its efforts to find new ways to meet its burgeoning workload and increased statutory responsibilities in an era of employment ceilings and limited resources."[76]

4.2 Evolution of Viewpoints During the 1980 to 1994 Crisis

The 1980 to 1994 crisis involved a series of regional recessions, major legislative changes, and significant changes within the banking industry. Not surprisingly, the FDIC's viewpoints changed a great deal over this tumultuous 15-year period.[77]

The viewpoints expressed in the previous section prevailed early in the crisis. As the number of failures increased, the volume of assets remaining to be liquidated also increased and the cash in the Bank Insurance Fund (BIF)[78] that was available for failures declined. These factors highlighted the costs of holding assets in receivership. And, after L. William Seidman became Chairman in 1985, the FDIC placed a stronger emphasis on selling assets retained in receiverships more quickly.[79] The FDIC also sought to increase the volume of assets sold to acquirers at resolution amid concerns that the value of assets may decline once they are placed in government hands.[80] The FDIC adopted bid evaluation procedures that favored passing assets to acquirers in 1986 and introduced a new whole-bank P&A approach in 1988.[81] Throughout the crisis – and indeed through both crises – the FDIC continued to prefer P&A agreements (as opposed to payouts) for resolving closed banks.[82]

The FDIC also believed that it was sometimes more cost-effective (that is, less costly to the BIF) to judiciously assist distressed banks to avoid failure rather than closing them.

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76 FDIC Annual Report (1980), p. 6. It is unlikely that the FDIC anticipated the extent of the future crisis. The paragraph indicated that most of the changes were anticipated in the examination function, which made up 70 percent of its budget that year. By 1985, direct receivership expenses (excluding overhead) comprised 65 percent of its budget. (The source for the details in this footnote is Historical FDIC Expenses, FDIC Division of Finance.)

77 This section draws heavily from chapter 3 and chapter 12 of FDIC (1998). Chapter 3 discusses the evolution of resolution methods used by the FDIC during this period. Chapter 12 discusses methods used to sell assets retained in receiverships.

78 At that time, the FDIC insured banks and savings banks through the BIF but did not insure thrifts. On July 1, 1995, the FDIC began resolving insolvent thrifts through the Savings Association Insurance Fund (SAIF). On March 31, 2006, the SAIF and the BIF were merged into the DIF.

79 Seidman (1993), pp. 99-102.

80 Potential reasons for this viewpoint include: (a) borrowers may be less inclined to pay loans if they are held by the government, especially if there are no longer prospects for future borrowing; (b) government staff may be paid less or have weaker incentives to diligently pursue high asset prices (fewer sales bonuses, etc.); (c) political influence may reduce recoveries; and (d) government requires more extensive oversight and reporting, which adds costs.

81 See FDIC (1998), pp. 86–90 and FDIC, "FDIC Chairman Unveils New Approach to Handling Bank Failures," news release no. PR-79-88, April 18, 1988, for additional discussion.

82 However, the scope for acting on its preference was reduced after the LCT was introduced in 1992.

For example, many savings banks had funded long-term mortgages with low interest rates using short-term deposits. When interest rates spiked in the late 1970s and early 1980s, these institutions suffered losses that might have been reversed if interest rates dropped – provided that the institutions were well managed.[83] Congressional views and related legislation (and thus the FDIC's scope, and sometimes its mandate, for the use of such assistance) changed markedly during the crisis: Garn St. Germain (1982) and CEBA (1987) expanded the FDIC's ability to use such methods, whereas FIRREA (1989) and FDICIA (1991) restricted their use.

Early in the crisis, the FDIC recommended that it be granted bridge bank authority, and Congress authorized it in 1987. The bridge bank structure allows the FDIC to close a failing bank and temporarily run the bank as an operating institution while it devises and executes a strategy for final resolution. Where failure occurred quickly, this authority improved the FDIC's resolution options because it enabled the FDIC to choose options that defer some of its resolution tasks until after the bank failed.[84] As it exercised the new authority later in the crisis, the FDIC found that it effectively facilitated the resolution of larger failures, and FDIC staff viewed it as the preferred tool when failure occurred at a large or complex bank too quickly to arrange a P&A and if the bank still had franchise value.[85]

Through most of the crisis, the FDIC avoided sales methods that involved retaining risk after the assets were sold. That began to change as the crisis peaked. In 1991, the FDIC introduced a P&A agreement where the FDIC would share in the future credit losses of selected troubled asset portfolios sold to the acquirer. This P&A agreement, known as "loss share," was viewed as a means to reduce costs and improve credit availability for the failed bank's borrowers.[86] Near the end of the crisis, the FDIC used risk-sharing methods for a limited amount of assets retained in receiverships.[87]

4.3 Viewpoints and Anticipated Strategies at the Onset of the 2008 to 2013 Crisis

In 2007, the FDIC's resolution staff had an average FDIC tenure of 21 years. Many staff members had vivid memories of the previous crisis and the lessons that they had learned from it.[88] Senior FDIC staff believed that a quick sale was advantageous to the FDIC because

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83 See FDIC (1986).

84 Without a bridge bank option, the FDIC must either execute a payout (where the franchise value of the bank is lost) or have enough time to identify poten- tial acquirers and market the failing bank before the failure.

85 That is, the value of the bank as an operating company exceeded the value of the individual assets minus liabilities. For a discussion of these options in the context of large bank failures before the 2008 to 2013 crisis, see Marino and Shibut (2006).

86 See FDIC, "FDIC Approves Assumption of Deposits of Southeast Bank N.A., Miami and Southeast Bank of West Florida, Pensacola," press release no. PR-137-91, September 19, 1991.

87 See FDIC (1998), chapters 7, 16, and 17.

88 The experience of the FSLIC and RTC was also considered. Some FDIC employees shifted to the RTC during its tenure, and (by law) all RTC employees were given jobs at the FDIC when the RTC closed. In addition, a task force was formed to review FDIC and RTC differences and adopt best practices. See FDIC (1995).

of its effect on long-term financial stability and operational simplicity.[89] First, it allowed markets to recover quickly after the potential short-run drop in asset prices. Managing large volumes of assets for an extended period theoretically could mitigate short-term asset-price volatility, but it would extend the period of market disruption.[90] Second, because troubled assets are difficult to manage, the receivership asset values might deteriorate even as the overall asset markets improve.[91] Through quicker asset sales, the FDIC could reduce its influence on financial markets and increase the role of the private sector in determining market prices.[92] Removing the FDIC as the primary custodian of a large volume of banking assets is also operationally simpler for the FDIC. As an asset manager, the FDIC must devote substantial resources to servicing and liquidating assets. By minimizing its role as an asset manager, the FDIC reduces its need for a large infrastructure to maintain and manage assets before disposition.

The FDIC also found that serving as an asset manager can increase the odds of experiencing political pressure. In the first crisis, the FDIC was the subject of congressional hearings where its handling of troubled assets was criticized and "better treatment" of borrowers was sought.[93] John Bovenzi, the highest-level career executive who had served at the FDIC during both crises, explained that the job of asset servicing "never produces many friends" but that it instead "assured screams of protest by the borrowers to their elected officials."[94] By removing itself from the business of servicing assets, the FDIC could focus its resources on resolving the more immediate concerns that arise during a banking crisis, such as the payment of deposit insurance claims and the resolution of failed institutions.[95]

One of the most painful lessons the FDIC learned after the first crisis was the high human capital cost of downsizing when a permanent workforce is hired for temporary work. The FDIC's workload is countercyclical, and the FDIC requires more resources, including staff, when institutions are failing and assets are being liquidated than when the banking industry is in an extended period of stability. As of year-end 1992, the FDIC's resolution divisions had 6,757 employees, 1,754 (24 percent) of whom were permanent. In addition, the FDIC was required to absorb the remaining staff at the RTC as it wound down its operations; the RTC had 7,382 staff as of year-end 1992, almost all of whom performed resolution and receivership tasks.[96]

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89 See Bovenzi (2015), pp. 59-60.

90 Bovenzi (2015), p. 48.

91 There are also costs associated with holding assets, such as loan servicing and management fees.

92 Economists have also raised concerns related to government control of banking assets, such as reduced efficiency. See Clarke et al. (2003) and Shirley and Walsh (2000) for a discussion of the theoretical and empirical evidence. Also note that sale prices are likely to be lower when assets are sold quickly during distress periods. See Shleifer and Vishny (2011) for additional discussion.

93 Bovenzi (2015), p. 164. See also Seidman (1993).

94 Seidman (1993), p. 210.

95 The FDIC did not escape criticism in the second crisis. For example, a number of criticisms about the FDIC's resolution process were raised at a field hearing in 2011. See H.R. *Field Hearings for the Committee on Financial Services titled Potential Mixed Messages: Is Guidance from Washington Implemented by Federal Bank Examiners?* 112th Congress (2011).

96 FDIC 1992 Annual Report and internal FDIC sources.

Resolution activity slowed quickly after that: from 1995 to 2007, there were on average only five resolutions per year, with the average total of assets of failed banks per year of $1.4 billion (in 2016 dollars); no failures occurred from July 2004 through January 2007. The more aggressive asset disposition philosophy resulted in only $1 billion (in 2016 dollars) in failed bank assets remaining to be liquidated as of year-end 2007. Although the problem bank list grew to 76 banks in 2007,[97] it was still low by historical standards and there was no expectation of a looming, large-scale crisis. Therefore, while the FDIC continued to consider readiness to meet its resolution and receivership responsibilities in its planning, the FDIC increasingly focused on being a responsible steward of the DIF by controlling its operating expenses and reducing its budget to reflect the reduced workload.[98] To reduce staff, the FDIC imposed a hiring freeze, stopped renewing temporary employment contracts, offered buyouts, and carried out layoffs. By year-end 2007, the FDIC had cut its resolution staff to 218, or only 3 percent of its 1992 staff level.

By reducing the number of employees to this level, there was a risk that the FDIC could be initially understaffed if a large number of institutions failed in a short time. But the FDIC accepted this risk since the probability of such an event appeared remote, the FDIC had external pressure to reduce its staffing levels based on its current workload,[99] and the FDIC believed its staffing levels were sufficient to handle the most likely scenarios of increased resolution-related work. In addition, lowered staffing levels saved money in years with modest resolution activity levels and addressed concerns about keeping the resolution staff engaged.

At the onset of the crisis, senior staff at the FDIC viewed structured asset sale transactions as the most effective vehicles for liquidating assets quickly when a large volume of assets was available for sale, because of the potential for a greater recovery. Structured transactions include securitizations and limited liability corporations (LLCs).[100] Both of these sales methods, which had performed well in the first crisis, involve sharing risk with asset buyers. Therefore, senior management anticipated that securitizations and LLCs would be the key sales methods used for receivership assets during crisis periods; they viewed auctions, combined asset sale and management contracts,[101] and loss share as useful

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97 FDIC, *Quarterly Banking Profile* (2007). Although this was an increase from 2006, it was less than one-tenth of the 1992 figure (863 institutions).

98 The 2006 FDIC Annual Report stated that "[T]he Corporation seeks to operate in a consistently efficient and cost-effective manner in order to fulfill its fiduciary responsibilities," and "[T]he FDIC has had an extraordinary record of controlling its operating expenses over the past five years." See also Bovenzi (2015), chapter 9.

99 See Bair (2007).

100 The LLC was co-owned by the FDIC and an outside investor, with accompanying agreements that described the responsibilities of both parties. The FDIC transferred troubled assets, usually nonperforming loans and other real estate owned (ORE), from its receiverships into the LLC. It retained partial ownership of the LLC and sold the remaining ownership to investors. The investors managed and sold the assets. The FDIC and the investor shared the funds recovered from the assets (net of expenses). See FDIC (1998), chapter 17 for a more detailed description. Example contracts can be found at https://www.fdic.gov/buying/historical/structured/index.html.

101 During the first crisis, a third-party contractor often would be responsible for both servicing and liquidating a pool of retained assets. For additional information about asset sale and management contracts used during the first crisis, see FDIC (1998), chapter 14.

options that would probably not be widely used during periods with high levels of activity. During the period between the two crises, the FDIC sold 39 percent of failed bank assets to acquirers at failure, and the remaining assets were usually sold quickly through auctions. The volume of assets sold was too small to merit the use of securitizations or LLCs.

Another strategy used during the first crisis that senior FDIC staff planned to use in the future was the bridge bank structure. Because the FDIC had found that the bridge bank structure effectively facilitated the resolution of larger failures, senior FDIC staff anticipated that bridge banks would continue to be a valuable tool for the FDIC and would be the preferred method for resolving the failure of larger and more complex insured depository institutions.[102]

4.4 Evolution of Viewpoints During the 2008 to 2013 Crisis

Once again, the FDIC adapted its viewpoints and strategies during the 2008 to 2013 crisis. The changes in the FDIC's general philosophy about asset disposition were relatively modest, especially given the extent of the depth of the crisis and its effects on the economy.

Early in the crisis, the market's appetite for purchasing failed bank assets nosedived. During the first nine months of 2008, the FDIC resolved 11 small and midsized institutions and the acquirers purchased only 8.5 percent of the assets.[103] Buyer interest in failed bank assets retained in receiverships was similarly weak. In addition, the previously robust market for securitized assets evaporated. Consequently, the FDIC had to quickly reconsider its marketing strategies if it wanted to achieve its goals of selling assets promptly. Given market conditions, the losses associated with asset sales without risk sharing were exceedingly high. But the combination of the viewpoints expressed above, low staff levels, and rapidly increasing numbers of potential bank failures continued to support a strategy that would dispose of as many assets as possible at failure. Although opinions varied about the best strategy early in the crisis, it did not take long for the FDIC to shift to whole-bank P&As – with virtually all of the failed bank's assets passing to the assuming institution – coupled with loss share coverage for the transferred loans and real estate assets, as its primary asset disposition strategy.[104]

As the markets normalized, the pace of bank failures slowed, and staff levels increased, the FDIC gradually shifted to strategies it had viewed as optimal during the period between the first and second crisis. The FDIC began reducing the scope of loss share coverage it offered to bidders at resolution in 2011, and it executed its last loss share resolution in September 2013.

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102 FDIC (1998), p. 186. See also Bair (2007) and Marino and Shibut (2006).

103 These figures exclude WaMu (with $300 billion in assets) and IndyMac (which failed in July 2008 but was not resolved until 2009).

104 See FDIC (2017), chapter 6.

4.5 Information Technology Improvements and Bank Resolutions

During the period between the two crises, the FDIC initiated several new computer systems that could be used for resolution activity. In 2005, the FDIC updated its general ledger. The new ledger is an enterprise-wide, integrated financial system that provides accounting, reporting, and management data to support the financial management needs of the FDIC. In 2007, the FDIC implemented a new franchise marketing and asset management tool called Communication, Capability, Challenge, and Control (4C), which replaced several outdated systems. The intent of 4C was to allow the FDIC to more efficiently market financial institution franchises, manage and sell the assets of failed institutions, and easily report on these activities.[105] The FDIC also began development of a new insurance determination system called the Claims Administration System (CAS) in 2007.[106] CAS was intended to determine the insurance status of depositors if a failure occurs, "minimize the potential for FDIC losses, reduce any spillover effects that could lead to systemic risks, [and] preserve franchise value."[107] CAS was also designed to manage receivership claims after resolution. It was implemented in 2010.

During the first crisis, the FDIC's franchise marketing staff prepared confidential summaries for each potential failing bank. The summaries, called "information packages," were 40 to 50 pages long and included a summary balance sheet, asset and liability schedules, limited organizational charts, income statements, deposit data, interest yield, cost data, and fee income. Preparation of each information package required five to ten specialists working on site for three to four weeks.

The information package was typically hand-delivered to potential bidders at a confidential bidders meeting held near the headquarters of the failing bank. Potential bidders would have to travel to that location if they wanted to learn details about the institution. The limited data available in the information package and the need to commit significant bank resources to even inquire about the attractiveness of the failed bank's franchise and assets discouraged potential acquirers from participating in the review and bidding.

Beginning in 2000, improvements to technology allowed the FDIC to simplify and improve its collection and dissemination of critical failing bank data. Upon notice of a potential bank failure, FDIC staff downloaded detailed data on site and then loaded the data in a secure location at the FDIC for processing. Detailed data from the failing bank and summaries developed by FDIC staff were provided to prospective bidders and select FDIC staff through a secure web portal called a Virtual Data Room (VDR). VDRs are electronically accessed data depositories that provide qualified potential bidders that have executed a confidentiality agreement with access to financial data on the institution,

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105 2007 FDIC Annual Report.

106 Ibid.

107 2006 FDIC Annual Report. ("The FDIC is taking advantage of the hiatus in resolution activity by modernizing the way it determines the insurance status of depositors in the event of failure by streamlining its business processes and modernizing the internal systems used to facilitate a deposit insurance determination through improved use of current technology.").

legal documents, information on the due diligence process, bidding procedures, and descriptions of the resolution transactions being offered.[108] This process provided several benefits: Prospective franchise bidders could receive substantially more data about potential failed banks, the data format was easier to use, and prospective bidders did not have to travel to learn details about the bank. Costs and risks associated with the bidding process dropped. In addition, increased availability of bank data allowed the FDIC to prepare more effectively for failure.

The FDIC instituted similar improvements to its process for selling assets held in its receiverships. In 2003, the FDIC adopted an online secure sales system for these assets that expanded the available information and reduced transaction costs for interested buyers. During the second crisis, the FDIC routinely posted up-to-date information about prospective asset sales on its public website. In addition, the FDIC enhanced its publication of information on closed transactions for franchise sales and receivership asset sales.

5. Resolution Transactions and Results

In this section, we compare the resolution transactions used for each crisis, examine the speed of asset disposition and the resulting volume of assets held by the FDIC during each crisis, and review the FDIC's risk retention and loss rates.

5.1 Resolution Approaches and Asset Disposition

During the 1980 to 1994 crisis, the FDIC used several approaches to resolve failed banks.[109] In a P&A agreement without loss share (P&A without LS), the assuming institution purchases assets and assumes certain liabilities, including deposits, with little or no recourse to the FDIC. In a P&A agreement with loss share (P&A with LS), the assuming institution purchases assets and assumes certain defined liabilities (primarily deposits and secured liabilities), with some assets covered by a loss share agreement. The acquiring bank assumed all domestic deposits for P&As prior to 1992; after 1992, they sometimes assumed only the insured deposits. In an insured deposit transfer (IDT), the assuming institution purchases certain assets and assumes only the insured deposits.[110] In a payout (PO), there is no assuming institution and the insured deposits are paid directly to depositors. In a Deposit Insurance National Bank (DINB), there is likewise no assuming institution; the FDIC charters a bank to hold the insured deposits for a limited time to permit the depositors to access the deposit accounts, allowing for a less disruptive transfer of depositor funds. In both a PO

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108 FDIC *Resolution Handbook* (2014), p. 11.

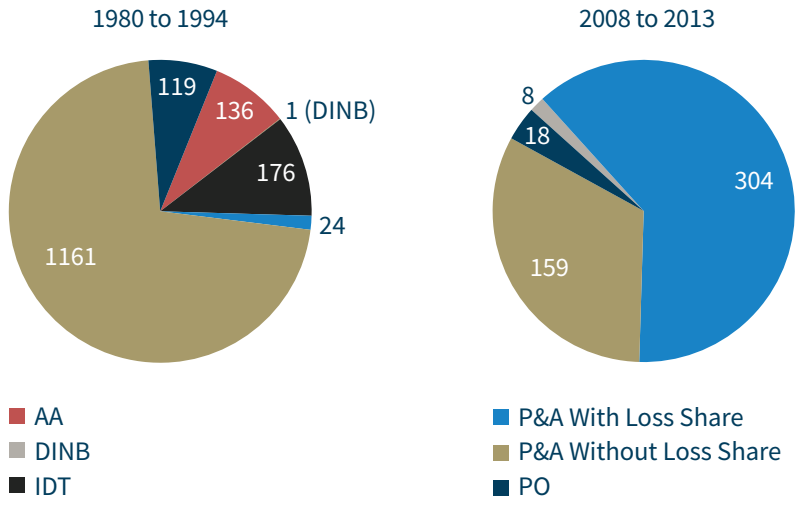
109 For more information about the resolution options used by the FDIC, see FDIC (2014) or FDIC (1998), especially chapter 3.

110 The FDIC stopped using the IDT transaction after it introduced the P&A transaction, in which only insured deposits were assumed by the acquiring bank. In addition, for P&A transactions from 1992 forward, the FDIC would sometimes pay out brokered deposits directly rather than passing them to the acquiring bank.

and a DINB, the FDIC retains all failed bank assets. Finally, in an assistance agreement (AA), the FDIC contracts to provide financial assistance to facilitate a merger of the troubled bank with a healthy bank. Unlike the other transactions, the AA is a form of open bank assistance and the troubled bank is not placed into receivership as part of the transaction. Figure 9 shows the number of each of these resolution approaches used in the two crises.

Figure 9

Number of Bank Failures



Source: FDIC.
Note: AA is Assistance Agreement, P&A is Purchase and Assumption, IDT is Insured Deposit Transfer, DINB is Deposit Insurance National Bank, and PO is Payout.

During the second crisis, the FDIC used a smaller set of resolution approaches: the P&A with LS, the P&A without LS, the PO, and the DINB. AAs and IDTs were not used. After FDICIA was passed, AAs were not permitted except under extremely limited circumstances. In 1992, the FDIC introduced a form of a P&A that passed only insured deposits to assuming institutions and abandoned the IDT transaction. The FDIC used loss share agreements much more often in the second crisis (304 receiverships, or 62 percent of non-systemic resolutions, compared with 24, or 1.5 percent, during the first crisis). There were 8 DINBs and 18 POs.

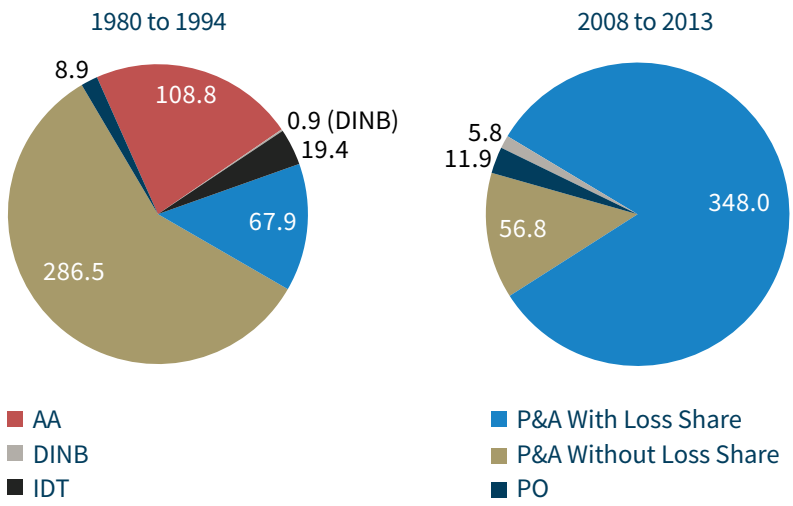
There were arguably additional "failures" of FDIC-insured institutions during the first crisis where the FDIC did not render direct financial assistance. During that crisis, the FDIC had varying degrees of authority to permit certain forms of accounting or capital forbearance that might allow troubled banks to avoid failure if their problems were deemed temporary and bank management was sound. In total, 363 FDIC-insured institutions received forbearance under these programs, and 77 (21.2 percent) subsequently failed.

The remaining 286 institutions are excluded from the failure statistics reported elsewhere in this study.[111]

Figure 10 reports the value of failed bank assets that passed through each of the resolution approaches during the two crises. During both crises, banks resolved using loss share were, on average, larger than other failed banks. In the first crisis, banks resolved using assistance agreements were also larger on average. Payouts and DINBs were mainly used for smaller institutions in both crises.

Figure 10

Failed Bank Assets (Billions of 2016 Dollars)



Source: FDIC.
Note: Data for 2008 to 2013 exclude the Washington Mutual (WaMu) failure. If WaMu had been included, assets for P&A without loss share would have increased by $345 billion. AA is Assistance Agreement, P&A is Purchase and Assumption, IDT is Insured Deposit Transfer, DINB is Deposit Insurance National Bank, and PO is Payout.

The treatment of uninsured depositors and other unprotected creditors also changed over time. From 1980 to 1987, losses were imposed at 24 percent of resolutions. From 1988 to 1991 – at the peak of the first crisis but before the least-cost test provisions of FDICIA had been implemented – this ratio dropped to 14 percent. FDICIA had a profound effect on the treatment of uninsured depositors, and from 1992 to 2007 losses were imposed on uninsured depositors at 65 percent of bank failures. In 2008, concerns about public confidence

[111] See FDIC (1998), chapter 3, RTC (1989), and FDIC (1997), chapter 6.

in deposits increased, the deposit insurance limit was increased from $100,000 to $250,000, and a temporary guarantee program for uninsured noninterest-bearing transaction accounts was introduced. As a result, losses were imposed on uninsured depositors at 28 percent of the failures in 2008 and at only 6 percent of failures from 2009 to 2013.[112]

The usage of bridge banks also differed across crises. Although the authority to use bridge banks was only first granted in 1987, the FDIC used it for 115 banks during the first crisis, primarily for resolving large banking companies.[113] In the second crisis, bridge banks were used for only three institutions, even though more of the banks were larger and failed more quickly.[114]

Changes in the FDIC's philosophy had a profound effect on the speed in which assets were sold from receiverships. Figures 11 and 12 provide information about the speed of asset liquidation over the first four years of the receiverships for the two crises.[115] The first column (Assets at Resolution) reports the total asset balance when the banks were resolved. The second column (Assets after Resolution) reports the assets that remained after the acquirer's purchase on the resolution date. Then, the balances are reported for each three-month period after the banks failed. From 1986 to 1994, the FDIC as receiver retained 61 percent of the assets held by the failed banks after resolution.[116] During the second crisis, the FDIC sought to sell as many assets as possible to the acquiring institution to keep assets in the private sector and in recognition of staffing and funding shortfalls, and only 19 percent of assets remained in receivership after resolution.

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112 After the insurance limit was raised, and especially when the Transaction Account Guarantee Program (TAGP) was in place, the amount of uninsured deposits declined. The TAGP protected all noninterest-bearing transaction accounts at participating banks, even if the balances exceeded the insurance limit. The program was enacted in October 2008 and ended in December 2010. Section 343 of Dodd-Frank provided the same additional protection to participating banks from January 2011 through December 2012. Participation in TAGP was voluntary, but most banks participated. At some failed banks, losses that would have been imposed on uninsured depositors exceeded the cost of administering the deposit insurance limit. In that situation, resolution transactions where all deposits were assumed by the acquirer would be less costly to the FDIC than transactions where only insured deposits were assumed by the acquirer.

113 In many cases, multiple institutions within a bank holding company were closed simultaneously. Bridge bank authority was used for only ten banking companies. See FDIC (1998), p. 171. In seven of the ten instances in which the FDIC used this authority, the failure involved institutions with assets of more than $1 billion.

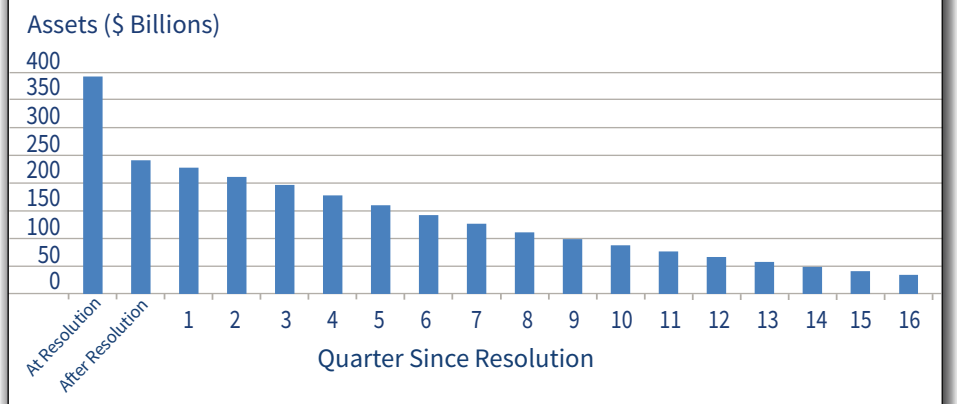
114 See FDIC (2017), pp. 196-197.

115 Figure 11 excludes failures from 1980 to 1985 (because the data are not available), and assistance agreements are omitted (because these were not receiverships). Figure 12 excludes WaMu and failures after year-end 2012. If WaMu had been included, the asset sales speed for the second crisis would have been faster.

116 The acquirers purchased 39 percent of the assets. Data prior to 1986 are not available.

Figure 11

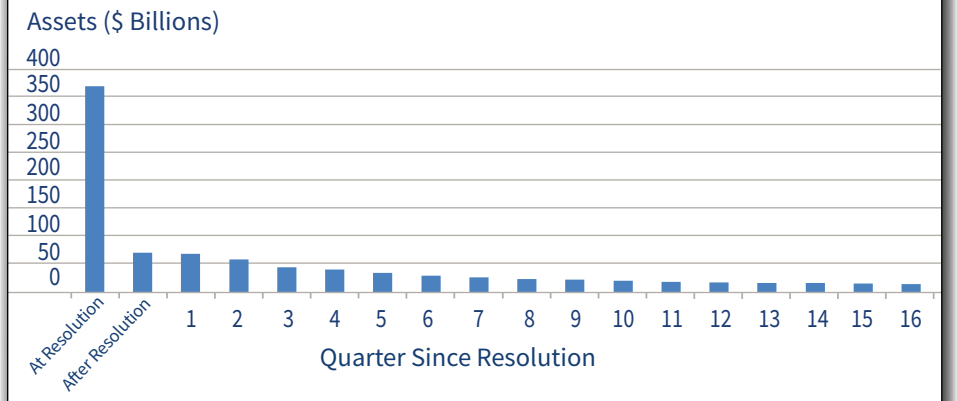
Outstanding Asset Balance Over Life of Receivership (1986 to 1994)



Source: FDIC.

Figure 12

Outstanding Asset Balance Over Life of Receivership (2008 to 2012)



Source: FDIC.
Note: Excludes Washington Mutual.

In addition to passing a greater portion of failed bank assets to the assuming institutions, the FDIC disposed of retained assets much more quickly during the second crisis than during the first crisis. From 1986 to 1994, the FDIC held approximately 9 percent of failed bank assets 16 quarters following bank failure. At the same point during the second crisis, the FDIC held only 3.7 percent of failed bank assets.

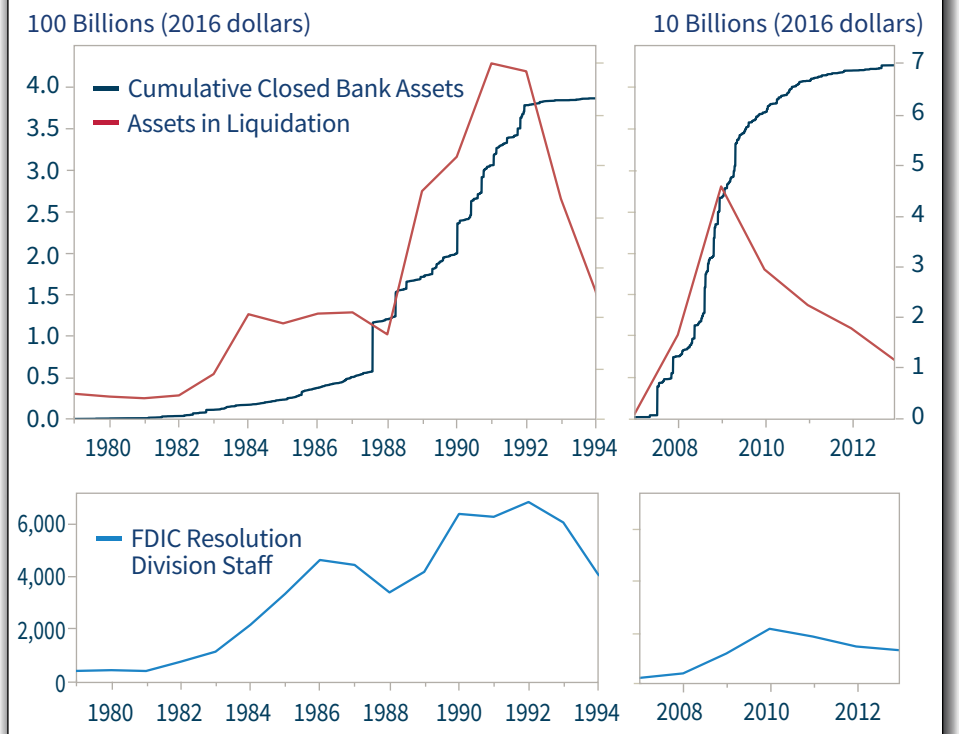
The effects of the philosophical shift are also revealed by comparing cumulative assets of banks that were closed, receivership assets, and FDIC resolution division staff levels during each crisis (Figure 13).

In the first crisis, receivership assets available for sale peaked in 1991 at $69.6 billion (in 2016 dollars), or 18 percent of assets placed into receivership during the crisis period. In the second crisis, receivership assets available for sale peaked in 2009 at $46 billion, or 10.8 percent of total assets placed into receivership (excluding WaMu). Staff levels were

much higher in the first crisis: resolution division staff peaked at 6,757 in 1992, dropped to a low of 219 in 2007, and then reached a maximum of 2,110 during the second crisis.

Figure 13

Cumulative Closed Bank Assets, Receivership Assets Available for Sale, and FDIC Resolution Division Staff



Source: FDIC.
Note: Open bank resolutions are omitted, since the bank's assets are not placed in receivership. Washington Mutual (WaMu) is excluded. At WaMu, almost all assets were passed to the acquirer at resolution. Therefore, if WaMu had been included, cumulative closed bank assets would have increased by more than $300 billion from 2008 forward, and assets available for sale would not have changed much.

5.2 Risk Sharing and Securitized Asset Resolution

Loss share agreements, securitizations, and structured transactions all involve the retention, or sharing, by the FDIC of the risk of loss related to assets sold.[117] With a guarantee from the FDIC in its corporate capacity, asset purchasers under loss share agreements have the right to recover certain defined and covered shortfalls in the expected return on covered assets. Such recovery comes not from the limited (and declining) assets of the individual receiverships that held the assets before the sale

[117] Other types of risk sharing exist. Examples include stock warrants (or other ownership-sharing devices), seller financing, representations and warranties, and putbacks. The FDIC has made only limited use of these methods. For example, only narrowly defined representations and warranties were provided to buyers. For more information about these three methods, see FDIC (1998), chapters 7, 16, and 17, and FDIC (2017), chapter 6.

or other transaction, but from the DIF. In other transactions, the FDIC also transferred assets but retained risk exposure, and sometimes rights of recovery, based on the future value of the assets.

The FDIC first used loss sharing on September 19, 1991. With the sale of the assets of the failed Southeast Bank, Miami, Florida, to First Union National Bank, the FDIC agreed to reimburse the assuming institution for 85 percent of the loss on certain assets, primarily commercial loans. During the first crisis, the FDIC entered into 16 loss sharing agreements to resolve 24 banks. The loss share banks were, on average, relatively large: while loss share was used on only 1.5 percent of the banks that failed during that period, failed banks with loss share agreements held 14 percent of total failed bank assets. The FDIC found that its cost of resolution as a percentage of assets for failing banks holding $500 million or more in assets with loss share was 7.8 percent, compared with 12.2 percent for similarly sized banks closed without loss share. For failed banks with less than $500 million in assets, the difference in cost of resolution to assets was greater: 6.1 percent with loss share versus 17.1 percent without loss share. The FDIC made loss share payments of slightly more than $1 billion, approximately 74.3 percent of the amount it had originally forecast.[118]

The FDIC used loss share much more frequently in bank resolutions during the second crisis. Loss share agreements covering single-family loans, commercial loans, or both were part of 304 bank failures. Approximately 215 billion in failed bank assets was passed to 152 assuming institutions[119] and covered by loss share agreements. As of December 31, 2018, the FDIC had paid $29.1 billion in claims (net of recoveries) to assuming institutions, with remaining net loss share payments estimated to be $566 million.

During the first crisis, the RTC conducted 72 securitizations to dispose of $42 billion in assets, but the FDIC engaged in only two securitization transactions.[120] During the second crisis, the FDIC conducted seven loan securitizations, including performing residential and commercial transactions and nonperforming residential loan securitizations. To increase marketability, the FDIC in its corporate capacity guaranteed the senior bond classes of the performing loan securitizations. Under this asset disposition strategy, certain retained loans ($3 billion in all) from one or more failed banks were pooled and then sold into a trust structure, followed by the issuance of securities with varying characteristics of risk and return. Those assets with similar characteristics and payment histories would be combined into either performing or nonperforming securitizations. In addition to the loan securitizations, the FDIC re-securitized eight mortgage-backed securities, with $6.3 billion in interests held by failed banks in earlier mortgage-backed securities transactions repackaged and sold.

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118 FDIC (1998), pp. 193-209.

119 Many acquirers purchased multiple failed banks.

120 See FDIC (1998), chapter 16.

As with securitizations, the RTC created many more private-public partnerships than did the FDIC to sell troubled assets during the first crisis. The RTC sold $21.4 billion in troubled assets through 72 structured transactions, but the FDIC created only two LLCs to sell $3.7 billion in troubled failed bank assets.[121]

From 2008 to 2013, the FDIC used 35 LLCs to sell $26.2 billion in failed bank assets. For 23 of the transactions, the LLC issued a note, guaranteed by the FDIC in its corporate capacity and payable to the FDIC, to cover a portion of the value of the assets transferred. Recoveries on the contributed assets went to pay expenses and repay the notes held by the FDIC, with no equity distribution until the note was paid. Three notes were sold to third parties, providing an immediate recovery to the FDIC. All of the FDIC notes have been paid in full.

Table 5 summarizes the risk-sharing programs for the two crises.

Table 5

Summary of Asset Sales with Risk Sharing

(Dollars in Billions)

	1980 to 1994 Crisis		2008 to 2013 Crisis		
	Amount	% Total	Amount	% Total	% Total excl WaMu
Loss Share					
Number of Banks	24	1.5	304	62.2	62.3
Assets with Loss Share Coverage	$18.5	6.2	$214.9	31.6	56.4
Total Assets	$41.4	13.9	$314.0	46.2	82.4
Loan Securitizations					
Number of Deals	2		8		
Assets Sold	$1.5	0.5	$3.0	0.4	0.8
Resecuritizations of MBS					
Number of Resecuritizations	0		8		
Assets Sold	$0	0.0	$6.3	0.9	1.7
Joint Ventures (LLCs)					
Number of Deals	2		35		
Assets Sold	$3.7	1.2	$26.2	3.8	6.9
Total Assets Sold with Risk Sharing	$23.7	8.0	$250.0	36.8	65.7

Source: FDIC.

Note: The 1980 to 1994 crisis excludes activity from the Resolution Trust Corporation (RTC). The RTC relied heavily on securitizations and joint ventures for loan sales; it sold $42 billion in loans through 72 loan securitization deals and $21.4 billion in troubled assets in 72 joint ventures. "Total Assets Sold" in the 2008 to 2013 crisis includes an adjustment for a situation in which a loan was sold, repurchased, and resold again. The sale and resale of loans to Franklin Venture are both included in "Assets Sold" under the Securitizations and LLC sections of this table, but the resale has been excluded from the total amount of assets sold. WaMu is Washington Mutual, MBS is mortgage-backed securities, and LLC is Limited Liability Corporation.

121 See FDIC (1998), chapter 17.

The FDIC relied much more heavily on risk-sharing programs in the second crisis, especially loss share and structured transactions using LLCs. Loss share coverage was provided on 32 percent of failed bank assets during the second crisis but only 6 percent during the first crisis.[122] Likewise, LLC usage increased from 1.2 percent during the first crisis to 3.8 percent during the second crisis.[123] Risk-sharing sales methods were used four times as often during the second crisis (37 percent versus 8 percent); excluding WaMu, usage of risk-sharing sales methods increased eight-fold (66 percent versus 8 percent).

5.3 Comparison of Loss Rates

A comprehensive analysis of the overall loss rate on failed banks between the crises presents difficulties.[124] Many more bank failures occurred in the first crisis than in the second crisis. The first crisis was much longer than the second crisis. Significant legislative changes altered the FDIC's resolution toolbox and restrictions as well as its supervisory practices. The FDIC changed its resolution philosophy repeatedly over this time period. The first crisis passed through regional phases, while the second crisis was national in scope amid a broader and deeper recession. Table 6 presents loss rates for the two crises.

Table 6

Loss Rates for Each Crisis*

	Program Wide **	Mean	Median
1980 to 1994 Crisis			
Assistance Agreements	8.3%	7.9%	3.3%
P&A With Loss Share	5.5%	8.7%	7.5%
P&A Without Loss Share	14.4%	21.2%	19.8%
IDT	28.0%	26.7%	26.1%
Payout/DINB	26.2%	25.1%	25.2%
Total	12.7%	20.8%	19.5%
2008 to 2013 Crisis			
P&A With Loss Share	17.8%	22.0%	21.3%
P&A Without Loss Share	3.2%	28.2%	26.5%
Payout/DINB	27.1%	32.7%	34.5%
Total	10.4%	24.6%	23.6%
Total Excluding Washington Mutual	18.8%	24.6%	23.6%

* Losses are calculated as the FDIC loss estimate as of year-end 2018 divided by total assets as of the quarter prior to resolution.

** Mean losses, weighted by assets as of the quarter prior to resolution.

Source: FDIC.

Note: P&A is Purchase and Assumption, IDT is Insured Deposit Transfer, and DINB is Deposit Insurance National Bank.

122 If WaMu is excluded, the FDIC's usage of loss share for the second crisis increases to 56 percent.

123 If WaMu is excluded, the FDIC's usage of structured sales/LLC for the second crisis increases to 6.9 percent.

124 Throughout this section, the loss rate is calculated as the FDIC's costs of resolution divided by total assets.

With these differences noted, the overall loss rates for the crises were remarkably similar: 12.7 percent for all bank failures during the first crisis and 10.4 percent for the second crisis. However, if WaMu is excluded, then the second crisis had a significantly higher loss rate (18.8 percent). The loss rate on assets covered by loss share is noteworthy: for the limited number of banks where loss share was used during the first crisis, the loss rate was 5.5 percent, while the loss rate on a much larger share of failures during the second crisis was 17.8 percent.

The overall loss rate on assets passing through a P&A without loss share during the second crisis was only 3.2 percent, compared with 14.4 percent for the first crisis. However, if WaMu is excluded from the second crisis, the loss rate for the second crisis period jumps to 22.3 percent. It is noteworthy that the loss rate (excluding WaMu) was higher in the second crisis than in the first, even though most of the P&A without loss share transactions occurred as the second crisis waned, when the markets were less fragile and had a greater appetite for failed bank assets and fewer concerns about the real value of those assets.

The loss rates for bank assets passing through POs and DINBs were similar for both crises. Because almost all banks resolved using POs and DINBs lack franchise value or interested bidders, it is not surprising that their loss rates usually exceeded those of other resolution strategies. Many of these institutions were small (and lack the benefits of economies of scale) and in economically depressed areas.

6. Conclusion

This study has compared certain aspects of the 1980 to 1994 crisis with the 2008 to 2013 crisis, and discussed key differences in the characteristics of the banks that the FDIC resolved and the FDIC's response in meeting its obligations. There were substantive differences in numerous areas. These differences between the crises were shaped by forces and trends in banking and finance, changes in the statutory environment and the associated tools available to the FDIC, the FDIC's viewpoints about its resolution strategy options, and the FDIC's operational capacity. The comparison reveals that crises can vary markedly, and that the availability of a wide variety of resolution tools – combined with the operational capacity to wield those tools given evolving circumstances – benefited the FDIC. It also demonstrates how resolution philosophies have a strong influence on results. Finally, it shows that the banking industry continues to evolve, and that the FDIC's decisions about any future resolution strategies are also likely to evolve as the agency adapts to changes in its environment and circumstances.

References

Bair, Sheila. 2007. "Remarks at the Exchequer Club," Washington, D.C., March 21, 2007. https://www.fdic.gov/news/speeches/archives/2007/chairman/spmar2107.html.

Bennett, Rosalind L., Mark D. Vaughan, and Timothy J. Yeager. 2005. "Should the FDIC Worry about the FHLB? The Impact of Federal Home Loan Bank Advances on the Bank Insurance Fund." FDIC Center for Financial Research Working Papers, 2005-10. https://www.fdic.gov/bank/analytical/cfr/2005/wp2005/2005-10.pdf.

Bovenzi, John F. 2015. *Inside the FDIC Thirty Years of Bank Failures, Bailouts, and Regulatory Battles*. Wiley.

Clarke, George R.G., Robert Cull, and Mary Shirley. 2003. "Empirical Studies of Bank Privatization: An Overview," Working Paper. https://pdfs.semanticscholar.org/2003/d60dc47be4194808439cecd2505e6e4175ba.pdf.

Cole, Rebel A., and Lawrence J. White. 2012. "Déjà Vu All Over Again: The Causes of U.S. Commercial Bank Failures This Time Around," *Journal of Financial Services Research* 42: 5-29. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1644983.

Cooke, J.B., Christoffer Koch, and Anthony Murphy. 2015. "Liquidity Mismatch Helps Predict Bank Failure and Distress," *Federal Reserve of Dallas Economic Letter* 10, no. 6 (May). https://www.dallasfed.org/~/media/documents/research/eclett/2015/el1506.pdf.

Davison, Lee. 2020. "Two Crises, A Comparison," FDIC Staff Studies number 2020-02. https://www.fdic.gov/bank/analytical/cfr/staff-studies/2020-02.pdf.

Diamond, Douglas W., and Raghuram G. Rajan. 2002. "Liquidity Shortages and the Banking Crisis," (Working Paper 8937, National Bureau of Economic Research, May 2002). https://www.nber.org/papers/w10071.pdf.

FDIC. 1977. "Study of Purchase and Assumption Transactions." Unpublished manuscript by the Office of Corporate Planning.

———. Annual Reports (1980, 1992, 1997, 1999, 2004, 2005, 2006, 2007, 2009). https://www.fdic.gov/about/financial-reports/report/.

———. 1984. FDIC: *The First Fifty Years*. https://www.fdic.gov/bank/historical/firstfifty/.

———. 1986. "FDIC Statement of Policy and Criteria on Assistance to Operating Insured Banks."

———. 1995. "Final Report on the FDIC/RTC Transition," submitted to the Committee on Banking and Financial Services, U.S. House of Representatives, December 29, 1995.

———. 1997. *History of the Eighties–Lessons for the Future, Volume 1: An Examination of the Banking Crisis of the 1980s and Early 1990s*. https://www.fdic.gov/bank/historical/history/vol1.html.

——— . 1998. *Managing the Crisis: The FDIC and RTC Experience 1980-1994*. https://www.fdic.gov/bank/historical/managing/.

——— . 2007. *Quarterly Banking Profile. Fourth quarter*.

———.2014. *Resolutions Handbook*. https://www.fdic.gov/bank/historical/reshandbook/resolutions_handbook.pdf.

——— . 2017. *Crisis and Response: An FDIC History, 2008–2013*. https://www.fdic.gov/bank/historical/crisis/.

Financial Crisis Inquiry Commission. 2010. The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States. Washington, DC. http://purl.fdlp.gov/GPO/gpo50165.

Fuchs, Jim, and Timothy A. Bosch. 2009. "In-Depth: Why Are Banks Failing?" *Federal Reserve Bank of St. Louis Central Banker* 19, no. 3 (Fall): 4–5. https://www.stlouisfed.org/publications/central-banker/fall-2009/why-are-banks-failing.

GAO. 2013. "Financial Institutions: Causes and Consequences of Recent Bank Failures," GAO – 13-71 (January 3, 2013). http://www.gao.gov/products/GAO-13-71.

Johnson, Christian A., and Tara Rice. 2007. "Assessing a Decade of Interstate Bank Branching," Federal Reserve Bank of Chicago Working Paper 2007-03. https://www.chicagofed.org/publications/working-papers/2007/wp-03.

Jones, Kenneth D., and Tim Critchfield. 2005. "Consolidation in the U.S. Banking Industry: Is the 'Long, Strange Trip' About to End?" FDIC *Banking Review* 17 (4): 31-61. https://www.fdic.gov/bank/analytical/banking/br17n4full.pdf.

Kowalik, Michal, Troy Davig, Charles S. Morris, and Kristen Regehr. 2015. "Bank Consolidation and Merger Activity Following the Crisis," *Federal Reserve Bank of Kansas City Economic Review* 2015 (Q1): 31-49. https://www.kansascityfed.org/publicat/econrev/pdf/15q1Kowalik-Davig-Morris-regehr.pdf.

Marino, James A., and Rosalind Bennett. 1999. "The Consequences of National Depositor Preference," *FDIC Banking Review* 12 (2): 19-38. https://www.fdic.gov/bank/analytical/banking/9910.pdf.

Marino, James A., and Lynn Shibut. 2006. "Resolution Strategies for Large U.S. Commercial Banks." Unpublished manuscript presented at the Bank of England. https://www.fdic.gov/bank/analytical/cfr/bios/shibut-marino-wp.pdf.

McDill, Kathleen, and Andrea Maechler. 2003. Do Uninsured Depositors Vote with Their Feet? In *Market Discipline in Banking: Theory and Evidence*, edited by George G. Kaufman, 211-48. Elsevier Science, Ltd.

McIntyre, Lloyd E. III, and Peter A. Martino. 2008. "The Changing Liquidity Landscape," *FDIC Supervisory Insights* 5 (2). https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin08/liquidity_landscape.html.

OCC. 1988. Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks. https://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-other-bank-failure.pdf.

O'Keefe, John P. 1993. "Risk-Based Capital Standards for Commercial Banks: Improved Capital-Adequacy Standards?" *FDIC Banking Review* 6 (1): 1-15. https://www.fdic.gov/bank/analytical/banking/br1993vol6no1full.pdf.

Park, Sangkyun, and Stavros Peristiani. 1998. "Market Discipline by Thrift Depositors," *Journal of Money, Credit, and Banking* 30, no. 3 (August): 347-64. https://www.jstor.org/stable/2601105?seq=1#metadata_info_tab_contents.

Resolution Trust Corporation. 1989. "Open Bank Assistance." Unpublished manuscript.

——— . 1995. *Statistical Abstract*.

Seidman, L. William. 1993. *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas*. Beard Books.

Shirley, Mary, and Patrick Walsh. 2000. "Public Versus Private Ownership: The Current State of the Debate," World Bank Policy Research Working Paper 2420. http://documents.worldbank.org/curated/en/952171468766218935/Public-versus-private-ownership-the-current- state-of-the-debate.

Shleifer, Andrei, and Robert Vishny. 2011. "Fire Sales in Finance and Macroeconomics" *Journal of Economic Perspectives* 25, no. 1 (Winter): 29-48. https://scholar.harvard.edu/files/shleifer/files/fire_sales_jep_final.pdf

Strahan, Philip E. 2012. "Liquidity Risk and Credit in the Financial Crisis," *Federal Reserve Bank of San Francisco Economic Letter*, no. 15 (May 14). http://www.frbsf.org/economic-research/publications/economic-letter/2012/may/liquidity-risk-credit-financial-crisis/.

Discussion

Elena Carletti

Thank you for the invitation and good afternoon to everyone. Let me start with echoing the previous speakers in congratulating the Bank of Italy for the very timely and greatly important conference. I have been listening to the entire event and have found it extremely inspiring.

When thinking about what to say, I was expecting, that most of the things would have already been said by this time of the day. So, I thought of raising just a few points. I would like to start by describing a little bit again the US regime and asking the question: to which extent can we really export this model? Here I will share partly the conclusion of Nicolas in the sense that we can't just have gradual changes. We need to think of the framework in its entirety because taking pieces of the US regime cannot work in the current EU framework.

I would then like to make two additional points that have been less discussed so far. First, I would like to stress that it's not important only to look at resolution and therefore at what happens after a bank becomes failing or likely to fail. It's also important to consider what happens before that moment. Second, I would like to raise the question of why we start from the end point, given that there is a sort of mutual influence between the structure of the banking system and the resolution framework. In other words, shouldn't we rather start asking the question "what is the optimal structure of the banking sector we would like to have in Europe?" and then adapt the resolution framework accordingly.

Let me start with going back briefly to the US institutional architecture, which has been discussed very nicely already by Nicola and Lynn. As we have heard, there is just one institution, the framework is centralized and integrated. The FDIC is not only the insurer and the receiver in resolution, but, importantly, it is also the insurer and the prudential supervisor in normal times. And this is important for what happens before the initiation of insolvency. It has many tools at its disposal. As we heard by Lynn, it has liquidation which is basically a pay off. It has P&A, with or without loss sharing, and bridge bank.

And importantly, and this is in my view, one of the main differences with the resolution framework in the EU, it has the flexibility to adapt across time, as we have seen in the presentation by Lynn, but also in the cross section in the sense of differentiating between large and small or mid-sized banks. There is no MREL but clear creditor rules, there is no hardwired framework, but there are haircuts sometimes to uninsured depositors and even on senior debt, as Nicolas said.

And then the FDIC not only relies upon the Deposit Insurance fund resources, but it can also anticipate funds based on expected recovery in particular because it is also the receiver and therefore can also evaluate recovery much better. The overall objective, of course, is common to all of these frameworks, at least in theory, that is minimizing public costs and moral hazard, while maintaining the predictability and credibility of deposit protection. And an important change and milestone in the evolution of the FDIC regime has been achieved in 1991 with the introduction of the least costly method with however the systemic risk exception, which is how flexibility plays a role.

The European framework is very different. We have as default option the national insolvency proceedings; there are different institutional frameworks for small and large banks. It is a fragmented approach with national governments and no clear check and balances. There is the DG Competition with the state aid framework that acts as a check and balance, but it's different from the FDIC regime from an accountability perspective. And then there is the use of the mutual support arrangements such as the deposit guarantee schemes before liquidation. All in all, it is a much more hardwired framework and, as Nicolas also said, this hinders the predictability of the regime and its operational credibility. This is an important point of reflection, because ultimately this is what we need to achieve: predictability and credibility. So, all in all, is the US model an exportable model? We should evaluate it in its entirety and not in single pieces.

Starting from the need of evaluating the framework in its entirety, what are the key issues we should focus on in future modifications of the EU regime? First of all, the need for larger powers and functions. The FDIC is not only the deposit insurer, it is much more than that, it has also the prudential function, which is important for assessing the franchise value when disposing the assets of the failed bank in a P&A transaction. Second, we should reflect on the need to hardwire so much. As we have learnt from Lynn, crises are clearly very different, different banks experience problems in the different crises, and the operational capacity of the authorities can also differ across time. Thus, while hardwiring principles and procedures has some advantages, in particular within the European framework given the plethora of authorities involved in the different countries, it also entails inflexibility. Finally, we should reflect on whether there is a need for a different regime for large and small and medium-sized banks. Ultimately, what is important is that there is no arbitrage between the procedure for either type of banks, in particular concerning the losses on creditors and moral hazard incentives.

Overall, I think there may be the need for more centralization for example through and hub and spokes architecture, more tools and functions, greater flexibility, and no arbitrage

possibilities (as the ones currently between BRRD bail-in rules and burden sharing). At the same time, it would be important to also have more centralized funding for all banks, not only for the large banks for which there are the SRF and backstop, but also for the smaller ones, to create level playing field and a unitary regime for all banks. To conclude, the important takeway is that looking at single pieces of the FDIC regime is not the right approach because there are too many differences between the US and the EU regime.

Let me now turn briefly to the other two points I would like to raise. The first one concerns the use of mutual support arrangements such as deposit guarantee schemes (DGSs), which Francisco also talked about. These schemes are increasingly used as a funding tool in going concern because they are considered as the least cost solution for precautionary recapitalization. My question is: to which extent these are fair and effective tools? I understand Emiliano's argument that the value lost in liquidation is always going to be larger than what is lost if the bank is still operating in going concern. Withstanding this point, I believe that if we want to use mutual support arrangements as a tool for precautionary recapitalization then we should design them differently. I echo Francisco's concern that the way DGSs are used now has the potential to increase the moral hazard of the small and medium-sized banks, not only towards public finances but also towards the rest of the system. Indeed, some (larger) banks contribute to the deposit guarantee scheme but have very few chances to use it. We should avoid putting excessive burden on the other banks, in particular the larger banks that have already to pay the Single Resolution Fund in addition to the Deposit Guarantee Fund and they are often called to replenish the latter when it is depleted.

So is there room for improvement? Yes, I think we should enhance actions before liquidation, not just in resolution or in liquidation. And this echoes what Andrea Enria said this morning both for banks and supervisors, which means enhancing recovery planning, but also the early intervention powers. For example, we did not talk about the PCA of the FDIC, which I think is an incredible instrument if used properly. Further, as suggested by Francisco, we should also differentiate more the insurance premia across different types of banks.

Finally, let me turn to my last point. The discussion that we're having today tends to take the structure of the banking sector as given and exogenous: there are large, medium and small banks. We know that there is an overbanking problem in Europe but we are not addressing the issue of what banking structure we should have. Clearly, the crisis management regime affects the structure. For example, if you impose MREL on the small and medium banks, they may be induced to consolidate and there is the TBTF problem that Emiliano mentioned earlier. On the other hand, the structure affects the crisis management regime. So rather than trying to fix the problem of resolution or liquidation or crisis management in general, I would try a reverse engineering exercise and start with asking what is the optimal structure that we want to have in the European banking sector? Also taking account of other factors, such as low interest rate and low market evaluations. Answering this question should be the first priority. The crisis management framework should follow.

Thank you.

Round Table

moderated by Alessandra Perrazzelli

Claudia M. Buch

Q. There seems to be a broad consensus about the need to harmonize EU rules applicable to banks that currently do not undergo the resolution procedure under the BRRD. Do you share this view? Is there anything that we can learn in relation to this from the FSB evaluation of the TBTF reforms?

A. Yes, thank you very much, Alessandra, and everybody who helped to organize this conference. I think these are very relevant topics right now. We are dealing with the effects of the COVID-19 pandemic, and we are trying to understand its impact on the financial system. One important issue is the possibility of an adverse scenario in which the effects of the virus on the real economy turn out to be more severe than expected and in which the financial system is affected to a greater degree.

On top of that, there is the issue of structural change in the financial system. We need to understand what is happening, what tools we have available if an adverse scenario materializes, and whether we have to deal with distress in the banking sector.

I'm looking at the issues we are addressing at this conference through the lens of the FSB's evaluation of the too-big-to-fail reforms. You might be thinking: well, that's the FSB; it's in charge of the G-SIBs, so how does that make it relevant to Europe and the smaller banks? I actually think it's very important. The evaluation of the too-big-to-fail reforms has given us some very interesting insights, and I think there are lot of lessons that we can learn for Europe. I would like to walk you through those lessons very briefly.

Basically, this evaluation shows what we have achieved in terms of resolution reforms and highlights what still needs to be done. One challenge in this evaluation has been how to evaluate the effects of resolution reforms if few resolutions are actually taking place. Still, one can indirectly assess the effects of resolution reforms by looking at what the banks are doing and how they are behaving in response to the reforms. You can look at market pricing.

And I would suggest that a question we should discuss at this table is whether we could do more in Europe, whether we could evaluate the effects of resolution reforms on European banks in a similar way so as to better understand how the system is working.

Now, as I said, this FSB evaluation also looked at the D-SIBs or the O-SIIs at the European level, so there's also something we can learn about the smaller banks, the medium-sized banks, and the domestic systemically important banks. What we found, very broadly, in terms of what has been achieved, is that indicators of systemic risk and moral hazard are moving in the right direction. So it's not that this evaluation is saying that we have completely eliminated moral hazard, thus solving the issue of systemic risk once and for all. But we do find that banks are better capitalized and have greater loss-absorbing capacity, which is good news.

Comparing TLAC and MREL, my reading of the evidence is that – broadly speaking – the globally systemically important banks already meet the TLAC requirements.

Turning to market impact, we see that markets are indeed reacting to the implementation of the resolution reforms. We see that estimates of implicit funding subsidies are declining to a greater extent in countries that have implemented the resolution regimes more comprehensively. That's also good news.

Overall, the evaluation shows that too-big-to-fail reforms bring net benefits to society. I should say that the work on the broader effects of the reforms has been co-chaired very successfully by Banca d'Italia.

So, what remains to be done? There are actually three big takeaways from this evaluation. One is that obstacles to resolution remain, and the Financial Stability Board continues to work on closing these gaps.

In Europe, we also have to make sure not only that the reforms are fully implemented but that the new frameworks are applied consistently. I think there's a strong case for having the instruments that we have for the larger banks in principle available also for smaller banks and to harmonize instruments that can be used for liquidation.

The second finding is that transparency can be further enhanced and information gaps can be closed. This is about improving our statistical systems in a way that provides all the relevant stakeholders with relevant information. But there is also a broader lesson: we need to communicate and make clear what resolution is about and why new institutional frameworks were needed.

The European system is complex – highly complex. Of course, this complexity reflects to some extent the different institutional frameworks that Europe has, but we certainly need to do more in order to reduce complexity where it is not needed.

There are also other issues at play, such as obtaining reliable information about TLAC and MREL. We should deepen improve information systems on who the holders of TLAC and MREL are, especially in the cross-border context, and what this means for a potential bail-in.

The third finding of the TBTF evaluation is that the surveillance of risks can be enhanced. The too-big-to-fail evaluation of the FSB also considered the effects of the reforms on domestically systemically important banks. However, we found it very difficult to obtain consistent information on reforms affecting these D-SIBs.

One important lesson for Europe is clearly that we have to address the political economy of bank resolution. We have often observed that, even if authorities announced ex ante that they will not bail out banks, it can be difficult to avoid bail-outs ex post. Frameworks for bank resolution support the political process in dealing with this time inconsistency problem by providing authorities with more tools to deal with failing banks and ensuring

that there is more loss-absorbing capacity within the system. But it is also important for public authorities to commit in advance to actually using the resolution framework.

Perhaps just one final point. Sometimes, the discussion about resolution in Europe focuses on the difficulties we are encountering and where the system is not working. Instead, I would say that we have a new system, that we are learning how the system works and how to improve it – but we should not argue that the system as a whole is not working.

Q. *Is there anything in the previous discussion that you want to expand upon? Any specific point that you would like to go into in further detail?*

A. One of the issues I would like to come back to is the discussion about why we have seen cases in which State support has continued. Clearly, the new systems are still in transition. Loss-absorbing capacity has had to be built up; new institutions need some time before they can become fully operational. There might have been legacy cases. This could be one of the reasons why we have seen individual cases of State support, which is certainly not ideal. But those cases should not be held against the idea of resolution reforms. The new institutional frameworks are necessary to reduce State support for failing banks. Instead, we should learn from those cases, see where the new system can be improved, and consider how to enhance its credibility.

I'd also like to make two additional points about MREL. A common argument is that issuing MREL is unrealistic for small and medium-sized banks owing to their business models. We should note here that the *very* small banks are not that much of a concern. In Germany, the number of banks has fallen quite dramatically over the past decades, and mergers between smaller banks have been an important driver of this trend. Also, liquidations of very small banks are easier than for larger banks. So there are different ways of leaving the market other than through resolution and restructuring.

Now, for the "middle class" of banks, we should not rule out the option that the markets for MREL liabilities and the business models of these banks develop over time. So we should weigh up the feasibility of MREL against the status quo, but we should bear in mind that markets can develop dynamically. The Capital Markets Union might play an important role in this context. It may support a market for these instruments to develop over time.

We need to discuss the economics of distress for these banks. If there is a sufficiently high probability of default and loss given default, and if we cannot put these banks into insolvency, we need to find a way to pick up the losses. This is what this discussion is about. The Capital Market Union can contribute to developing markets for loss-absorbing capital by promoting integrated markets for debt and equity instruments.

Let me also mention another critical feature of MREL. For TLAC, which applies to globally systemically important banks, banks need to deduct TLAC holdings from their own Tier 2 capital. This limits the risk of contagion within the banking sector, should a bail in

be necessary. However, this deductibility is not generally required for MREL. In Germany, for example, a substantial volume of MREL instruments (except CET1) issued by German banks is held within the German banking sector (44% as at end-2018). I think that there's a clear issue here in the European legislation that we should address by expanding the MREL deduction regime.

So, my overall message is this: we do have new resolution frameworks and tools available for authorities to use in case a bank is distressed. This is good news and an improvement compared to the situation prior to the global financial crisis. But while we are using the new frameworks, we are also learning how to improve them, and we should work towards closing the gaps that have been identified.

Alessandro Rivera

Q. Do you share the view that a crisis management framework specifically tailored to small-medium sized banks is still a missing piece in the banking union architecture? How urgent do you think it is to fill this gap?

A. Thanks Alessandra. A crisis management framework specifically tailored for small-medium sized banks is certainly an urgent and needed improvement for the completion of the banking union. It is our first priority in this debate, along with a fully-fledged EDIS that provides full loss coverage for all deposits and the improvement of cross-border integration. The BRRD framework clearly shows signs that it needs to be revised. Within the last four years, in all the banking crises that involved small and mid-sized banks, we have all looked for solutions outside the default one provided in the BRRD, i.e. resolution. This has been done by the national authorities, but in the end also the EU authorities themselves agreed on the need to use some flexibility in order to avoid negative effects on financial stability.

There is clearly an issue of process, as we indicated from the very beginning of the BRRD negotiations. Let us first equip banks with bail-inable liabilities and loss-absorbing capacity and then move on to implement the rest. Therefore, the sequence was not right. Moreover, this is not the only aspect that does not work. The public interest test is particularly stringent, as the threshold that we have set is high. Furthermore, even if we reviewed the public interest test and made the framework more flexible and open to smaller banks too, other issues would still remain. The central one is that the business model of small and medium banks is not appropriate for being managed under the BRRD resolution framework. Smaller banks are unfit to issue on the market subordinated bonds and so to build-up of the necessary loss absorbency capacity. They are generally unrated and unknown to institutional investors. Data show that around 70% of significant banks under the direct supervision of the ECB are not listed, 60% have never issued convertible instruments, and 25% have not even issued subordinated debt.

Those banks are too small for large institutional investors to look at them. Fixed costs for the due diligence are too high and, in case they are able to tap the market and have access to niche investors, the latter require very high yields and invest in liquid instruments. Therefore, even if some of these banks could find solutions, many of them would in any case be excluded from that market. Moreover, the percentages I mentioned before of course rise sharply if we look at non-significant institutions. Hence, applying bail-in to this kind of banks would be problematic due to its impact on deposits and financial stability.

Therefore, we need to think about a harmonised framework for the liquidation of this kind of banks that do not have access to funding market. An idea could be to work on alternative interventions performed by the Deposit Guarantee Scheme (DGS). Consequently, a number of issues have to be addressed: one is how to deal with the least cost assessment. We need to take on board also the indirect costs and look at the super-priority because it is

something that does not really bring added depositor-protection, this is already ensured by the deposit guarantee scheme. The super-preference benefits the DGS itself and the banks that finance it.

Q. You mentioned a number of issues that can be part of a broader debate on the completion of the Banking Union. Do you want to expand a little bit more on the topic that you mentioned earlier?

A. A point that has been made is that we should be careful about the interaction of new crisis management models and the existing toolkit. On the one hand, I very much share that we should avoid duplications; on the other, I also agree that we should avoid creating divides by designing an uneven playing field and making a framework more convenient than the other. My point, however, is that the current framework is already quite divided. First, applicable thresholds already create a playing field that is not level at all. Take the public interest test, nobody knows exactly where it stands, and that's a relevant threshold that defines the crisis management strategy for a bank, it has an impact on the cost of risk and on the cost of each single transaction. Secondly, if we are asking banks to equip themselves with loss absorbing capacity and some of them cannot do it, we, as regulators, are introducing another divide and making the playing field uneven. I agree that we have to pay attention not to create distortive incentives, but the point is that we probably already have many divides, and our regulatory framework treats unfairly banks that are below certain thresholds or have no access to certain markets.

In conclusion, I would say that we need to complete the toolkit to help us dealing with some remaining legacy situations and at the same time move towards a fully mutualised EDIS and support market-driven consolidation processes between banks. It is central that these three things go together.

John Berrigan

Q. How do you assess the BRRD six years after its entry into force in connection with the crisis management of small and mid-sized banks? What are the priorities in the Commission legislative agenda on this specific front?

A. The BRRD was a necessary response to the global financial crisis. It was necessary to preserve financial stability, to manage the so-call doom-loop between sovereigns and banks and so to protect the taxpayers from incurring the costs of bank failures. So, it is a need to have, not a nice to have.

I agree that it may be controversial to speak about the BRRD as not working, but the fact is that the BRRD framework has not been used very much in managing bank failures over the past six years. That is partly due to transitional issues following the crisis, with legacy losses accumulated around the banking system and MREL not fully in place. So, the framework has not been in its steady state. And that combination of accumulated legacy losses and inadequate MREL has made it very difficult to operationalize the framework. So, while I agree with Claudia that there have been major improvements over the last six years, and we are approaching the steady state, we are not there yet.

That being said, I think that there is also evidence of more structural shortcomings in the EU crisis management framework, which are linked to what I would call the "applicability" of the framework. The framework allows us to manage the financial stability risks linked to the failure of large banks – we used to bail them out, now we bail them in. Similarly, the framework allows us to manage the failure of very small banks, we can put those banks into judicial insolvency and not worry too much about related financial stability risks. Uncertainty is still surrounding what we call the medium-sized banks, as these may not be easily handled under current arrangements for resolution or liquidation. They cannot go into judicial insolvency because of their size. And, they do not fit well into current arrangements for resolution either because their size or their business model, or even their location, can make it difficult for them to accumulate sufficient bail-inable liabilities; so for these banks bail-in could apply to senior liabilities, even to depositors. The question we are facing in the Commission is how to address this category of banks within the resolution or insolvency.

One view is that banks that cannot be managed safely in death probably should not exist in the first place. This is a very straightforward view but would run counter to the principle of diversity that has inspired EU banking policy over the last 30-40 years. Another view is that we have to reform the EU crisis management framework to address the problem. We have two main approaches here. The first is to extend resolution to all banks, the second is to create an administrative insolvency regime at national level, which would be substantially harmonised across Member States and be available in parallel to resolution. Such administrative insolvency regimes already exist in some Member States, in Italy for example, but actually the majority of

Members States do not have such regimes. On the basis of these two options, we have found broad consensus among Member States and the European Parliament to reform the crisis management framework – even if there is less consensus between the two options for reform. So far, in the Commission we have mainly been engaged in intensive technical work. Based on this work, we will soon launch a public consultation lasting 12 weeks. Then we will finalise an impact assessment and possibly bring forward a legislative proposal – by the end of this year – to revise the crisis management framework.

We are still looking at the options for reform. We think that any reform must make the crisis management framework more predictable. The resolution toolbox should be used more extensively. However, a more extensive use of the resolution toolbox immediately raises a number of issues. It raises the issues that Alessandro mentioned relating to the public interest assessment, but it also raises issues relating to external funding, e.g. how do you access external funding and how do you balance the need for proportionality in terms of access to external funding and level playing field between the bigger and the smaller banks. Therefore, we have to assess whether the existing funding architecture is fit for purpose.

On the idea of creating additional crisis management tools for medium-sized banks, we should look at both options – the option of extending resolution and the option of harmonizing administrative insolvency arrangements. But, with regard to harmonizing administrative insolvency arrangements, I would make just three points:

1 it is very important to avoid duplication between these administrative insolvency arrangements and the resolution arrangements, whereby you may use the same tools of resolution but on easier terms. This could in fact lead authorities to avoid using the resolution tools altogether. The key question is how to achieve equivalence – they cannot be exactly the same – between resolution and administrative arrangements.

2 When you create tools in insolvency you may have legal problems: as I have said, not all insolvency laws around Europe have provisions for administrative arrangements and from the experience that I have harmonization of insolvency law across the EU would not qualify as "a low hanging fruit".

3 My third point is that DGSs are an important factor, and we cannot forget that in the past these national sources of funding often proved inadequate and needed to be backstopped by the State. If we get back into a world where you were trying to use the DGS funding when the DGS is inadequate, and then you have to use the State funding, we would just re-nationalise the whole process of resolution and that would further fragment the banking union.

We have many complex issues to address and potentially important policy choices coming down the lines, initially for the Commission but then for the Member States and European Parliament. Unfortunately, the complexity and sensitivity of these choices can be a powerful incentive to do nothing. But, we must avoid such inaction bias because the cost of doing nothing could be very high. So, the Commission will proceed as we are, we will

gather information, conduct a public consultation, finalise an impact assessment, most likely prepare a proposal and put it on the table in the last quarter of this year. Thanks Alessandra.

Q. Is there any point that you want to develop further? I have another question for you. Due to the pandemic, a gradual return to economic normality may well take all of 2022; a "new normality" may emerge, with opportunities for some, but also with permanent destruction of value added for others. In this environment, bank crises could be more likely than in the recent past. They could also more likely degenerate into systemic instability, if managed via disorderly liquidations, with losses imposed on depositors. In the light of this risk, shouldn't a temporary "quick fix" be devised for avoiding any instability that may arise?

A. I would like to come back to the first point raised by Claudia, on MREL, whether or not we can look at it dynamically over time, with the development of Capital Market Union that can make it possible for a wider universe of banks to access MREL. This is a very good point; however, it is not only the issue of whether the banks can access the market for MREL, it is whether they can sustain the level of MREL that is required to access the resolution fund, the 8% minimum subordination requirement. Therefore, it is not just the issue of access but also the issue of whether the business model of some banks allows them to support those levels of MREL.

I also agree with Claudia that probably the most important effect of the resolution framework is not how it manages the banks in death but how it affects the behavior of banks in life, and particularly how this affects the behavior of the investors in banks. We have created incentives for proper oversight on banks by investors, so we should focus much more on the living effects of resolution rather than the effects in death.

I also agree that we have found it very difficult to find any real effect in terms of managing moral hazard but I think this has much to do with the current interest rate environment. A recent presentation by the ECB indicated that 70% of all bond issuances are now yielding less than 1%. In this environment, we are not going to see quite a lot of moral hazard because people are seeking yield and I imagine people investing in convertible bonds are not thinking too much about the conditions of the conversion.

Coming to some principles that should guide the reform, I think that within the reform we have to preserve financial stability and to preserve taxpayer protection, so burden sharing must be appropriate. We must also preserve a level playing field and we must have proportionality, two principles which can be challenging to reconcile. We need to have a continuum of outcomes, so no gaps in the framework. At the same time, we have to create incentives to use crisis management tools most suited to the banks concerned. Such a reform is theoretically doable but not easy, so perfection may not be achievable. But, we should strive for having something that works and works better than now.

On your question on the quick fix, I think that there is a clear distinction between the structural reforms that we are talking about today, and how what we may need to address

the more immediate impact of the Covid crisis. Everybody knows the average time it takes to pass legislation in the European Union is between two and three years. This is going to be a particularly challenging reform, so I do not imagine we will do better than that. I do not think that this reform would be in place in time to meet any problems arising from Covid, so we will need to manage those problems within the existing crisis management framework. I think that if we are intelligent and if we look at the rules we can do that, but we need to be intelligent. And most importantly we have to be able to differentiate between banks that were not viable before Covid from banks that were viable before Covid but have been made unviable by Covid: that's not going to be easy.

Fernando Restoy

Q. A couple of years ago you warned that the EU framework might have a problem with "middle-class" banks. Do you think that this is a general issue or a EU-specific problem? How do you think Europe could overcome this situation?

A. Many thanks Alessandra and many thanks to friends and colleagues at the Bank of Italy for inviting me to this conference and congratulations for putting together an excellent agenda to discuss a very topical issue right now.

Indeed, we have been talking about the middle class banks over the last few years, trying to figure out what kind of modifications to envisage for the European bank failure management framework in order to address this issue. I think, as Nicolas Veron was saying before, at the very least there seems to be broad agreement in terms of the diagnosis. Just listening to a number of presentations today, and in particular the welcome remarks by Governor Visco and the keynote speech by Chairpersons Andrea Enria, there is already quite a broad consensus on the assessment that the European crisis management framework does not provide sensible mechanisms to deal with the failure of mid-sized institutions. Of course, the devil is in the details about solutions, discussions are plenty of technical, political complexities and we are not even close to the end of the story, but at least we agree on the issues we have to look at. That consensus constitutes a necessary condition to develop sensible reform proposals that could help address the issues at stake. So, this is my first remark.

Now, what we mean by middle class banks? By the term *middle class* we all now refer to those banks that are considered to be too large too complex to be liquidated according to regular insolvency procedures but at the same time too small and too traditional, as Elke König was emphasizing before, to satisfy stringent loss-absorption requirements in gone-concern situations, as required for the swift functioning of the new resolution framework.

Coming to your question, this is not a specificity of the European Union. This category of banks exists in all jurisdictions. In a number of countries they may represent a substantial, sometimes a predominant, part of the banking sector. But the existence of a middle class everywhere does not necessarily imply that the severity of the problem these banks create for effective crisis management is the same in all jurisdictions. I pretty much believe that the middle class problem is particularly large in the European Union due to the singularity of the crisis management framework in our jurisdiction.

That severity is a function of the nature of the crisis management framework. That would depend on the ability by the regular insolvency procedures to swiftly deal with the failure of different types of banks and, in particular, on the availability – under insolvency or resolution – of effective tools (beyond piecemeal liquidation or open bank bail-in) to manage those failures.

As we have been pointing out over the last few years, the European framework has several singularities that makes the middle class problem particularly severe.

First, in most European countries the national insolvency procedures are not only quite diverse as has been noted before, but most importantly they are quite inefficient. They are not bank-specific regimes but the application of corporate insolvency legislation. They are often court-based rather than administrative, and judicial authorities have limited powers, tools and resources to deal swiftly with failing banks. That makes the destabilising potential of liquidation procedures particularly great, thereby reducing the number of banks that could be safely subject to those procedures. So this is the first singularity.

Second, the possibility of using external support for orderly bank failure management is significantly constrained by law, even for orderly banks exit. For external funding I mean any sort of funds that are not already in the bank's balance sheet.

- We know that the provision of effective public support is severely constrained by the Bank Recovery and Resolution directive and State aid rules under both resolution and insolvency. Importantly, and somewhat paradoxically, conditions for public support are more rigid under resolution than under liquidation.
- The support of the Single Resolution Fund (SRF) is capped and made conditional on several conditions and particularly on the satisfaction of stringent minimum bail-in obligations.
- The support of the deposit guarantee scheme (DGS) for crisis management (other than paying out covered deposits) is extremely constrained by a very restrictive financial cap associated with the super-preference of covered deposits that was discussed before.

And third, partly as a consequence of the two points above, the set of banks that are asked to satisfy resolvability requirements (including a stringent MREL obligation) is particularly large. This includes a number of banks whose business models may not be compatible with issuing large amounts of bail-in-able liabilities.

Those singularities can of course be justified one by one on the basis of relevant policy (sometimes political) considerations. But the truth is that the combination of those singularities makes the middle class problem particularly severe.

Therefore, this is an important issue that we should address. Indeed, without doing nothing we can come out with a restructure of the industry which is induced by regulation in a socially undesirable way. This is why we have recently put forwards some ideas on how to reform the crisis management framework in Europe that were presented by Ruth Walters early this morning.

In a nutshell, an important improvement would be to facilitate the use of the sale-of-business tool (or P&A in US terminology), under both resolution and insolvency,

as it is probably the most effective instrument to deal with the crisis of small or medium-sized institutions.

Based on the experience of other jurisdictions (notably the US), that entails: i) the existence of an administrative authority able to prepare and operate transfer transactions in a timely manner. ii) very importantly, ensuring there are sufficient external funds to finance those transfer transactions in cases where there is a shortfall of assets to back transferred liabilities (money is key!). iii) in the EU framework, that could only be achieved by softening restrictions for the use of SRF (in particular the 8% minimum bail-in condition) or, at least, for the use of the DGS funds. iv) provided the 8% rule may not be easy to remove, is essential to make the least cost condition for the use DGS funds less restrictive by removing the super-preference of covered deposits in a liquidation scenario.

Naturally, for those new arrangements to be consistent with the purpose and principles of the banking union we need to consider in due course both further centralisation of decision-making procedures for all types of banks (in the Single Resolution Board (SRB)) and sufficient mutualisation of the funds used to support sale of business transactions. That implies not only the creation of the European deposit insurance scheme (EDIS) but also empowering the EDIS to play an active support role for crisis management under the authority of the SRB.

Q. *Is there anything that you want to pick from the discussion that we had, from the interventions of the other participants?*

A. Let me just say a few words on the extent to which the FDIC model constitutes the reference for a possible reform of the European crisis management framework. There now seems to be a broad agreement that the US approach to dealing with failing banks constitutes a very helpful reference. The interesting presentation of the FDIC experience during this conference and the keynote speech of Art Murton provide very useful insights on the issue.

As I argued before, the adoption, following the US example, of a bank-specific insolvency regime managed by an administrative authority endowed with tools and powers to prepare and execute purchase and assumption (P&A) transactions with the effective support of the DGS must be seriously considered within the EU.

Yet it would be imprudent to simply cut and paste the US framework into EU legislation. There are several features in the US regime that could not – or should not – be directly imported. Let me give two examples.

First, the public interest test. I do believe that the Public Interest Assessment (PIA) constitutes a useful element of the current EU framework which is not fully in line with the US approach.

The US regime is composed of two different mechanisms: Title II of the Dodd-Frank Act, which can be considered a resolution regime perfectly in line with the FSB's Key Attributes, and the Federal Deposit Insurance Act, which can be considered an administrative and bank-specific insolvency regime. Powers, instruments and funding mechanisms differ across those two regimes, although the FDIC manages all bank failures. While resolution actions do not require an explicit public interest assessment, Title II of Dodd-Frank can only be applied to institutions considered "large and systemic". That arguably constitutes a sort of indirect, implicit, public interest criterion. However, it leads to a relatively narrow definition of public interest that leaves outside Title II a number of institutions whose failure would most likely meet the public interest criteria in the EU.

We need to bear in mind that resolution actions may entail a sort of expropriation of contractual rights. That is the case when resolution authorities convert debt into equity before insolvency, when they impose a differentiated treatment of liabilities which are *pari passu* in the insolvency hierarchy, or when they impose a stay in early termination rights for derivative contracts. In order to do that in a legally safe way you have to make some sort of assessment that you are making this in a public interest. An explicit PIA may therefore help mitigate risks of potentially complex disturbing litigation in the middle of resolution processes.

That said, the goal should be to ensure that there are effective (albeit possibly different) mechanisms to deal with crises of all types of institutions regardless of whether or not they meet the public interest test.

Second, minimum requirements for own funds and eligible liabilities (MREL). At present, almost all significant banks in the EU must satisfy stringent MREL requirements. In the case of the US, only truly systemic banks must satisfy comparable obligations.

We have been arguing that the current MREL requirements may challenge the viability of mid-sized institutions with a traditional business model. That could eventually affect the structure of the industry in a socially undesirable way.

We have also argued that by improving the crisis management framework, essentially by making transfer transactions more feasible and effective, MREL requirements could be adjusted downwards for a number of significant institutions.

It would be a mistake to think that any reform of the bank EU crisis management framework should aim at removing any MREL requirement above regulatory capital for these small and mid-sized institutions. We know that the feasibility of transfer transactions depends very much on the availability of sufficient assets that could be transferred to acquiring banks as a compensation for taking over failing banks' deposits. Even if the financial cap for the DGS is adjusted as we propose (by removing the super-preference of covered deposits), that restriction may be particularly tight for failing banks holding large volumes of uncovered deposits. Yet, reasonably calibrated MREL requirements should remain a feature of the EU framework.

It therefore seems sensible to continue requiring all banks holding significant amounts of non-covered deposits to also keep sensible amounts of subordinated liabilities. Those liabilities could be left behind in the liquidating entity in order to facilitate the transfer of a sufficiently large volume of assets to the acquirer.

Therefore, the reform effort should aim at moderating MREL requirements for mid-sized institutions, but those requirements should remain a feature of the European framework.

Final remarks

Alessandra Perrazzelli

During this workshop, we have had the chance to promote a fruitful dialogue on the European crisis management for bank failures. We have had three sessions full of insights and interesting ideas, which I am sure will inform the next policy debate. I am grateful to the presenters, discussants and panellists for their contributions.

One message that seems to emerge from the workshop is that, despite the significant efforts made to establish an integrated mechanism to address bank failures, there is still much to do to improve the current European crisis management framework. There is a broad consensus that a greater degree of harmonization is necessary on fundamental issues, such as the treatment of creditors, the applicable procedural framework and the role of industry funds (the SRF and the national DGSs) in order to enhance the level playing field in the EU single market and reduce fragmentation along national lines.

The crucial point is how to achieve such a greater degree of harmonization. While each of us would inevitably have different views on this subject, today's workshop has shown that we can all agree on at least two principles. First, piecemeal liquidation is an inefficient and value-destroying outcome that any forthcoming harmonized regime should strive to avoid. Second, most small and medium-sized banks are not able to tap capital markets to build enough loss absorption and recapitalization capacity to sustain the application of the BRRD resolution toolkit; any forthcoming harmonized regime should therefore take into account this limit of the existing framework.

Against this backdrop, there is particular merit in enhancing the current EU crisis management framework in order to properly manage the failure of small to medium-sized banks whose business model is based on simple deposit funding and that do not pass the public interest test.

In our opinion, an orderly European liquidation regime for small and medium-sized banks is the best available option to avoid an inefficient outcome and spillover effects on the whole banking sector.

For these banks, a transfer of assets and liabilities to another viable party with external funding support where necessary – a 'purchase and assumption' technique, to use the American expression – would be a suitable option to consider in a crisis. Indeed, this model has been successfully applied by the FDIC to thousands of banking failures for almost a century. This approach has also been successfully applied in Italy when measures alternative to depositor payout proved to be more efficient for the DGS and minimized costs to the economy.

This does not mean that applying this approach would be without difficulties. In particular, it may be hard to define ex ante – in the legal framework – the most appropriate perimeter of assets and liabilities to be transferred. On the asset side, the greater the scope of the transfer, the smaller the need for the authority to engage in value-destroying liquidation of the remaining assets of the entity under liquidation and thus the smaller the losses for creditors. On the liability side, limiting the transfer to deposits alone could have unintended consequences in some national markets, lowering the franchise value of the viable part of the failing bank and then reducing the attractiveness to suitable purchasers. On the other hand, we should take into account that the transfer of a wide range of liabilities in many cases might reduce market discipline in certain circumstances, e.g. when the funding structure of banks includes sophisticated creditors.

As highlighted by some participants in the workshop, the harmonization of key aspects of the bank insolvency regime, with flexible external funding, could be an option to widen the current toolkit available to address the failure of banks that do not undergo resolution. Such harmonization may not be easy, especially considering that some countries do not have a special insolvency regime for banks but rely on ordinary corporate insolvency proceedings. Nevertheless, we think that the very special nature of banks and the need to develop an effective crisis management framework for all banks in the EU could help overcome the obstacles to greater convergence.

Another approach would instead apply the existing resolution framework to smaller banks too by expanding the scope of the public interest test. Against this backdrop, the Single Resolution Board is working on a possible extension of its Public Interest Assessment methodology by operationalizing its policy, thus not excluding the possibility of adopting current resolution tools for small and medium deposit-funded banks. Given this context, several Member States have already started to earmark some LSIs for resolution in line with the current criteria of public interest.

Although welcome, this approach leaves unresolved the above-mentioned difficulty for these banks to access wholesale market for MREL-eligible instruments. A solution to this puzzle would therefore need further work. In the transition to a fully-fledged EDIS, more flexibility in the use of national DGS could be considered, e.g. by adopting a more flexible approach for the least cost criteria and, at the same time, by adding a reasonable lower calibration of MREL requirement in order to support transfer strategies for viable businesses. In addition, there could be room for policies aimed at fostering issuance of MREL-eligible instruments by small and medium banks; one option that could be explored is the use of

alternative investment funds specializing in liabilities issued by EU banks, thereby exploiting cross-country diversification.

Whatever the solution chosen, efficient crisis management implies stable and certain funding arrangements for all banks that can be either internal (the bank's liabilities, in particular, its MREL) or external (industry funds, such as the DGS or the SRF, or, as a last resort, public resources). The ultimate challenge is to find the right balance between reducing moral hazard and ensuring adequate financing to resolve crises in order to protect creditors' interests, taxpayers, public confidence and, ultimately, financial stability. In this regard, the constraints in the EU regulatory framework that currently limit the DGS's ability to intervene to support a transfer strategy and the use of the SRF should be reconsidered. The rationale behind a more flexible use of DGS funding, in particular for liquidation, would respond to the aim of involving the industry in resolving crises instead of relying only on creditors' resources, especially when these creditors are small firms and households with limited or no ability to monitor and impose market discipline on banks.

Finally, the policy debate on the architecture of crisis management cannot overlook the completion of the Banking Union through the implementation of a fully-fledged EDIS that offers liquidity support and loss coverage, including the possibility for the future European Deposit Insurance Fund to intervene in order to sustain a transfer of the assets and liabilities of a failed bank through alternative measures. The SRB has also expressly recognized the benefits of the DGS alternative measures regulated by Article 11(6) of the DGS Directive. Centralizing the decision-making process at European level – as originally proposed by the European Commission – only seems reasonable under a fully mutualized EDIS.

The policy debate on crisis management for banks highlights that none of the approaches are able to combine all the interests at stake and the different peculiarities of the national banking markets in a comprehensive manner. As a consequence, there is a need to find the right balance between these different approaches; for instance, a combination of different tools and sources of funding might be worth exploring for mid-sized banks. In this perspective, the regulatory options should provide authorities with the flexibility to pursue the most appropriate strategy to resolve the crisis, considering the specificities of bank failures and the need to meet the proportionality principle while at the same time strengthening the safety net.

It is time to close the workshop. I would like to thank again the speakers, the discussants and all the participants for their important contributions.

Call for papers

The future of the European crisis management framework for banks. How can we deal with the crisis of small and medium-sized banks?

A Bank of Italy workshop

Rome, 15 January 2021

The Bank of Italy is organizing a workshop on "The future of the European crisis management framework for banks – how can we deal with the crisis of small and medium-sized banks?". The event will take place on 15 January 2021 at the Bank of Italy in Rome, or in an online format.

Within the EU's legal framework, the resolution procedure can only be used when public interest is at stake. Based on the interpretation of the concept given thus far, it appears that resolution is actually available to deal with the crisis of a small number of large banks (in the euro area, probably fewer than 100 out of a total of about 3,000); all other banks' crises must be handled through national insolvency proceedings.

National insolvency regimes normally result in a piecemeal liquidation, which gives no guarantees that exit from the market will take place in an orderly fashion. Indeed, if interested acquirers cannot be rapidly identified, liquidation will lead to the immediate disruption of the bank's core activities, to the disposal of assets and collateral at fire sale prices, and to non-insured creditors having a lengthy wait to obtain partial and uncertain reimbursement. Confidence in other banks may be shaken, with possible knock-on effects on the real economy. A disorderly piecemeal liquidation process is clearly not efficient and entails serious concerns, given the social and economic importance of the banking industry.

The establishment of a common deposit guarantee scheme (DGS) for the Banking Union would not fix the problem. While it would increase the overall level of confidence in the banking system, it would not *per se* avoid piecemeal liquidation since the existing EU framework tilts the choice of the DGS towards depositor reimbursement instead of alternative interventions. A solution has thus to be found to avoid disorderly piecemeal liquidations for banks, as has been recognized by many authorities and commentators.

The workshop aims to bring together researchers and practitioners, as well as policymakers, to discuss areas for improvement in the European framework for managing the crises of small and medium-sized banks.

The organisers are inviting submissions of policy-oriented papers on the challenges and the way forward for the EU's bank crisis management framework. Submissions from resolution and supervisory authorities are especially encouraged. Suggested topics are:

– Effective crisis management frameworks for non-systemic banks.

– The role of the DGS within the crisis management framework.

– Harmonisation of national insolvency laws.

– The approach of the Federal Deposit Insurance Corporation (FDIC) to manage banking crisis.

– Minimum Requirement for Own Funds and Eligible Liabilities (MREL)/loss-absorbing capacity for small and medium-sized banks.

– The Single Resolution Board (SRB) and the EU's DGS in the steady state and during the transition.

Interested parties should submit their papers and any queries to crisismanagement-workshop@bancaditalia.it at the Bank of Italy.

The submission deadline is 15 October 2020.

Contributors will be notified in early November 2020.