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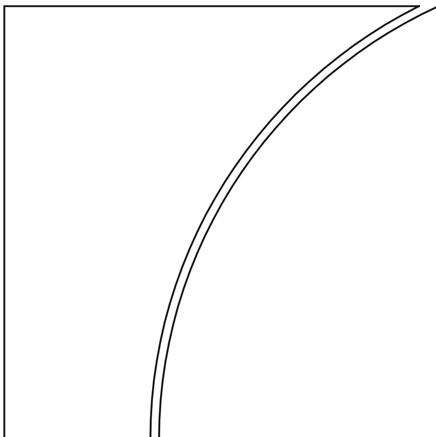

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Bank failure management in the European banking union: What's wrong and how to fix it

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

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 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.

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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".[2] 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".

"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.[3] 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

[2] 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).

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

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 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.[4] 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."[5]

[4] Article 32(5) BRRD.

[5] Recital 45 BRRD.

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

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.[6] 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.[7] 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.[8] 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

[6] SRB (2017a).

[7] 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).

[8] See SRB (2019).

of one or more Member States.[9] However, national authorities have applied different criteria when assessing whether resolution is in the public 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*,[10] including bail-in, sale of business and bridge banks.[11] 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.[12] The BRRD envisages several potential sources of funding to support resolution.[13] 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.

[9] 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 [….]".

[10] 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)).

[11] 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.

[12] 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)).

[13] 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.

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.[14]

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.[15] 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.[16] 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.[17] 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 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.

[14] 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.

[15] Article 44(5)(b) BRRD.

[16] Article 44(5)(a) BRRD.

[17] Article 109 BRRD.

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.[18]

National insolvency regimes

The "normal" insolvency frameworks that apply to banks vary considerably across EU Member States.[19] 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.[20] 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.

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.[21] 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.[22] 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

[18] 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.

[19] 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.

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

[21] 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)).

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

(supervisors, courts, liquidators, creditors' committees); and substantive creditor rights (eg set-off and netting, recognition of non-financial collateral arrangements).[23] 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,[24] 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.[25] Table 2 takes a closer look at insolvency grounds and other features of national frameworks.

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.

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

[24] Article 48(7) BRRD.

[25] 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.

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.

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
	- Access condition	None	None	None
	- Amount capped	Yes**	Yes**	Yes***
Resolution funds	Other funding for SoB	Yes (RF)	Yes (RF)	No
	- Access condition	Minimum writedown****	Minimum writedown****	n/a
	- 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.

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.[26] 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 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.[27]

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

[27] 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

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 ordinary insolvency proceedings".[28] 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.[29] 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.[30]

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.

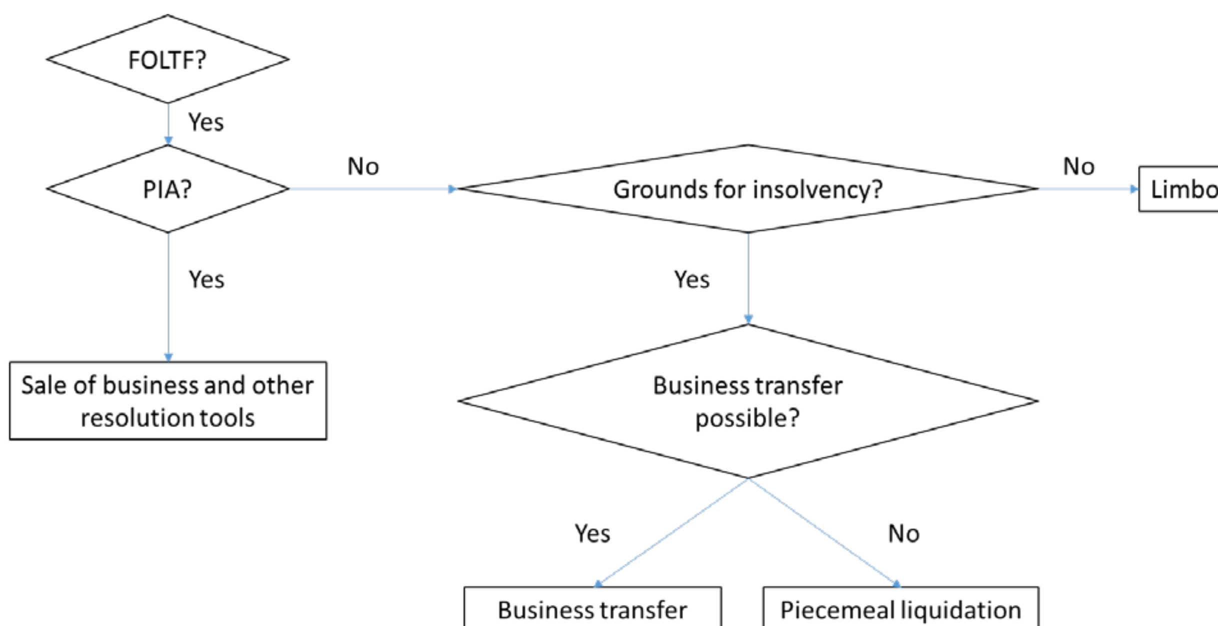
Kingdom – have practical experience of using the DGS to fund alternative measures, and the report notes that those cases generally involved small institutions and the sums involved were low.

[28] 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.

[29] 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).

[30] 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.[31]

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.[32]

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

[32] 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.

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.[33] 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.[34] 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 will therefore need to be recapitalised, and the "recapitalisation component" of MREL might be reduced proportionately.[35] 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".[36] 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.[37]

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

[33] 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.

[34] 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.

[35] 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.

[36] See paragraphs 25–27 of the SRB statement of its MREL policy for the second wave of resolution plans, 16 January 2019.

[37] 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."

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 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).[38]

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).

[38] 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.[39] 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.[40]

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".[41] 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".[42]

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 of the NCWO safeguard in resolution.[43] 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.

[39] Garicano (2020) develops this point forcefully.

[40] 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.

[41] Article 32b BRRD, inserted by Directive (EU) 2019/879.

[42] 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).

[43] This point is also made by König (2019a).

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.[44] 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.[45]

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 have introduced that type of flexibility in their own transposition of DGSD.[46] 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

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

[45] 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.

[46] 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).

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 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

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.[47] 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 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.[48] That could be achieved by adding two further features to those under the basic reform.[49]

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.[50]

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

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

[49] 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).

[50] 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.

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 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.[51] 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.[52]

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.

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

[51] 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.

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

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.[53] 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 – 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.

[53] 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.

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