



Working paper **on resolution**

**Enhancing the credibility of the
EU bail-in design: the example of
the treatment of discretionary
exclusions**

Riad Benahmed

JULY 2023

Enhancing the credibility of the EU bail-in design: the example of the treatment of discretionary exclusions

ABSTRACT

Bail-in is key to ensuring burden sharing and addressing moral hazard in bank resolutions. However, bail-in implementation – the bail-in mechanics – may pose significant economic and operational challenges. This paper¹ aims to assess the relevance of discretionary exclusions – i.e. decisions by resolution authorities, at the time of resolution, to exclude from bail-in some liabilities that are legally bail-inable – for the credibility of the EU bail-in design, both in resolution planning and execution. It presents discretionary exclusions as a legal flexibility to minimise operational and economic risks of bail-in execution.

The first part shows that discretionary exclusions in the EU are a consequence of the legal nature of the EU open bank bail-in and the prevalence of the OpCo structure in its banking landscape – in contrast to the US economic “closed-bank bail-in” for HoldCos of G-SIBs. We highlight that discretionary exclusions, as resolution authorities’ prerogative, serve to ensure the credibility of bail-in execution, either as part of an open bank bail-in strategy or as a source of financing for transfer strategies.

The second part focuses on the operational and economic challenges to the bail-in of three types of liabilities – derivatives, structured notes and non-covered deposits – to illustrate the potential need for discretionary exclusions. This technical analysis is based on a survey of the six largest French banking groups, following a workshop with the industry in March 2023.

In the third part, we assess the overall capacity of resolution authorities to make discretionary exclusions. We highlight the resolution authorities’ trade-off between, on the one hand, excluding liabilities to ensure a smooth bail-in execution, and, on the other hand, the need to mitigate the risks of a lack of resolution funding and NCWO breach. We argue that the quality of the bail-inable capacity is more important than its quantity, underlining the need to focus efforts on fully operationalising the bail-in of subordinated debts and senior vanilla liabilities of banks with an ample bail-inable capacity.

¹ Paper prepared by Riad Benahmed, Resolution Expert at ACPR, with advice by Ben Konare deputy head of Resolution Department at ACPR. *This paper benefited from comments by Jean-Baptiste Feller, Mah Cherif, Florent Cheung-Chin-Tun, Jeremy Fraisse and Elodie Bataille.*

Accordingly, we put forward a proportionate and pragmatic approach to determine the relevant bail-in operational scope in resolution planning.

Introduction

According to the Financial Stability Board (FSB) *Key Attributes of Effective Resolution Regimes for Financial Institutions* (FSB, 2011, *Key Attributes* thereafter), when resolution authorities (RAs) implement bail-in, they should write down shareholders and creditors in a manner that respects the hierarchy of claims in liquidation.

At the same time, the *FSB Key Attributes* also provides flexibility to depart from the general principle that creditors within a class of liabilities can be written down only if creditors immediately junior to them have been fully written down first – with transparency about the reasons for such departures. In the European Union (EU) resolution framework, this flexibility is illustrated by the liabilities that are legally “bail-inable” but whose bail-in may create more difficulties than benefits in specific cases: liabilities that can be excluded from bail-in at the time of resolution by RAs under article 44(3) of the Bank Recovery and Resolution Directive (BRRD, OJEU, 2014b). This possibility for a tailored bail-in scope reflects the diversity of EU banks’ liability and legal structures.

More than ten years after the adoption of the FSB Key Attributes, RAs continue to carefully prepare for and operationalise bail-in, as evidenced by the FSB Bail-in Execution Practices Paper (FSB, 2021) and the European Banking Authority (EBA) guidelines on bail-in mechanics (EBA, 2023). This includes preparing for potential discretionary exclusions.

On the one hand, RAs should assess whether the application of the bail-in tool to various types of liabilities, including complex – e.g. structured notes or derivatives – or sensitive liabilities – e.g. deposits –, under high time pressure, could put at risk the credibility of bail-in implementation. On the other hand, RAs should always ensure that sufficient funding capacity remains available for the execution of the resolution strategy and that the No Creditor Worse Off (NCWO) safeguard is respected.

This paper emphasises this trade-off faced by RAs in the exercise of discretionary exclusions and its implications for resolution planning. It illustrates this with the case of the six largest French banking groups.²

² BNP Paribas, Groupe BPCE, Groupe Crédit Agricole, Groupe Crédit Mutuel, La Banque Postale and Société générale.

However, bail-in in the EU resolution design is more than a resolution tool and strategy for large banks: it is a necessary condition to access industry-funded safety nets (resolution funds). As such, the topic of discretionary exclusions also concerns banks whose resolution strategy relies secondarily on bail-in, as a source of financing for transfer tools.

The paper is organised as follows.

The first section considers discretionary exclusions in the EU bail-in design, as a necessary tool to resolve in a credible way Operating Company (OpCo) banks which hold very various types of liabilities – including liabilities whose bail-in may be challenging.

The second section illustrates these challenges by focusing on three types of liabilities – derivatives, structured notes and uncovered deposits.

The third section assesses the overall capacity of RAs to make discretionary exclusions and the trade-offs they face. It argues that the credibility of bail-in implementation lies less in the quantity of bail-in than in the quality of the operationalisation of a significant subset of the bail-inable capacity, putting forth a proportionate approach to the determination of the operational scope of bail-in in resolution planning.

1 Can all liabilities be bailed-in in all cases? Discretionary exclusions in the EU bail-in design

In this section, we highlight that the discretionary exclusions topic mainly arises in the context of performing an open-bank bail-in at the level of an OpCo under high time pressure, by comparing the “administrative” open-bank bail-in in the EU to the “economic” closed-bank bail-in in the US. We present discretionary exclusions as RAs’ prerogative to fine-tune, at the time of resolution, the scope of the bail-in tool given the challenges to the bail-in of certain liabilities, thereby ensuring the credibility of its implementation.

1.1 Bail-in principles: the EU bail-in design from a comparative perspective

1.1.1 *Bail-in approaches: closed-bank vs open-bank bail-in/economic vs administrative bail-in*

Bail-in is applied at the level of the resolution entity.³ Bail-in may provide resources to two types of entities and, accordingly, there are two distinct approaches to bail-in: (i) recapitalisation of the failing entity, which emerges from resolution with long-term viability being restored and its legal existence maintained (“open-bank bail-in”); (ii) capitalisation of a new legal entity or bridge institution (“closed-bank bail-in”). The differences between these two types of bail-in can be illustrated by comparing the EU BRRD resolution framework to the US Title II of the Dodd-Frank Act (DFA) resolution for Bank Holding Company (BHC) of Global Systemically Important Banks (G-SIBs) (Table 1).

In the EU context, bail-in has three dimensions. First, it is a resolution tool.⁴ A distinction must be made between the write-down and conversion of capital instruments (WDCCI)⁵ and the bail-in tool. Whereas WDCCI relates to the write down or conversion of capital instruments, bail-in continues with subordinated debt followed by senior unsecured debt and other higher-ranking claims. The bail-in tool may be applied in combination with all other resolution tools.⁶ Second, bail-in is a key component of a resolution strategy in itself taking the form of a Single Point of Entry (SPE)⁷ or Multiple Point of Entry (MPE) open bank bail-in. Third, bail-in is a necessary tool to fulfill the condition embedded in the EU framework under which shareholders and creditors must absorb losses up to 8% of the Total Liabilities and Own Funds (TLOF) before tapping into the resources of industry-financed resolution funds.

In this EU bail-in design, RAs must determine the resolution entity’s liabilities subject (fully or partially) to bail-in, their specifications⁸ and the optimal treatment of different classes of liabilities (e.g. extent

³ A banking group may be composed of one or more resolution groups and may have one or more resolution entities. Entities to which resolution tools will be applied under the group resolution strategy are known as resolution entities. A resolution entity and its subsidiaries constitute a resolution group.

⁴ Resolution tools can be divided into two categories: bail-in and transfer tools, namely the bridge institution tool, the sale of business (SoB) tool and the asset separation tool.

⁵ Article 59 BRRD.

⁶ For example, the bail-in tool can provide capital for a bridge bank or an asset management vehicle (AMV). In this scenario, bail-inable liabilities transferred to the bridge bank or an AMV would subsequently be written down and converted, resulting in additional capital. The capital of a bridge bank or an AMV can alternatively be provided by transferring more assets than liabilities to such entity, with the bail-inable liabilities left behind. If the SoB tool is used, the bail-in tool can be applied to the bank in resolution to “clean” its balance sheet before transferring its shares to another party.

⁷ An Single Point of Entry (SPE) strategy involves the application of resolution powers/tools at the parent company level – the resolution entity – by a single RA and the absorption of losses by the parent or the bank holding company – the point of entry –, keeping the subsidiaries within the resolution group in going concern. An MPE strategy involves the application of resolution powers/tools by two or more RAs to different parts of the group and the absorption of losses by the relevant subsidiaries.

⁸ For instance, in relation to securities, RAs need to gather the relevant information comprising the International Securities Identification Number (ISIN), currency of denomination, whether they are listed/traded, relevant central securities depositories in which they are held, governing law, and the rank in the creditor hierarchy...

of write-down and/or cancellation of bail-inable instruments, conversion ratios to be used) to apply a bail-in within the existing legal resolution entity. This treatment must be determined within a very short timeframe – the so-called resolution weekend.⁹ In practice, this implies that RAs have significant discretion in allocating losses among the various creditors, choosing pre-determined “haircuts” for each class of liabilities based on the valuation of losses and in accordance with the applicable creditor hierarchy. More specifically, bail-in takes the form of a creditor waterfall or bail-in cascade, whereby junior liabilities are written down first, followed by the next (more senior) layers upon depletion of each previous layer.

Thus, in the BRRD context, bail-in is not only an economic outcome – namely, shareholders and creditors’ absorbing losses – but also a legal concept, a power and a tool at the hands of the RA.

Table 1 – the EU and the US resolution frameworks: comparison of bail-in designs

	EU	US
Scope of entities	BRRD institutions (more than 200 institutions)	BHC resolved by the FDIC under title II of the DFA (8 US G-SIBs)
Bail-in tool/strategy	Legal and administrative bail-in with explicit statutory bail-in powers Distinction between WDCCI and the bail-in tool SPE or MPE open bank bail-in	Economic bail-in: no explicit statutory bail-in powers SPE closed-bank bail-in (use of a bridge institution)
Write down and conversion powers	Both write-down and conversion powers by RAs for both WDCCI and the bail-in tool	Economic write-down as part as part of the liquidation of the residual failed entity Possible conversion through a successor entity’s securities-for-claims exchange
Exclusions from bail-in in resolution execution	Discretionary exclusions by RAs and mandatory exclusions	All liabilities included in the transfer perimeter to the bridge institution are excluded from bail-in
Interaction with industry-funded safety nets	Minimum bail-in condition of 8% TLOF to access resolution funds	No bail-in condition to access the Orderly Liquidation Fund

⁹ In the particular case of a resolution weekend, in the Banking Union (BU), the Single Resolution Board (SRB) is required to draft a resolution scheme and national RAs a national implementing act by end of that resolution weekend, with the implementation of the adopted scheme (execution) starting on Monday morning.

In a typical closed-bank bail-in, the RA would transfer most of the assets and some of the liabilities of the institution in resolution to a new institution such as a bridge institution, leaving behind capital instruments and other liabilities to absorb losses.¹⁰ For instance, in the US Orderly Liquidation Authority (OLA)¹¹ of Title II of the DFA, the assets transferred to the bridge institution by the FDIC would mostly consist of equity and investments in operating subsidiaries remaining open. The institution in resolution would be wound down, and the shareholders and creditors whose claims are left behind would be able to file claims against the estate of the failed legal entity – the receivership. The allowed claims against the failed institution could be satisfied through distribution of securities in the successor entity, which would succeed the bridge institution. Thus “bailed-in”, the creditors left behind would be paid later from the eventual proceeds of the sale of the company, with the amount of losses to be absorbed ultimately depending on the sale price of the assets of the residual entity and/or of the successor entity. Accordingly, such bail-in is a much longer process and would take more time than the resolution weekend mentioned above.

In the US closed-bank bail-in context, bail-in is more of an economic concept: it does not take the form of pre-determined levels of write-down and/or conversion of some liabilities by the RA. It rather takes the form of an absorption of losses by claims of shareholders and unsecured debt holders of the failed legal entity and/or through satisfaction of these claims through a successor entity’s securities-for-claims exchange.

1.1.2 Runnable liabilities and banking structures: the necessity of discretionary exclusions

From an economic perspective, the bail-in tool was designed to address the “too big to fail” problem and the disorderly failures of large banks. The latter could, to some extent, be explained by banks’ reliance on uninsured runnable liabilities¹² (McAndrews et al., 2014). These runnable liabilities include notably short-term repurchase agreements (repos), derivatives¹³ and uncovered deposits.

¹⁰ Thereby capitalising the bridge institution, as this implies that the liabilities that it assumes would be materially less than the assets.

¹¹ When appointed as OLA under Title II of the DFA, the FDIC may charter a bridge financial company to which the failed BHC assets - including equity in subsidiaries and loans to subsidiaries - and liabilities are transferred.

¹² In this paper, runnable liabilities refer to (i) liabilities that, in going concern, are redeemable on demand at any time or at a short notice – for instance deposits that may be withdrawn; (ii) liabilities that, in insolvency, are exempted from the automatic stay triggered by liquidation in insolvency proceedings – as the latter triggers an automatic stay of claims and proceedings against the bank and its assets.

As a result of runs on such liabilities, the liquidity position of the bank is likely to rapidly deteriorate.

¹³ The runnable character of repos and derivatives of financial institutions stems from their privileged treatment in insolvency proceedings as they are typically exempted from the automatic stay triggered by liquidation (e.g. the so-called “safe harbour” in US law and the EU Financial Collateral Arrangement directive in EU law).

With regard to these liabilities, the EU resolution framework equips RAs with certain statutory temporary stay¹⁴ and moratorium¹⁵ powers. These powers aim to minimise temporarily run-off risks in the run-up to resolution and/or in resolution, enabling them to be potentially bailed-in. However, after an open bank bail-in execution phase, there is some risk that remaining liabilities would become even more “runnable” due to the negative perception and low market and retail confidence in the bank.

In the EU context, a limited number of liabilities are mandatorily excluded from bail-in, notably covered deposits or secured claims.¹⁶ The scope of bail-in includes the runnable liabilities mentioned above. In contrast, in the US closed-bank bail-in, the bail-in scope is by construction less diversified and extended, as the points of entry (PoE) in resolution are Holding Companies (HoldCos) which cannot incur runnable liabilities (“clean holding company” requirements¹⁷) and have little/no liabilities excluded from bail-in. This fundamentally reflects the different structures of the PoE of banking groups across the US and the EU: the US OLA SPE resolution is tied to the HoldCo model, while the EU banking landscape, though diverse and heterogeneous, is mostly characterised by the OpCo structure with a wide and diverse range of liabilities covering the full spectrum of banking business on the balance sheet of the parent company.

In a tailored bail-in approach, discretionary exclusions are the EU framework recognition of the specific operational and economic challenges posed by such a wide scope of bail-inable liabilities. This is especially the case in an open bank bail-in context where the various resolution powers – such as temporary stays and moratorium powers on runnable liabilities – may enable a successful bail-in operational execution but prove in some circumstances insufficient to meet the bail-in tool objectives¹⁸ – that is restoring the institution to financial soundness and long-term viability.

¹⁴ As regards derivatives and repos, Article 70 and 71 BRRD respectively give to RAs the power to restrict the enforcement of security interests and the power to temporarily suspend termination rights.

¹⁵ Article 33a BRRD gives to RAs the power to suspend for a limited period of time (two days) certain payments and contractual obligations of the institution under resolution.

¹⁶ Other mandatorily excluded claims include claims of employees, claims of commercial or trade creditors and claims arising from the provision of goods or services to the bank that are critical to the daily functioning of its operations, like IT services, utilities and the rental, servicing and upkeep of premises.

¹⁷ They are indeed required to maintain a minimum amount of Total Loss Absorbing Capacity (TLAC), consisting of Tier 1 (T1) capital and certain long-term debt instruments and clean holding company requirements which limit or prohibit a covered BHC from entering into certain arrangements or incurring runnable liabilities. The scope of bail-in is coextensive to that of TLAC: in the event of a resolution, external TLAC holders of the parent holding company would not be transferred but left behind in the failed entity’s receivership to absorb losses.

¹⁸ As per article 43(3) BRRD, RAs may apply the bail-in tool “only if there is a reasonable prospect that the application of that tool (...) will (...) restore the institution in question to financial soundness and long-term viability”.

1.2 The credibility of the bail-in tool: discretionary exclusions and bail-in operationalisation

1.2.1 *Discretionary exclusions in the EU resolution framework: grounds and rationale*

Discretionary exclusions are thus tied to three features of the EU resolution framework:

- (i) the legal nature of the bail-in tool and the administrative nature of its execution, giving significant flexibility and discretionary powers to RAs in the allocation of losses to the different classes of liabilities;
- (ii) as a specificity of open bank bail-in, the very short timeframe of the resolution weekend, meaning that RAs that do not have the operational ability to execute their write-down and conversion powers on certain liabilities under high time pressure will have no choice but to exclude these liabilities;
- (iii) the prevalence of the OpCo model in the EU banking landscape, implying a vast diversity of bail-inable liabilities on the resolution entity's balance sheet – including of the runnable type – whose bail-in may pose significant operational and economic challenges.

As mentioned above, Article 44(3) BRRD¹⁹ lays down four grounds for which, in exceptional circumstances, the RA may exclude or partially exclude certain liabilities from the application of write-down or conversion powers in resolution execution:

- (i) the bail-in of these of liabilities is not possible within a reasonable time;
- (ii) the exclusion is strictly necessary and proportionate to ensure the continuity of critical functions and core business lines;
- (iii) the exclusion is strictly necessary to avoid a wide-spread contagion, in particular as regards eligible deposits²⁰ held by natural persons and micro, small and medium enterprise (SMEs);
- (iv) the application of bail-in to those liabilities would result in a destruction in value such that the losses borne by other creditors would be higher than if those liabilities were excluded.

¹⁹ Commission Delegated Regulation (EU) 2016/860 (CDR 2016/860, OJEU, 2016d) lays down more precise rules for the assessment of discretionary exclusions, providing that the final assessment should be made at the time of resolution and that liabilities can be excluded only if that is strictly necessary and proportionate in light of the results of a case-by-case assessment. It also further specifies the four possible grounds for discretionary exclusion.

²⁰ Eligible deposits are deposits that are not excluded from protection/repayment by a Deposit Guarantee Scheme (DGS) pursuant to Article 5 of the Deposit Guarantee Schemes Directive (DGSD, OJEU, 2014b). The part of those eligible deposits that is covered by the DGS protection – the coverage level stands at EUR 100 000 in the EU – corresponds to covered deposits.

The first condition stems from the fact that any delay in the allocation of the aggregate level of losses to the various classes of creditors and in the publication of the bail-in decision may negatively impact market confidence and be detrimental to the overall effectiveness of resolution actions. This condition is particularly important in a bail-in of an “open bank” nature as it assumes that there is an amount of time after which the failing institution can no longer be handled in an orderly manner and would necessarily have to exit the market. The second and third reasons for discretionary exclusions are linked to two resolution objectives: the continuity of critical functions and the protection of financial stability.²¹ The fourth condition can be construed as a means to select the most favourable resolution scenario for creditors – in case this scenario entails such exclusions – compared to alternative scenarios with no exclusion.

1.2.2 Bail-in operationalisation: MREL/TLAC and bail-in playbook

Operationalising bail-in is a critical part of resolution planning for banks where bail-in is part of the resolution strategy. In particular, for the EU administrative bail-in, planning is of paramount importance, as the execution of bail-in involves a complex bail-in mechanics – a sequence of operational steps that requires diligent planning and preparation –, including the coordination of many stakeholders (RAs, the resolution entity, market authorities, and financial market infrastructures such as central counterparties (CCPs) and trading venues).

In a resolution planning context, RAs in the EU have two fundamental tools to support the operationalisation of the bail-in tool:

- (i) quantitative loss-absorbency requirements in the form of the Minimum Requirement for own funds and Eligible Liabilities (MREL²²) for all BRRD institutions and TLAC for G-SIBs to ensure the availability of a minimum level of bail-inable capacity at the resolution entity level;
- (ii) a qualitative operational document, called bail-in playbook, prepared by banks and describing the operational and procedural steps, information and data points necessary for bail-in execution.²³

²¹ As per Article 31(2) BRRD.

²² The composition of these quantitative requirements may have a qualitative dimension in the form of MREL subordination requirements.

²³ For instance, as per the SRB Operational Guidance on bail-in playbooks (SRB, 2022b), the bail-in playbook would cover at a minimum: 1) An identification and description of relevant governance arrangements for bail-in execution; 2) Identification of relevant bail-inable liabilities for bail-in at individual level and the generation of granular information/data points related to these liabilities; 3) a detailed description of the procedural steps for the execution of bail-in inside (internal execution) and outside (external execution) the institution for each type

In the BU context of the phase-in of the Expectations for Banks (EfB), a gradual extension of the scope of instruments covered²⁴ by the bail-in playbooks was agreed by the SRB, which expects that the fully-fledged version of the bail-in playbooks would cover all bail-inable instruments not explicitly excluded under Article 44(2) BRRD. In practice, there are two different cases depending on the group's structure:

- (i) for banks with a clean HoldCo structure, the bail-in playbook coverage is essentially limited to vanilla²⁵ liabilities and is very close to the set of TLAC/MREL eligible liabilities²⁶, as MREL/TLAC eligible liabilities represent the most significant portion of bail-inable liabilities on the balance sheet of a clean HoldCo;
- (ii) for banks with an OpCo structure, the bail-in playbook should eventually cover complex types of instruments beyond vanilla liabilities, including derivatives, structured notes and non-covered deposits, that may represent a more significant theoretical source of loss-absorbing capacity than MREL/TLAC.

1.2.3 The pivotal bail-in tool: lessons learnt from resolution cases

This subsection draws lessons from various recent resolution cases both in the EU and US to show that the bail-inability of some liabilities remains complex in specific cases. In the BU, the bail-in tool remains untested, with transfer tools and WDCCI powers being preferred in practice.²⁷ In non euro-area countries, it has been used in combination with some transfers. Past resolutions cases show that, in practice, the scope of bail-in cannot be based on a pillar 1²⁸ logic, but actually crucially depends on a case-by-case assessment, consistent with a pillar 2 logic.

of instrument covered by the playbook; and 4) a description of information systems supporting the different processes.

²⁴ Typically, an instrument covered in the playbook will be considered as operationalised if the bank: (i) is able to generate granular information/data points related to these liabilities as part of the bail-in data set (data/MIS requirements) ; (ii) has identified and proved that it is able to perform all the procedural steps for the execution of bail-in inside (internal execution) ; (iii) proves that there is no impediment to the external execution of bail-in outside the institution (for instance, for the CSD to perform the write-down and conversion in its book).

²⁵ In this paper, we define vanilla liabilities as non-excluded financial liabilities that are neither deposits nor derivatives nor liabilities with embedded derivative features.

²⁶ On top of MREL/TLAC, there may be for instance some liabilities with a residual maturity of less than 1 year.

²⁷ In the two BU resolution cases of Banco Popular and Sberbank, the SRB deviated from the resolution plan, which provided for the bail-in tool as the preferred resolution strategy, and applied the sale of business tool. For instance, in the Banco Popular case, the SRB decided to exercise the WDCCI power prior to the transfer, to address the shortfall in the value of the institution: CET1 and AT1 were written down, while T2 was converted into new shares transferred to Banco Santander S.A. for the price of EUR 1. The rationale for these deviations was that the bail-in tool cannot address the liquidity situation – as opposed to the solvency - of an institution to restore it to financial soundness and long-term viability. In both cases, the failure of the institution was a consequence of the deterioration of the liquidity situation of the institution.

²⁸ In a prudential context, pillar 1 requirements are prudential requirements that apply to all covered banks, as opposed to the bank-specific pillar 2 requirements which apply on top of and covers risks which are underestimated or not covered by the pillar 1 requirements. In this paper, we use the pillar 1 and pillar 2 concepts

Lessons from a non-resolution context: the Credit Suisse case

The Swiss Financial Market Supervisory Authority's decision to fully write down Credit Suisse AT1s without shareholders' CET1 being fully written down first was taken outside of a resolution context. However, it illustrates, by way of contrast, that the discretionary powers of RAs in resolution are constrained by the respect of the creditor hierarchy. Under Article 48(5) BRRD, RAs cannot exercise their write-down and conversion powers upon a class of liabilities, with another class that is subordinated to it remaining substantially unconverted into equity or not written down. Such a decision, where implementing a public support or resolution measure, would not have been possible without breaching the legal BRRD resolution framework.

EU experiences of bail-in of uncovered deposits: Polish and Danish experiences

In the EU, the bail-in of uncovered deposits under BRRD has happened in Poland and Denmark either as a consequence of the 8% TLOF constraint or on very small banks with limited contagion and financial stability risks.

In January 2020, the Polish resolution authority, the Bank Guarantee Fund (BFG) adopted the resolution scheme of the regional cooperative bank – Podkarpacki Bank Spółdzielczy in Sanok (PBS). The latter relied on the use of the bridge bank combined with a bail-in. The bank's net asset value was brought back to zero through the application of the bail-in tool on the non-transferred subordinated bonds (full write-down) and uncovered deposits (43% write-down of their notional amount) (Stopczyński, 2021). A significant share of depositors whose funds were written off were local governments and their units (public hospitals and schools). As the service to local governments and their units was considered as a critical function of the bank by BFG, the discretionary exclusion of their deposits under Article 44(3)(b) BRRD would have been justified. In this context, the bail-in of deposits from local government units proved necessary to reach the 8% TLOF condition to access the Polish resolution fund's resources, illustrating the resolution financing constraint limiting the overall capacity of RAs to make discretionary exclusions (see section 3.1.3). Based on the PBS experience, deposits were deemed not bail-inable on financial stability grounds (bank-run risks) by the BFG in the subsequent case of the resolution of Getin Noble in September 2022 (see Box 6).

In Denmark, the Financial Stability Company (FSC) has twice applied the bail-in tool under the BRRD framework. The two resolutions were rather small institutions in the form of cooperative banks with total deposits under EUR 50 million, with limited contagion and financial stability risks (Andersen and

in a larger sense to refer respectively to considerations pertaining to all banks subject to bail-in and to bank-specific considerations.

Hovedskov, 2021). Uncovered deposits were successfully bailed-in, with no contagion effects or panic throughout the banking system.²⁹

Lessons from the US experience

Like in the BU, bail-in under OLA of DFA remains untested in the US. On the other hand, resolution cases of Insured Depository Institutions (IDIs) resolved by the FDIC under the Federal Deposit Insurance (FDI) Act point to the fact that not all types of liabilities can be left behind alike in the receivership to absorb losses. Though there is no formal bail-in design in the resolution framework of the FDI Act, there is a form of loss-absorption by shareholders and creditors by letting them in the failed entity to be liquidated under normal insolvency proceedings. This mechanism, designed for small and medium-sized banks, has been tested for decades and is quite similar, in terms of outcome, to the economic bail-in of the Title II of the DFA for BHCs.³⁰

As regards uninsured deposits, before 2008, it was not uncommon for them to take losses, in 43% of failures between 1992 and 2007 (FDIC, 2023).³¹ But since 2008, the FDIC has evidenced a preference for protecting uninsured depositors (for instance through whole bank P&A)³², effectively making deposits whole in 94% of resolution cases (FDIC, 2023).³³ The US bank crisis management framework has thus in practice moderated expected losses to insured deposits, giving them, especially since 2008, a significant amount of protection.³⁴

As regards other liabilities, in the three recent resolution cases (Silicon Valley bank, Signature bank and First Republic) of April and May 2023, the FDIC decided to transfer, on top of uninsured deposits, all qualified financial contracts (QFCs), including derivatives, which were either assumed by a bridge bank

²⁹ For instance, in September 2018, in the resolution of the cooperative bank, Københavns Andelskasse, the bridge institution tool was applied in combination with the bail-in tool. At the point failure, the cooperative had around 1,940 depositors with deposits in the amount of EUR 46 million. Based on the provisional valuation done by the authority and before the transfer to the bridge, the contributed capital of members was cancelled, and subordinated creditors and unsecured creditors, including uncovered depositors and covered depositors with deposits above the coverage level of EUR 100,000 saw their claims written down.

³⁰ In both cases, the liabilities not transferred to a bridge institution or to an acquirer as part of Purchase and Assumption (P&A) transaction absorb losses in the receivership. The main difference is that, for entities subject to the OLA of Title II DFA resolution, there are loss-absorbing capacity requirements in the form of TLAC to implement an economic bail-in and to give form to a real bail-in design. These requirements do not apply to IDIs.

³¹ And in the hundreds of bank failures between 2008 and 2013, senior unsecured creditors were not shielded from significant losses - most notably in the resolution of Washington Mutual.

³² In a whole bank P&A, bidders are asked to bid on all assets of the failed institution, with the potential assumption of both insured and uninsured deposits, which are thus protected.

³³ Most notably, uncovered depositors incurred losses in the Indymac – with USD 28 billion in assets – failure.

³⁴ The unconditional loss rate of uninsured depositors stood at 10% in the 1992-2007 period, and only at 3% since 2008 (FDIC, 2023).

or by the acquirer, thus preventing counterparties to terminate the QFCs. It implied that runnable liabilities were not left behind in the receivership estate to absorb losses.

2 Operational and economic challenges to the bail-in of derivatives, structured notes and uncovered deposits

This section focuses on the operational and economic challenges to the bail-in of three categories of liabilities – the uncollateralised part of derivatives, structured notes and uncovered deposits –, that may justify their discretionary exclusion from bail-in at the time of resolution, based on the circumstances of the case. As mentioned in section 1, these challenges only arise in the context of resolution entities with an Opco structure, as a 100% clean HoldCos cannot incur such non-subordinated liabilities.³⁵

The analysis presented below is based on a survey of the six largest French banking groups, following an industry meeting held in March 2023, and on their bail-in playbooks. In the French creditor hierarchy (Article L613-30-3 (I) (3°) of the French Monetary & Financial Code), the uncollateralised part of derivatives, structured notes and non-covered non-preferred deposits (see section 2.3.1 for a definition) rank *pari passu* with senior unsecured debt.

Uncovered deposits usually constitute a very significant share of the theoretical bail-inable capacity of banks (more than 50% for five out the six largest French banking groups). And for large universal banking groups with an international footprint, derivatives and structured notes may also represent a significant share – between 5% and 10% – of the bail-inable capacity (when excluding deposits).

2.1 Derivatives: the economic costs and operational challenges of closing out contracts within a reasonable timeframe

2.1.1 *Scope of bail-inable derivatives: the interplay between BRRD and EMIR*

RAs in the EU are empowered to terminate and close out derivatives for the purpose of exercising write-down and conversion powers upon entry in resolution.³⁶

³⁵ For instance, in the US, the clean holding company framework of the TLAC rule prohibits BHC to issue to a third party short-term debt instrument including short-term deposits and demand deposits. The TLAC rule also imposes a cap on the aggregate amount of certain unrelated liabilities, including structured notes, equal to 5% of the particular covered BHC'eligible TLAC. As regards derivatives, BHC are prohibited from entering into QFCs with a third party.

³⁶ Article 49(2) BRRD.

Derivative contracts subject to a netting agreement with a given counterparty give rise to a single close-out amount in the event of a contractual early termination. Accordingly, Article 49 BRRD provides that such derivative contracts are valued on a net basis in accordance with the terms of the netting agreement upon or after their close-out. Commission Delegated Regulation (EU) 2016/1401 (CDR 2016/1401, OJEU, 2016b) further specifies this valuation process. When it comes to derivatives, the relevant level of bail-in application is thus the netting set level. The net amount corresponding to the netting set is recorded either as an asset (positive net position) or as a liability (negative net position) for the bank and is recorded on a global basis (the netting set), with no breakdown on the elementary contracts. Any negative value netting set with a given counterparty (that represents a liability from the bank's perspective or an "out of the money" position) is theoretically bail-inable.

In practice, collateralisation has a significant influence on the bail-inability of liabilities.³⁷ For derivatives, variation margin (VM) covers current exposure (market value) on an ongoing basis and is calculated using a mark-to-market position. This implies that the net market value post collateral offset of a netting set should always be equal to zero, assuming that the resolution entity never owes any VM at the time of resolution. Uncleared derivatives with VM, as fully secured liabilities, would thus be excluded from bail-in. However, in practice, there is always some risk, especially at the point of non-viability (PONV), that the market value of some derivative contracts would change significantly and a resolution event would occur before additional VM is delivered. Moreover, though derivative trades are typically valued at mid-market prices, they cannot be replaced at this price due to the bid-ask spreads. On top of VM, initial margin (IM) may be posted at the outset of a derivative trade to cover potential future exposure arising in the time between the last exchange of margin and the liquidation or hedging of the position. In that respect, IM represents an additional buffer in resolution that would reduce the risk of a shortfall between the market value of the bank's derivative liability and the net collateral posted.

For the purpose of bail-in, the overarching distinction among derivatives is between secured and unsecured derivatives. Secured derivatives are either: (i) uncleared Over-the Counter (OTC)³⁸ derivatives liabilities governed by a master agreement in respect of which a Credit Support Annex³⁹ ("CSA") has been entered into – Commission Delegated Regulation (EU) 2016/2251 (CDR 2016/2251,

³⁷ Article 44(2)(b) excludes secured liabilities from the scope of bail-in.

³⁸ After the 2008 financial crisis, global leaders agreed that OTC derivatives needed more transparency and better risk-mitigating tools, as they are not centrally cleared by an exchange. In the EU, this regulatory effort led to the European Market Infrastructure Regulation (EMIR, OJEU, 2012), which provides for mandatory clearing of standard OTC derivatives and obliges some market participants to exchange collateral for non-centrally cleared OTC derivatives, in the form of variation or initial margin.

³⁹ One of the part of the master agreement defining the terms for the provision of collateral by the parties in derivatives transactions.

OJEU, 2016c) specifies the bilateral margining requirements for this type of derivatives; (ii) centrally-cleared derivatives⁴⁰.

In turn, secured derivatives can be divided in three classes, which correspond to various probabilities of undercollateralisation:

- 1) Non-centrally cleared secured derivatives fulfilling conditions of Article 43(1)b of the Commission Delegated Regulation (EU) 2016/1075 (CDR 2016/1075, OJEU, 2016a). This article specifies in the context of Article 55 BRRD⁴¹ the secured liabilities to which the mandatory exclusion from bail-in – as per Article 44(2) BRRD – applies, by providing, *a contrario*, that these liabilities should be, at the time at which they are created, fully secured and governed by contractual terms that oblige the debtor to maintain the liability fully collateralised on a continuous basis in compliance with regulatory requirements of Union law. Accordingly, in an extensive interpretation of this article beyond the context of Article 55 BRRD, it would be natural to consider that all liabilities arising from derivatives with a CSA for which “full” EU margin requirements – that is IM and VM – are applied, would be excluded from bail-in.
- 2) Centrally-cleared derivatives are not exempted from bail-in as a principle. But the probability of these liabilities’ being bailed-in depends on the probability of having insufficient collateralisation, which is deemed almost nil.⁴²
- 3) Other secured OTC derivatives liabilities, namely derivatives in respect of which only VM requirement is applicable may be in the scope from bail-in, provided that the net liability does exceed the value of the collateral.⁴³

In this classification, only OTC non-centrally cleared unsecured derivatives and secured derivatives in respect of which only VM is applicable⁴⁴ may fall within the scope of bail-in. Still, at the PONV even

⁴⁰ The CCP cleared transactions (whether listed or OTC) are concluded with a counterparty, in turn replaced by the CCP, which assumes all counterparty risk; to reduce it to nil on both legs of the transaction, IM and VM are exchanged.

⁴¹ Under this article, banks are required to include specific terms, known as bail-in recognition clauses, in relevant contracts of non-excluded liabilities governed by third country law, to ensure the effectiveness of write-down and conversion powers of the RAs.

⁴² Under EMIR, CCPs are required to apply sound risk management procedures on default of a clearing member. As the collateral posted is designed to be sufficient to cover the defaulting member’s liability to the CCP, bail-in of uncollateralised liabilities is unlikely to be required. This is of course dependent on the fact that the bank pays its margin calls even in resolution, but this is pre-condition not to be put immediately in default by the CCP.

⁴³ Under CDR 2016/2251, the IM requirement was phased in. Since September 2022, all counterparties need to start exchanging IM and VM if their average aggregated notional amount of OTC derivatives exceeds €8 billion at group level.

⁴⁴ Such derivatives are therefore outside the scope of margin requirements laid down in CDR 2016/2251. For instance, Article 27 to 29 of CDR 2016/2251 provides for several exemptions from initial margin requirements.

“fully secured” non-centrally cleared derivatives with both IM and VM may become partially collateralised, for instance owing to inappropriate calibration of margin requirements⁴⁵ or last margin calls having not been met.⁴⁶ The uncollateralised part – ranking *pari passu* with senior preferred debt – could thus be subject to bail-in (if the mark-to-market value at the level of the netting set is negative).⁴⁷ However, as the mandatory margin requirements of CDR 2016/2251 are now in force and implemented in new transactions, the pool of undercollateralised derivatives should decrease relative to the whole class of derivatives, making the potential contribution of derivatives in a bail-in less significant.

In the case of a derivative not subject to a netting arrangement, the probability that the derivative is bail-inable depends on the probability of undercollateralisation, which itself depends on the type of the counterparty due the interplay with EMIR and CDR 2016/2251 mandatory clearing provisions for certain standard OTC derivatives⁴⁸ and margin requirements for uncleared derivatives. For CCP and financial counterparties, this probability is in effect very low (see Table 2).

A netting set may encompass thousands of elementary derivatives transactions/contracts. As the various elementary derivative contracts are mixed within a netting set with a given counterparty, this implies that potential exclusions from bail-in cannot be based on a contract-by-contract perspective and on granular criteria such as the underlying assets, the economic purpose (hedging/trading) or the vanilla/exotic features of derivatives. Still, the probability to bail-in a netting set depends on the probability that it is undercollateralised, which is lower in the case of a netting set with a CCP or a financial counterparty compared to a netting set with a non-financial counterparty.⁴⁹

⁴⁵ This would for instance happen if margins are calculated on a static basis, where the initial margin remains constant over the life of the derivative contract in spite of change in its notional value.

⁴⁶ As regards the specific case of a CCP, a scenario of negative exposure towards it at the time of resolution is not entirely unlikely, for instance, if the institution under resolution has failed to post margin calls. However, this liability towards the CCP would represent a liability with a remaining maturity of less than seven days, as it is intra-day payable – even if the unpaid amount date back to more than seven days – and should be excluded under Article 44(2)(f) BRRD.

⁴⁷ This, however, can only be ensured once the valuation process described below has been applied according to Article 49 BRRD.

⁴⁸ Categories of OTC derivatives that are subject to the clearing obligation are also listed by the ESMA in its [public register](#).

⁴⁹ As the margin requirements under EMIR for non-financial counterparty are now fully in force and are applied to new derivative contracts, this should also reduce the probability of finding undercollateralised netting sets with a non-financial counterparty.

Table 2 – Bail-inability of derivatives: an intuitive single contract view (derivatives not subject to any netting agreement) based on the interplay between BRRD and EMIR

	Bail-inability	Main types of counterparty	Main types of derivatives
Centrally-cleared derivatives	Excluded (very remote probability of insufficient collateralisation, which would anyway result in a liability with a residual maturity of less than 7 days)	CCPs	Listed derivatives and EMIR mandatory cleared class of OTC derivatives (standardised OTC derivatives)
Uncleared secured derivatives with full EU margin requirements (VM+IM)	High probability of exclusion (remote probability of insufficient collateralisation)	Financial counterparties and non-financial counterparties	Non mandatorily cleared derivatives (e.g. equity swaps), including exotic derivatives
Uncleared secured derivatives with partial EU margin requirements (only VM)	Inclusion up to the uncollateralised part	Non-financial counterparties (Corporates, government, central banks and supranationals)	Mostly vanilla derivatives like interest rate (IR) swaps, cross-currency swaps, FX options and forwards
Bilateral unsecured derivatives	Inclusion	Non-financial counterparties (Corporates, government, central banks and supranationals) below margin requirements threshold	Mostly vanilla derivatives like IR swaps, cross-currency swaps, FX options and forwards

2.1.2 Timing challenges arising from legal and valuation issues

Recognition of close-out as a legal uncertainty

When the master netting agreement is governed by third country law, there is a specific legal challenge to the bail-in of derivatives.⁵⁰ Indeed, a master agreement typically provides that, in the event of a counterparty's default, it is the non-defaulting counterparty that can accelerate and terminate all outstanding transactions through the payment of a single early termination amount owed by, or owed to, the non-defaulting counterparty. Under Article 71a BRRD, resolution entities are required to include clauses that recognise the stay powers of RAs (known as contractual recognition of stay or 'CROS' clauses) in certain financial contracts that they enter into which are governed by the law of a non-EU Member State. These stay powers include temporary abilities to: (i) suspend payment

⁵⁰ For all types of liabilities governed by third country law, there is the common legal challenge of the recognition of bail-in powers recognition under Article 55 BRRD as explained in section 3.2.1.

or delivery obligations; (ii) restrict the enforcement of security interests; and (iii) suspend termination rights under the contract. However, even if these stay clauses were included, the powers of RAs – as opposed to the non-defaulting counterparty – to terminate and close out any derivatives under Article 49(2) may not be recognised.

Complex and uncertain valuation

For the purpose of bail-in, OTC derivatives are valued on the close-out date as the sum of net unpaid amounts, collateral or other amounts due from the institution under resolution to the counterparties (sum of amounts due thereafter) and a close-out amount covering the costs incurred by the counterparties, or gains realised by them, in replacing or obtaining the economic equivalent of material terms of the terminated contracts.⁵¹ The early termination amount of a netting set is the relevant bail-inable amount:

Early termination amount = Sum of amounts due (net) + Close-out amount = (Net mark-to-market value - Value of Net Collateral Posted) + Close-out amount

The timing issues largely stem from the derivatives valuation challenges. Those issues are also compounded by the fact that there is a clear trade-off between running the valuation and closing out the process as speedily as possible to minimise uncertainty, market impact and the risk of some bailed-in counterparties' contesting the valuation.

In application of CDR 2016/1401, the valuation process for OTC uncleared derivatives⁵² can be summarised in four steps:

1. As a first step, RAs should perform a comparison between, on the one hand, the destruction in value that would arise from the close-out and bail-in of derivatives and, on the other hand, the amount of losses that would be borne by those derivatives in a bail-in (*ex ante* valuation);

⁵¹ For non-cleared derivatives, Article 6 of CDR 2016/401 defines the close-out amount as replacement costs provided by the counterparty as the 1st option (the usual methodology applied in standard master agreements), then provides alternative methods if the counterparty was not able to provide evidence of commercially reasonable replacement trades with the deadline defined by the RA on close-out. For derivatives cleared by a CCP, Article 7 of CDR 2016/401 refers to the valuation provided by the CCP in accordance with its default procedure.

⁵² As regards centrally-cleared derivatives, in the event that a CCP clearing member is placed under resolution, and the RA closed-out derivative contracts prior to a bail-in, that clearing member would qualify as a defaulting clearing member with regard to the CCP in relation to the particular netting set. In order to avoid waiting for the completion of CCP default procedures over a very long period to set the value of derivatives, the resolution authority would agree with the CCP and the CCP's competent authority on a deadline by which the early termination amount has to be determined (Article 7 of CDR 2016/1401). If the CPP fails to determine the early termination amount within the agreed deadline, the RA should rely on its own estimates based on non-centrally cleared methodology to determine the early termination amount.

2. In case of a bail-in, RAs would have to notify the resolution entity's counterparties of the early termination and close-out of the derivative contracts, and give the counterparties the possibility to provide evidence of commercially reasonable replacement trades within a set deadline (*ex post* valuation by the counterparty). For large groups, RAs would have to notify and collect data on replacement trades from thousands of counterparties in very tense circumstances;
3. Should the counterparty not provide evidence of commercially reasonable replacement trades within the deadline, RAs may construct their final, non-provisional close-out valuation on the basis of mid-prices and mid-to bid or mid-to-offer spreads (*ex post* valuation by the RAs);
4. Finally, based on the final estimation of the close-out amount, RAs would exercise the bail-in powers on the early termination amount which constitutes the relevant derivative liability amount.

These steps entail a dependence on external stakeholders to give necessary information within agreed deadlines, with RAs having no powers over them to enforce them.

2.1.3 Financial stability protection and destruction of value challenges arising from the close-out of derivatives

The four largest French banks are among the EU systemically important banks, that have the necessary size and balance sheet capacity to keep a matched book and which can manage the associated market and liquidity risks. They are able to run derivative desks and provide market access to clients, as clearing members and market-makers. When acting as market-makers, banks generally take only limited directional positions in their trading books.

From a financial stability standpoint, the bail-in of major derivatives dealers may cause disruption in the derivatives markets. In particular, it may lead to significant directional open positions for the bank, reduced market access for certain clients and re-hedging costs for both the bank and the bailed-in counterparties. As regards the potential contagion risks, it is the magnitude of these potential directional positions that may destabilise the market and affect financial stability. But this magnitude is difficult to assess *ex ante*, as it will depend on the circumstances of the case.

All these potential economic costs would be factored in the destruction of value assessment that informs the decision whether or not to bail-in derivatives. A comparison has to be made between, on the one hand, the destruction in value that would arise from the close-out and the bail-in of derivatives and, on the other hand, the amount of losses that would be borne by those derivatives in a bail-in (see Box 1).

Box 1. Close-out of derivatives and destruction of value

If the RA decides to bail-in derivatives, it will close-out the derivatives, crystallising additional losses in the form of a close-out amount. If the early termination amount (ETA) is higher than the fair value of the derivatives, then the bank will have to book close-out losses in its profit and loss statement (P&L) equal to the difference between the two amounts. A higher ETA also means that the RA will have a larger amount of liability to bail-in, which will offset to some extent those close-out losses. The overall effect in terms of destruction of value depends on the share of close-out losses in the total losses and the share of derivatives liabilities in the *pari passu* class of liabilities.

For instance, suppose non-derivatives senior unsecured liabilities represent an outstanding bail-inable amount of 9,000 and derivatives' fair value in excess of net collateral posted prior to the close-out is equal to 500. If the close-out (losses) amount is 400 after close-out, then the ETA will be equal to 900 (500+400). If losses to be allocated to the senior unsecured class of liabilities are equal to 1,000 prior to the close-out of derivatives, the overall losses taking into account the close-out will be the sum of those two types of losses: $1,000 + 400 = 1,400$

Then, the RA would apply the following write-down/conversion ratios to non-excluded senior unsecured creditors depending on the scenario:

- (i) in case of exclusions of derivatives from bail-in: $1,000/9,000 = 11\%$;
- (ii) where derivatives are bailed-in: $1,400/9,900 = 14\%$

More generally, let:

- X be the amount of losses to be absorbed by liabilities ranking *pari passu* with the uncollateralised part of derivatives (the senior unsecured class in the French creditor hierarchy), prior to any decision on the bail-in of derivatives;
- and $Losses_{close-out}$ the difference between the early termination amount and the market-to-market value of derivatives in excess of net collateral posted prior to the close-out.

The bail-in of derivatives will lead to a destruction of value for other senior unsecured creditors only if the write-down/conversion ratio of the class of liabilities ranking *pari passu* with derivatives is higher than in the case of their exclusion from bail-in:

$$\frac{X + Losses_{close-out}}{Senior\ unsecured + Derivatives\ ETA} > \frac{X}{Senior\ unsecured}$$

This condition is met when the share of close-out losses in the total losses prior to the close-out of derivatives is higher than the share of the ETA of the bailed-in derivatives in the total outstanding amount of all other equally ranking senior unsecured liabilities to be bailed-in:

$$\frac{Losses_{close-out}}{X} > \frac{Derivatives\ ETA}{Senior\ unsecured}$$

In the example, above, the share of close-out losses in total losses to be absorbed by the senior unsecured class of liabilities is equal to $400/1,000 = 40\%$, which is indeed higher than that of the derivatives ETA in the class of liabilities ($10\% = 900/9,000$).

It is also possible to frame the comparative assessment formula also as follows:

$$\frac{Losses_{close-out}}{Derivatives\ ETA} > \frac{X}{Senior\ unsecured}$$

A destruction of value would take place when the share of losses related to the close-out of derivatives (with the potential addition of re-hedging costs and market losses due to open position and market conditions) relative to the bailed-in ETA of derivatives would be higher than the share of losses prior to the close-out of derivatives relative to the amount of other senior unsecured liabilities ranking *pari passu* with the derivatives.

The close-out (losses) amount of derivatives contracts can destroy value because it may crystallise additional losses that are not fully reflected in the fair value of the derivatives contracts before the close-out of derivatives, as evidenced by the close-out of Lehman Brothers derivatives (see Box 2).

There are two main sources of destruction of value⁵³:

- (i) losses generated by the actual replacement costs incurred by the counterparty that would increase the close-out costs owed by the institution under resolution to its derivatives counterparties;
- (ii) additional costs incurred by the institution under resolution in re-establishing hedges on exposures subject to open market risk resulting from the close-out or in order to maintain a risk profile consistent with the resolution strategy. The bail-in of derivatives may create a sizeable open position in the bank's trading book, which can be assumed, as a general rule, to be delta-neutral by default (that is excluding proprietary trading with directional positions). Besides, from a strictly operational point of view, the re-hedging exercise would use scarce trading resources (traders etc.) at a challenging time and would also require a front office staff retention plan.

⁵³ In order to assess of the amount of the costs resulting from the close-out, expenses or other impairment in value that would be incurred as a result of the close-out, RAs should also incorporate reasonable estimates of any reduction of the franchise value or in the value of underlying assets, that would arise from the close-out and ancillary costs or other measures (such as errors or disputes).

Box 2. The close-out of Lehman derivatives: valuation and collateralisation

The Lehman Brothers parent holding company's – Lehman Brothers Holdings Inc. (LBHI) – filing for bankruptcy protection in September 2008 was an act of default under many of the group broker-dealer Lehman Brothers Inc. (LBI) derivatives agreements, resulting in automatic termination of 733,000 transactions by November 13, 2008. More than 6,000 derivatives claims involving more than 900,000 transactions were filed against Lehman and its affiliates. Counterparties that had terminated their derivative contracts or otherwise had claims against Lehman's estate were given almost a year, to file a special Derivatives Questionnaire and to provide a valuation statement for any collateral, specify any unpaid amounts, and supply their derivatives valuation methodology and supporting quotations (Fleming and Sarkar, 2014). Under the Derivatives Master Agreements, valuation claims were determined primarily by replacement costs, which greatly differed from the booked fair value due to large observed bid-offer spreads in markets at that time.

The asserted claims of the 30 largest counterparties (\$21.8 billion) represented about twice the claims amounts ultimately allowed (\$10.3 billion). Disagreements between the Lehman estate and big bank counterparties notably pertained to the method of valuation and inputs of the valuation models (e.g. use of the bid or ask price rather than the mid-market price, discount rate used...) and the time and date of valuation (Fleming and Sarkar, 2014). These problems were compounded by the illiquidity prevailing at the time in relevant markets – resulting in wide bid-offer spreads that were the input of the “replacement cost” methodology. This illustrates the potential difficulties of the valuation of derivatives in application of CDR 2016/1401.

The Lehman Brothers case also illustrates how collateralisation may reduce the bail-inable potential of derivatives. For instance, assuming that, in September 2008, Lehman was up-to-date with its VM payments immediately before its default, then the claims of the 30 largest counterparties would have represented the change in value of the position of counterparties after the last transfer of VM. As resolution is a swift process during the resolution weekend, this scenario of inflated claims due to missed VM between the PONV and the restructuring process would be unlikely.

In contrast, Lehman centrally-cleared derivatives proved to be overcollateralised thanks to the IM posted. For instance, the UK CCP LCH.Clearnet Ltd liquidated Lehman's interest rate swap position – \$9 trillion notional – using only 35% of the \$2 billion IM provided by Lehman (Norman, 2011). And the price paid by the Chicago Mercantile Exchange (CME), a US CCP, to large dealers (\$2.2 billion) in auctioning/transferring the position of Lehman was very close – the IM was almost fully used – but still lower than the total collateral posted by Lehman (\$2.3 billion).

2.2 Structured notes: challenges linked to the valuation of a high volume of instruments

Structured notes are debt securities issued by banks, whose returns are based on, among other things, equity indexes, a single equity security, a basket of equity securities, interest rates, commodities, and/or foreign currencies. In the French creditor hierarchy, they rank *pari passu* with common senior unsecured bonds of the same issuer. Structured notes can be construed as including two components – a bond component and an embedded derivative.

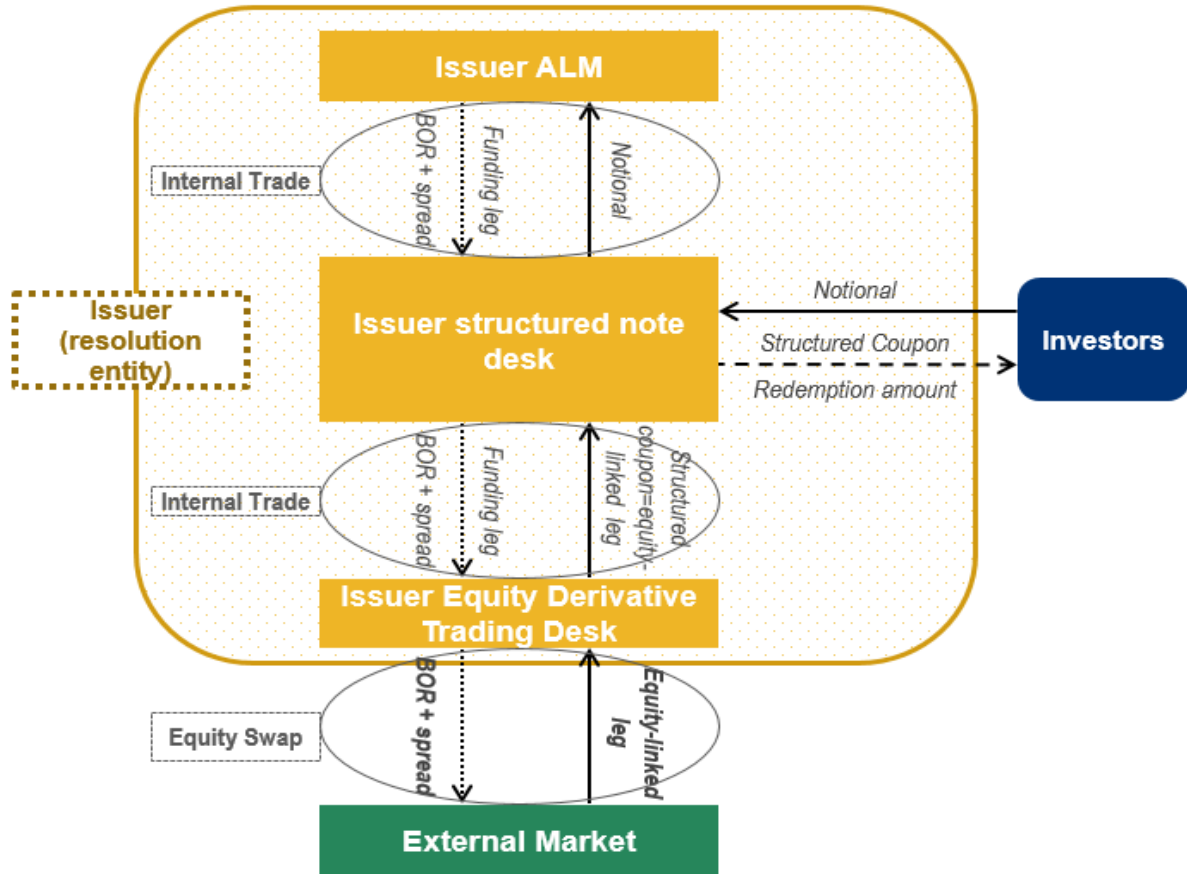
2.2.1 *The economic and accounting perspectives on structured notes*

Banks hedge the derivative features of their structured notes externally on the market – but also via internal hedging (trade) arrangements (see Figure 1). For instance, in the case of an equity-linked⁵⁴ structured notes, the derivatives desk will enter into an equity swap with an external counterparty, paying the floating fixed-income leg of the swap and receiving a payment stream of the performance of an equity security or index. This external swap would thus hedge the derivatives position linked to the structured notes, allowing for a matching of this payment stream and the equity-linked return of the structured note (“the structured coupon”). In case of bail-in of the structured note, the equity swap would represent an open position up to the level of write-down/conversion and the bank would need to adjust its hedge to close the position.

From an accounting viewpoint, both the structured notes and the hedging arrangements – the equity swap in the example above – are accounted for at fair value through P&L account according to the International Financial Reporting Standards (IFRS) framework. The IFRS fair value accounting registration of the structured product implies that the embedded derivative of the structured product is not separated from the non-derivative component/host contract. It is therefore not possible to isolate the mark-to-market value of the embedded derivative from the mark-to-market value of the structured product. From an economic viewpoint, this notably implies that the derivative position of a structured note – the equity swap in the example above – is macro-managed within the trading book of the bank like a standard derivative.

⁵⁴ Equity is the most common class of underlying asset for notes issued by French banks.

**Figure 1 – Stylised example of an issuance process of structured notes
(equity-linked structured notes)**



Note: the structured note desk hedges the proceeds of the issuance of the equity-linked notes to investors by making two internal trades: a) a deposit with the bank's ALM, and b) an internal swap with a derivatives desk of the bank. According to this internal trade, the funding leg (BOR+spread) received from ALM is swapped against the structured coupon of the issued note. From an economic perspective, this internal swap with the derivative desk may be identified as the derivative component of the structured note. As a second step, the equity derivative trading desk hedges the second internal trade on the market through an equity swap with an external counterparty.

2.2.2 Nature of the bail-inable amount and valuation issues

In contrast to derivatives, the bail-in of structured notes is applied to each individual note. The embedded derivative features of structured notes imply that, as is the case for derivatives, their value is linked to the value of underlying assets or instruments, which can evolve over time. In business as usual, this value can only crystallise upon maturity. However, the BRRD does not foresee a similar process to the close-out of derivatives under Article 49(3) BBRD that would allow for the crystallisation of the structured notes value before they can be subject to bail-in.

This leads to specific valuation challenges of structured notes to determine the relevant bail-inable amount. The more difficult it is for the value of structured notes to crystallise *ex ante* – in the absence of standard close-out amounts and valuation processes like the ones described above for derivatives – the more difficult it will be to bail-in them. In particular, the valuation challenges are linked to the nature and complexity of the structured notes payoffs.

The relevant bail-inable amount should represent the best estimate value of the claim in case of insolvency due to the NCWO constraint (see section 3.1.1). In most cases, the market value/fair value of the note can be considered a good proxy of this bail-inable amount. There may be some exceptions depending on each instrument’s contractual terms, which may specify the value of the claim in cases of the insolvency or resolution of the issuer.

The simplest structured notes have a principal amount – the maturity payoff – that is not affected by an embedded derivative feature or have a contractual term that specifies the value of the claim in insolvency/resolution. This is the case of MREL eligible structured notes. For those notes, only the coupons are affected by embedded derivative features – they are therefore “structured coupons”.⁵⁵ However even for this type of structured products, the use of the nominal value for the note – the nominal principal amount – may not be appropriate, as the accrued interests linked to the structured coupons and to be added to the fixed principal amount will have to be valued on a mark-to-market basis. Therefore, for this specific product type, the bail-in should be based on the principal amount plus the fair market value of the structured coupons (excluding the issuer spread that could affect the fair value of the principal amount as explained below).

The issuer is usually the calculating agent of the value and will determine the market price for the investors. The uncertainty and litigation risks related to this valuation will of course be higher if the principal amount – and not only the coupon – is affected by the embedded derivative features and the maturity payoff is also to be marked to market. Valuation risks affect the degree of complexity of structured notes’ bail-in (see Box 3 for stylised examples). It is thus possible to classify structured notes into three main classes, depending on whether the note’s indexation to the change of the underlying assets, concerns coupons made at pre-determined dates and/or the final redemption amount at the maturity of the note (see Table 3).

⁵⁵ As a general rule, there is no specific bail-in treatment of accrued interests in France as accrued interest have the same ranking as the principal amount in the French creditor hierarchy.

Table 3 – Three categories of structured notes based on the degree of complexity of their bail-in (in decreasing order in terms of complexity)

	Coupon (payable on pre-determined dates if applicable)	Principal amount (maturity payoff)
1. MREL-eligible structured notes (Article 45 BRRD)	May be affected by by an embedded derivative feature	Fixed or increasing Not affected by an embedded derivative feature Or Contractual term that specifies that the value of the claim in cases of the insolvency of the issuer and of the resolution of the issuer
2. Structured notes with partial protection⁵⁶	May be affected by by an embedded derivative feature	Affected by by an embedded derivative feature
3. Structured notes with no principal protection⁵⁷	May be affected by by an embedded derivative feature	Affected by an embedded derivative feature No maximum losses on the principal amount

However, this fair market value is impacted by changes in the issuer own credit risk, that are recognised in Other Comprehensive Income (OCI) under IFRS rule. Given insolvency or for the purpose of bail-in in resolution, the idiosyncratic credit risk of the issuer is no longer relevant and would negatively affect the market/fair value (or liquidation value) of the product. The relevant bail-inable amount of structured notes is thus the fair market value of the note deducted from any change attributable to the issuer (the bank) own credit risk:

Relevant bail-inable amount = Fair market value – Amount of the last change in the fair value attributable to changes in the issuer credit risk

Box 3. Stylised examples of structured notes bail-in

Assumptions for all the cases below:

Date of resolution=Reference date of the bail-in decision: 30/06/2023

Write-down rate applied to the class of senior unsecured liabilities: 20%

1) Vanilla notes

⁵⁶ Also known as "barrier" products: they allow investors to benefit from a protection of the capital initially invested as long the underlying asset has not crossed a threshold or "barrier". If the barrier is breached, the investor suffers a capital loss.

⁵⁷ The principal in a principal protected structured note is typically "guaranteed" to exactly the same degree as the principal in an unsecured senior debt is guaranteed, that is this protection is contingent on the absence of default of the issuer.

Nominal value of the principal amount=100 due on 31/12/2025

Annual coupon rate: 4%

Level of write-down applied to the senior unsecured class of liabilities: 20%

The relevant bail-inable amount is equal to the sum of the principal amount and the accrued interests at the date of resolution: $100 + \frac{4\%}{2} \times 100 = 102$

Post-resolution, the bank will have to pay coupons for the three remaining years (2023, 2024, 2025) until maturity, based on the reduced principal amount. For the first year (2023), as the date of resolution is mid-year and accrued interests for the first part of 2023 will have been bailed-in, the bank will only pay coupon on the reduced principal amount (by a 20% factor) for the second part of the year (i.e. $\frac{4\%}{2} \times 100 \times (1 - 20\%)$)

At the maturity of the vanilla note, the bank will have repaid the holder of the note: $100 \times (1 - 20\%) + \frac{4\%}{2} \times 100 \times (1 - 20\%) + 4\% \times 100 \times (1 - 20\%) + 4\% \times 100 \times (1 - 20\%) = 80 + \text{Coupons paid in 2023, 2024 and 2025} = 88$

2) Structured notes with full principal protection

Nominal value of the principal amount=120 due on 31/12/2025

Mark-to-market value of the structured coupon/payoff at the date of resolution (30/06/2023): +8

Change in the structured note's fair market value attributable to the change in the issuer credit risk at the time of resolution=+20

The relevant bail-inable amount is the fair market value of the note at the date of resolution (30/06/2023) including the deduction of the changes in the structured note's fair market value attributable to changes in the issuer's own credit risk, i.e. sum of the principal amount and the mark-to-market value of the structured coupon at the date of resolution: $120 - 20 + 8 = 108$

Post-resolution, at the maturity of the vanilla note, the bank will have repaid the holder of the note: $120 \times (1 - 20\%) + \text{Structured coupons to be paid in 2023, 2024 and 2025 (if applicable)}$

The partial reduction/conversion of the note implies that the bank will have to adjust its hedge to the reduced outstanding amount.

3) Structured notes with a principal amount affected by an embedded derivative feature

The principle is the same as in the cases above, except that it will be quite impossible to isolate the structured coupon from the principal. The fair market value including the deduction of any changes attributed to the issuer's own credit risk will still be the relevant bail-inable amount.

2.2.3 Operational and economic challenges: timing issues and hedge reversal

The use of the fair market value implies that Central Securities Depositories (CSDs) and international CSDs (iCSDs) where the notes are deposited should regularly update a structured issue outstanding amount based on data provided by an issuer's calculation agent to the extent that they only have the principal amount, not the fair value, in their central ledger. The write-down and conversion would then follow the same process⁵⁸ as for vanilla bonds held in those CSDs and iCSDs – Clearstream Banking Luxembourg and Euroclear Bank –, with the relevant amount being written down through the adjustment of the nominal value or via the use of a pool factor in the books of the CSDs based on the instructions of the issuer's (the bank's) paying agent. However, the main specificity of structured notes is that for some banking groups, they can represent a significant number of instruments compared to vanilla securities. The number of structured instruments can be higher than the combined number of all vanilla securities (including for instance AT1, T2, Senior Non Preferred (SNP) or Senior Preferred (SP) debt instruments) (see Table 4 for French banking groups).

Accordingly, part of the external execution depends on the operational capacity of external stakeholders, such as CSDs, to deal with the bail-in of potentially thousands of ISINs in a very short period.⁵⁹ Banks and third parties (paying agents, custodians) would have to manage and process multiple notes with several CSDs in short timeframes encompassing thousands of corporate action forms, which may be beyond standard volumes and current capacity in crisis time.⁶⁰

Table 4 – Ratio of the number of structured notes ISINs by the number of vanilla instruments ISINs

	A	B	C	D	E	F
$\frac{Nb\ of\ ISIN_{Structured\ notes}}{Nb\ of\ ISIN_{Vanilla\ instruments}}$	0.5	27.3	0.0	6.1	0.4	0.2

Sources: Six French banking groups LDR PoE (31.12.2021), ACPR computations.

Note: vanilla instruments include notably CET1, AT1, T2, SNP and senior unsecured liabilities.

As regards economic challenges, the bail-in of structured notes may create open positions in the bank's trading books because of the external hedging arrangements in place to hedge the issuance of

⁵⁸ As there are no specific corporate action standards for a bail-in event, under CSD procedures such an event is generally treated as a corporate reorganisation event.

⁵⁹ The internal execution is less problematic, as banks are expected to build up their operational capacity to deal with the bail-in of thousands of instruments as part of their bail-in playbook, with associated tests in planning phase being regularly performed.

⁶⁰ For instance, CA action forms of the French CSD, Euroclear France, are currently not automated, and banks fill them manually with one corporation action form per ISIN.

structured notes. While one of the challenges for derivatives is the re-hedging exercise, the economic challenge for structured notes is more of a hedge reversal exercise. The bail-in will affect by an x% the fair market value of structured notes. The effective reduction of risk will depend on the capacity of the bank to unwind by x% the corresponding hedge and will vary depending on the type of capital market transactions and underlying assets. For structured notes, the relevance of the underlying asset class only matters with respect to the unwind of open positions resulting from the structured notes' bail-in: the more liquid the market of the underlying asset is, the less costly the hedge reversal will be.

2.3 Non-covered deposits: the full granularity of deposits and economic challenges

2.3.1 *Scope of deposits which may be subject to bail-in*

Covered deposits are mandatorily excluded from bail-in under Article 44(2) BRRD. Uncovered deposits may be bailed-in and are broken down into two classes: non-covered preferred (NCP) deposits and non-covered non-preferred (NCNP) deposits. The former class consists of eligible deposits of natural persons and SMEs above the DGS coverage level (EUR 100,000), while the latter mainly consists of deposits made by large corporates (above the coverage level) and of financial institutions.

In France – as in most EU countries –, NCNP deposits rank *pari passu* with preferred senior unsecured.⁶¹ Thus covered deposits are super-preferred, ranking above preferred deposits (natural persons and SMEs above EUR 100 000), which in turn rank above other deposits, the latter ranking *pari passu* with ordinary unsecured claims (Figure 2).

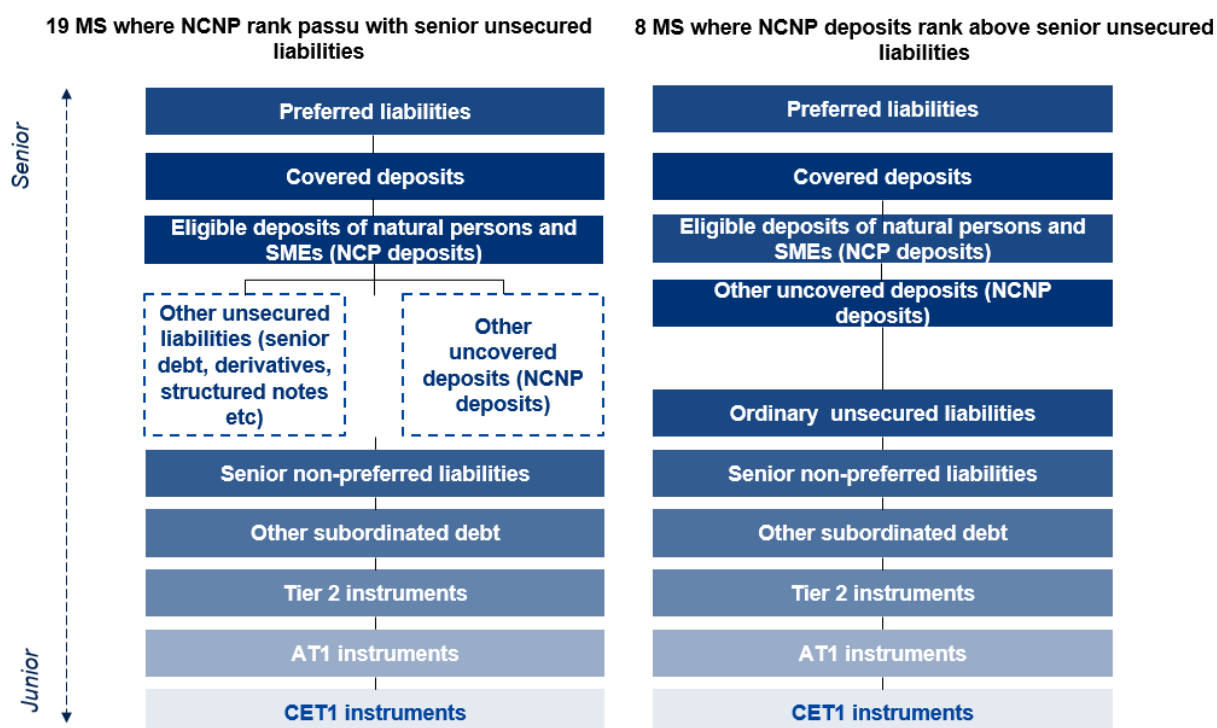
Some term deposits with a maturity over one year and which are non-covered and non-preferred, may be MREL eligible.⁶²

The weight of each class of deposits in total deposits depends on the bank's size and business models, as illustrated by the case of French banks. For retail banks, covered deposits tend to represent the majority of deposits and NCP deposits weight more relative to NCNP deposits. In contrast, for more diversified and international groups, NCNP deposits make up the majority of deposits.

⁶¹ For example, in Bulgaria, Croatia, Cyprus, Greece, Italy, Portugal and Slovenia, non-preferred deposits rank above preferred senior debt in the creditor hierarchy. This implies that preferred senior debtholders will bear losses prior to non-preferred depositors – and other depositors - in those countries in a resolution. Those countries have thus a three-tier depositor preference where covered deposits rank above preferred deposits, which rank above non-preferred deposits, the latter also ranking above ordinary unsecured claims.

⁶² Sight deposits are excluded from MREL due to an overnight residual maturity. In practice, MREL-eligibility of NCNP deposits implies that the contractual terms governing the deposit do not allow the depositor or a third party to withdraw the deposit with a notice period of less than one year.

Figure 2 – Relative ranking of deposits in the creditor hierarchy in the EU



Although deposits tend to represent a significant share of banks' liabilities, the loss-absorbency potential of deposits in resolution ultimately depends on their stickiness in the run-up to resolution. In that respect, it is necessary to distinguish two points in time.

Before the PONV phase, as the financial situation of the resolution group deteriorates, non-covered depositors would most likely try to withdraw funds from the bank, helped by technological advances in the financial sector allowing for large outflows to occur with unprecedented ease ("digital run").⁶³ This would especially be the case for the less sticky deposits of large corporates and financial institutions (NCNP deposits). Such phenomenon, with a potential for panic-driven run, would probably significantly change the outstanding amount of NCNP deposits that could be subject to bail-in. For instance, the NCWO methodology of the SRB (see section 3.1.1) assumes that NCNP deposits with maturity of less than 1 month will be withdrawn in the run-up to resolution, with a 100% outflow for deposits held by financial institutions and a 40% outflow for the deposits of households, SMEs, corporates, government, central banks and supranationals.⁶⁴

⁶³ This implies that large deposit outflows can also be expected in a fast-moving scenario to resolution, in addition to a slow-moving scenario.

⁶⁴ The NCWO methodology factors in the evolution of the balance sheet of the bank approaching failure by considering that some short-term unsecured liabilities (i.e. 7-day institutions' liabilities as well as deposits and unsecured liabilities with maturity of less than 1-month) will be replaced by secured liabilities.

Second, at the PONV, the moratorium power⁶⁵ may be applied to prevent a rapid and sizeable deposit run and allow for a timely and orderly reduction of eligible accounts. Under Article 33a(3) BRRD, when this moratorium power is applied in respect of eligible deposits, RAs may ensure that depositors have access to an appropriate daily allowance amount of those deposits. In practice, the potential for loss-absorption of deposits will be determined by the moratorium outstanding amount diminished by the aggregated appropriate daily allowance amounts that depositors will be authorised to withdraw.

Box 4. Deposits stickiness, collateralisation requirements and the bail-inability of deposits

Following the SVB bank run, the introduction of collateralisation requirements for non-covered deposits has been put forth as a possible way to solve the problem of runs (FDIC, 2023). However, as evidenced by the case of repos and derivatives, there is always some risk that a secured depositor would favour withdrawal over seizing collateral in a resolution process with high valuation risks. As collateralisation may also lead to a reduced scope and efficiency of banking intermediation, these collateralisation requirements would only apply above certain amounts and/or concentrations.

From a bail-in standpoint, such collateralisation requirements for uncovered deposits would however enhance their protection in resolution by reducing their loss-absorbing potential. Collateralised deposits would fall within the category of secured liabilities.

In the EU framework, under specific circumstances, some parts of secured liabilities can be bailed-in and are not excluded by default. For example, in the case of a repo or a derivative netting set, only part of the transaction may be collateralised, which makes the uncollateralised part potentially bail-inable. In a similar manner, in the case of a covered bond, following the valuation assessment in the resolution weekend, the value of the collateral pool may decrease at the PONV and that may create an uncollateralised part that is potentially bail-inable.

Collateralised deposits would however lead to the same operational challenges to the bail-in of deposits as those described below, as the full granularity for deposits data requirement would still apply to the uncollateralised part.

2.3.2 Operational challenges linked to the full granularity of deposits

The execution of bail-in by RAs requires banks to have in place Management Information System (MIS) to produce granular data for each instrument/liability (“full granularity”, see Table 5). As regards

⁶⁵ This moratorium power may only be applied if it is necessary for the assessment whether to place an institution in resolution or, in case of positive assessment, if it is necessary to choose the appropriate resolution actions or to ensure the effective application of one or more resolution tools.

deposits, the full granularity requirement poses specific challenges, given their volume compared to other types of liabilities.

For the purpose of bail-in, the granularity of deposits is more demanding than for paying out covered depositors in insolvency. This stems from the fact that the coverage level of EUR 100 000 relates to the aggregate deposits of each depositor, i.e. the amount of covered deposits is calculated at the depositor's level and not at the level of the single deposit. However, the bail-in will be applied to each single deposit, and not at the level of the depositor. This implies that banks need to submit data points for each deposit and have the operational capacity to allocate the covered portion of EUR 100 000 between the various deposits held by each individual depositor.⁶⁶

Table 5 – Selected granular data points applicable to deposits in the SRB bail-in data set

Data points	Attribute	Definition
Unique identifier number for the liability	[Account number]	Account number
Name of contracting party	[Name]	The name of the depositor
Counterparty type	[Euro amount]	Counterparty of the liability (households, SME, credit institutions...)
Outstanding principal amount	[Euro amount]	Value of the outstanding principal amount of the deposit
Accrued interest	[Euro amount]	Value of the outstanding accrued interest on the deposits
Relevant amount for write-down/conversion	[Euro amount]	Amount eligible for calculation of write-down / conversion rate
Not covered but preferential	[yes/no]	Deposits that do not qualify for exclusion but to which a preferential treatment is foreseen in line with Article 108 BRRD
Not covered and not preferential	[yes/no]	Deposits that do not qualify for exclusion from bail-in or preferential treatment in application of respectively Article 44(2)a or 108 BRRD
Covered portion of the eligible deposit	[Euro amount]	Covered portion of the eligible deposit

Source: SRB bail-in data set instructions (SRB, 2022a).

Given that the scope of bail-inable deposits goes beyond covered deposits, the number of clients to be reached out may be greater than is the case for a payout in liquidation and, yet, the timing is more stringent (48 hours instead of 7 days in a payout scenario in liquidation). For large international banking groups, the challenge is to be able to centralise all the information required on all deposits in all

⁶⁶ The current approach in the Liability Data Report (LDR) of the SRB is to allocate the covered portion on a pro-rata basis, regardless of the maturity of the deposits.

branches over the world where the group is located, within 24 hours (timeframe required by the SRB). The sheer volume of accounts held by these institutions would pose the significant challenge to banks and to RAs alike to make a rapid determination over a resolution weekend as to which accounts should be bailed-in. This volume can be proxied by the number of clients, which may hold several accounts at the bank. French banking groups have for instance millions of clients. A thorough resolution planning work is therefore needed on the bail-in of uncovered deposits

2.3.3 Economic challenges

In addition to operational challenges linked to the provision of granular data on deposits, the bail-in of deposits raises economic challenges that are related to all exceptional circumstances listed in Article 44(3) BRRD and the articulation of different resolution objectives.

While, in some Member States, it has been done in the past (see Poland and Denmark examples in section 1.2.3), bailing-in deposits may be sensitive, since some depositors are not considered as mere investors. The rationale is that eligible depositors use banks primarily as a secure place for placing their savings or for payments/working capital purposes as regards SMEs and corporates, while investors take a claim in the bank after having balanced and being aware of the related risks and rewards.

As regards the objective of maintaining the continuity of critical functions, there is a paradox in considering the provision of some non-covered deposits as a critical function in resolution planning while bailing-in deposits in resolution execution, as evidenced by the Polish PBS case mentioned above.

As regards contagion risks, article 44(3) BRRD explicitly points to eligible deposits held by natural persons and SMEs as potential exclusions from bail-in in order to avoid a wide-spread contagion. For instance, depositors who would have been bailed-in may need to withdraw and use money from their accounts in other banks, if any, creating potentially a knock-on or domino effect. Furthermore, depositors using the resolution entity as their main bank could themselves face serious liquidity issues, with possible adverse effects on the financial system and the real economy.

As regards the risk of value destruction, bailing in depositors under an open bank bail-in could give rise to potential negative effects on the bank's core franchise, hindering the capacity to reorganise the bank under the Business Reorganisation Plan (BRP).⁶⁷ Second round effects on the assets side of the institution's balance sheet derived from the bail-in of creditors that are, at the same time, borrowers from the failing institution should also be factored in. This may in particular be the case if the bail-in of

⁶⁷ Article 52 BRRD states that within one month after the application of the bail-in a bank has to deliver a BRP that shall be based on the *ex-post* insights into the causes, implications and circumstances of the institution's failure.

deposits results in loan repayments defaults and thus in an increase in Non-Performing Loans (NPLs).⁶⁸ In case of resolution transfer strategies, such bail-in might similarly deplete the attractiveness of assets and liabilities for a potential acquirer, eroding the franchise value.

3 The treatment of discretionary exclusions: managing resolution authorities' trade-offs

The aim of this section is to assess the overall capacity of RAs to make discretionary exclusions. This capacity is constrained by two factors: 1) overarching principles linked to the respect of the “bail-in, no bail-out” principle, the respect of the hierarchy of claims, and most notably the NCWO principle; 2) resolution financing issues, in particular the minimum 8% TLOF of bail-in condition to access resolution funds. Accordingly, in resolution execution, RAs face a trade-off between excluding liabilities to limit operational and economic risks of bail-in execution and mitigating NCWO and resolution funding risks. In resolution planning, the mirror image of this trade-off is that between the focus on the scope of bail-inable instruments most likely to be bailed-in or its extension to more complex types of liabilities, with a risk of dispersing RAs and banks' efforts and delaying the full operationalisation of the former instruments. We put forward a proportionate approach to manage this resolution planning trade-off.

3.1 Resolution authorities' trade-off between excluding liabilities for economic and operational reasons and mitigating resolution funding and NCWO risks of resolution execution

3.1.1 The discretionary exclusions NCWO constraint: mitigating NCWO risks while achieving resolution objectives

As a general rule, resolution powers should be exercised in a manner that respects the hierarchy of claims, the *pari passu* principle and the NCWO safeguard.

According to the *pari passu* principle, the creditors of the same class need to be treated on equal terms. This principle implies, as far as possible, to bail-in – or transfer, in case of transfer strategy – all liabilities of a same class. The discretion of RAs to fully or partially exclude certain liabilities from bail-in might affect in differentiated terms creditors placed in the same class and would run counter to the principle. However, BRRD provides RAs with the flexibility to depart from the general *pari passu* principle, as it

⁶⁸ This was one of the side effect of the pre-BRRD (2013) bail-in of deposits in two systemic banks (Bank of Cyprus and Laiki bank) in Cyprus (Stylianou, 2022).

only requires the “equitable”⁶⁹, not equal, treatment of creditors of the same class. Anyway, any departure from this principle is subject to the NCWO safeguard.⁷⁰

The concept of NCWO ensures that shareholders and creditors whose claims have been affected during a resolution do not incur greater losses than they would have if the entity had been wound up under normal insolvency proceedings at the time of the resolution decision. The NCWO principle also establishes that creditors should have a right to compensation should this condition not be verified.

The check of that NCWO principle consists then in performing a counterfactual assessment and comparing the treatment of each creditor in liquidation and resolution (see Box 5). Accordingly, it has two main drivers:

- (i) the aggregate amount of losses (or conversely the total value that can be retrieved from the orderly restructuring of the bank), which is presumably higher in liquidation due to fire sales considerations and assets whose value is higher in going concern than in gone concern;
- (ii) the allocation of those losses and the conversion process along the creditors’ hierarchy, with the same raking as applied in insolvency proceedings.⁷¹ Compared to liquidation, the difference in loss distribution stems from either mandatory or discretionary exclusions in exceptional circumstances. As losses that would have been imputed on creditors excluded on a discretionary basis are necessarily reported on other creditors, this introduces a bias compared to the insolvency scenario as non-excluded creditors see their payoff being negatively impacted.

Box 5. Modelling the NCWO risk

Level 1 texts do not specify how the NCWO risk should be computed. It can be modelled in a very simplified way for senior unsecured creditors. As stated above, the first driver of the NCWO assessment is the aggregate amount of losses. Therefore, the first assumption to be made is about the level of aggregate losses to be absorbed.

We assume that the amount of losses (the Loss Absorbing Amount (LAA)) is equal to own funds and that recapitalisation needs equal the Recapitalisation Amount (RCA).

For the argument below:

⁶⁹ Article 34(1)(f) BRRD.

⁷⁰ Article 34(1)(g) BRRD.

⁷¹ Article 34(1)(b) BRRD.

- SPU = Outstanding amount of Senior Preferred Unsecured liabilities not excluded from bail-in
- Sub=Subordinated debt
- $hc_{insolvency}$ = haircut applied to SPU liabilities in insolvency
- PtbOF= price-to-book value of Own Funds instruments following the conversion.

We assume that (i) the whole LAA is absorbed; (ii) the whole RCA is used for recapitalisation; (iii) and the subordinated debt layer is lower than the RCA (so that one needs to tap into senior resources to implement the bail-in). The value after resolution of instruments initially held by senior preferred unsecured debt holders would be the remaining senior preferred unsecured debt plus the value of the share of new own funds stemming from the conversion of senior unsecured debt to recapitalise the institution:

$$\begin{aligned} \text{Value in resolution}_{SPU} &= (SPU - (RCA - Sub)) + (RCA - Sub) \times \text{PtbOF}^{72} \\ \text{Value in insolvency}_{SPU} &= SPU \times (1 - hc_{insolvency}) \end{aligned}$$

There is a NCWO risk if:

$$SPU \times (1 - hc_{insolvency}) > (SPU - (RCA - Sub)) + (RCA - Sub) \times \text{PtbOF}$$

In case of a NCWO risk, we can determine the amount of subordinated debt $Sub_{no\ ncwo\ risk}$ which cancels the NCWO risk, by equalising the value in resolution and the value in solvency:

$$SPU \times (1 - hc_{insolvency}) = (SPU - (RCA - Sub_{no\ ncwo\ risk})) + (RCA - Sub_{no\ ncwo\ risk}) \times \text{PtbOF}$$

The add-on, a part of the subordinated amount, is the amount of subordinated resources that would need to be added to equalise the value in resolution and in insolvency and eliminate the NCWO risk:

$$Sub_{no\ ncwo\ risk} = Sub + add_on$$

The SRB has developed a quantitative approach that compares the situation (value at disposal) of certain groups of creditors in a resolution and in an insolvency scenario. The main parameters used in the SRB methodology are asset haircuts applied in the insolvency scenario equal to 10% and price-to-book ratio applied to converted shares in the resolution scenario equal to 25% (SRB, 2023).

As a conclusion, for a given conversion rate⁷³, modelling the NCWO risk implies setting three main parameters: (i) a level of loss and recapitalisation assumption (equal to MREL+CBR⁷⁴ in the SRB model); (ii) the haircut on assets (set at 10% in the SRB model for all banks) in insolvency; and (iii)

⁷² With no assumption on the relative size of the subordinated layer and the RCA, the formula would be:

$$\text{Value in resolution}_{SPU} = (SPU - \max(0; (RCA - Sub))) + (RCA - \min(Sub; RCA)) \times \text{PtbOF}$$

⁷³ As the conversion rate may not be equal to 1:1.

⁷⁴ More specifically, the loss assumption is LAA+CBR and the recapitalisation needs amount to the RCA (adjusted for consolidation scope).

the post conversion equity value (PCEV) of own funds after resolution (set at 25% of book value in the SRB model for all banks).

This means that the NCWO principle is best verified (1) the higher the aggregate loss is in liquidation relative to in resolution, and (2) the less exclusions there are from the bail-in scope.

The result of the NCWO assessment⁷⁵ also depends on the size and international reach of banks to the extent that liquidation is more destructive of value for large banking groups, and especially for G-SIBs (one of the main sources of the “too big to fail” issue) than for small and medium-sized banks.

For instance in the case of the Lehman Brothers bankruptcy, the recovery rate of the senior unsecured creditors of LBHI was only 16% (84% of losses) after a 1st distribution (April, 2012) and 46.6% (53.4% losses) after the 26th distribution (April, 2023⁷⁶).⁷⁷ Lehman’s creditors fared worse than historical norms: Acharya, Bharath and Srinivasan (2007) found that average recovery rates in bankruptcy for senior unsecured claims between 1982 and 1999, based on market prices of bonds, loans, and other debt instruments, were about 59 percent for financial institutions. As another point of comparison, in the report issued by Deloitte on the Valuation 3 of Banco Popular⁷⁸ (EUR 160 billion in total assets), in the 7 years scenario, the recovery rate of senior unsecured creditors is 67% (33% losses) in the worst case and 87% (13% losses) in the best case scenario.⁷⁹

The secondary objective of value maximisation

In normal insolvency procedures, the primary objective is to maximize the value of assets of the failed firm in the interest of creditors, with no or little timing constraints. However, this may take many years, in particular for complex institutions leading to uncertainty with a knock-on effect on confidence. In contrast, the primary objective of bank resolutions is to respond in a swift manner to a bank’s failure

⁷⁵ As a further problematic issue—especially for institutions that operate cross border—the liquidation scenario, on which the NCWO test is based, inevitably refers to national legislations, as bank insolvency rules are not harmonized in the EU. For example, rules governing the creditors’ hierarchy in insolvency may significantly differ among member States, so that a creditor might “pass” or “fail” the NCWO test depending on the jurisdiction where the failed bank would be declared insolvent.

⁷⁶ [lehman26thdistributionnotice-April2023.pdf \(wilmingtontrust.com\)](#)

⁷⁷ For a comparison with resolution, the FDIC (2011) estimates that Lehman’s senior unsecured creditors would have been able to recoup 97 cent on the dollar were Dodd-Frank powers and OLA authority of Title II of DFA in place at the time of Lehman’s failure.

⁷⁸ https://srb.europa.eu/sites/srbsite/files/annex_i_-_valuation_3_report_en.pdf

⁷⁹ The report assumes 6 scenarios to estimate the losses in insolvency: 3 different time lengths of the insolvency proceedings (18 months, 3 years and 7 years), with best case and worst case scenarios for each one of them. The average haircuts on assets, including liquidation costs (contract termination costs, layoffs, legal risks, etc.), is 19.6% (3 best case scenarios) and 22.7% (3 worst case scenarios), meaning recovery rates of respectively 80.4% and 77.3% for creditors.

to achieve the resolution objectives – which includes the preservation of financial stability and the protection of the taxpayers’ money.

However, there is also a maximisation of value objective (or conversely minimisation of losses) embedded in the EU resolution framework as evidenced by: (i) the existence of a recovery floor in the form of the NCWO principle, which ensures at least similar outcomes to those of normal insolvency proceedings for all creditors; (ii) the fact that discretionary exclusions can be justified on destruction of value grounds as per Article 44(3)(d); (iii) its mention as part of resolution objectives.⁸⁰

This objective is secondary to the primary objective of ensuring the successful implementation of resolution strategies and objectives. For open bank bail-in strategies, the bail-in tool must be calibrated to such an extent that there is a reasonable prospect to restore the resolution entity to financial soundness and long-term viability. This would entail maintaining the core franchise value to enable progressive restructuring of the institution post-resolution under a BRP. For transfer strategies, as insolvency is often initiated at a stage where the franchise value has largely been eroded, preserving and maximising the franchise value in resolution is key to ensuring that the resolution outcome is indeed superior to that of insolvency.

Whether in open bank bail-in or transfer strategies, the comparative advantage of resolution with respect to insolvency is that it makes the preservation of a viable business possible. In that respect, discretionary exclusions may be necessary, and when deciding on their exercise, this secondary objective of value maximisation acts as a counterweight for RASs to exclusion-linked NCWO risks.

3.1.2 The importance of dense layers of subordinated and senior vanilla liabilities

Though discretionary exclusions remain a case-by-case assessment based on each bank’s liability structure, it is possible to provide an overview of those layers of liabilities that would be more or less prone to discretionary exclusions and to generate NCWO risk (see Table 6). The density of two layers of liabilities of the resolution entity, the subordinated layer and senior vanilla sub-layer, is instrumental in mitigating NCWO risks.

⁸⁰ As per Article 31(2) BRRD: “When pursuing the above objectives, the resolution authority shall seek to minimise the cost of resolution and avoid destruction of value unless necessary to achieve the resolution objectives.”

Table 6 – Distribution of liabilities (excluded and non-excluded) in three layers

Subordinated layer	Subordinated liabilities (not recognised as own funds)
	Senior non-preferred liabilities
Senior vanilla sub-layer	Other MREL eligible liabilities
	Senior unsecured liabilities
	Uncollateralised secured liabilities
Senior non-vanilla sub-layer	Structured notes
	Derivatives
	Deposits, not covered and not preferred
	Liabilities towards other entities of the resolution group (Article 44(2)(h) BRRD)
	Critical service liabilities (Article 44(2)(g)(ii) BRRD)
	System (operator) and CCP liabilities < 7 days (Article 44(2)(f) BRRD)
	Institution liabilities < 7 days (Article 44(2)(e) BRRD)
Super Senior Layer	Residual liabilities
	Non-financial liabilities
	Deposits, not covered but preferential (Article 108 BRRD)

Note: mandatory excluded liabilities in bold, senior non-vanilla layer in blue

The subordinated layer, is, as a general rule, not prone to either mandatory or discretionary exclusions and, accordingly, the bail-in of subordinated instruments (notably SNP debt) does not raise concern from a NCWO perspective.⁸¹ For the credibility of the bail-in tool⁸², the importance of the subordinated layer also stems from the fact that the bail-in of subordinated creditors, as “educated investors”⁸³, does not entail economic, social or other sensitivities. In case of an SPE open bank bail-in strategy, the subordinated layer of non-resolution entities is also very important for the operationalisation of the strategy. This layer includes subordinated⁸⁴ liabilities issued by non-resolution entities to the resolution entity for the purpose of the internal loss transfer and recapitalisation mechanisms (ILTRM),

⁸¹ Intragroup liabilities that are subordinated under the law of some Member States, for instance under Spanish law, are one of the rare examples of potential discretionary exclusions of subordinated liabilities. There is a strong case for excluding these intragroup liabilities, as they are likely to derail and run counter to the whole SPE resolution strategy which is supposed to downstream capital, not losses, from the resolution entity to subsidiaries. But on the other hand, the exercise of discretionary exclusion for subordinated liabilities entails a very high risk of NCWO breach due to the low level of losses needed to reach the subordinated layer.

⁸² As regards transfer tools, subordination makes it also easier to transfer non-subordinated liabilities to a bridge bank or sound bank.

⁸³ For instance, under Article 44a BRRD, there is an explicit prohibition on the sale of subordinated MREL-eligible liabilities to retail investors in the absence of the MIFID2 suitability assessment and/or in breach of minimum investment/financial capacity thresholds.

⁸⁴ For instance, in the BU, to be eligible for internal MREL, liabilities other than own funds instruments have to be fully subordinated and must rank in normal insolvency proceedings below excluded liabilities and all externally issued liabilities.

enabling the transfer of losses from the group's non-resolution entities up to the PoE and potential transfers of capital from the PoE down to the rest of the resolution group.

The senior unsecured layer can be construed as being divided into two equally ranking sub-layers: the senior vanilla sub-layer, consisting mostly of vanilla senior debt instruments and the senior non-vanilla sub-layer, consisting mostly of NCNP deposits and instruments with derivative features. The senior layer's potential discretionary exclusions (e.g. derivatives or uncovered deposits) are concentrated on the senior non-vanilla unsecured sublayer: the more significant their share of the senior class, the greater the potential to create NCWO risks in case of exclusions. However, in Member States with a depositor preference – NCNP deposits ranking above senior unsecured claims –, the NCWO risks at the senior layer level arising from the exercise of discretionary exclusions on NCNP deposits are mitigated, compared to Member States where they rank *pari passu* with senior preferred claims.⁸⁵ A “cleaner” senior layer in relation to NCWO risk is thus to a significant extent linked to the creditor hierarchy.

From an operational standpoint, the importance of the senior vanilla sub-layer stems from the fact the bail-in execution treatment (i.e. the mechanics for the write-down and conversion) of vanilla debt instruments under EU law is the same, regardless of it being senior non-preferred (i.e. subordinated) or senior preferred. Accordingly, banks can operationalise concurrently the subordinated layer and the senior vanilla sub-layer, with no or little difficulties.

As regards layers ranking higher than the senior unsecured layer, they concentrate mandatory exclusions and the potential discretionary exclusion of NCP deposits. For some Pillar 1⁸⁶ banks, the scenario of impacting the layer of creditors above senior unsecured creditors is very unlikely given that the level of losses that it would entail would probably run counter to the very “open” nature of bail-in. This is due to the fact that Pillar 1 banks are subject to MREL subordination requirements and have, accordingly, a quite dense subordinated layer. On the contrary, for some non-Pillar 1 banks, in particular small and medium-sized banks, this scenario is more likely given their balance sheet structure, consisting mostly of own funds and deposits (ECB, 2022).

⁸⁵ The *pari passu* ranking of senior unsecured claims and deposits of large corporates and financial institutions may also create ambiguous market expectations concerning the “bail-inability” of senior unsecured claims. Markets participants may consider that the bail-in of any deposits would entail such political sensitivities that they should be shielded from taking losses in resolution, implying a similar protection for all *pari passu* claims.

⁸⁶ Pillar 1 banks are those banks subject to a minimum subordination requirements: TLAC for G-SIBs and 13.5% TREA/5% LRE for top tier banks and fished banks. The BRRD framework makes a distinction between various types of institutions, subject to proportional MREL requirements: (i) G-SIBs; (ii) top tier banks, which represent resolution entities, other than G-SIBs, that are part of resolution groups with total assets exceeding €100 billion (Article 45c(5) BRRD); (iii) smaller banks, but considered by RAs as likely to constitute a systemic risk in insolvency (known as fished banks, Article 45c(6) BRRD); and (iv) all other institutions.

3.1.3 *The need for discretionary exclusions vs the resolution funding constraint*

Discretionary exclusions deplete the pool of resources available for loss absorption, which makes them a resolution financing issue. Depending on the relative magnitude of this pool of bail-inable resources compared to the losses, there are two scenarios:

- The depleted pool of internal resources available for loss-absorption and recapitalisation is still sufficient to ensure a full loss absorption and a potential recapitalisation. Losses that are not borne by excluded liabilities are passed on fully to other liabilities – increasing the level of write-down and conversion that is applied to the latter – subject the NCWO safeguard.
- The reduced pool of resources is not sufficient to absorb losses not borne by excluded liabilities, implying reliance on external funding – resolution funds – to offset the depletion effect of discretionary exclusions. In the EU, the key condition to use resolution funds is a bail-in in the amount of at least 8% TLOF (see the example of Box 6) *“in the event that the use of the resolution funding arrangement indirectly results in part of the losses (...) being passed on to the resolution financing arrangement”* (article 101(2) BRRD). In the discretionary exclusion context, it is clear that resolution funds will step in to bear losses, if (i) the losses not borne by excluded liabilities have not been passed on fully to other creditors; (ii) and/or to compensate certain classes of creditors when mitigating NCWO risks. In this case, the resolution fund may make a contribution to the institution to⁸⁷ cover any losses which have not been absorbed by the excluded liabilities or purchase instruments of ownership of the institution under resolution to capitalise it. The fund usage is, in principle, limited to 5% TLOF.⁸⁸

Therefore, two conditions must be met for the flexible exercise of discretionary exclusions without funding impediments:

- (i) the amount of bail-inable liabilities excluding those subject to discretionary exclusions should be at least equal to 8% TLOF at the time of resolution;
- (ii) the aggregate amount by which bail-inable liabilities must be written down or converted to ensure enough resources for the successful execution of the resolution strategy is below 13 (=8+5) % TLOF.

⁸⁷ Article 101(1) BRRD.

⁸⁸ Any additional fund aid or state aid beyond the 5% limit is subject to strict pre-conditions. The cap could be exceeded under strict condition that all unsecured, non-preferred liabilities, other than eligible deposits, have been written down or converted in full (Article 44(7)(b) BRRD). In case of discretionary exclusions of non-preferred liabilities such as derivatives, this condition would not be met.

The respect of the two conditions depends on the funding structure and the size of the banks. In particular, challenges in meeting these them are likely to be greater in the case of smaller institutions, relying on deposits as a main source of funding.⁸⁹

Box 6. Exclusion of deposits from bail-in and the resolution funding constraint: the example of the resolution of Getin Noble in Poland

In September 2022, the BFG adopted a resolution scheme for the failing Getin Noble Bank, relying on the use of the bridge institution tool. The main challenge of the resolution execution was linked to its financing: the fulfillment of the 8% TLOF to use the national resolution fund. It would have been necessary to write down liabilities above own funds and subordinated liabilities to meet the 8% requirement.

As Getin Noble relied on deposits as a primary source of funding, the only available liabilities to be bailed-in to reach the 8% threshold were deposits, mostly the ones from local government units and large corporates. BFG performed a bail-in of deposits in PBS w Sanoku resolution case as mentioned in section 1.2.3. Based on this BFG experience, deposits were deemed not bail-inable on financial stability grounds (bank run risks).

The resolution process – the use of bridge institution tool, with some liabilities, most notably equity and subordinated left behind in the residual failing entity to absorb losses – was made possible thanks to the financial contribution of Protection Scheme set up by the 8 biggest banks in Poland. The aim of such protection scheme was to ensure the liquidity and solvency of its members, including by supporting the possible resolution of a failing or likely-to-fail bank by providing liquidity or capital support through loans or guarantees. The Protection Scheme members made private and voluntary contributions to the resolution of Getin Noble, allowing for the fulfillment of the 8% TLOF threshold and tapping into the resolution fund’s resources to support the bridge bank. This solution was accepted by the European Commission.

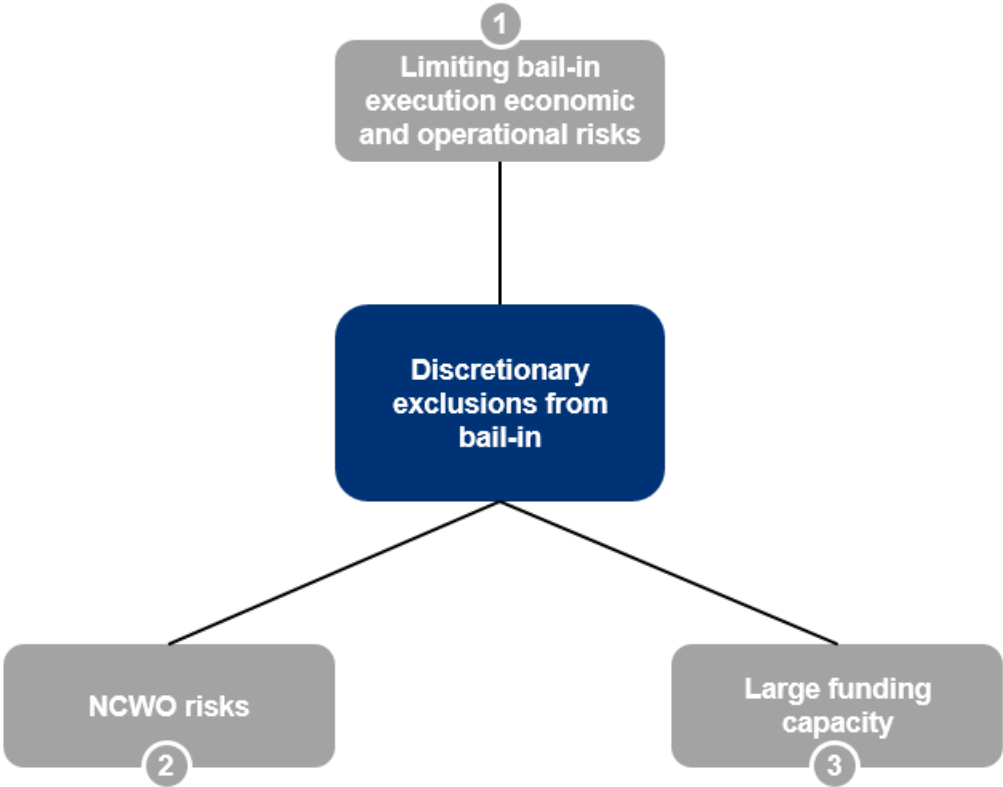
The discretionary exclusion trade-off

When making discretionary exclusions RAs have three priorities, between which they must arbitrate: (i) limiting bail-in execution operational and economic risks; (ii) mitigating NCWO risks; and (iii) keeping a sufficient large funding capacity to execute the resolution strategy. In resolution execution, the combination of the resolution funding and the NCWO constraints creates a trade-off for RAs between

⁸⁹ It may be impossible for these banks to reach the 8% threshold without bailing deposits and, considering the size of their balance sheet, the 5% TLOF cap on the usage of such funding may not be enough to fund, for instance, a transfer strategy. Discretionary exclusions may also tilt the overall balance between internal resources and external resources for resolution funding to an extent not compatible with reduced moral hazard.

excluding liabilities to limit operational and economic risks of bail-in execution and the mitigation of the two constraints (see Figure 3). RAs also need to carefully assess whether the exercise of discretionary exclusions creates the risk for implicit guarantees and increased moral hazard.

Figure 3 – Resolution authorities’ priorities and trade-off in resolution execution



3.2 The treatment of discretionary exclusions in resolution planning: towards a qualitative and proportionate approach to the extension of the operational scope of bail-in

3.2.1 The example of French banks’ bail-in operational scope: state of play, challenges and discretionary exclusions constraints

The current scope of significantly operationalised instruments

For the six French banking groups, all vanilla instruments up to senior level are on their way to being fully operationalised without any major issue. These vanilla instruments are mostly made up of own funds (CET1, AT1, T2), subordinated debt not recognised as own funds, SNP and SP debt. The data provision, internal execution and external execution steps supporting their bail-in under French law are being tested by means of dry-runs. The vanilla instruments represent on average 42% of the total

theoretical bail-inable capacity and 91% of the bail-inable capacity excluding non-covered deposits as of end 2021 (see Table 7).

Table 7 – Bail-in playbook coverage of French banks: instruments on the verge of full operationalisation (% of the bail-inable capacity (BC) and bail-inable capacity excluding deposits (BCED)⁹⁰)

	Bank A		Bank B		Bank C		Bank D		Bank E		Bank F	
	BC	BCED	BC	BCED	BC	BCED	BC	BCED	BC	BCED	BC	BCED
Total vanilla instruments	48%	99%	19%	94%	42%	90%	36%	83%	65%	99%	40%	81%

Sources: Six French banking groups bail-in playbooks, LDR PoE (31.12.2021), ACPR computations

External execution challenges and the issue of third country law liabilities

Work remains to be done on two fronts to achieve full operationalisation of the subordinated and senior vanilla layers of liabilities.

First, the external execution phase should be further operationalised and tested, through close cooperation with the French issuer CSD Euroclear France. The volume of ISINs represented by the senior vanilla layer is within the current operationalisation capacity of CSDs – as opposed, potentially, to structured notes (see Table 4 in section 2.2.3).

Second, while it can be considered that vanilla instruments under EU law are close to full operationalisation, the bail-in of instruments under third country law poses specific challenges. In line with Article 55 BRRD, banks are required to include specific terms – known as bail-in recognition clauses – in relevant instruments governed by the law of a third country, to support effective write-down and conversion of the related liabilities RAs (see Table 8).⁹¹ Even for instruments with the relevant clause⁹², banks should address in detail the operationalisation of the bail-in of third-country law in the next iterations of their bail-in playbooks, including through specific playbook chapters for major third country laws like US and Japanese law, with specific regards to the disclosure obligations,

⁹⁰ For the purpose of Table 7, non-financial liabilities and residual liabilities are excluded from the BC and BCED.

⁹¹ The inclusion of those contractual clauses is mandatory in the absence of binding international agreements with third countries or statutory recognition of the effect of a WDC decision by the third country law.

⁹² As regards MREL eligibility, the relevant clause is not sufficient: the SRB must confirm their eligibility. Accordingly, banks in the BU required by the SRB to provide legal opinions on the effectiveness and enforceability under the relevant third country law of the contractual recognition clauses contained in these instruments in accordance with Article 55(3) BRRD and the SRB MREL policy (SRB, 2023).

suspension, delisting and issuance registration arrangements, investor protection/reporting obligations and other relevant legal requirements in non-EU jurisdictions.⁹³

Table 8 – Share of third country law liabilities in three types of liabilities of French banks (% of total liabilities of the class)

	A	B	C	D	E	F
1. Subordinated liabilities (not recognised as own funds)	14%	18%	na	na	4%	na
% of third country law liabilities including a bail-in recognition clause	100%	90%	na	na	83%	na
2. Senior non-preferred liabilities	28%	26%	49%	na	12%	na
% of third country law liabilities including a bail-in recognition clause	100%	100%	100%	na	100%	na
3. Senior unsecured liabilities	50%	15%	3%	3%	30%	0%
% of third country law liabilities including a bail-in recognition clause	73%	100%	99%	100%	50%	na

Sources: Six French banking groups LDR PoE (31.12.2021), ACPR computations

Structured notes, derivatives and non-covered deposits

The operational challenges French banks are faced with when including structured notes, derivatives and non-covered deposits in the scope of their bail-in playbook, are broadly similar to the general ones described in section 2. Two French banks have volumes of structured notes instruments (number of ISINs) more material than the total number of vanilla instruments (see Table 4 in section 2.2.3). Two retail banks, with low number of structured notes instruments, have started operationalising these instruments in their playbooks.

In terms of outstanding amounts, structured notes and derivatives represent a significant loss-absorbing potential for only two French banking groups, which are major EU dealers, as opposed to other retail French groups (see Table 9). The loss-absorbing capacity of non-covered deposits is by far more significant, as it is one of the main component of liability structure of French banking groups.

⁹³ The conversion of third-country instruments deposited at the foreign CSD into equity may be more challenging than their write-down, as it depends on active links between the issuer CSD (Euroclear France) and the foreign CSD.

Table 9 – Magnitude of the different layers of liabilities of French banks (in % TLOF)

Bail-inable liabilities	A	B	C	D	E	F
MREL	10.4%	9.4%	13.4%	9.6%	9.9%	9.1%
Senior vanilla layer	15.4%	12.3%	19.0%	13.6%	14.4%	11.6%
Senior vanilla layer + structured notes	15.5%	13.0%	19.2%	15.6%	15.1%	12.2%
Senior vanilla layer + derivatives	15.4%	14.1%	19.1%	14.9%	15.3%	11.7%
Senior vanilla layer + non-covered deposits	32.1%	32.1%	29.0%	30.6%	32.4%	47.5%
Senior vanilla layer + structured notes + derivatives + non-covered deposits	32.2%	34.6%	29.2%	33.8%	34.1%	48.1%

Sources: Six French banking groups bail-in playbooks, LDR PoE (31.12.2021), ACPR computations

3.2.2 Delimiting the bail-in circle in resolution planning: a pillar 2 approach

The French banks' current operational scope is a case in point of the tension between the theoretical bail-in scope in resolution planning and the *ex post* practical bail-in scope. The MREL capacity and the subordinated and senior vanilla layers currently operationalised as part of bail-in playbook are largely above the 8% TLOF for all French banking groups, implying in a static view⁹⁴ that the resolution funding constraint is not binding. Moreover, the necessity to bail-in liabilities not part of these layers would entail extreme and improbable scenario of losses that may not be compatible with an open bank bail-in strategy.

Should banks in a similar situation only focus on fully operationalising these two layers of liabilities? Or should they operationalise concurrently more types of instruments, unlikely to be bailed-in due to economic challenges and sensitivities or their high rank in the creditor hierarchy?

The first option of this trade-off implies that the quality of the bail-in capacity is the main factor to give RAs sufficient comfort for resolution execution. In practice, for large international banks, such a solution would bring the bail-in playbook scope of OpCo banks closer to that of HoldCo banks. It would entail an *ex ante* (in resolution planning) discretionary exemption from operationalisation requirements, at least in the short and medium term.⁹⁵ The second option would entail the extension

⁹⁴ A more elaborate and dynamic view would need to take into account the losses that might be incurred before the PONV and the evolution of the balance sheet – and thus a change in TLOF – in the run-up to resolution.

⁹⁵ But information requirements would still be necessary. In order to be able to either bail-in or exclude the liabilities, the RAs needs full information on the legal or operational difficulties to bail them in.

of the scope to more complex classes of instruments with a risk of dispersing RAs and banks' efforts and delaying the full operationalisation of the most important layers of liabilities

There is no single best option for all banks as it depends on each bank's liability structure. In particular, a pillar 1 assessment as regards which liabilities or categories of liabilities should be discretionarily excluded from bail-in, cannot be performed entirely *ex-ante*. On one side, large international banks tend to have many if not all types of liabilities on their balance sheet and therefore resolution may be carried out by using largely own funds and SNP debt before tapping into higher ranking and more complex instruments. This justifies, in the short to medium term, focusing efforts on fully operationalising liabilities up to the senior vanilla layer, including third country law instruments and the internal loss transfer mechanism crucial for the execution of an SPE bail-in strategy. At the other end of the spectrum, there may be small and medium-sized banks, with a MREL and bail-inable capacity made up predominantly of own funds and deposits. In such cases, the operationalisation of liabilities challenging to bail-in from an operational and economic standpoint, like deposits, is necessary and should be a priority in the short-term, as the discretionary exclusions constraints are binding.

In the context of bail-in playbook, exempting in the short term certain liabilities from operationalisation requirements would be the mirror image of *ex ante* MREL-type discretionary exclusions already foreseen in the BRRD framework (see Box 7). As the liabilities subject to *ex ante* discretionary exclusions from bail-in playbooks would differ across banks according to a pillar 2 logic, the principle that no liabilities should be presumed to be always excluded from bail-in unless they fall within the list of liabilities explicitly excluded under article 44(2) BRRD would still be respected.

Box 7. Ex ante discretionary exclusions from MREL

Discretionary exclusions from bail-in have to be made at the time of resolution and, accordingly, the assessment cannot be performed entirely *ex ante* for all banks as it would depend on the specific circumstances of the resolution execution. However, the EU framework already provides for two examples of *ex ante* – that is, in resolution planning – discretionary exclusions in relation to MREL. One is a general *ex ante* discretionary exclusion related to the overall MREL capacity. In accordance with Article 45(c)(8) BRRD, the RA may take into account the fact that certain classes of eligible liabilities are reasonably likely to be fully or partially excluded from bail-in on a discretionary basis or “might be transferred in full to a recipient under a partial transfer” when determining MREL. Accordingly, MREL requirements should be met using own funds or eligible liabilities that are sufficient to (a) cover the amount of such discretionarily excluded liabilities; and to (b) meet the

MREL target of the bank. In practice, this may imply that those liabilities should be excluded from the MREL capacity of banks (the modality depends on the application of this provision by RAs). For small and medium-sized banks meeting their MREL only with own funds and deposits, the application of this provision by RAs may force them to issue debt instruments to cover the amount of likely to be excluded deposits.

The second is a specific discretionary exclusion, that of third country liabilities from MREL. Article 55(2) BRRD provides that liabilities governed by the law of a third country cannot be considered as eligible if the write-down and conversion could be not effectively enforceable (either by an international agreement, domestic statutory provisions in the third country or a recognition clause compliant with Article 55(1) BRRD).

3.2.3 Relevant conditions for delayed operationalisation

For certain banks, the respect of a set of four conditions would give RAs sufficient confidence and comfort to choose the option of exempting in the short and medium term from operationalisation requirements certain liabilities identified as likely to be excluded at the time of resolution. This would enable them to prioritise and allocate resources to the operationalisation of other bail-inable liabilities or to other resolution planning activities.

Each condition reflects a RA's priority in managing the discretionary exclusions trade-off and could be assessed in resolution planning for each bank, following a pillar 2 logic (Figure 4).

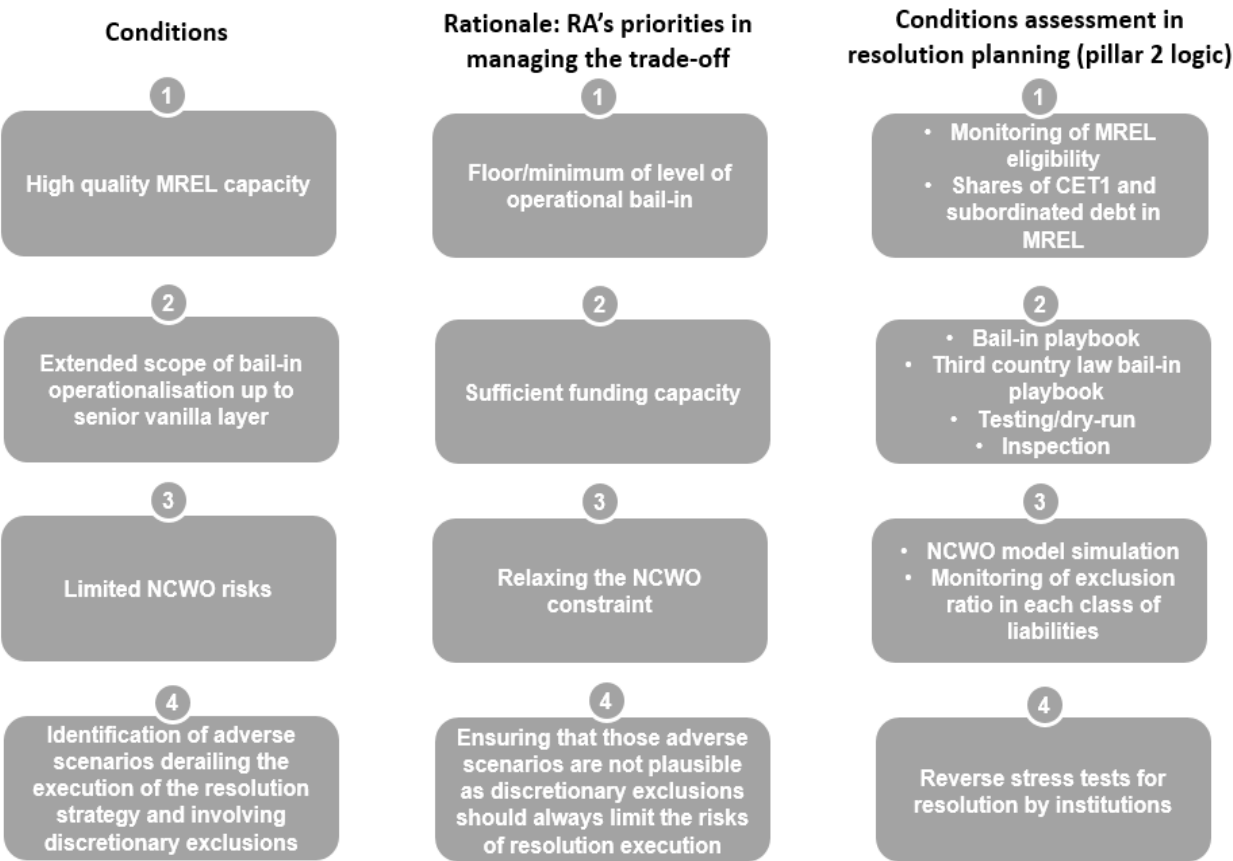
First, the MREL capacity should be high enough and of sufficient quality to represent the first line of defense. This condition would ensure a floor level of bail-in at the time of resolution. In that respect, the quality of the MREL capacity is more important than its quantity and special attention should be paid to its composition in resolution planning. For instance, a very high share of CET1 may indicate that significant MREL resources may absorb losses in going concern and would not be available at the time of resolution, while a high share of subordinated debt instruments ensures such availability with minimal bail-in operational execution challenges.

Second, there should be an extended scope of operationalised instruments up to the senior vanilla layer, above the conditions for access to resolution funds and to absorb high level of losses compatible with the viability of the institution post-resolution in case of open bank bail-in. An emphasis should be laid on fully operationalising third country law instruments in these layers. This conditions would ensure that the exercise of discretionary exclusions would not result in a significant resolution funding gap.

Third, RAs should anticipate limited NCWO risks stemming from these discretionary exemptions in resolution planning through the monitoring of an exclusion ratio⁹⁶ within certain classes of liabilities and/or through simulations of NCWO models.

Fourth, RAs and banks should identify and evaluate the probability of adverse scenarios involving foreseen discretionary exclusions where resolution execution is derailed. This could be achieved through resolution-specific reverse stress testing, assuming not only the failure of the institution but also a derailment of the resolution strategy. In particular, those scenarios should model in a dynamic way the losses before PONV and the evolution of the balance sheet of the institution in the run-up to resolution. The respect of the above three conditions should imply that such scenarios are not plausible.

Figure 4 – Relevant conditions for exemption from operationalisation requirements in the short and medium term



⁹⁶ For instance, under Article 55(2) BRRD, when the overall amount of bail-inable liabilities ranking *pari passu* with MREL within a class of liabilities that are (i) mandatorily excluded, (ii) likely to discretionary excluded and (iii) governed by third country law and without the bail-in recognition clause, represent more than 10 % of that class, RAs are required to assess the potential impact on the resolvability of the institution.

Conclusion

Under exceptional circumstances, discretionary exclusions represent a built-in flexibility of the EU bail-in design to execute a tailored bail-in in the smoothest way possible. However, the exercise of discretionary exclusions to manage bail-in operational and economic challenges leads to a trade-off, as it may reduce resolution funding and increase NCWO risks.

The ability of RAs to manage this trade-off ultimately depends on the bank's balance sheet structure. Some banks' balance sheet structures and size represent a challenge for the feasibility and/or credibility of bail-in, while at the same time offering a large funding capacity and low prospect of NCWO breach. In such cases, RAs can be more comfortable when managing the trade-off in resolution execution. And in resolution planning, deprioritising the bail-in operationalisation of certain complex liabilities – a form of *ex ante* discretionary exemption – that are likely to be discretionarily excluded at the time of resolution⁹⁷ would enable some banks and RAs to focus on fully operationalising the most important layers of liabilities for a credible bail-in execution.

Such treatment of discretionary exclusions represents a prudent and pragmatic risk-based approach, enabling RAs to tailor the resolution planning work based on each bank's characteristics and resolution scenarios. This embedded proportionality in the implementation of the EU bail-in framework would enhance the credibility of bail-in implementation both in resolution execution and in resolution planning.

⁹⁷ Notably due to i) the high likelihood of meeting the conditions of article 44(3) BRRD; and ii) the absence of NCWO risk.

References

- Acharya, V. V., Bharath, S. T., & Srinivasan, A. (2007). Does industry-wide distress affect defaulted firms? Evidence from creditor recoveries. *Journal of financial economics*, 85(3), 787-821.
- Andersen J.V. & Hovedskov M.S. (2021). How to deal with weak financial institutions: experiences and lessons from a non-euro area country. In *Workshop and Conferences* (No. 24). Bank of Italy, Economic Research and International Relations Area
- Angehrn U. (2023). Address , 5 April 2023 Speech in Bern.
- BFG (2023). Resolution of Podkarpacki Bank Spółdzielczy w Sanoku.
- EBA (2023). Guidelines to resolution authorities on the publication of the write-down and conversion and bail-in exchange mechanic. European Bank Authority.
- ECB (2022). LSI supervision report 2022, European Central Bank.
- FDIC (2017). Crisis and Response: An FDIC History, 2008-2013. Federal Deposit Insurance Corporation, Washington DC.
- FDIC (2019). Resolution Handbooks, Federal Deposit Insurance Corporation, Washington DC.
- FDIC (2023). Options for deposit insurance reform? Federal Deposit Insurance Corporation, Washington DC.
- Fleming, M. J., & Sarkar, A. (2014). The failure resolution of Lehman Brothers. *Economic Policy Review*.
- FSB (2011). Key Attributes of Effective Resolution Regimes for Financial Institutions, Financial Stability Board.
- FSB (2015). Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution, Total Loss-absorbing Capacity (TLAC) Term Sheet, Financial Stability Board.
- FSB (2018). Principles on Bail-in Execution, Financial Stability Board.
- FSB (2021). Bail-in Execution Practices Paper, Financial Stability Board.
- Gelpern, A., & Véron, N. (2019). An effective regime for non-viable banks: US experience and considerations for EU reform.
- Machado, P. (2016). Bail-in as new paradigm for bank resolution: discretion and the duty of care. *e-Pública*, 3(1), 29-49.

McAndrews, J., Morgan, D. P., Santos, J. A., & Yorulmazer, T. (2014). What makes large bank failures so messy and what to do about it?. *Economic Policy Review, Forthcoming*.

Norman P. (2011). *The Risk Controllers*.

OJEU (2012). Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories. Official Journal of the European Union.

OJEU (2014a). Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (recast) Text with EEA relevance, Official Journal of the European Union.

OJEU (2014b). 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, Official Journal of the European Union.

OJEU (2016a). Commission Delegated Regulation (EU) 2016/1075 of 23 March 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the content of recovery plans, resolution plans and group resolution plans, the minimum criteria that the competent authority is to assess as regards recovery plans and group recovery plans, the conditions for group financial support, the requirements for independent valuers, the contractual recognition of write-down and conversion powers, the procedures and contents of notification requirements and of notice of suspension and the operational functioning of the resolution colleges, Official Journal of the European Union.

OJEU (2016b). Commission Delegated Regulation (EU) 2016/1401 of 23 May 2016 supplementing Directive 2014/59/EU of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms with regard to regulatory technical standards for methodologies and principles on the valuation of liabilities arising from derivative, Official Journal of the European Union.

OJEU (2016c). Commission Delegated Regulation (EU) 2016/2251 of 4 October 2016 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories with regard to regulatory technical standards for risk-mitigation techniques for OTC derivative contracts not cleared by a central counterparty, Official Journal of the European Union.

OJEU (2016d). Commission Delegated Regulation (EU) 2016/860 of 4 February 2016 specifying further the circumstances where exclusion from the application of write-down or conversion powers is

necessary under Article 44(3) of Directive 2014/59/EU of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms, Official Journal of the European Union.

Restoy, F. (2018). Bail-in in the new bank resolution framework: is there an issue with the middle class? Bank for International Settlements, Basel, March.

SRB (2022a). Bail-in Data Set Instructions, Single Resolution Board.

SRB (2022b). Operational Guidance on Bail-in Playbooks, Single Resolution Board.

SRB (2023). SRB MREL Policy, Single Resolution Board.

Stopczyński, A. R. (2021). Does Bank Resolution Rule out the Use of Public Funds? The Case of the Podkarpacki Bank Spółdzielczy. *Finanse i Prawo Finansowe*, (1), 135-157.

Stylianou, M. (2022). Experiences from the implementation of bail-in resolution measures in Cyprus. FinSAC Annual International Conference, Central Bank of Cyprus.