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Public support for bank resolution

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Executive summary

Credible bank resolution crucially requires appropriate means to preserve failing banks' critical functions. To that end, resolution policies work in two directions. First, they require banks to have internal resources that could facilitate the continuation of a bank's main functions by itself or by a suitable acquirer. Second, they mobilise resources that are external to the failing bank to help close remaining mismatches, for example by providing support to an acquirer. In many jurisdictions, such external resources can be made available from industry-sourced funds such as deposit insurance funds or dedicated resolution funds.

Banks' internal resources and those of industry-sourced funds are finite, and public resources may therefore be needed to enhance them. Both banks' internal resources and those of industry-sourced funds may not always be sufficient, they may not be available within the requisite time, or they cannot be called upon without defeating the very objectives of resolution. In such circumstances, if resolution is to preserve financial stability, and considering that financial stability is a key public good, using public resources as a last resort to enhance funding capacities appears only natural.

Yet public support for resolution action poses obvious risks. If funds are used on a temporary basis, for example as loans, immediate risks pertain to recouping those outlays over time. More generally, using public resources to fund resolution, even if only on a temporary basis, comes at the expense of other public tasks and may jeopardise the credibility of resolution policies and, eventually, erode social confidence. Lastly, expectations that resolution will be publicly funded are likely to lead to moral hazard and distort market discipline. These risks are exacerbated if public resources are committed without predetermined duration, for example as capital. Resolution policy needs to mitigate these risks.

The simplest way to organise public support for resolution action is through a loan to industry-sourced funds. This enhances the resources of industry-sourced funds and strengthens their capacity to fund resolution actions. Such an arrangement has various advantages. The lending terms can reflect proper burden-sharing across funding sources, reinforcing the last resort principle. Moreover, public loans are repaid from fees and levies imposed on fund constituencies, ensuring that public expenses are recouped and loans do not permanently burden the public purse. Lastly, as loans are repaid through fees and levies, the cost of failure is contained within and mutualised across the financial system as the primary beneficiary of resolution action, rather than imposed on the taxpayer.

Residual risks to public finances remain but can be managed by remuneration policies. Where public support for resolution is provided as a loan to industry-sourced funds, punitive interest rates may help set incentives that reduce the exposure of public funds, similar to lender of last resort policies, and further mitigate moral hazard risks. If public support is deployed directly, for example through publicly funded recapitalisations or guarantees, setting such incentives is more challenging and requires negotiating bespoke terms into the relevant instruments.

While flexibility is a key feature of effective arrangements for public support, it needs to incorporate safeguards. If required, public support needs to be deployed quickly and provided in sufficient amounts. Overly constraining caps as well as overly demanding thresholds, while potentially mitigating public exposure, tend to reduce the scope of action and ultimately may harm the credibility of resolution frameworks. Arrangements should therefore be sufficiently flexible while incorporating

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safeguards to ensure that public support is provided as and when needed to preserve financial stability, alternative suitable solutions are unavailable, adequate conditionality applies and recoupment is effective.

Resolution frameworks should integrate well-defined public support arrangements that enhance financial stability and contain adverse social costs. Integrating public support into resolution frameworks has various benefits. It clearly ties public support to the public interest by identifying the considerations to be taken and processes to be followed, if and when authorities deem financial stability is at stake. It then underpins these decisions with governance arrangements, safeguards and conditionality that help to preserve social legitimacy.

Section 1: Introduction

1. **A key principle of bank resolution policies developed after the Great Financial Crisis was to minimise taxpayers' exposure to loss.** In the European Union, for example, public funds totalling EUR 1,459 billion in capital-like aid and EUR 3,659 billion in liquidity aid were deployed between 2008 and 2017 to maintain financial stability.[2] Policies adopted after that fallout therefore aimed to strengthen banks' loss-absorbing capacity.[3] This achieved a twofold objective. First, it made banks internalise the cost of a potential failure as creditors of instruments earmarked for loss absorption demanded appropriate returns on their investments. Second, it created a stack of "bail-in-able" debt that would be available to write down (whether by open bank or closed bank bail-in) in case of an actual failure. Such a writedown would absorb losses and thus minimise the need to resort to external funds, including potentially from the public sector.

2. **Notwithstanding such progress, external funding has been provided to help manage recent bank failures.** In 2017, for example, the failure of the so-called Venetian banks necessitated a cash injection of EUR 5 billion as well as a fiscal guarantee by the Italian state of EUR 12 billion to support the transfer of the failed banks' businesses to another bank.[4] More recently, the bank failures in the spring of 2023 are evidence that significant amounts of funding may be required to support the resolution strategy. In the US cases, for example, the Federal Deposit Insurance Corporation (FDIC) provided more than USD 20 billion in temporary funding for the resolution of Silicon Valley Bank (SVB) alone, in addition to expenses related to Signature Bank and First Republic.[5] In Switzerland, the Swiss National Bank (SNB) provided liquidity support of CHF 168 billion to Credit Suisse, and the Swiss treasury provided a CHF 5 billion guarantee to UBS for its acquisition of Credit Suisse.[6]

3. **Public support may therefore be necessary to preserve financial stability.** At times, banks' internal resources may be insufficient to fund resolution, and third-party resources or those from industry-sourced funds may also not be available in requisite volume and speed. Even if a failing firm does not qualify as systemically important for prudential purposes, its failure may be a risk to financial stability through contagion effects. In the above-mentioned cases from 2017 and 2023, for example, most of the banks (except Credit Suisse) had not been designated as systemically important beforehand, and yet their failure threatened to spill over to other banks, potentially posing a systemic risk. In such circumstances, public support for resolution action, provided by national treasuries and/or central banks, may be needed as a last resort and its use may be warranted to the extent that financial stability is a key public good and cannot be maintained otherwise.

4. **International standards recognise this policy issue at the heart of resolution arrangements.** The Financial Stability Board's Key Attributes of Effective Resolution Regimes for Financial Institutions stipulate that effective resolution regimes should not be constrained to rely on public ownership or bailout funds as a means of resolving firms, and these regimes should not create an expectation that such support will be available. At the same time, the Key Attributes do not in principle prohibit the deployment of public funds altogether. Rather, they stipulate that, if public support is provided for resolution, this should be to maintain essential functions and accomplish orderly resolution. It should be based on a clear and accountable determination that the public interest is at stake and cannot be safeguarded by private sources of funding alone. In addition, the Key Attributes require provisions to recover any losses incurred

[2] European Court of Auditors (2019).

[3] FSB (2011, 2014, 2024), Barr et al (2021, p 1081).

[4] European Commission (2017).

[5] See FDIC (2024a, pp 8, 29, 80-82). By law, these funds must be repaid by the banking sector through special assessments.

[6] See SNB (2023, p 25).

by the public purse from unsecured creditors or, if necessary, the financial system more widely.[7] Similarly, the soon-to-be-revised International Association of Deposit Insurers (IADI) Core Principles require that public backstop arrangements are in place to provide backstop funding for the deposit insurance fund.[8]

5. **In 2018, the Financial Stability Board (FSB) provided specific guidance for access to temporary public sector backstop funding mechanisms to address liquidity stress for banks in resolution.** Banks experience liquidity stress if market participants transacting with them do not extend credit and/or choose to withdraw or not roll over their funds. The more troubled a bank is, and the less confidence it commands in the markets, the more likely it is to experience such liquidity stress. Once confidence is lost, it may take a while to be restored, even as authorities take resolution action. As a consequence, the need may arise to alleviate liquidity stress prior to, during and after resolution. The 2018 FSB guidance primarily aims to define actions and measures that should be set out in resolution plans to mitigate any liquidity stress that banks in resolution may face.[9]

6. **Specific guidance does not exist however for the provision of public support for resolution actions.** This public support could take different forms, including capital injections, guarantees or loans provided by treasuries or central banks to the failing bank or intermediate entities (eg industry-contributed funds or bridge banks) with the purpose of facilitating a resolution action such as a transfer of assets, sale of business or recapitalisation. This paper aims at benchmarking jurisdictions' approaches to such public support. Our analysis is based on the legal frameworks in 10 different jurisdictions as well as certain actions and measures taken in recent cases.[10]

7. **The remainder of this paper is organised as follows:** Section 2 discusses the scope of public support for different resolution strategies. That distinction is the basis for examining, in section 3, different frameworks for the provision of public support in resolution. This includes in particular the conditions that need to be met and the provisions that apply, if public funds, and notably treasury funds, are to be deployed. Section 4 reflects on the main trade-offs and challenges that jurisdictions face as they seek to balance the use of public funds in resolution against the need to protect the taxpayer. Section 5 concludes.

Section 2: Public support for resolution actions

8. **Resolution aims to preserve the critical functions of a failing bank.** Authorities therefore take resolution action as soon as a bank is failing or likely to fail. Banks may fail for a variety of reasons, and a failure may manifest itself as a violation of key regulatory metrics or a run by the bank's creditors. In the run-up to the 2023 turmoil, for example, creditors of Credit Suisse withdrew a total of CHF 110 billion – roughly 20% of the bank's balance sheet at the time – within three weeks. Depositors of SVB withdrew or sought to withdraw almost all of their deposits within 24 hours of SVB's loss announcement on 10 March 2023.[11] Such dynamics, if uncontained, have the potential to disrupt critical functions such as deposit taking, lending or payment systems, both at the failing bank and potentially other banks, eventually causing significant damage to the real economy. Resolution actions aim to contain those dynamics and preserve the critical functions of the affected banks and financial stability more broadly.

[7] See FSB (2024) (paragraph 6.5).

[8] IADI (2024) (Principle 9, Essential criterion 7, p 35).

[9] FSB (2018, 2016), Baudino et al (2021).

[10] Jurisdictions covered in this paper include Bahrain, Canada, the European Banking Union, Hong Kong SAR, Japan, Malaysia, Morocco, Switzerland, the United Kingdom and the United States. The Banking Union is treated as single jurisdiction in this analysis, given its single resolution mechanism. Our analysis of the Swiss approach largely reflects the CHF 9 billion treasury loss guarantee in 2023, while the proposed Swiss public liquidity backstop framework is not in our scope.

[11] FDIC (2024a, pp 7-9), Swiss Financial Market Supervisory Authority (FINMA) (2023).

9. **The scope of external support required for resolution largely depends on the chosen resolution strategy.** The public support needed to implement resolution may therefore also differ depending on the type of strategy applied. A stylised typology of resolution strategies may look as follows:

– **In a closed bank strategy, the failing bank's business is transferred to a solvent acquirer or bridge institution while certain liabilities are left behind in a receivership or bankruptcy estate.** The acquirer assumes a rebalanced portfolio of assets and liabilities, while losses are imposed on those liabilities (and equity) left behind in receivership. To facilitate the transaction with the acquirer, transferred assets are often augmented through external cash support or shielded from valuation risks through guarantees to the acquirer.

– **Open bank strategies focus on cancelling certain liabilities.** The principal example is a pure open bank bail-in, which aims to restore a failing bank's viability by writing off or converting into equity certain classes of liabilities. If applied puristically, it operates with no parallel injection of fresh funds and hence does not, by definition, pose risks for external providers of funding, including any public support.

– **Lastly, public ownership and bridge bank strategies may involve public funds more directly.** If a capital injection against issuance of new shares is publicly funded in an open bank strategy, the exposure can be analysed as an equity investment and hence carries the standard risks of dilution, exit and loss. Bridge bank strategies may mitigate some of these risks to the extent that a bridge bank may legally operate with or without lower levels of injected capital.[12]

10. **Many jurisdictions can, in principle, resort to any of these strategies.** Authorities' tools and powers are designed so they can potentially support any of these strategies. In the European Banking Union and the United Kingdom, policy emphasises the open bank bail-in approach. In the United States, transfer strategies were applied during the 2023 banking turmoil and contained bridge bank elements and asset guarantees. Swiss authorities opted in 2023 to support a private law merger between UBS and Credit Suisse, which, while largely based on emergency legislation and hence not part of authorities' standard tools and powers, was functionally similar to a transfer strategy (see Box 1). Beyond that, public ownership and/or bridge bank strategies do not appear to have been applied in recent years. Nevertheless, Canada, Hong Kong SAR, Japan and Malaysia highlight the availability of these tools, and the FDIC's expected approach to resolution under the US Orderly Liquidation Authority reflects to a large extent a bridge financial company approach. In this paper, when referring to public support for resolution, we mean public support for these types of strategies and do not refer to central bank liquidity support for banks prior to, in or after resolution.

[12] For the United States, see US Code (USC), Title 12 section 5390(h)(2)(A)-(G) (Dodd-Frank Act, section 210(h)(2)); for Canada, see section 39.152(5) of the Canada Deposit Insurance Corporation Act; for Hong Kong SAR, see Hong Kong, Financial Institutions (Resolution) Ordinance, 23 May 2025 (Part 5, Division 1, Subdivision 3 – Transfer to Bridge Institution).

Box 1

Public actions to support bank resolution during the March 2023 turmoil

During the March 2023 banking turmoil, US and Swiss authorities took a series of measures to resolve banks that were failing in these jurisdictions. These banks included US regional banks Silicon Valley Bank (SVB), Signature Bank and First Republic with assets of USD 209 billion, USD 110 billion and USD 229 billion, respectively, and Credit Suisse, a Swiss global systemically important bank with assets of CHF 575 billion as of end-2022. The US regional banks were heavily invested in low-yielding fixed income securities that rapidly lost value as a result of the interest rate hike in 2022. Credit Suisse, which had suffered a number of large losses and governance scandals leading up to 2023, had a market capitalisation that continued to erode and diverged markedly from its stated accounting capital. While the causes of these failures were manifold and continue to be explored, impaired net asset positions – or at least, market perceptions of impaired net asset positions – appear to have played a significant role.①

The measures that US and Swiss authorities took included, in addition to central bank liquidity support and removal of senior management and board members, actions to facilitate the resolution of the failed banks in a manner that mitigated financial stability risks. In the United States, these measures were based on a mix of transfer and bridge bank strategies combined with loss absorption by shareholder equity and some liabilities. To support the acquisition by third-party banks, the FDIC entered into shared loss agreements with First Citizens Bank to resolve SVB and with JP Morgan in the case of First Republic. Under these agreements, the FDIC would share in any losses on transferred assets.② A functionally similar measure was taken in Switzerland, as the Swiss treasury issued a CHF 9 billion guarantee to UBS to support its acquisition of Credit Suisse. The guarantee was designed to cover losses in excess of CHF 5 billion that UBS might incur on certain Credit Suisse assets. In addition to a writedown of Additional Tier 1 (AT1) liabilities with a nominal amount of around CHF 16 billion, this guarantee helped create a balance between transferred assets and liabilities and made the Credit Suisse franchise sufficiently attractive to UBS.③

In the United States, resolution measures were funded from the FDIC's Deposit Insurance Fund (DIF), and in one case, by a mortgage securitisation of USD 50 billion.④ Resolution actions were designed to protect both insured and uninsured deposits and resulted in a total cost to the DIF that exceeded the cost of payouts of insured deposits. This required a systemic risk determination by the US Secretary of the Treasury, in consultation with the president, following recommendations from the FDIC Board of Directors and the Federal Reserve Board of Governors.⑤ The FDIC expected to recover losses to the DIF in excess of the cost of liquidation by levying "a special assessment" on the banking industry, beginning on 1 January 2024.⑥ As of 31 December 2024, the FDIC had collected USD 6.3 billion in these special assessment fees.⑦ In Switzerland, the treasury guarantee and other measures were based on emergency legislation passed by the Swiss Federal Council. UBS did not call the guarantee and cancelled it in 2023. It is estimated that the Swiss treasury earned around CHF 200 million in guarantee fees.⑧

These cases illustrate a number of points: Perceptions of impaired net asset positions are enough to destabilise banks, and destabilised banks may create systemic risks, whether or not they are labelled as systemically important. External funding may be needed to support the acquisition by third parties, remove uncertainties around asset valuations and/or operate bridge banks. This funding may have to be deployed, either directly or in support of intermediary, industry-sourced funds, from public funds if financial stability is deemed to be affected. And public funds can be protected through recoupment mechanisms and/or remuneration policies.

① Eg United States Government Accountability Office (GAO) (2025) (pp 8-10); FINMA (2023). ② FDIC (2024a, p 81); see US GAO (2025, p 18). ③ FINMA (2023). ④ FDIC (2024a, pp 141, 180). ⑤ For the legal requirements, see 12 USC section 1823(c)(4)(G); for the FDIC's 2023 determination, see FDIC (2023) and US GAO (2025, pp 11-17); for background on the process, see Barr et al (2021, p 1072). ⑥ FDIC (2024a, pp 29, 140). ⑦ FDIC (2025, p 80). ⑧ Swiss Federal Department of Finance (FDF) (2024).

Section 3: Approaches to public support in resolution across jurisdictions

Institutional models

11. **Jurisdictions' crisis management frameworks are evolving.** In some jurisdictions, long-standing primary legislation specifies whether, how and to what extent authorities may access funds from the treasury or the central bank to fund resolution. This includes, for example, the United States and Malaysia. The FDIC may borrow from specifically enumerated public entities, namely the US Treasury, the Federal Financing Bank and Federal Home Loan Banks, to enhance funding for bank and, after 2010, financial company resolution.[13] In Malaysia, the Perbadanan Insurans Deposit Malaysia (PIDM) may seek central bank and treasury support for this purpose under a similarly long-standing framework. Other jurisdictions are in different stages of updating their frameworks. In Morocco, changes to the crisis management framework are in the last stages of adoption and will strengthen the role of the deposit insurer as well as the central bank as the lead resolution authority; this will also govern how, and for what purposes, the central bank or the treasury may help fund resolution.[14] In the Banking Union, the European Stability Mechanism (ESM) will be able to lend to the Single Resolution Fund (SRF), if recently agreed treaty amendments are ratified (see Box 2 for a discussion on the ESM as the envisaged public backstop to the SRF). In the United Kingdom, a Bank Resolution (Recapitalisation) Bill was being considered in parliament as of early 2025 and, if passed, will enhance the role of the Financial Services Compensation Scheme to allow it to support transfer strategies and access treasury loans.[15]

12. **Jurisdictions differ on whether public funds in support of resolution are made available directly or indirectly.** We explore this difference in Table 1, second column. In the direct model, a government authority that has either general taxing or money-issuing powers, ie either the national treasury or the central bank, may directly support resolution measures, sometimes termed government stabilisation tools or direct recapitalisation instruments. Such measures may include, for example, recapitalising the failing bank, taking it under temporary public ownership or issuing guarantees to third-party acquirers. In the indirect model, in contrast, the treasury or the central bank provides support indirectly, by lending to a deposit insurance or resolution fund and thereby augmenting its resolution funding capacity. These funds are administered by an authority that does not itself have general taxing or money-issuing powers, is institutionally and operationally largely separate from both the central bank and the treasury and, while primarily using its own resources, may borrow from these authorities or, with or without their support, on capital markets.

13. **The institutional model largely determines whether the treasury or the central bank is the primary source of support for resolution.** As reflected in Table 1, third column, the treasury is the primary source of support in two out of the five surveyed jurisdictions that apply the direct model (Switzerland, United Kingdom). In Bahrain and Hong Kong, it is primarily the central bank, though potentially with the treasury, that provides support under a direct model.[16] In contrast, in jurisdictions that apply the indirect model, resolution authorities may borrow from the national treasury (for example, Canada and the United States) or the central bank on the basis of a treasury guarantee (for example, Japan and Morocco) but, in our sample, never from the central bank alone. Moreover, the central bank is prohibited by its mandate or by statute from lending directly to resolution authorities in the European

[13] 12 USC section 1824(a)–(b), (e); in addition, the FDIC may borrow from insured depository institutions.

[14] Bank Al-Maghrib (2025).

[15] Bank of England (2025).

[16] Hong Kong, Financial Institutions (Resolution) Ordinance, 23 May 2025 (section 176).

Banking Union, Canada and the United States,[17] although they may continue providing ordinary central bank facilities aimed at supporting the liquidity of banks in resolution (including bridge banks and other credit institutions) that meet the conditions of access.

14. **There appears to be a trend towards the indirect institutional model.** In 2014, Japan enhanced the role of the Deposit Insurance Corporation of Japan (DICJ) to support resolution action in systemic cases, which for such a purpose may access public funds via the treasury-backed Crisis Management Account.[18] Morocco is the most recent example of a jurisdiction in our sample establishing an indirect backstop (see above). In the Banking Union, if the changes to the ESM treaty are ratified, the ESM will be able to lend to the SRF to support its resolution funding capacity.[19] Under the Bank Resolution (Recapitalisation) Bill proposed in the United Kingdom, the Financial Services Compensation Scheme will have enhanced resolution funding functions, backstopped by the UK treasury. As yet, it is unclear to what extent governmental stabilisation tools will remain available.[20]

Institutional models Table 1

Jurisdiction	Model	Primary public support	Other aspects
Bahrain	direct	Central bank	Limited indirect support from deposit insurance fund
Canada	indirect	Treasury	Direct governmental support possibly allowed
European Banking Union	indirect	ESM	Subject to depletion of Single Resolution Fund
Hong Kong SAR	direct	Central bank and treasury	n/a
Japan	indirect	Central bank with treasury guarantee	Treasury may provide additional limited support to DICJ
Malaysia	indirect	Treasury	Direct governmental support allowed
Morocco	indirect	Central bank with treasury guarantee	Direct governmental support allowed
Switzerland	direct	Treasury*	Limited support from DIF available
United Kingdom	direct	Treasury	Limited support from DIF available
United States	Indirect	Treasury**	Direct governmental support of open bank not provided in statute**

* This refers to the treasury guarantee issued in the 2023 Credit Suisse case, rather than the SNB loans aimed at supporting liquidity.

** FDIC may also borrow from the Federal Financing Bank, Federal Home Loan Banks and insured depository institutions. Direct governmental support available subject to systemic considerations.

Source: FSI survey; authors' research.

17 For the Banking Union, this follows from European Union (2012), article 123, which prohibits overdraft facilities or any other type of credit facility by the ECB or any central bank of a member state for the benefit of governments and other public bodies. For Canada and the United States, this follows from the central bank not being included in the borrowing authorities, as reflected in the respective frameworks. See 12 USC, section 1824(a) (section 14 of the FDIA (US)) and section 7 of the CDIC Act (Canada).

18 Deposit Insurance Act of Japan, amendments (2014), article 126sqq.

19 As a consequence, the direct recapitalisation instrument, which the ESM may currently apply to directly recapitalise a failing bank, will be discontinued (ESM (2019b), "After the establishment of the ESM common backstop, the Direct Recapitalisation Instrument for banks will be removed from the ESM's toolkit of financial assistance instruments."). See ESM (2014b) (establishing the direct recapitalisation instrument). See Regling (2019).

20 See United Kingdom Parliament (2025).

15. **Jurisdictions may have more than one type of fund available for resolution funding.** All surveyed jurisdictions have a deposit insurance fund (DIF), although the extent to which these are available for resolution-supporting measures varies (Table 2, first column). In surveyed jurisdictions where the DIF is the only such funding arrangement, its mandate may be broad enough to cover larger, potentially systemic bank failures (for example, Canada) or have a more limited objective and mandate (for example, the United Kingdom). The need to establish funding arrangements for more systemic failures may have contributed to the establishment of separate resolution funds to serve purposes beyond deposit insurance (Table 2, second column). Their scope may be defined in terms of banking activity, type of licence or other abstract eligibility criteria. In the United States, for example, the Orderly Liquidation Fund (OLF) exists in addition to the DIF but is reserved for "financial companies", as defined in the Dodd-Frank Act.[21] This corresponds to the distinction, in Japan, between the General Account and the Crisis Management Account, each administered, separately, by the DICJ. In the Banking Union, the SRF co-exists with a variety of DIFs that are each administered at the member state level by separate national bodies. In Malaysia, the PIDM operates several funds separately for different subsections of the financial system. Lastly, some surveyed jurisdictions have established sovereign wealth funds that may be used in resolution.

16. **In most cases, deposit insurance and resolution funds are industry-sourced but publicly administered.** This applies to deposit insurance as well as resolution funds, as both types are primarily financed from levies imposed on the financial sector or a subsection thereof, though levy methodologies may differ depending on the type of fund. Jurisdictions may have other types of fund. Hong Kong, for example, has the Exchange Fund, the primary purpose of which is to affect, either directly or indirectly, the exchange value of the currency of Hong Kong; its secondary purpose is to maintain the stability and integrity of Hong Kong's monetary and financial systems, and in such a context may be used in resolution.[22] At times, the same authority may manage multiple funds, as in the United States, where the FDIC administers – albeit separately – both the DIF and the OLF. Notwithstanding public-law governance and authorities' control over the use of these funds, these resources are generally not subject to appropriation processes.[23]

17. **Policies regarding the interaction of separate funds differ.** Among the surveyed jurisdictions that have more than one industry-sourced fund (typically, a deposit insurance fund and a separate resolution fund), we observe three approaches when it comes to using their respective resources in the same case (Table 2, third column). Combined usage is not available in the United States.[24] In contrast, the framework in the Banking Union provides for member states' DIFs to contribute to an SRF-funded resolution proceeding.[25] Japan and Morocco adopt a compromise approach, in that combined usage is an option if funding needs cannot be met by the resources of one fund alone.

[21] 12 USC, section 5381(a)(11); see FDIC (2024b, p 8).

[22] For Hong Kong, see Hong Kong, Exchange Fund Ordinance, 19 September 2019 (section 3). Elsewhere, other types of fund have been used to stabilise financial institutions. In China, for example, Central Hujin Investment Ltd, a subsidiary of the China Investment Corporation, has been used to recapitalise troubled or failing banks, for example by injecting an estimated USD 150 billion in 2008–15. Bloomberg (2023), Reuters (2009).

[23] They may nevertheless be considered part public funds for statistical purposes or, in the Banking Union, for purposes of calculating state aid under article 107 of TFEU, although some DIFs are exempt from the state aid framework on the grounds that their contributions are voluntary. See European Court of Justice (2019) (Tercas).

[24] In the United States, the DIF is available when the FDIC has been appointed receiver of an insured depository institution under the FDI Act, whereas the OLF is available when the FDIC has been appointed receiver of a non-bank "financial company", as defined in 12 USC, section 5381(a)(11), under Title II of the Dodd-Frank Act. It is theoretically possible that the FDIC would act in both capacities, serving as a receiver for a financial company and separately for its insured depository institution subsidiary. These two receiverships would not, however, be combined.

[25] See European Banking Authority (2014), which makes the DIF liable provided that resolution action ensures that depositors continue to have access to their deposits.

Industry-sourced funds available to support resolution				Table 2
Jurisdiction	Deposit insurance fund	Resolution fund	Other type of fund	Combined usage
Bahrain	Yes/ex ante/narrow	No	Yes	n/a
Canada	Yes/ex ante/broad	No	No	n/a
European Banking Union	[DIF on MS level]	Yes/ex ante	No	Mandatory
Hong Kong SAR	Yes/ex ante/narrow	No	Yes	n/a
Japan	Yes/ex ante/broad	Yes/ex post	No	Optional
Malaysia	Yes/ex ante/broad*	No	No	n/a
Morocco	Yes/ex ante/narrow	No	Yes	Optional
Switzerland	Yes/ex post/narrow**	No	No	n/a
United Kingdom	Yes/ex post/narrow	No	No	n/a
United States	Yes/ex ante/broad	Yes/ex post	No	Not available

* PIDM operates separate funds for different subsections of the financial sector.

** The Swiss DIF is typically not used in resolution, though its articles (*Selbstregulierung*) reflect the possibility of "alternative" measures in resolution (article 1 lit. e), including transfer support.

Ex ante means fees are levied on a regular basis, so there is funding available for a resolution before it is needed. Ex post means fees are levied only during or after a resolution is conducted to finance amounts not recouped from the firm in resolution.

"Narrow" means scope of support by DIF is limited, typically to transfer strategies; "broad" refers to scopes that may include transfer as well as other types of measure, like creating a bridge bank or recapitalisation.

Source: FSI survey; authors' research.

Conditionalities

18. **The use of public funds to support resolution is typically conditioned on systemic considerations.** While frameworks typically include financial stability as a major consideration and/or target the soundness of the financial sector more generally, differences and nuances exist in several respects. In the United States, while the FDIC's USD 100 billion borrowing authority for the account of its DIF is not conditioned on systemic considerations, use of, and therefore borrowing under, the Orderly Liquidation Authority is conditioned on this being necessary to avoid "serious adverse effects" on financial stability.[26] In the Banking Union, any use of the SRF's resources is subject to a "public interest assessment" by the Single Resolution Board, and by extension so is any borrowing by the SRF under the ESM Treaty, as amended. Other frameworks mention the economic conditions or social or developmental considerations more broadly as the relevant reference, in addition to financial stability. Frameworks may also differ in whether the relevant criteria are framed in positive or negative terms. The Canadian framework, for example, provides that support through public funds must be "*necessary to promote* the stability or maintain the efficiency of the financial system".[27] In Hong Kong, a resolution authority must have regard for the resolution objectives, which include to promote the stability and effective working of the financial system of Hong Kong, when performing any of its functions.[28] In the UK framework, in contrast, the

[26] 12 USC, section 5383(b)(2).

[27] Canadian Financial Administration Act, section 60.2.

[28] Hong Kong, Financial Institutions (Resolution) Ordinance, 23 May 2025 (section 8).

relevant criteria are framed as avoiding "a serious threat" to financial stability,[29] emphasising the crisis management aspect.

19. **Governance arrangements reflect the systemic functions of public backstops.** Typically, authorities involved in the decision to provide public funds in support of resolution include national treasuries, central banks and technical financial sector authorities with supervisory, resolution and/or deposit insurance functions. Differences exist in the degree of involvement, which varies depending on whether public funds are used for deposit insurance or systemic resolution purposes. The United States uses a "three key" model for the latter. The US Treasury, the central bank and the resolution authority must all agree to place the financial company into resolution under the Orderly Liquidation Authority in Title II of the Dodd-Frank Act, which includes a borrowing authority of the FDIC for the account of the OLF, and the Treasury secretary must consult with the president. The FDI Act includes a similar process to invoke the systemic risk exception to the least-cost requirement for the resolution of failed depository institutions, but not for the typical use of DIFs.[30] In Japan, approvals from the prime minister (delegated to the commissioner of Japan's supervisory and resolution authority, the Financial Services Agency (FSA)) and the minister of Finance are required for borrowing by the DICJ. The FSA and the Ministry of Finance cooperate with each other in authorising loans to the DICJ. In Canada and Malaysia, treasuries decide alone whether to authorise loans to the CDIC or PIDM, respectively, for resolutions as part of the public backstop.[31] In the United Kingdom, the Treasury's consent is required to operate any resolution program that would implicate its backstop.[32] The Banking Union follows a similar pattern under the ESM Treaty, as amended, as the EMS board includes the treasuries of member countries.

20. **Approaches to impose losses on banks' internal resources differ.** While jurisdictions generally seek to exhaust internal resources to the maximum extent, approaches to achieve internal loss absorption differ in terms of process, scope and levels of discretion. We analyse these by asking two questions (Table 3, first two columns). First, is a prior, upfront writedown of certain liabilities to impose losses a condition precedent for the provision of public funds and, in particular, a drawdown condition for any treasury loans (yes/no)? We find that for half of surveyed jurisdictions, this is not the case, as loss allocation may be achieved by a subsequent writedown (for example, Malaysia) or implicitly as part of the resolution proceeding in accordance with the statutory priority of payments (for example, in the United States where liability holders receive a claim against the receivership in a "closed bank" process).[33] Second, do authorities have discretion, rooted in statute, to treat similarly situated or equally ranking creditors differently to expose them to or shield them from loss absorption, as long as the "no creditor worse off" safeguard applies (yes/no)? To illustrate, in Hong Kong, a resolution authority may, in a bail-in strategy, exclude certain liabilities from the application of a bail-in on the grounds of effective execution, resolution objectives or a better outcome for other creditors.[34] In Canada, while regulations prescribe the order of conversion, treatment of equally ranked instruments and relative creditor hierarchy, the CDIC "has flexibility with respect to the amount and timing of conversion".[35] In Switzerland, the treasury guarantee

[29] HM Treasury (2017), paragraph 4.

[30] When the FDIC borrows, the secretary of the Treasury and the FDIC are required to consult with the Financial Services Committee of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate on the terms of any repayment schedule agreement.

[31] Survey responses – CDIC (citing Financial Administration Act, section 60.2); survey responses – PIDM (citing PIDM Act section 29).

[32] United Kingdom Bank Act of 2009, section 78(1)–78(3), 79(1)–79(2) (all changes in force on or before 22 January 2025).

[33] In the United States, the FDIC's appointment as receiver for a financial company under the Orderly Liquidation Authority is conditioned on the prior conversion of convertible regulatory instruments (12 USC, section 5383(b)(6)).

[34] Hong Kong, Financial Institutions (Resolution) Ordinance, 23 May 2025 (section 59).

[35] CDIC (2016, pp 9-10).

for the benefit of UBS was made available without a writedown of outstanding Credit Suisse total loss-absorbing capacity bonds.

21. **Deposit insurance or resolution funds do not always have to exhaust their own resources before accessing central bank or treasury facilities.** Evidently, such a requirement can conceptually only apply in respect of ex ante financed funds. Yet we find that even for ex ante financed funds, it is the exception (Table 3, third column). In the United States, for example, the FDIC may borrow under its facility with the US Treasury even if its deposit insurance fund is not depleted. Similar approaches are pursued in Canada and Malaysia under their respective frameworks. In contrast, the ESM Treaty, as amended, provides that the SRF may, in principle, borrow from the ESM only if the SRF's own resources have been exhausted.[36] This requirement emphasises the last resort principle, yet may imply additional procedural steps to establish whether funds are exhausted, decreasing flexibility and potentially delaying or fragmenting the crisis response.

22. **Industry-sourced funds are generally not required to issue debt on capital markets before seeking public support.** To illustrate, no jurisdiction makes it a condition when providing public funds that authorities have attempted but failed to obtain funding from markets. That said, some nuances exist (Table 3, fourth column). Authorities administering industry-sourced funds may demonstrate that debt issuance is not opportune (Banking Union[37]). Conditions may vary depending on the type of fund. In the United States, for example, debt issuance (or demonstration of its inopportunity) by the FDIC is not a formal condition for accessing the FDIC's OLF. Regarding the FDIC's borrowing authority for its deposit insurance fund, the FDIC's policy is to borrow from the US Treasury only if "customary sources in private markets" are unavailable.[38] In Malaysia, in contrast, PIDM would first seek to borrow from the central bank under a standing repo facility, then seek to raise funds by issuing debt on capital markets, if opportune, and lastly resort to its fiscal facility.

23. **Additional conditions may apply in terms of actions against management.** If a bank fails, its senior management, including board members, may be found responsible for the failure, and legal or regulatory action may be taken accordingly, ranging from removal to clawback of remuneration and other actions. Surveyed jurisdictions differ as to whether and how they make such actions a condition to borrow from the treasury or central bank. In the United States, for example, management and directors responsible for the failure of a financial company must be removed under the Orderly Liquidation Authority, but this measure is not an explicit condition precedent for the FDIC's access to the OLF.[39] Elsewhere, authorities can decide on a case-by-case basis whether public support is provided only if actions against management are taken, and what such actions should be (for example, in the Banking Union).

24. **Provisions reflecting fiscal considerations vary in terms of stringency.** We can broadly distinguish three approaches. In the United States, for example, the systemic risk determination that opens the OLF under the Orderly Liquidation Authority must consider, among other things, "the cost to the general fund of the Treasury".[40] The Banking Union and the United Kingdom, in contrast, make fiscal neutrality a condition precedent for treasury support, rather than a mere consideration. Specifically, the proposed ESM backstop to the SRF may only be granted "to the extent that it is fiscally neutral in the

36 ESM (2021, 2014a (article 9), 2019b).

37 European Parliament and European Council (2014), Regulation (EU) No 806/2014, article 73, of the European Parliament and of the Council of 15 July 2014, establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a single resolution mechanism (SRM) and an SRF and amending Regulation (EU) No 1093/2010, 15 July 2010.

38 FDIC (2013), Barr et al (2021, p 1074).

39 12 USC, section 5386(4)–(5) (Dodd-Frank Act, section 206(4)–(5)).

40 12 USC, section 5383(b)(5), Barr et al (2021, pp 1074-75), Gelpern and Veron (2019).

medium term".[41] Fiscal neutrality is understood as the ability of the SRF to repay loans within approximately three years. Lastly, the Moroccan framework caps any treasury support amount by stipulating that it must be financed out of existing budgetary appropriations for unforeseen expenses of the current fiscal year.

What conditionalities apply in respect of public support? Table 3

Jurisdiction	Loss imposition condition precedent	Statutory discretion	Fund depletion	Third-party funding
Bahrain	No	No	No	Customary
Canada	Yes	Yes	No	Secondary
European Banking Union	Yes	No	Yes	Negative condition
Hong Kong SAR	Yes	Yes	n/a	n/a
Japan	Yes	No	No	Customary
Malaysia	No	Yes	No	Secondary
Morocco	No	No	No	Negative condition
Switzerland	No	No	n/a	n/a
United Kingdom	Yes	No	n/a	n/a
United States	No	Yes	No*	Customary

"Loss imposition condition precedent": Is loss absorption by the bank's internal resources, by way of administrative writedown or otherwise, a condition that must be met or have occurred before public funds are deployed? (yes/no).

"Fund depletion": Is depletion of an ex ante financed industry-sourced fund a condition that must be met or occur before public funds are deployed? (yes/no or n/a if no ex ante fund).

"Third-party funding": Do industry-sourced funds have to demonstrate that third-party funding is inopportune (negative condition), do they have to explore that option (customary) or may they resort to it on a secondary basis to obtain public funds?

* In the United States, the FDIC may borrow for its ex ante financed deposit insurance fund under its Treasury facility without such fund having to be depleted. The Orderly Liquidation Fund is ex post financed, hence such a condition is inapplicable.

Source: Authors' research.

Caps, terms and provisions

25. **Some jurisdictions cap the amounts that resolution authorities may borrow from treasuries or central banks.** Table 4 provides an overview and illustrates that, in our sample, most jurisdictions do not apply such caps. Caps on borrowing authorities of industry-sourced funds are in some cases capped in absolute terms, ie as a specified maximum amount expressed in local currency. These caps can be rooted in statute and can therefore only be adapted by primary legislation. In the United States, for example, statute caps the amount that the FDIC may owe to the Treasury at any time to a maximum USD 100 billion.[42] The DIF is ex ante financed, and the FDIC may call for advanced premia as a means to enhance its resources, in addition to calling on its Treasury facility. Approaches differ on making caps

[41] Survey responses – SRB (noting that any ESM disbursement would need to comply with ESM Treaty, Annex IV, article 18a); ESM (2021), pp 36–37; European Council (2018).

[42] 12 USC, section 1824(a). Throughout the FDIC's history, Congress has raised this borrowing limit periodically by amendments to the statute, most recently to USD 100 billion in 2009; Id.; Pub. L. 111–22, section 204(c), at p 19, PUBL022.PS; section 218 at p 79, STATUTE-103-Pg183.pdf (1989 amendments, which raise it to USD 5 billion).

adaptable to ensure backstops can be deployed in sufficient amounts. Some operate on the basis of floating variables, while others delegate cap-setting authority to lower-level regulation. In the United States, FDIC borrowing from the OLF for the resolution of a non-bank financial company under the Orderly Liquidation Authority (as opposed to DIF borrowing under the FDI Act) is capped by reference to the total consolidated assets of each firm being resolved.[43] In Canada, while the statutory borrowing cap of CAD 30 billion can only be increased by act of Parliament, statute also provides for some adaptability by indexing the cap to the growth of deposits.[44] In Japan, caps on borrowings by the DICJ are specified by Cabinet order, and treasury guarantees for DICJ borrowing are subject to the national budget as approved by the National Diet for each fiscal year.[45] Similarly, Morocco sets a cap by reference to existing budgetary appropriations (see above). In the Banking Union, the revolving credit line that the ESM may grant to the SRF is expected to be capped at EUR 68 billion – effectively doubling the SRF firepower of approximately EUR 70 billion – on the basis of an ESM Board of Governors resolution, which may be amended from time to time.[46]

Caps on public support

Table 4

Jurisdiction	Caps	Based on	Comments
Bahrain	n/a	n/a	n/a
Canada	CAD 30 billion	Statute	Cap indexed on growth of deposits
European Banking Union	EUR 68 billion	ESM board resolution	Board of Governors may adapt its resolution over time
Hong Kong SAR	n/a	n/a	n/a
Japan	Budgetary cap	National budget	As appropriated by parliament
Malaysia	n/a	n/a	n/a
Morocco	Budgetary cap	National budget	As appropriated by parliament
Switzerland	n/a	n/a	n/a
United Kingdom	n/a	n/a	n/a
United States	Differ for Deposit Insurance Fund (DIF) and Orderly Liquidation Fund (OLF)	Statute	DIF borrowing authority capped at USD 100 billion; firm-specific cap applies for OLF borrowing for each financial company placed in resolution

Source: Authors' research.

26. **Borrowing by industry-sourced funds may take different legal forms.** In the United States, under the Orderly Liquidation Authority, statute provides that credit may be extended in cash or on the basis of marketable securities (see Box 1),[47] while the facility that the ESM would provide to the SRF is

[43] 12 USC, section 5390(n)(6).

[44] CDIC (2025).

[45] For example, the cap applicable to the DICJ General Account, available to support transfer and bridge bank strategies, was set at JPY 19 trillion in 2024. See DICJ (2024).

[46] European Council (2018), original terms of reference for the SRF (announcing there will be a cap); ESM (2019a) (setting the cap at EUR 68 billion).

[47] This provision, however, does not exclude cash credits.

characterised as a revolving credit line, ie non-marketable instrument.[48] Most other jurisdictions follow the latter approach or do not characterise the legal nature of the instrument.

27. **Where treasuries or central banks lend to industry-sourced funds, this is done for a predetermined, limited period of time.** The duration is mostly set on a case-by-case basis. In Malaysia, for example, the Ministry of Finance determines the terms and conditions of PIDM borrowing from the treasury.[49] Similarly, Treasury borrowing by the FDIC for the OLF must include a repayment schedule agreed to in advance and the amounts must be repaid within five years.[50] Where durations are set by statute or other legal instruments, such as board guidelines, a midterm horizon of three to five years appears to dominate. In the Banking Union, the ESM guidelines for the backstop to the SRF provide for a standard initial duration of three years. This initial duration may be extended for a maximum of two years or initially set to five years in case of a threat to financial stability. Earlier repayment remains possible and is reported as welcome, unless it would itself risk financial instability.[51]

28. **Public facilities to industry-sourced funds are provided at moderately elevated rates.** This is a common feature of all surveyed jurisdictions where industry-sourced funds may borrow from the treasury or the central bank, reflecting the nature of such facilities as a funding source of last resort and the desire to incentivise financial companies in resolution or resolution authorities to tap market funding. Some jurisdictions use primary legislation to define remuneration level (eg United States) while most are treaty-based or discretionary.

29. **Public lending to industry-sourced funds may benefit from a senior ranking.** In the Banking Union, for example, the ESM treaty specifies that ESM claims shall be senior to all other claims against the SRF, with the exception of any claims that the International Monetary Fund may have against the SRF. In terms of further securing repayment, the ESM may request that any levies collected by the SRF to repay its loan from the ESM be paid into accounts that are pledged to the ESM. In the United States, amounts borrowed from the OLF in a Title II resolution have repayment priority ahead of all unsecured creditors of the receivership.[52]

Recoupment

30. **Jurisdictions seek to eventually recoup public support for resolution over time.** In principle, jurisdictions do not envision resolution funding support to be a permanent commitment of resources. In that sense, public support for resolution can be characterised as a temporary financing tool, aimed at managing the immediate crisis and bolstering confidence until stability is re-established. Recoupment mechanisms are therefore an integral part of resolution frameworks that incorporate public support. Recoupment mechanisms vary in terms of their scope, structure and severity. These variations partly depend on whether public funds are deployed indirectly, through industry-sourced funds or directly.

31. **In jurisdictions that provide support through industry-sourced funds, those funds are recouped through levies paid by the banking sector.** That is a way to mutualise the residual cost of failure across the financial sector. The timing of levies may be subject to financial stability provisos. These provisos take the form of (non-permanent) deferrals of levies and may be implicit or explicit. In jurisdictions where authorities have broad discretion as to how and when levies shall be collected, provisos are implicit and financial stability considerations are likely to inform authorities' decisions as they exercise that discretion. In Morocco, for example, authorities have relatively broad powers and may impose

48 Eg ESM (2025b).

49 Malaysia PIDM Act, section 29 (Malaysia Deposit Insurance Corporation Act 2011 (updated as of 21 July 2023)).

50 It is, however, the policy of the US Treasury that any outlays be repaid as soon as possible, see Barr et al (2021, p 1075).

51 ESM (2014a) (article 6).

52 See 12 USC, section 5390(b)(1); see also, eg Gelpern and Veron (2019).

discretionary additional levies on the banking sector to recoup any expenses of the public purse made in a resolution context. Similar powers are available to the Hong Kong Monetary Authority. In other jurisdictions, financial stability provisos feature explicitly in the recoupment framework. Thus, the FDIC may, with the approval of the US Treasury, defer levies to "avoid a serious adverse effect on the financial system of the United States".[53] An explicit proviso also applies in the Banking Union, although deferral shall be granted to an individual institution if necessary to "protect its financial position".[54]

32. **There are different ways to define industry contributions to the recoupment of public support.** The perimeter of contributors may coincide with the membership in the industry-sourced fund, the supervisory perimeter or another grouping. In the United States and Canada, for example, resolution funds expended by the DIF or CDIC, respectively, are repaid from assessments levied on their respective member institutions. For the OLF, if assessments are needed after exit from resolution, levies can be imposed on all non-bank financial companies supervised by the Federal Reserve Board of Governors following designation by the Financial Stability Oversight Council under Section 113 of the Dodd-Frank Act as well as on bank holding companies and financial companies with total consolidated assets above a certain threshold (USD 50 billion).[55] In the Banking Union, once the ESM revision is ratified, ESM loans to the SRF will be repaid out of levies imposed on all firms in the scope of the SRF.[56] In some jurisdictions, the extent of levies may be defined on an ad hoc basis, as in Hong Kong and the United Kingdom, where authorities may impose levies on a subsector of the broader financial sector or, for example, "the same sector to which the entity in resolution belongs or belonged".[57]

33. **Recoupment mechanisms may include risk-based criteria.** That way, the residual cost of failure is mutualised in ways that reflect the exposure of financial system participants and the extent to which they have benefited from resolution. Jurisdictions that have some discretion in defining the perimeter of firms from which levies are collected (see previous paragraph) can do so via ad hoc created groupings. The US framework mandates that levies be risk-based,[58] and similar risk-based approaches exist in Hong Kong. In the Banking Union, the ESM revision will enhance the levy powers of the SRF.

34. **Where treasuries deploy public funds directly, recoupment often involves exiting the investment.** Given that most of these deployments take the form of equity investments, the duration of the investment, and hence the recoupment of expenses made for it, depends on when and how it is divested. Divestments may take various forms: selling the shares acquired in the recapitalisation of a failing firm; redemption of Additional Tier 1 (AT1) bonds subscribed for capital support; or expiration or cancellation of a loss guarantee. Jurisdictions that apply the direct model mandate exit strategies for that purpose. These exit mandates are typically defined broadly and do not materially differ in terms of severity. In the United Kingdom, if stabilisation tools have resulted in government holdings in a resolved firm, these must be managed on a commercial and professional basis and transferred to the private sector as soon as commercial and financial circumstances allow.[59] Similarly, ESM policy has been for its direct recapitalisation tool "to actively seek opportunities to sell the investment".[60]

53 12 USC, section 5390(o)(1)(C) (Dodd-Frank Act, section 210 (o)(1)(C)).

54 Regulation (EU) No 806/2014, article 71(2), of the European Parliament and of the Council of 15 July 2014, establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a single resolution mechanism and an SRF and amending Regulation (EU) No 1093/2010.

55 12 USC, section 5390(o)(1)(A) and (D)(ii).

56 Single Resolution Board (2025).

57 See Hong Kong, Financial Institutions (Resolution) Ordinance, 23 May 2025, section 180(3); HM Treasury (2017), paragraph 27.

58 12 USC, section 5390(o)(4) (Dodd-Frank Act, section 210(o)(4)).

59 European Banking Authority (2014), article 57(3).

60 ESM (2019b).

35. **Ways to recoup or exit other forms of direct backstops are designed ad hoc, rather than provided in statute.** It is, in theory, conceivable for a framework to mandate that a treasury guarantee be directly granted to an acquirer of a failing bank only for a limited period of time. It is also conceivable, though arguably more complex, for legislation to stipulate if and how a subsidy must be recouped. Yet such provisions are very rare, and this may be an element driving the trend towards indirect models and their relatively easier, levy-based recoupment mechanisms (see above). As a result, exit and recoupment of directly granted support depend on the terms and provisions that authorities negotiate into the underlying instruments. The treasury guarantee granted to UBS in the Credit Suisse case provides for an interesting example. While given for an unlimited period of time, it was structured as a second-loss guarantee, covering only losses in excess of CHF 5 billion. Losses below that threshold fell to UBS. This may have incentivised UBS to cancel the guarantee to avoid fees for a guarantee that it would be allowed to call only by recognising its own losses.[61]

Box 2

The ESM as the backstop of the European Banking Union

The European Stability Mechanism (ESM) is an intergovernmental organisation created by EU member states that have the euro as their currency. Founded in 2012, the ESM was initially designed to help those countries "avoid and overcome financial crises … [by] act[ing] as a 'lender of last resort' for euro area countries when they are unable to refinance their government debt in financial markets at sustainable rates".① With a total balance sheet of EUR 808.4 billion as at end-2023, the ESM has an authorised capital, attributable to participating member states, of EUR 708.5 billion, of which EUR 80.97 billion have been paid up.②

In 2020, the Eurogroup (ie the finance ministers of Eurozone countries) agreed to expand the ESM mandate and allow it to lend to the Banking Union's resolution fund, the Single Resolution Fund (SRF).③ The ESM Treaty was accordingly amended but has not yet been ratified by all ESM member states.④ Once ratified, the ESM will perform the role of public backstop of the Banking Union, given that the SRF cannot borrow from national treasuries or the ECB.⑤ The SRF is financed through ex ante levies, with some ex post components.⑥ Its target level of 1% of covered deposits in the Banking Union was reached in 2023, as total holdings stand at EUR 78 billion.⑦

Deployment of the ESM backstop to the SRF is subject to stringent conditions, provided for under the ESM Treaty and the policies developed by the ESM, reflecting among other things the multilateral nature of the ESM and the Banking Union at large. These include, among other things: (i) general resolution conditions, including a public interest assessment and loss absorption by the failing firm's liabilities equal to 8% of its total liabilities, including own funds; (ii) a depletion of the SRF or its inability to raise sufficient contributions or borrow funds from other sources at acceptable rates; (iii) a descriptive outline of the resolution strategy to be applied in respect of the failing bank; and (iv) the principle of midterm fiscal neutrality. All these conditions must be met or occur prior to deployment.⑧ The ESM facility to the SRF is capped at EUR 68 billion, on the basis of an ESM Board of Governors resolution. The standard duration of each borrowing under the facility is three years.⑨ While the treaties and instruments establishing the SRF and ESM can, in principle, be amended at any time, neither explicitly envisages a "systemic exception"-like procedure allowing an overruling of caps, conditions or other constraints, other than extending the duration of individual SRF borrowings with the ESM by two years. The ESM Board of Governors may also increase the nominal cap. Direct governmental stabilisation tools, as envisaged by the Bank Recovery Resolution Directive for non-Banking Union EU member states, are not available in the Banking Union. Following the introduction of the ESM backstop to the SRF, the ESM will discontinue its direct recapitalisation instrument, developed on the basis of the current general powers provision of the current ESM Treaty.⑩

① See ESM (2025a) regarding the purpose of the ESM; see also ESM (2012) regarding the establishment of the ESM; see Visco (2019) for a general description of the origins and purpose of the ESM. ② ESM (2024). ③ Eurogroup (2020). ④ ESM (2021), Visco (2019). ⑤ European Union (2012), article 123. ⑥ Regulation (EU) No 806/2014 ("SRMR"), articles 70(2) and 71(1)). ⑦ Single

[61] Swiss Federal Council (2023), Swiss Federal Department of Finance (FDF) (2024).

Resolution Board (SRB) (2023, 2025). ⑧ For the proposed requirements, see ESM (2021); for a general description, see ESM (2025a). ⑨ Eg ESM (2025a). ⑩ ESM (2021, 2025a).
Source: FSI Survey.

Section 4: Policy reflections

Credibility

36. **Bank resolution must be credibly funded.** To the extent that the resolution of a bank is a matter of financial stability – a key public good – using public funds for this purpose is only natural. That is the reason why the FSB Key Attributes allow resolution funding arrangements to be publicly backstopped. This achieves various benefits. The mere existence of a credible backstop may prevent a crisis from escalating in the first place. And once a crisis does erupt, a credible backstop helps fund resolution action, contain crisis dynamics and restore stability. Key for the credibility of a backstop are authorities' powers to promptly provide funding as and when needed and market participants' confidence that authorities will duly exercise these powers. Ambiguity around the former risks corroding the latter, potentially even ending in a vicious cycle. Conversely, a framework that combines strength with due flexibility and carefully mitigates the risks for the public purse is likely to command such confidence, reinforcing overall stability.

37. **Yet publicly backstopping resolution comes with a variety of risks.** The immediate risks pertain to timely recouping any public funds that are committed, for example, to recapitalise a failing bank or support its acquisition by a third party. More generally, if no ex ante funds are established, using public resources to fund resolution necessarily comes at the expense of other public tasks, and this aspect merits emphasis in times of strained fiscal budgets. Broader risks come from the fact that, if a resolution action addresses asset-liability mismatches and allocates losses, public support for such action without recoupment mechanisms risks silently transferring losses to the public purse. In the long run, if expectations are allowed to persist that resolution is publicly funded as a matter of course, this will distort market discipline and lead to moral hazard, eroding social confidence in the integrity of the financial system and, eventually, destroying the broad public support that is needed for systemic crisis management. The Key Attributes provide a balanced framework for establishing credible public backstops in a manner that mitigates and balances these risks.

38. **The first step to make public support for resolution credible while managing the inherent risks is to integrate it into the broader resolution framework.** Most jurisdictions surveyed in this paper have done so. Integrating public support into a resolution framework does not mean that the exact circumstances under which public funds will be used for resolution need to be specified, much less that public funding of resolution actions, such as recapitalisations or merger support, is guaranteed up front. Rather, a backstop framework defines the considerations to be taken, processes to be followed and control mechanisms to be applied, if and when authorities deem financial stability to be at stake. That way, market participants, and societies at large, may be reasonably confident that authorities will be able to preserve financial stability without such confidence degenerating into general expectations of public bailouts.

39. **Credible frameworks incorporate three key elements.** These are defined in the FSB Key Attributes. First, frameworks incorporate the last resort principle, clarifying that equity holders should bear the first loss, and creditors should expect losses in resolution if a financial institution fails. In addition, codified frameworks can help frame the expectations of market participants more generally, for example by linking public support to management accountability. Second, codified frameworks establish a systemic threshold, involving a jurisdiction's relevant technical and political bodies and thereby ensuring legitimacy and social acceptance of resolution actions. Third, codified frameworks have mechanisms that allow recoupment of the cost of backstops. This addresses the immediate financial risks of backstops while also signalling fiscal sustainability that lower the cost of public borrowing.

Burden-sharing across the financial system

40. **Expenses incurred by the public purse should be recouped from the financial system over time.** It is a key feature of crisis management regimes that the cost of resolving an individual bank should be borne by the bank's shareholders and creditors and, if the latter is not possible for financial stability reasons, borne by the wider financial system. Allocating the residual cost of resolution – ie that portion that is not covered by available internal or prefunded resources – is rooted in the need to reduce moral hazard and the understanding that the system at large stands to benefit from resolution, because it contains contagion and preserves financial stability. If public funds are used to cover the residual cost of resolution, these expenses should therefore be recouped from the financial system.[62]

41. **The easiest way to achieve this is to lend to industry-sourced funds.** If deposit insurance or resolution funds can borrow from treasuries or central banks to augment their resolution funding capacity, that achieves two goals: public expenses are recovered as the underlying loan is repaid; and the means to repay loans are sourced from fund members, via ex ante premia or ex post levies, who are themselves financial system participants. That way, all public backstop funding expenses are ultimately redirected to the financial system. As a result, industry-sourced funds operate as both a mechanism of recoupment and a vehicle of mutualisation. To ensure this double function, many jurisdictions that follow the indirect model provide for a direct link between the repayment obligation of industry-sourced funds and their powers to impose levies on their constituencies. The tighter that link, the lower the risk to the public purse.

42. **Recoupment comes with some caveats.** First, whether or not the resources of industry-sourced funds are augmented through public support, there is always the risk that, by using them for resolution purposes, the cost of resolution is diverted from a failing bank's internal resources to the wider system. Arguably, the availability, for example, of treasury support might even be seen as increasing such risk somewhat. Second, some financial system participants may benefit far more than others from contagion being averted. Consider, for example, the resolution of a real estate financing bank that failed because of losses on its commercial real estate portfolio. Its resolution prevents contagion of other real estate financing banks (and likely others) but may have a more limited relevance for banks narrowly specialising in trade finance or private wealth. In such cases, an indiscriminate allocation of recoupment across the entire financial system would be likely challenged.

43. **Recoupment mechanisms can be designed to cover such risks.** Key issues are to define the scope of recoupment, its timing and process. If loss absorption by use of a firm's internal resources is not a condition precedent for drawing on backstops, recoupment mechanisms can reinforce the underlying principle of loss allocation by imposing levies primarily on holders of those internal liabilities. Recoupment mechanisms may also include risk-based criteria that reflect other financial firms' degree of connectivity with or exposure to a resolved firm. In the case of exposure, a key design feature is whether such criteria should be fully specified by statute or authorities should have some discretion in terms of the methodology of allocation, for example by imposing proportionately higher levies on firms deemed to have particularly benefited from resolution. Aspects to consider are, on one hand, the difficulties of abstractly defining degrees of connectivity and channels of contagion and, on the other hand, perceptions of arbitrary administrative loss allocation.

Residual risk

44. **Some residual risks for public funds are likely to remain.** The extent of these risks depends on the degree to which any expenses incurred by the public purse can be successfully recouped.

[62] Mutualisation may have additional positive side effects, as in increasing healthy peer pressure or incentivising voluntary contributions from financial system participants – all of which ultimately reflect benefits to the financial system at large from preserved or restored stability.

Recoupment may face obstacles, such as when levies on the financial system cannot be imposed or directly granted backstops cannot be exited without these measures triggering financial instability.[63] It may also suffer if the collection process is flawed.

45. **Remuneration and exit policies may be ways to manage residual risks.** It is true that the purpose of public support for bank resolution is not to generate fiscal revenue or seize investment opportunities, and such considerations are therefore typically not a major concern across jurisdictions. Yet remuneration policies are, generally speaking, a convenient way to manage residual risk, as they set incentives for other agents – borrowers and counterparties to backstops – to act in ways that minimise those risks. The way in which such incentives play out differs for directly deployed backstops and those that are indirectly deployed, via industry-sourced funds.

46. **Residual risks under indirect models can be managed through interest and duration.** In addition to allowing backstop expenses to be mutualised (see above), indirect models appear to make it easier for authorities to mitigate residual risks. As backstops are structured as interest-bearing credit instruments, residual risks are captured by interest rates and terms of duration. Interest rates that are set at moderately elevated levels, as observed across jurisdictions, may incentivise intermediary funds to reduce their reliance on public backstops, thereby reducing public exposure. Durations may be fixed to allow repricing at regular intervals that align with interest rate developments and broader considerations. Lastly, credit instruments that are structured as marketable securities may create additional refinancing options for authorities compared with non-marketable loans.

47. **Managing residual risks under direct models requires bespoke negotiated terms.** Directly deployed public support – for example, public recapitalisations or guarantees – is remunerated through expected future dividends, exit gains or guarantee fees. At times, this may create tensions between authorities' fiscal and supervisory objectives, for example if dividends need to be suspended to conserve capital in a resolved firm or exits from a recapitalised firm need to be delayed. Such risks can be mitigated by negotiating bespoke terms and leveraging, to the extent possible, the involvement of third parties and ensuring their interests are aligned with those of the authorities.

Flexibility

48. **Credible backstops offer flexibility.** Flexibility of decision-making is arguably warranted across most of the dimensions analysed in Section 3. It is relevant for applying systemic thresholds as the principal condition in a given case. Flexibility, understood as some margin of appreciation, is also needed to estimate the losses that are driving a crisis, given that, under conditions of urgency and uncertainty, a precise calculation of losses is prohibitive and likely too costly. Lastly, a modicum of flexibility might also be relevant to deal with the contingencies of the recoupment process. Yet the value of flexibility is arguably greatest at the height of a crisis.

49. **Crisis conditions call for swift and prudent judgment.** Such judgment can be fostered only under flexible frameworks. They protect officials responsible for crisis measures from personal liability, as fear of being held personally liable may be a powerful inhibitor to prudent decision-making. Protection may be provided by mechanisms to review those decisions. A way to achieve this is to apply a deferential standard of judicial review of administrative decisions to ascertain whether criteria of imminent failure or risks for financial stability are met.

[63] This is probably by definition the case in heavily concentrated markets. A system characterised by one (or a few) very large firms and many very small ones will have difficulties in meaningfully mutualising the cost of resolving the former across the latter group without overburdening their capacity. As a result, recoupment by mutualisation is not a policy option, and residual risks are relatively large. See, for example, the argument by Federal Council (2023) against a backstopped resolution fund in Switzerland.

50. **Finding the right level of flexibility is a challenge.** Unconstrained flexibility carries its own risks. It will corrode market discipline, externalise the cost of failure rather than impose it on a bank's shareholders and creditors and may be too demanding on, and in worst cases an abuse of, public funds. In terms of risks for public funds specifically, there is always the risk that when in doubt, flexibility will be exercised to the detriment of public resources and would increase moral hazard.

Section 5: Conclusion

51. **Resolution action requires funding, yet funding sources from within the failing bank or the financial system may be limited.** Banks are unlikely to always have sufficient volumes of liabilities that may be cancelled without negative consequences. And it is equally unlikely that industry-sourced funds can always be called upon to contribute towards funding resolution actions, without such contributions being a disproportionate burden on their resources or causing broader turmoil. This calls for an additional source of funding to preserve financial stability.

52. **Public funds may be a supplementary source of funding, used as a last resort.** Financial stability is a key public good, and hence public funds should in principle be available to preserve it if this systemic threshold is met. Also, if resolution action avoids contagion and preserves financial stability, that is likely to lessen the need to provide liquidity support, including from central banks, across the financial system. Given that system-wide liquidity support is likely to involve significantly larger amounts than those needed to fund resolution actions that address asset-liability mismatches in a single bank, using public funds for the latter may ultimately be an efficient way to protect financial stability.

53. **The need for effective public support for resolution is therefore widely acknowledged across jurisdictions.** The challenge is to integrate the use of public funds in resolution frameworks in such a way that their deployment, if systemically required, is at hand, all the while maintaining market discipline, protecting public finances and avoiding moral hazard. As a general rule, it is easier for authorities to align their policies with these principles and standards such as the FSB Key Attributes and the IADI Core Principles if they are rooted in codified frameworks rather than designed on an ad hoc basis. A codified framework defines thresholds and objectives, defines the hierarchy for allocating the cost of failure and sets principles of accountability.

54. **Governance is critical when using public funds to support resolution actions.** If public funds are to be provided for systemic purposes, the decision to do so needs to be subject to a determination that the public interest is at stake. This calls for an exercise of judgment at the senior level. Jurisdictions address this through governance arrangements that typically bring together senior officials from technical and political authorities that are able to consider supervisory, monetary and fiscal implications. These governance frameworks provide the legitimacy needed if public funds are to be deployed and underpin the powers needed to impose levies to recoup public expenses.

55. **Public funds are a funding source of last resort.** This principle is universally recognised but can be operationalised in different ways. Key policy choices relate to the scope of loss allocation by private sources of funding and the process through which it is achieved. Specifically, the extent to which loss allocation is a condition precedent for accessing public funding or achieved ex post through recoupment differs across jurisdictions and is a key variable in how flexibly public funds can be deployed.

56. **Public support in resolution should be a temporary solution to address financial stability risks.** To that end, resolution frameworks should have strong recoupment mechanisms. That can be more easily achieved when the public support takes the form of loans to industry-contributed funds that would eventually be repaid by levies imposed on the banking industry. Thus, the costs of bank failure would be, at least partially, mutualised across financial system participants, who are more direct beneficiaries of the preservation of systemic stability.

57. **Flexibility is a key design challenge when integrating the use of public funds in resolution frameworks.** Although public support should be a means of last resort, this support is not necessarily the source that is resorted to at the latest moment in time. Put differently, the last resort principle is a principle of seniority, not chronology. That suggests that some flexibility may be warranted in respect of when, how and in what amounts public support may be provided, especially at the zenith of a crisis, subject to appropriate governance and adequate conditionalities. Conversely, this understanding of the last resort principle calls for relatively greater stringency in the recoupment process, once the crisis has abated.

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