



SWEDEN

FINANCIAL SECTOR ASSESSMENT PROGRAM

TECHNICAL NOTE ON CRISIS MANAGEMENT AND RESOLUTION

May 2023

This Technical Note on Crisis Management and Resolution for the Sweden FSAP was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on April 12, 2023.

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CRISIS MANAGEMENT AND RESOLUTION

Prepared by
**Monetary and Capital Markets
Department**

This Technical Note was prepared by Eamonn White, short-term consultant, under the supervision of Tommaso Mancini-Griffoli, in the context of the Financial Sector Assessment Program in Sweden. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at

<http://www.imf.org/external/np/fsap/fssa.aspx>
<http://www.imf.org/external/np/fsap/fssa.aspx>

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Glossary

AMC	Asset Management Company
BCP	Basel Core Principles for Effective Banking Supervision
BRRD	EU Bank Recovery and Resolution Directive
CCP	Central Counterparty Clearing House
CBR	Combined Buffer Requirement
CCyB	Countercyclical Buffer
CMG	Crisis Management Group
CSD	Central Securities Depositor
CSE	Crisis Simulation Exercise
DA	Deposit Aggregators
DGA	Deposit Guarantee Act
DGS	Deposit Guarantee Scheme
DGDS	EU Deposit Guarantee Schemes Directive
DGF	Deposit Guarantee Fund
EBA	European Banking Authority
ECB	European Central Bank
Ecofin	EU Economic and Financial Affairs Council
EIF	Early Intervention Framework
ELA	Emergency Liquidity Assistance
EMIR	European Market Infrastructure Regulation
ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESRB	European Systemic Risk Board
EU	European Union
FI	Finansinspektionen
FOLTF	Failing or Likely to Fail
FSAP	Financial Sector Assessment Program
FSC	Financial Stability Council
GFC	2007–08 Global Financial Crisis
IADI	International Association of Deposit Insurers
ICS	investor compensation scheme
IMF	International Monetary Fund
LOLR	Lender of Last Resort
MCM	Monetary and Capital Markets Department, IMF
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
NBSG	Nordic–Baltic Stability Group
NCWO	No Creditor Worse Off
SNDO	Swedish National Debt Office
PGSF	Precautionary Government Support Facility
RRP	Recovery and Resolution Planning

SCV	Single Customer View
SEK	Swedish krona
SPE	Single Point of Entry
SRB	EU Single Resolution Board
SSM	EU Single Supervisory Mechanism
SRM	EU Single Resolution Mechanism
SREP	Supervisory Review and Evaluation Process
TLOF	Total Liabilities and Own Funds

EXECUTIVE SUMMARY

The Swedish financial safety net and crisis management arrangements rest on sound foundations and have been strengthened further by legislative and policy reforms in the financial sector. The introduction of the Banking Recovery and Resolution Directive (BRRD) ahead of the 2016 Financial Stability Assessment Program (FSAP) established a well-developed statutory regime for supervisory early intervention, crisis management and resolution in Sweden. Since then, the government has implemented new EU Regulations on Recovery and Resolution of CCPs via complementary Swedish legislation establishing an early intervention, recovery, and resolution planning regime for CCPs. The new Riksbank Act, which came into force in January 2023, provides an explicit statutory basis for the central bank to provide liquidity support to avert *“a serious disruption to the financial system in Sweden.”*

Since the last FSAP, the authorities have made some progress, but, much work remains to operationalise the new crisis management framework and ensure resolution powers can be used quickly and with confidence. While high capital requirements for Swedish banks help ensure resilience to shocks, they are not a substitute for crisis management and resolution tools, nor will they address problems related to non-financial risks, including operational or cyber threats. Swedish authorities' past use of public funds to manage financial crises may no longer be a credible domestic crisis management strategy, given the growth in the size of the financial system relative to Gross Domestic Product (GDP) when compared to crises in the 1990s and the Global Financial Crisis (GFC). The introduction of the resolution framework has also imposed legal constraints on the use of public funds as a means for crisis management.

Developing crisis management capacity within and between agencies is required to ensure credible crisis management plans, including for bank resolution. Building these operational capabilities for crisis management is a multi-year undertaking. It will require the authorities to develop operational plans, processes, procedures, and internal capacity to deploy crisis management and resolution tools quickly and with confidence in a coordinated manner. The Finansinspektionen (FI) should formalize its internal monitoring arrangements for identifying and intensifying supervision of banks at increased risk of failure (i.e., solvency analysis). The FI should also develop and share its framework for conducting bank viability analysis with the Swedish National Debt Office (SNDO) and the Riksbank. The FI would use these frameworks to support the SNDO's resolution determinations and the Riksbank's lending decisions in a crisis. The ex-ante design of such shared methodologies improves speed of coordination in crisis but does not preclude authorities at reaching different conclusions when applying the methodology nor does it change the independent nature of their respective assessments. It is important that the Ministry of Finance (MoF)'s role in approving SNDO resolution decision-making that might have *“direct budgetary or systemic effect”* be limited to resolutions that require funding from government budgets only. This should be clearly communicated in public policy. Public funds should not be judged to be at risk when the SNDO's preferred resolution strategy can be implemented in an orderly manner e.g., bail-in of MREL is sufficient to stabilize the firm in resolution.

On preparing for future bank failure, banks are yet to remove known barriers to resolvability, including reporting capabilities on resolution valuation, funding in resolution, and operational services dependencies. The SNDO and other financial authorities should develop fully operational bank-specific resolution plans which require banks to remove all known barriers to the resolvability of systemic banks under the bail-in resolution strategy (e.g., SRB’s resolvability expectations for banks).¹ The SNDO should further refine its Minimum Requirement for Own Funds and Eligible Liabilities (MREL) policy and ensure that Swedish banks comply with its recently expanded resolvability expectations by the 2024 compliance deadline. The SNDO should also develop its capacity to manage central counterparty clearing house (CCPs) failure, in line with its new resolution responsibilities, by setting resolvability expectations for domestic CCPs.

On managing failed banks, the statutory resolution tools need to be usable, at speed and with confidence to impose losses on the banks’ creditors by applying bail-in or transfer tools. The SNDO should develop its resolution mechanics to use the resolution tools to support effective crisis response involving failing systemic financial institutions. It should prioritise the further development over time of procedures and mechanisms to implement the recently published bail-in powers.

The Riksbank should improve market transparency by publishing a policy framework describing the central bank’s lender of last resort bilateral liquidity facilities’ capability for crisis management purposes, including funding in resolution. Such a public policy framework should clarify how banks in resolution could access backstop liquidity support to meet their obligations as they fall due if private sources are unavailable. Considering the additional authority coordination and decision-making requirements under the new Riksbank Act, the Riksbank should also establish the ex-ante operational capacity to take swift, decisive, and well communicated collateralized lending decisions in a crisis.

On financial crisis preparedness, it is essential to develop today the tools and processes for contingency planning that the authorities will use in responding to a future crisis. The authorities need to continue to formalize their internal crisis management practices and ensure that resources dedicated to crisis management are commensurate with their statutory functions. The authorities should codify shared operational frameworks for informing crisis decision making. These frameworks should include developing common methodologies for assessing systemic impact, solvency, and viability assessments, which set out the authorities’ expectations on the underlying sources of information and valuation methodologies that inform such important decisions in crisis management. The ex-ante design of such shared methodologies improves speed of decision making. The authorities should develop a Crisis Simulation Exercise (CSE) manual or playbook that defines the different purposes of the CSE for authorities at different stages of their development.

¹ Eight barriers to resolvability: 1) insufficient loss absorbing capacity, 2) resolution valuations, 3) funding in resolution, 4) continuity in financial contracts in resolution, 5) operational continuity in resolution, 6) continuity of access to financial market infrastructure, 7) restructuring in resolution, and 8) management, governance, and communications.

The MoF should work to improve the operational independence of the SNDO by updating its funding arrangements. The basis for setting the SNDO’s funding should be calculated as a function of the industry resolution levy arrangements. Such a mechanism for identifying the appropriate budget for the SNDO would make it less exposures to the MoF wider public finances priorities related to annual budgeting processes. This would give the SNDO independence in taking resolution decisions and also enable it to define the necessary resources to discharge its statutory duties more independently. Finally, the MoF should ensure the legal protections for the authorities are sufficient to ensure that legal challenges will only be successful if based on criminal activities, gross negligence, or bad faith.

Table 1. Sweden: FSAP 2022—Key Recommendations on Financial Safety Net and Crisis Management*		
Recommendations	Agency	Priority
Framework for Bank Failure		
1. Establish an intensive supervisory monitoring process for identifying banks at risk of failure with clearly defined financial triggers to inform judgements (¶126)	FI	H
2. Develop an analytical framework for providing systemic impact, solvency, and viability analysis consistently across authorities (¶128, 96)	FI/SNDO/ Riksbank	H
3. Clarify in public statements and in legislation that the MoF role in approving SNDO resolution decision-making is limited to scenarios where resolution requires funding from government budgets only and is not required if SNDO’s preferred resolution strategy can be implemented in an orderly manner. (¶122,24)	MoF & SNDO	H
Preparing for Future Bank Failure		
4. Clarify certain aspects of MREL regulations incl. specifying the consequences for bank breach of MREL requirements, MREL maturity profile and roll-over risk. (¶148)	SNDO & FI	H
5. Ensure bank resolvability expectations are sufficiently clear at a national level to enable banks to implement capabilities needed to support orderly resolution by 2024. (¶153)	SNDO	H
6. Develop the capacity to improve the resolvability of CCPs by ensuring staffing is adequate, establishing an annual resolution planning cycle, and defining clear resolvability expectations for CCPs. (¶158)	SNDO	M

Table 1. Sweden: FSAP 2022—Key Recommendations on Financial Safety Net and Crisis Management (concluded)*

7. Develop and publish a policy framework describing the lender of last resort bilateral liquidity facilities' capabilities for crisis management purposes, including funding in resolution. (¶75-79)	Riksbank	H
8. Document an agreed governance process between resolution and DGS functions of SNDO for assessing the resolution valuation outcomes for NWCO insolvency counterfactual losses for the DGS (¶83)	SNDO	M
Financial Crisis Preparedness		
9. Formalize existing crisis management practices including by developing a CSE manual to increase the authority operational readiness and adequately resourced for crisis (¶106)	SNDO, FI, Riksbank	M
10. The Government should update the funding arrangements for the SNDO operations as resolution authority, so it is calculated as a function of the industry resolution levy arrangements (¶97-98)	MoF	H
* H: within 1 to 2 years; M: within 2-3 years; L: within 3-5 years.		

BACKGROUND²

A. Introduction

1. This note analyzes the Swedish financial safety net and crisis management arrangements, including bank resolution and contingency planning. It is based on a review of the relevant legal, policy, and operational documents, as well as the authorities' comprehensive responses to the questionnaire prior to the assessment. Extensive discussions with authorities have also informed this note. While much progress has been made since the 2016 FSAP to establish the necessary statutory basis for crisis management and resolution, many aspects of these arrangements are still in the process of being operationalized within and among authorities as well as by banks.

2. This does not reflect a formal or granular assessment of compliance with any specific standard assessment framework but rather is based on a comparison against established international policies and best practices. Examples of these standards include: i) the Key Attributes (as updated in October 2014 by the Financial Stability Board); ii) the Basel Core Principles for Effective Banking Supervision (BCP; updated in September 2012 by the Basel Committee on Banking Supervision), and iii) the Core Principles for Effective Deposit Insurance (updated in November 2014 by the International Association of Deposit Insurers (IADI Principles).

3. The note aims to help strengthen the Swedish financial safety net and crisis management framework by identifying gaps and recommending steps to improve them in

² This Technical Note was prepared by Eamonn White (External FSAP Advisor, IMF). The author would like to thank the Swedish authorities for their excellent engagement, open dialogue, and warm hospitality throughout the FSAP process.

light of specific Swedish context.³ Where available, these recommendations are accompanied by examples and references to best practices.

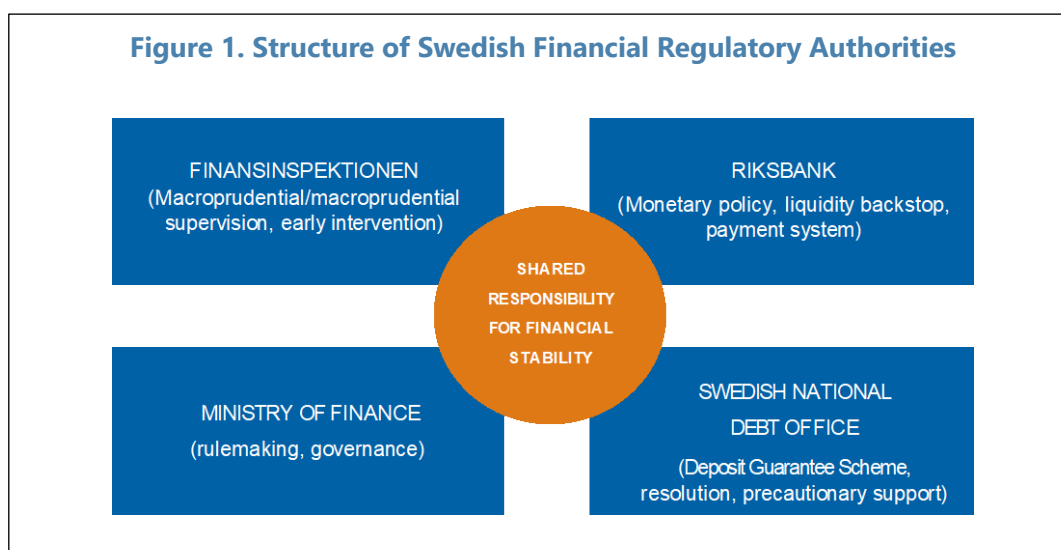
B. Financial Oversight Architecture

4. Financial safety net and crisis management arrangements are essential in handling financial crises.

The IMF defines the financial safety net as comprising: (1) prudential supervision, including recovery planning; (2) resolution actions, including bank resolution planning, (3) central bank lender of last resort liquidity assistance (LOLR), and (4) deposit protection. Since the 2008 financial crisis, the Swedish financial safety net has been expanded to integrate both the process of recovery and resolution of distressed financial institutions into the financial safety net. Crisis management requires the development of tools and procedures that allow authorities to respond quickly, decisively, and in close collaboration with other authorities. This requires significant advance preparation both within individual authority but a framework that ensures a necessary level of coordinated analysis, decision making and action between several authorities.

5. The Swedish financial safety net has a decentralized financial authority structure comprising four domestic agencies:

Finansinspektionen (FI), the Swedish National Debt Office (SNDO, *Riksgälden*), the Riksbank, and the Ministry of Finance (MoF); the Financial Stability Council (FSC) complements these agencies—see Figure 1 for an illustration. Sweden is neither part of the Eurosystem nor the European Union (EU) Banking Union. However, as a member state of the EU, it plays a role in shaping EU legislation concerning financial regulation, crisis management, and resolution, and its agencies are part of the EU cooperative arrangements.



³ The Swedish financial safety net and crisis management framework is based on European Union arrangements, in particular, the BRRD. Therefore, the note's assessment and recommendations may go beyond national responsibilities and legislation—and if so, it may be necessary for the Swedish authorities to advocate changes within the European Union for those issues they cannot take unilateral action upon.

6. FI is the micro-prudential and macro-prudential supervisory authority for the Swedish financial sector. It is an integral part of the EU system of Financial Supervision (ESFS) and the European Systemic Risk Board (ESRB), but it is not part of the EU Single Supervisory Mechanism (SSM) nor the ECB Supervisory Board. FI's statutory objective is to ensure that the financial system is stable and efficient as well as to ensure sustainability and an effective consumer protection. For this purpose, FI is primarily responsible for i) issuing secondary regulations and guidelines on licensing and supervision of Swedish financial institutions, ii) monitoring and supervision of financial institutions' compliance with prudential rules and regulations, and iii) taking measures to prevent financial imbalances and stabilizing the credit market.⁴ FI's functions and related powers are stipulated in the Banking and Financing Business Act and the Financial Supervisory Authority Instruction Ordinance (2009:93).

7. The SNDO is the Swedish resolution authority for banks and investment banks and is responsible for resolution policy, planning and implementation in a crisis. It is also the responsible for the deposit guarantee scheme (DGS), the investor compensation scheme (ICS) and the precautionary government support facility (PGSF) framework. The SNDO is not part of the EU Single Resolution Mechanism (SRM) nor the EU Single Resolution Board (SRB). However, SNDO is an active participant in EU resolution colleges for other EU headquartered banks (e.g., Danske Bank, Nordea and DNB) as well as the chair of EU resolution college for the Swedish bank, SEB Swedbank, and engages in bilateral resolution planning with the Bank of England, as a third country resolution authority, with respect to Handelsbanken. The SNDO's functions and related powers—including the power to issue secondary regulations and guidelines—are stipulated in the Resolution Act, the Deposit Guarantee Act, the PGS Act, and the National Debt Office Instructions Ordinance (2007:1447).

8. The Riksbank is the monetary authority responsible for monetary policy, liquidity support to the financial system, and payment system stability. The Riksbank's mandate is set out in the Sveriges Riksbank Act (Riksbank Act, 1988:1385). It is an integral part of the European System of Central Banks (ESCB) and the ESRB, but not the Eurosystem. The Riksbank's primary statutory objective is to maintain price stability, promote a safe and efficient payments system through a provision of adequate liquidity, and act as LOLR.⁵ The Riksbank also oversees, together with FI, the financial market infrastructure.

9. The Ministry of Finance is responsible for policy making and governance of the regulatory authorities. As such, it gives strategic direction to the financial oversight agencies under

⁴ See 'Finansinspektionen and financial stability' (Finansinspektionen, 2014): http://www.fi.se/upload/90_English/20_Publications/20_Miscellaneous/2014/fi_financialstability_eng.pdf; http://www.fi.se/upload/90_English/20_Publications/20_Miscellaneous/2014/fi_financialstability_eng.pdf see also Finansinspektionen's financial stability reports: http://www.fi.se/upload/90_English/20_Publications/10_Reports/2016/stab2016-1_engNY.pdf http://www.fi.se/upload/90_English/20_Publications/10_Reports/2016/stab2016-1_engNY.pdf

⁵ The latter also includes the authority to issue banknotes and coins. Additionally, the Riksbank operates a gross settlement system.

its jurisdiction (that is, the FI and the SNDO),⁶ sets their budget and resourcing envelop as part of the annual budgeting process. The MoF has the primary responsibility to prepare pertinent legislations that the government subsequently will submit to the parliament. Public authorities, including the parliament and the government, are not allowed to intervene in decisions by the FI, the SNDO and the Riksbank in individual cases. As regard to the Riksbank, its independence is regulated in the Treaty of the Functioning of the European Union. Sweden is represented in the EU Economic and Financial Affairs Council (Ecofin) but not in the Eurogroup.

10. The decentralized financial authority structure is effective at ensuring operational independence of the authorities for their respective functions but creates the need for active coordination. There is a healthy tradition of the authorities challenging the policies and actions of their fellow financial regulators in public via consultation processes. While the authorities have been effective in managing crises in the 1990s and the GFC, a highly independent authority can bring with it integration and coordination challenges, including ensuring coordinated actions. Crisis management requires joint authority crisis management plans (e.g., bank-specific resolution plans) that specify the necessary sequence of actions the different authorities will need to take at the relevant point in different crisis scenarios. It is essential for the authorities' respective crisis actions to be based on a common understanding of optimal crisis management outcomes and how they can collectively achieve it.

11. The MoF created the Financial Stability Council (FSC) in 2013 to facilitate crisis coordination among the authorities. The Minister responsible for financial markets chairs the FSC. The FSC meets regularly to discuss financial stability issues, the need for measures to prevent financial imbalances from building up and, in the event of a financial crisis, the need for crisis measures. The FSC is designed to facilitate discussion on measures for preventing as well as responding to financial stability issues including macro-prudential risks⁷ but is not a decision-making body. The FSC provides a forum for the senior officials to prepare for and manage financial stability crises. Its work is complemented by parallel expert-level discussions. The new FSC memorandum of understanding was agreed upon by the Swedish authorities in 2016 and aims to improve further cooperation, information sharing and knowledge exchange to promote crisis management in the interest of financial stability in Sweden.

C. Progress Since the 2016 FSAP

12. The authorities have made progress in developing their crisis management and resolution regime and addressed the recommendations in the 2016 FSAP, including:

- On bank resolvability, the SNDO has made significant progress in improving the resolvability of banks it deems systemically important by setting bail-in as the preferred resolution strategy for all bank resolution entities. More importantly, these banks have been subject to the SNDO's

⁶ The Riksbank is an agency within the jurisdiction of the parliament.

⁷ See IMF Swedish FSAP 2022 Technical Note on Macroprudential Policy Framework and Tools.

MREL requirement for systemic banks since the January 1, 2018. More recently, in March 2022, the SNDO issued a guidance document on the European Banking Authority (EBA) published guidelines on improving resolvability for institutions and resolution authorities to help Swedish banks understand how certain parts of those guidelines should be interpreted and applied.

- On crisis liquidity support arrangements, the new Riksbank Act, which came into effect on January 1, 2023, clarifies the role of the central bank in providing liquidity support to avert “a serious disruption to the financial system in Sweden” and provides improved statutory clarity for the central bank role in providing bilateral collateralised liquidity assistance to a temporarily illiquid and solvent firm.
- On international cooperation, the Swedish authorities participated in one of the largest cross-border crisis simulation exercises (CSE) ever, organised by the Nordic-Baltic Stability Group, the first such simulation held since the introduction of the BRRD.
- On financial crisis preparedness, the Financial Stability Council (FSC) was further developed to enhance cooperation among authorities during a crisis, including by documenting the role and responsibilities of each authority. Moreover, resources dedicated to crisis management at the SNDO increased from 10 full-time equivalents (FTEs) in 2016 to 25 FTEs by the end of 2022.
- On central counterparty clearing house (CCP) crisis management regime, new legislation for effective crisis management of CCPs came into effect in August 2022. The new EU Regulation on recovery and resolution of CCPs and the Swedish complementary legislation will establish an early intervention, recovery, and resolution planning regime for CCPs. FI continues as the supervisor for CCPs to be responsible for CCP early intervention regime. According to the new legislation, the SNDO is appointed as resolution authority for CCPs.

FRAMEWORK FOR BANK FAILURE

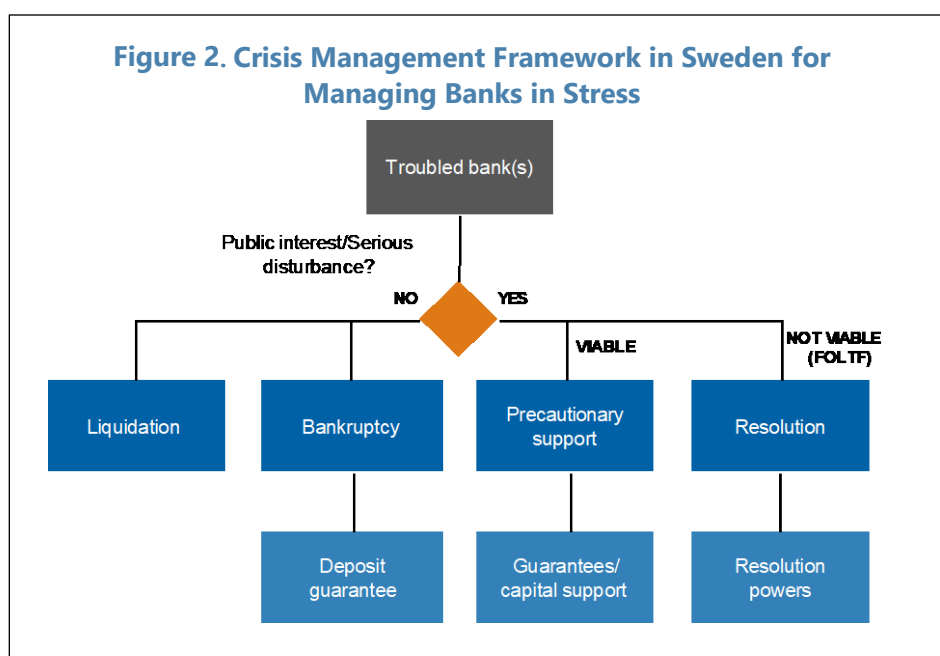
A. Banks (Both Resolution and Liquidation)

Existing Arrangements

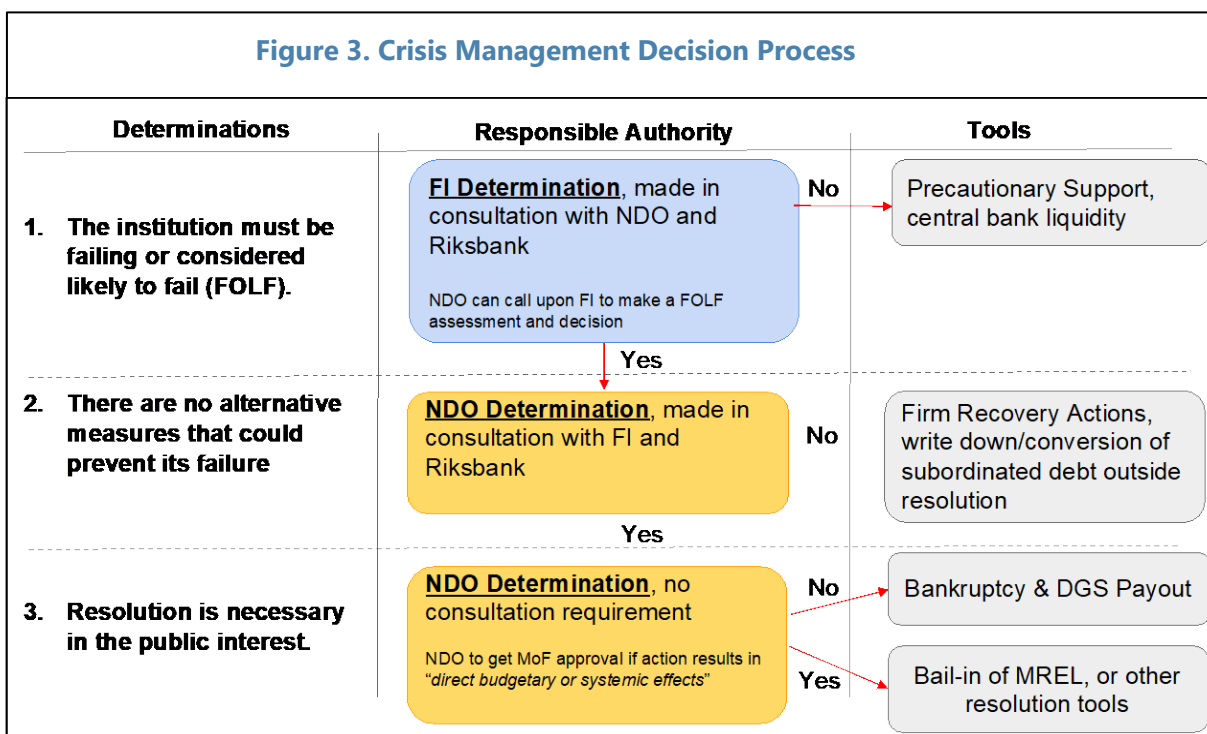
13. The framework for managing banks experiencing extreme stress includes tools aimed at minimising the cost of bank failure (Figure 2). FI can exercise its early intervention powers to address weaknesses in stressed banks and minimise their risk of failure. If a bank is facing serious solvency issues, (FOLTF), the SNDO decides whether the bank should be closed and depositors repaid, or whether to use its statutory resolution powers to ensure continuity in the failed bank's critical services. Resolution powers are used if deemed necessary with regard to the public interest (e.g., a firm's entry into liquidation *would* present a risk to the stability of the financial system at the time of failure) while bankruptcy or liquidation⁸ will apply if no public interest (i.e., the firm's entry

⁸ Swedish law distinguishes between liquidation and bankruptcy. In case of insolvency only bankruptcy is applicable - liquidation only applies if assets are sufficient to cover all claims, including depositors.

liquidation *would not* present a risk to the stability of the system at the time of failure). Bankruptcy is accompanied by a DGS pay-out of eligible protected deposits. For viable banks, the Riksbank may provide liquidity support (subject to conditions in the Riksbank Act). Under certain circumstances the SNDO may also provide support to viable banks by means of guarantees (liquidity support) or capital injection (capital support)—so called precautionary government support. Such support may be given to firms experiencing temporary stress and if it is needed to counteract a serious disruption of the financial system in Sweden. The support is provided on a discretionary basis by means of agreements between the institutions and the SNDO, subject to government approval.



14. The resolution decision-making process starts when the FI declares a bank to be failing or likely to fail (FOLTF), and the SNDO decides that resolution is in the public interest (Figure 3). Before the declaration, FI is required to consult with the SNDO and the Riksbank. After the FI establishes FOLTF, the SNDO can decide to resolve an institution after it has determined that no other actions, private or public, would prevent a failure, known as an “alternative measures” determination, and resolution is necessary in the public interest. The SNDO is also required to seek the MoF approval to take resolution measures that might have “*direct budgetary or systemic effects.*” If the SNDO determines that no alternative measures exist, it then needs to determine whether that bank is systemically important. If it is not, then the bank will be allowed to enter liquidation or bankruptcy, which is followed by a DGS pay-out.



15. If the SNDO determines a failing bank should be placed into resolution, the SNDO assumes control over the bank and can exercise its resolution tools and powers to stabilise and restructure the bank. These tools include transfer and bail-in powers. The banks' shares or assets and liabilities can be transferred to a private-sector purchaser (PSP), to a temporary bridge bank that the SNDO would control and operate, or to an asset management company (AMC). The bail-in tool entails shareholders and creditors having their claims on the failed bank written down or converted into equity.

16. As a last resort option, the government stabilization tools allow the provision of public equity support and takes a systemic bank into temporary public ownership. For example, the Swedish Government has previously nationalized two banks (Gota Bank and Nordbanken) and implemented a good-bad bank split in both cases. Post-BRRD, this tool is designed as a backstop only for situations of extraordinary systemic crisis and where the use of the other SNDO resolution tools would not suffice to avoid significant adverse effects on the financial system. In addition, under the BRRD there is a mandatory 8 percent contribution to loss absorption by the systemic bank's shareholders and creditors when the government stabilization tool is used.⁹ This means in practice that MREL liabilities will need to be written down to at least the same extent as with other resolution

⁹ The BRRD government stabilisation tools provided for in Articles 56 to 58 must meet the following conditions: (i) a contribution to loss absorption and recapitalisation equal to an amount not less than 8 percent of total liabilities including own funds of the institution under resolution, measured at the time of resolution action in accordance with the valuation provided for in Article 36, has been made by the shareholders and the holders of other instruments of ownership, the holders of relevant capital instruments and other eligible liabilities through write down, conversion or otherwise; (ii) it shall be conditional on prior and final approval under the Union State aid framework (article 37.10).

tools if the government stabilisation tools are used, i.e., no government bail-out of shareholders and creditors. Instead, this backstop tool is designed for scenarios where additional public support is required to stabilise the failing bank even after private shareholders and creditors have been wiped out.

17. The MoF's role in crisis management is primarily related to developing the statutory and regulatory requirements on the financial system by implementing EU rules and facilitating cross-authority coordination. It also must approve some of the underlying authorities' decisions on crisis management, including the deployment of precautionary support to banks experiencing stress. The government also has solely the gateway to the European Commission regarding all state aid cases.

Assessment

18. The precautionary government support tool provided under the BRRD is likely to be used in a limited range of circumstances outside of wider failure in the funding and capital markets. Its use is subject to several statutory conditions, including 1) the support shall be temporary, 2) proportionate to the serious disruption of the financial system, 3) shall be provided on market conditions i.e., banks who need the support must be able to pay commercial terms, and 4) a credit institution in receipt of the support shall not be considered FOLTF i.e., viable. The provision of precautionary support by the SNDO must also be judged by the European Commission as not state aid. These conditions taken together suggest that the use of this crisis management tool will be limited to crises involving a wider funding or capital market failure. In such circumstances, central banks traditionally play a leading role.

19. The resolution decision-making process requires very close coordination between the FI, the SNDO and the Riksbank to implement the joint plan in an orderly manner. An essential input to this coordinated decision-making and subsequent action is that the authorities take a consistent approach to the assessment of the systemic impact, solvency, and viability position of the bank in question. Experience from crises in other jurisdictions suggests that the absence of such share assessment frameworks can result in unproductive discussion due to conflicting data and differences in analytical methodology in a crisis. This can undermine the ability of the authorities to take decisions in a timely manner. The Financial Stability Board (FSB) Principles for cross-border cooperation on crisis management make clear that crisis coordination arrangements should include the development of common support tools, including a shared systemic impact assessment framework.

20. In Sweden, each authority assesses key factors relevant to crisis management independently and shares its assessment with the other authorities. While the SNDO and FI work closely together on recovery and resolution planning based on common criteria sets out in EU legislation and rules, there is no formalised cross-authority methodologies for making these determinations in a coordinated way. In addition, there are no predefined cross-authority quantitative or qualitative triggers for identifying a bank at risk, now or in the future, of entering the resolution decision making process. The ex-ante design of such shared methodologies can improve

the speed of coordination in crisis but does not preclude authorities from arriving at different conclusions when applying the methodology nor does it change the independent nature of their respective assessments.

21. The FI's existing practises for identifying at-risk banks support its ability to take early intervention supervisory and provides a basis for coordination with other authorities in crisis.

The more time the SNDO has to prepare for a crisis before it crystalizes, the better able it is to use its resolution tools in an orderly way. As a result, it is essential that both authorities develop and agree on a mechanism for coordinating authority crisis response once the FI decides that it may need to make a FOLTF determination for a bank (e.g., up to a 12–24 month time horizon).

22. The MoF's role in approving parts of the resolution process and the SNDO budget may create a risk to the SNDO's operational independence as resolution authority.

Under the existing framework, if the SNDO are considering bank resolution actions that would have "direct budgetary or systemic effects," the SNDO must secure the MoF approval before taking its decision. This provides the MoF with a veto on the SNDO resolution actions under certain circumstances. In other jurisdictions, it is typical for governments to be consulted on the resolution authority's determinations before a bank is taken into resolution and for the resolution authority to make the final determination as an operationally independent agency. While it is appropriate that the Swedish MoF has an approval role where there is a direct risk to public funds, the scope of the role is subject to judgement and legal interpretation. In the absence of more specificity, this may risk undermining the SNDO's ability to implement an orderly resolution at minimal risk to public funds and erode the operational independence of the SNDO as a resolution authority. A lack of the SNDO independence might result in a reduced willingness to impose short-term costs of improving bank resolvability to achieve the much greater long-term benefit of reducing the cost of future crises.

23. The BRRD's mandatory 8 percent requirement related to the government stabilisation tools or use of external funds in resolution may limit the flexibility in responding to certain banking crises.

The IMF 2018 Euro Area FSAP recommended that a financial stability exemption is needed from the 8 percent bail-in requirements to help mitigate critical constraints in the framework. Under extraordinary circumstances, (e.g., in a systemic wide crisis), access to public funds to support resolution actions may be necessary to preserve financial stability. Swedish banks have sufficient resources to comply with full MREL requirements. However, as Swedish MREL-requirements are not generally calibrated towards the 8 percent total liabilities and own funds (TLOF) threshold, theoretically even banks within the scope of resolution and subject to MREL requirements may not be able to access external funds. In addition, this may particularly be the case for Swedish banks not expected to be resolved (but rather liquidated) and therefore not required to meet full MREL-requirements. As a result, Swedish banks that do not have sufficient loss absorbing capacity (e.g., MREL-resources) to meet the 8 percent requirement at the point of failure the option to access public funds is not available in a system wide crisis.

24. The structure of the financial system is changing, and the authorities should keep under review the impacts on the effectiveness of the crisis management arrangements to ensure they remain fit for purpose.

The authorities should also consider the development of tools

for responding to non-financial causes of financial institution failure, including cyber-attack, the challenges of executing orderly resolution actions in a 24-hour payment and settlement environment, ensuring early intervention and resolution tools apply to Fintech, including e-payment institutions and other non-bank payment service providers, as well as the implication for CBDC for the stability of bank liabilities structure in resolution.

Recommendations

25. The MoF's role in approving SNDO resolution decision-making should be clarified in public statements and in legislation to make explicit that MoF approval is required only where public funds are directly at risk. Further clarification in public policy should limit the MoF approval role to resolutions that require funding from government budgets. This would give the SNDO independence in taking resolution decisions. It would also enable it to define the necessary resources to discharge its statutory duties more independently. This is appropriate as the SNDO's preferred resolution strategy for a failing systemic bank is designed to restore the solvency of the failing bank via the bail-in of MREL instruments and without resorting to the use of public funds, including the industry-funded resolution reserve funds. This clarification of the MoF's role in the resolution decision-making process should be subsequently reflected in SNDO publications defining its overall approach to resolution. It would encourage the MoF to focus on ensuring the SNDO has feasible and credible resolution plans, of which adequate MREL is an important part, as the primary means of minimising budgetary and systemic effects of the SNDO resolution actions. The UK¹⁰ and the Hong Kong Monetary Authority¹¹ resolution authorities have published frameworks of different levels of detail that describe the appropriate level of consultation required with the MoF in taking decisions as resolution authorities, while limiting the MoF's role in approving such decisions to scenarios where public funds are more directly at risk.

26. The FI should formalize its existing practices for managing banks at risk of failure into a documented and formally approved monitoring process for intensified supervision with terms of reference for including banks. The terms of reference should specify the internal governance, quantitative and qualitative aspects for considering whether to include a bank for intensified supervisory monitoring (e.g., depletion of combined buffer requirement, breach of Pillar 2 requirements, etc.), supervisory information to be accompanied when adding a bank to intensified supervision monitoring prerequisites for removing a bank from intensified supervision. The FI should use the codified monitoring framework for intensified supervision as the basis for coordinating with the SNDO. The SNDO should confirm that the FI monitoring framework insufficient is sufficient to allow the time SNDO need to conduct the required contingency planning to prepare for a resolution transaction. The agreed monitoring framework should consider the complexity of the bank, the need for coordination with foreign authorities for cross-border banks and the SNDO's resource

¹⁰ <https://www.bankofengland.co.uk/-/media/boe/files/about/legislation/statement-structural-separation>
<https://www.bankofengland.co.uk/-/media/boe/files/about/legislation/statement-structural-separation>

¹¹ [https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolutions/RA-1 Operational Independence of the Monetary Authority as Resolution Authority \(v2\).pdf](https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolutions/RA-1%20Operational%20Independence%20of%20the%20Monetary%20Authority%20as%20Resolution%20Authority%20(v2).pdf)

constraints. Once agreed, the FI should provide the SNDO with a regular update on any banks subject to FI intensified supervisory monitoring.

27. To facilitate the FI sharing a regular report on banks under intensified supervisory monitoring with the SNDO, the SNDO should describe its internal protocols to classify and handle such bank specific, market sensitive information. This should include a description of the SNDO's internal information controls, that such information would be shared only on a "need to know" basis, by identifying the individuals who can access the information (i.e., "insiders"), by educating insiders on how to manage such sensitive information appropriately and being able to identify those who access the information.

28. The FI should develop a framework for providing bank specific viability analysis on a consistent basis to support the SNDO decision-making in a crisis. The FI would use this framework to provide supporting advice to the SNDO's resolution determinations. This advice would allow the SNDO to leverage the FI's supervisory perspective on the failing bank and the credibility of its recovery planning capabilities in the context of the FI's wider supervisory judgement of the bank's governance, operational capabilities, and experience of similar restructuring work. The SNDO should establish a process with the FI where such FI advice is requested to be linked to indicators of bank stress in the FI's intensified supervisory monitoring framework. This would allow the FI time to develop and the SNDO to consider it before needing to make a formal "alternative measures" determination. The authorities use of such methodologies does not preclude them arriving at different conclusions when applying the methodology nor does it change the independent nature of their respective assessments as set out in legislation.

29. The Government should consider pressing at an EU level for a financial-stability exception to the BRRD mandatory 8 percent contribution to loss absorption by the systemic bank's shareholders and creditors when using the government stabilisation tool. The exception would be designed only to be used in times of a country-wide crisis. Such an exception would need to be subject to strict conditions and appropriate governance arrangements. However, making such a change would bring additional flexibility to managing a wide range of crises the FSAP favours.

B. Central Counterparty Clearing House

30. The GFC highlighted the importance of the CCPs for safeguarding financial stability. The increasing use of CCPs due to the introduction of the resulting clearing obligations has furthered their importance in the financial system. Given the significance of CCPs to the resilience of the financial system, it is important that there is a robust regime for their recovery (the process by which a CCP manages the default of one or more of its members or losses arising for other reasons) and resolution.

31. The European Union adopted a legislative proposal on CCP recovery and resolution in 2020.¹² The framework for the recovery and resolution of CCPs is regulated in the Regulation on

¹² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016PC0856>

Recovery and Resolution of CCPs (CCP RRR). Most of the provisions of CCP RRR started to apply in EU in August 2022, and supplementary national legislation in Sweden entered into force at the same time. Together, these enable the national resolution authority to apply resolution tools to a failing national CCP to protect financial stability and taxpayers.

32. The new CCP resolution powers will enable national authorities to sell CCPs and distribute losses among owners and participants. The powers and tools would allow the authorities to i) stabilise a CCP so that it can continue to provide its critical clearing services, ii) prevent contagion from spreading across the financial system; and iii) ensure losses are allocated fairly across CCPs and clearing members, rather than to create a risk to public funds.

33. In August 2022 new legislation came into effect that appoints the SNDO to be the resolution authority for CCPs. The FI is responsible for enhanced supervisory interventions and oversight of recovery measures for CCPs.

PREPARING FOR FUTURE BANK FAILURE

34. This section discusses the Swedish authorities' approach to preparing for future bank failure. It examines the work of the FI's tools for reducing the likelihood of banks and examines the work of the NDO to prepare for future bank failure through bank-specific resolution planning.

35. The SNDO's approach to resolution planning is that, in the event of failure, systemically important institutions are to be placed into resolution, while non-systemically important institutions are to be wound up by means of bankruptcy or liquidation. The SNDO focuses its resources on planning on systemically important institutions.

36. The SNDO conducts an annual decision-making process to formally designated institutions as systemically important, set resolution strategies and loss-absorbing capacity (MREL requirements) for each bank based on its designated strategy. Nine Swedish banks are designated as systemically important: large ones—Skandinaviska Enskilda Banken (SEB), Svenska Handelsbanken, and Swedbank; as well as the mid-sized institutions—Landshypotek, Länsförsäkringar, SBAB, Skandiabanken, Sparbanken Skåne; and the Swedish Export Credit Corporation (SEK).¹³ The three largest Swedish-headquartered banks (SEB, Svenska Handelsbanken, and Swedbank) have a mix of subsidiaries and branches in other European countries, mostly in the Nordic and Baltic regions.

37. In addition to its annual designation process for resolution planning purposes, if the FI identifies a bank as failing or likely to fail, the SNDO will again assess at that point whether the firm is systemically important (i.e., test whether taking the bank into resolution is in the public interest if it fails) taking into account the market context at that time. This allows the

¹³ <https://www.riksdagen.se/contentassets/e615d0d9c8594ffabe526efcde2a7dd1/report-compliance-mrel-requirement-q4-2021.pdf> <https://www.riksdagen.se/contentassets/e615d0d9c8594ffabe526efcde2a7dd1/report-compliance-mrel-requirement-q4-2021.pdf>

SNDO to put banks into resolution that were not designated as systemically important as part of its annual planning processes. In an actual crisis, SNDO thus has the flexibility to use all resolution tools on any bank to ensure its orderly resolution even if not planned for as part of SNDO's ex-ante resolution planning.

38. Crisis planning for banks which the SNDO does not consider systemically important is focused on ensuring that covered deposits can be paid out quickly and efficiently under the deposit guarantee scheme. This work includes ensure these firms have the capabilities to provide information about their depositors and those depositors balances at the point of failure. The SNDO regularly checks firm's capability to provide this information.

A. Plans for Restoring Banks at Risk of Failure

39. The FI has a wide range of early intervention tools for managing banks. The tools include the power to activate a bank's recovery plan, dismiss members of the bank management body, request a debt restricting plan and the appointment of a temporary administrator. The latter tool is considered particularly relevant for smaller banks experiencing stress where insufficient management capacity may be the main risk to bank recovery.

40. FI has continued to strengthen its bank-specific risk assessments and the early intervention framework (EIF). It conducts a continuous risk assessment as part of its risk-based approach to supervision, classifying all institutions into one of four supervisory categories: category 1 (most systemically important) to 4 (least systemically important). The FI has continued to make minor refinements to its early intervention framework since the last FSAP. This continuous improvement is important both because avoiding bank failure is a much lower cost solution than bank failure and because the resolution frameworks build on the quality of risk assessments and early intervention. Since the last FSAP, the FI has clarified that its bank Supervisory Review and Evaluation Process (SREP) scores are the basis for assessing whether bank violating the FI conditions of authorisation are likely to fail within 12 months if measures are not taken.

41. Relying on its existing SREP, the FI has an internal arrangement for identifying and prioritising its supervisory focus on banks experiencing stress. When a bank is identified as experiencing stress or at risk of failing, the FI begins to conduct supervisory reviews, including reassessing capital requirements. The bank is added to a monthly review process where supervisory interventions are discussed and supervisory or bank actions prioritised. If the firm's position continues to deteriorate, a FI crisis management team is formed to further intensify supervisory dialogue with the bank and to prepare for possible failure.

B. Bank Resolvability: Loss-Absorbing Capacity

Existing Arrangements

42. SNDO's MREL policy aims to ensure adequate levels of loss absorption and recapitalisation capacity when a bank fails. It is based on updated rules in the EU Bank Recovery and Resolution Directive 2014/59/EU (BRRD2), which have been transposed through the Swedish

Resolution Act (2015:1016). The SNDO's NDO's policy aims to ensure that (i) MREL requirements ensure sufficient capacity to recapitalise a failing bank, (ii) the application of MREL is transparent and easily understood, (iii) MREL is risk-based (above certain "minimum levels"); and (iv) MREL is calculated and complied within the same manner for banks with similar resolution strategies.

43. Consistent with the EU framework, SNDO MREL requirements are determined based on a bank's capital requirements (risk-weighted and non-risk-weighted). The MREL requirement (recapitalisation amount) includes a market confidence charge (risk-weighted requirement) which is equal to the combined buffer requirement (CBR) minus the countercyclical buffer (CCyB) plus the FI's Pillar 2 guidance requirement on banks. A market confidence charge set at CBR minus CCyB is the standardised level. The inclusion of FI's Pillar 2 Guidance is a matter of Swedish national policy discretion within the EU BRRD framework. The market confidence charge can be adjusted both up and down if this is deemed appropriate to maintain market confidence and to ensure that the bank is able to maintain its critical functions without preventive state aid.

44. Swedish banks subject to SNDO MREL requirements will be required to disclose their MREL resources via Basel Pillar III disclosures 1 January 2024. These disclosure requirements are set out in the European Commission Implementing Regulation (EU) 2021/763. For non-globally systemically important institutions, disclosure shall be made semi-annually. These disclosures are designed to enable market investors, including other banks, investment, and pension funds, to risk manage their credit exposures to Swedish bank MREL instruments and set limits on their holdings of MREL debt that reflect their risk tolerance for losses on those investments should a bank fail.

Assessment

45. The SNDO has a comprehensive MREL policy and has made good progress in ensuring implementation by banks. In particular, the SNDO has taken opportunities when implementing the BRRD 2 to maintain its pre-existing MREL levels for its banks. The overall outcome under the SNDO's MREL policy is that Swedish institutions are subject to somewhat higher (risk-weighted) requirements (both overall and subordination requirement.) than institutions within the Banking Union (SRB MREL-policy).

46. SNDO has also introduced some additional aspects to its MREL policy, including making quarterly disclosure of bank MREL requirements and resources. These disclosures evidence the credibility of this key component of the resolution regime. The legal framework also imposes some ownership restrictions on MREL eligible debt by defining investor eligibility criteria to be met for non-professional retail investors when buying such debts, and the seller of the MREL-instrument is responsible for ensuring that retail investors understand the inherent risks of these instruments.¹⁴

47. Larger Swedish banks have been able to comply with their overall MREL requirements through the issuance of senior unsecured debt. The investor base for MREL eligible liabilities

¹⁴ See are specified in chapter 9, section 25 in the Swedish Securities Market Act (2007:528)

consists mostly of asset managers, insurance companies and banks. Banks have an ongoing need to manage the maturity profile of their MREL liabilities to minimise refinancing risk.

Recommendations

48. The SNDO should further refine its MREL policy within the statutory national discretion to specify consequences for banks breaching minimum MREL requirements. Both the SNDO and the FI have powers to act should firms breach MREL requirements. The SNDO's MREL policy states that banks that breach MREL policy may be subject to dividend restrictions. The SNDO also has wider ranging powers to reduce or remove impediments to resolvability under BRRD Article 17 powers which allow it to direct firms to take certain actions. The FI has powers relating to early intervention, recovery options as well as to determine whether the firm is failing or likely to fail. To inform the consistent use of these powers in response to an MREL breach, the SNDO should make more explicit in its MREL policy the process and consequences for firms of an MREL breach and FI should clarify how it would treat MREL breaches e.g., a breach of a bank's minimum financial conditions for authorisation or a basis for assessing it failing or likely to fail (FOLTF).

49. In monitoring compliance with MREL standards, the SNDO and FI should continue to emphasise to banks that they should actively risk manage the maturity profile of their MREL eligible liabilities. Such MREL maturity risk management will help minimise refinancing risk in the face of changing wholesale market conditions and wider instability. This should include overseeing the maturity profiles of bank MREL liabilities and discussing any shortening of maturity by the authorities. By understanding the level of eligible liabilities with longer-term maturity, the authorities can assess a bank's ability to withstand being temporarily locked out of wholesale markets due to wider market instability.

C. Bank Resolvability: Other Non-MREL Barriers

Existing Arrangements and Assessment

50. A bank under resolution must be able to demonstrate it has adequate financial resources to ensure it can be stabilised, maintain continuity of its operations, and coordinate and communicate effectively during the process. The Financial Stability Board¹⁵ has identified eight barriers to resolvability: 1) insufficient loss-absorbing capacity, 2) resolution valuations, 3) funding in resolution, 4) continuity in financial contracts in resolution, 5) operational continuity in resolution, 6) continuity of access to financial market infrastructure, 7) restructuring in resolution, and 8) management, governance, and communications. These have underpinned national approaches to enhancing bank resolvability in many jurisdictions.¹⁶ While MREL resources go some way to address adequate financial resources in resolution, they do not address the ability of the

¹⁵ <https://www.fsb.org/wp-content/uploads/Report-to-the-G20-on-Progress-in-Resolution-for-publication-final.pdf>

¹⁶ <https://www.bankofengland.co.uk/-/media/boe/files/paper/2021/bank-of-englands-approach-to-assessing-resolvability-sop-may-2021.pdf>

bank to conduct an assessment or valuation necessary to inform its capital position and recapitalisation need, nor does it solve the bank's ability to meet its liquidity in resolution.

51. The SNDO has recently begun to make progress in developing its domestic resolvability expectations and requiring banks to remove non-MREL barriers to resolvability.

The SNDO has had a bilateral dialogue with banks on resolvability topics in recent years including on continuity of access to FMs, operational continuity in resolution and liquidity in resolution. In early 2022, the EBA issued guidelines to introduce an EU-common minimum standard for resolvability for systemically important banks¹⁷. In March 2022, the SNDO issued guidance on the EBA published resolvability guidelines¹⁸. These SNDO publications are to help Swedish banks understand how those guidelines should be interpreted and applied. The SNDO resolvability guidance makes clear that Swedish banks are expected to comply with the EBA guidelines by January 2024.

52. Given that the SNDO published its resolvability expectations so recently, banks are likely to have undertaken limited work to remove non-MREL related barriers to resolvability.

Many of the resolvability requirements will be novel to banks. For example, banks are likely to require detailed guidance to be able to develop new reporting capabilities to forecast cash flows or liquidity needs in a resolution scenario or provide the authorities with the resolution valuations outputs necessary to inform the bail-in of shareholders and creditors. Removing bank-specific barriers to resolvability and developing the capabilities to meet the emerging SNDO resolvability requirements will need significant management time and investment by banks to develop the reporting capabilities required to support orderly resolution action.

Recommendation

53. The SNDO should work to ensure that banks comply with its resolvability expectations by the 2024 deadline and ensure there is sufficient national-level guidance on resolvability expectations on banks to support consistent implementation.

To this end, the SNDO should keep under review its national resolvability guidelines to ensure they are sufficiently specific to support the bank's resolution planning implementation work. The SNDO should establish an active schedule of regular engagements with banks to receive updates on bank implementation progress and, where necessary, provide clarification of policy interpretation before banks begin significant investment programs to comply with these resolvability expectations. Where this engagement identifies issues of common concern for all banks, the SNDO should share with other banks within the scope of the requirement consistently via publishing Q&A or facilitating workshops with banks. The SNDO should ensure its resource planning considers the likely increased demand for bank engagement over this next phase of resolvability work with banks.

¹⁷ <https://www.eba.europa.eu/eba-publishes-guidelines-institutions-and-resolution-authorities-improving-banks-percentE2percent80percent99-resolvability-and>

¹⁸1) https://www.riksdagen.se/globalassets/dokument_eng/financial-stability/memorandum-application-of-the-ebas-guidelines-on-improving-resolvability.pdf, 2) https://www.riksdagen.se/globalassets/dokument_eng/financial-stability/guidance-on-eba-resolvability-guidelines.pdf

D. Central Counterparty Clearing House Resolvability

54. There is one central counterparty (CCP) in Sweden, Nasdaq Clearing. It is one of the 13 CCPs judged by the Financial Stability Board to be systemically important in more than one jurisdiction. It provides clearing of both exchange trading and OTC derivatives contracts as well as repo clearing services. Nasdaq Clearing also offers clearing of equities and index derivatives, fixed income and commodity derivatives on power, natural gas, emissions rights, electricity certificates, seafood, and renewable energy. It is authorised as a CCP and is licensed to conduct clearing operations by FI under the European Market Infrastructure Regulation (EMIR).

Existing Arrangements & Assessment

55. Resolution planning for CCPs in Sweden is at an early stage. Despite enhanced risk management and recovery planning, the risk that a CCP default cannot be eliminated. The recent experience of the default of a member of Nasdaq Clearing in 2018 reinforced the importance of having credible resolution arrangements for systemic CCPs (see Box 1). A resolution planning framework aiming at maintaining financial stability while avoiding bail-out in the event of a failure of a systemic CCP remains important.

56. Since August 2022, the SNDO is the designated authority for CCPs responsible for CCP resolution. The Nasdaq Clearing Crisis Management Group (CMG) is currently chaired by the FI, and two meetings have been held to date—in 2020 and 2021. As appointed the CCP resolution authority, the SNDO will form a resolution college for Nasdaq Clearing and these cross-border resolution planning arrangements will replace the CMG.

57. The SNDO's approach to CCP resolution planning remains to be developed. Discussions are ongoing as to its approach to how a CCP would be resolved in the event of a failure. Its forward work plan on CCP resolution planning will, like that for banks, include the development of its approach to resolution planning for CCPs and its operational preparedness to handle a crisis in Nasdaq Clearing. However, the resolution toolkit proposed for resolving CCPs will likely differ from the approach developed for banks. Instead, resolution tools for CCP failure need to address the key issue driving CCP failure: its risk model. Although CCPs should have in place comprehensive loss allocation arrangements for default losses consistent with the *"Principles for financial market infrastructures"* (PFMI), these could fail, and an orderly wind-down may not be possible, which could lead to a resolution being required. Resolution plans need to reflect the risk model of CCPs if they are to be able to ensure the continuity of the critical functions provided by the CCP.

Recommendations

58. The SNDO should put in place the necessary arrangements to both assess CCP resolvability and ensure any barriers to orderly CCPs failure are addressed. This work will include the recruitment of SNDO staff to support its new role as CCP resolution authority. The SNDO should establish an annual resolution planning cycle and define clear resolvability expectations for CCPs, including considering the need for financial resources to manage a non-default loss scenario.

Box 1. Nasdaq Clearing AB Member Default

Sweden is home to one CCP, Nasdaq Clearing AB. In 2018, a single clearing member of Nasdaq Clearing, a natural person, lost a large sum of money on the commodities market when the spread between Nordic and German electricity prices increased. An auction was held for a single clearing member's portfolio with four of Nasdaq Clearing's other members. The winning bid resulted in a loss of €114 million more than the collateral. For commodities, Nasdaq Clearing's "default waterfall" (after the single members' collateral was exhausted) started with capital of €7 million, after which it used a €166 million fund made up of contributions from the non-defaulting members. In the case of Nasdaq Clearing, this fund sufficed to absorb the loss. In addition to the funds consumed, another layer of capital was available, as well as a general default fund covering all Nasdaq Clearing's services.

In the ex-poste investigation, the FI found serious deficiencies in Nasdaq Clearing's operations and governance. The requirements the CCP placed on the clearing members' financial and operational capacity had been insufficient. The CCP had also been in violation of the investment prohibition in the EU regulation on OTC derivatives, central counterparties, and trade repositories (EMIR) by investing its own funds in derivatives much too long after the default event, which resulted in prohibited exposures to credit and market risks. FI issued a warning and an administrative fine of SEK 300 million in early 2021. Nasdaq Clearing appealed the decision to the Administrative Court. In December 2021 the court dismissed the appeal. Nasdaq Clearing has thereafter appealed to the Administrative Court of Appeal where the case is awaiting a decision.

For a CCP to exhaust a defaulter's collateral is unusual, even in the case of a large default such as Lehman's. In the case of Nasdaq Clearing, the default was in large part due to the undiversified and heavily concentrated exposure in a smaller and less liquid market. This experience reinforces the importance of maintaining sufficient market liquidity for central clearing to support default management in stressed conditions and of applying a reliable long-term perspective to set accurate margins. It was also a reminder of the importance that resolution authorities should have to maintain or restore the continuity of critical CCP functions in the event of failure, return the CCP to a matched book where losses arise from clearing member defaults, and address default and non-default losses.

MANAGING FAILED BANKS

A. Implementing Resolution Plans

59. Resolution powers are designed to allow the authorities to act—when a bank is nonviable—to minimize any wider consequences of its failure for financial stability and maintain confidence in the financial system. The tools include bail-in¹⁹, transfer of all or part of a bank's business to a private sector purchaser or a bridge bank or an asset management vehicle. As a last resort, the government may use its financial stabilisation tools to achieve the resolution

¹⁹ Bail-in involves the write-down of the claims of the bank's shareholders and unsecured creditors (including holders of capital instruments) and conversion of those claims into equity as necessary to restore solvency to the bank.

objectives, which allows it to inject equity or transfer the failed bank to temporary public ownership.²⁰

60. For bank resolution plans to be credible, the statutory resolution tools need to be usable, at speed and with confidence to impose losses on the banks' creditors through the application of either the bail-in or transfer tools. The bail-in tool relies on imposing losses on the shareholders and creditors holding loss-absorbing instruments (e.g., equity, debt capital and senior unsecured debt) by cancelling or reducing the value of their claims, thereby recapitalizing the bank ensuring that it can remain a going concern. Transfer tools rely on stranding the bank's creditors holding loss-absorbing instruments (e.g., equity, debt capital and senior unsecured debt) in an administration while transferring good assets and other liabilities (e.g., insured deposits) to a bridge bank or a private sector purchase.

61. The FSB has noted that public disclosure of an authority's bail-in mechanisms is essential to ensure credibility and predictability of resolution actions. Such clarity on the authority's bail-in mechanism allows other stakeholders (e.g., Financial Market Infrastructure (FMI), Central Securities Depositor (CSDs) etc.) to take coordinated action required to implement the bail-in. Since then, good progress has been made by authorities in UK, Germany, Netherlands and by some banks to define bail-in mechanisms. In designing its bail-in mechanics, authorities should set out how they will navigate the key sequential steps in a bail-in mechanic, including 1) identification of the eligible securities within the scope of the bail-in, 2) suspension of trading of relevant securities including equities, 3) suspension of, or change in, shareholder rights, 4) write down and/or cancellation of equity and/or debt, 5) issuance and trading of interim instruments,²¹ 6) redemption of interim instruments, 7) issuance of new equity, and 8) lifting the suspension of trading and shareholder rights (see Annex I for more detail).

Existing Arrangements & Assessment

62. SNDO has established a comprehensive operational framework for the resolution process, which identifies a sequence of actions for the SNDO. This includes a description of the assessments, decisions, consultations with other authorities, and communication required to implement a bail-in resolution. However, the SNDO has not yet defined its resolution mechanics to a level of detail required to fully operationalise the tool (e.g., detailed operational processes and procedures, including specifying actions for CSDs). In December 2022, SNDO published bail-in mechanic that relies on the suspension of liabilities and interim instruments²². This publication

²⁰ Criteria for use of these tools are outlined in Chapter 22 Section 2 of the Resolution Act (SFS 2015:1016). If the government stabilisation tools are used in resolution, the Stability Fund would be the financing arrangement.

²¹ Interim instruments, such as warrants or certificates of entitlement, may be issued pending the completion of a valuation after the resolution weekend. These can then be exchanged for equity (or other securities and potentially even cash) once a valuation exercise has been completed.

²² "Implementation of the bailin tool Version 1.0" (https://www.riksdagen.se/globalassets/dokument_eng/financial-stability/implementation-of-the-bail-in-tool.pdf)

described the SNDO's current assessment of the steps needed to write down a failing bank's shareholders and bail-in its creditors.

Recommendations

63. The SNDO should continue to refine and publish its approach to deploying the resolution tools. These resolution mechanics should: i) clearly define operational procedures in place for imposing losses on MREL holders and ii) specify the detailed procedures in operational playbooks. The procedure for imposing losses needs to be transparent to the market. It is very positive that the SNDO has published a bail-in mechanic. It should continue to refine its published bail-in mechanism over time and develop detailed operational processes and procedures to ensure all stakeholders involved in the process can take the necessary supporting actions.

B. Liquidity in Resolution

64. In addition to ensuring systemically important banks in resolution can be recapitalized by imposing losses on MREL holders, it is essential to ensure banks in resolution have sufficient liquidity to meet their obligations as they fall due. In the first instance, banks in resolution will be expected to meet any liquidity needs from their own private resources. However, where the bank's liquid resources are insufficient, or they are unable to access normal private funding markets in the initial phase of the resolution, the bank in resolution needs to be able to access temporary liquidity assistance to ensure the overall resolution strategy is orderly. Such liquidity support in resolution should be secured against a wide range of eligible collateral, including the high-quality listed securities that are currently eligible under the Riksbank standing overnight and intraday facilities²³ and loan collateral.

65. Central banks have become more transparent to the market about their functions as liquidity providers of last resort by publishing details on their crisis lending facilities. For example, the Bank of England's sterling monetary framework²⁴ and resolution liquidity framework²⁵ sets out the conditions for access to central bank liquidity against a wide range of collateral with transparent access criteria in the public domain. In 2019, the Hong Kong Monetary Authority published a comprehensive revamp of its liquidity facility framework. Its aim was to reflect better its

²³ The collateral is mainly comprised of different types of security, but in special cases foreign currency may also be used as collateral. The document "Eligible assets (Annex S2)" contains information on the securities accepted by the Riksbank as collateral for credit and monetary policy instruments (<https://www.riksbank.se/globalassets/media/rix/engelska/2022/eligible-assets.xlsx>) (<https://www.riksbank.se/globalassets/media/rix/engelska/2022/eligible-assets.xlsx>)

²⁴ <https://www.bankofengland.co.uk/markets/bank-of-england-market-operations-guide/our-tools>
<https://www.bankofengland.co.uk/markets/bank-of-england-market-operations-guide/our-tools>

²⁵ <https://www.bankofengland.co.uk/-/media/boe/files/news/2017/october/the-bank-of-england-approach-to-resolution> <https://www.bankofengland.co.uk/-/media/boe/files/news/2017/october/the-bank-of-england-approach-to-resolution>

role as a lender of last resort in crisis management and resolution.²⁶ The Central Bank of Canada has also published a standing liquidity facility framework to support its function as lender of last resort for banks experiencing stress or in resolution.²⁷

Existing Arrangements

66. The Riksbank is the provider of central bank lending facilities in Sweden and the lender of last resort, though there is currently no explicit lending framework for a bank in resolution. Banks with membership of Riksbank's large-value payments system, RIX, have access a standing intraday credit facility in Swedish kronor (SEK). The Riksbank's standing lending facility offers overnight credit against reassuring collateral at an interest rate of 0.10 percent above the Riksbank's policy rate. A supplementary standing liquidity facility for monetary policy purposes was introduced in mid-2022, offering overnight liquidity, accepting collateral in the form of Swedish covered mortgage bonds at an interest rate of 0.75 percent above the Riksbank's policy rate. Access to these facilities is automatic for the Riksbank's monetary policy counterparties. Only credit institutions (banks) that are participants in the RIX qualify as monetary policy counterparties. Currently, the Riksbank's overnight and intraday standing facilities accept as collateral high quality listed securities which are mark to market on a daily basis. As a result, the valuation challenges and credit risk for the Riksbank related to accepting such collateral is kept to a minimum. The Riksbank's operational approach to assessing securities as eligible is set out in its *Terms and Conditions for RIX and Monetary Policy Instruments Annex H4 Instructions Collateral*.

67. Under the Swedish financial safety net arrangements, the Riksbank is the lender of last resort, but has a limited range of standing liquidity facilities that are designed for financial stability-related lending. The Riksbank Act states that in "exceptional circumstances,"²⁸ the Riksbank may, with the aim of supporting liquidity, grant credits or provide guarantees on special terms to banking institutions and Swedish companies subject to the supervision of the FI. Such a decision to lend to a bank would need to meet systemic importance criteria as well as be able to demonstrate that a bank is solvent and viable. The Riksbank has developed internal processes for assessing systemic importance, solvency and viability for these purposes and considers advice from the FI and the SNDO as important inputs to arriving at its determinations of both systemic importance and solvency.

²⁶ <https://www.hkma.gov.hk/eng/key-functions/money/liquidity-facility-framework/hong-kong-dollar-liquidity-facility-framework/> <https://www.hkma.gov.hk/eng/key-functions/money/liquidity-facility-framework/hong-kong-dollar-liquidity-facility-framework/>

²⁷ <https://www.bankofcanada.ca/markets/market-operations-liquidity-provision/framework-market-operations-liquidity-provision/emergency-lending-assistance/> <https://www.bankofcanada.ca/markets/market-operations-liquidity-provision/framework-market-operations-liquidity-provision/emergency-lending-assistance/>

²⁸ See Riksbank act, Chapter 6. Art. 8.

68. The SNDO also has the flexibility to provide guarantees and lending to support banks in resolution by leveraging the resolution reserve^{29,30}. In extraordinary circumstances, the reserve can also be used to recapitalise a bank in resolution. However, such use of resolution reserve funds requires a percentage of the failed firm's liabilities (corresponding to 8 percent of total assets or 20 percent of risk-weighted assets) to have been written down. The use of the resolution reserve is considered state aid and must therefore also be approved by the European Commission.

69. Firms within the scope of the resolution pay levies for the SNDO resolution reserve but those funds are not segregated and are instead placed in a government account available to support the financing of public services. As a result, the SNDO is dependent on issuing government debt to create the liquidity to support the function of the resolution reserve.³¹ The SNDO is confident that in normal market conditions, it would be able to raise the necessary market funding by issuing short-term paper to meet the liquidity needed in an idiosyncratic bank resolution. However, even if the SNDO has capacity to mobilize sufficient liquidity, the balance of the reserve and additional credit and guarantee limits are not designed to meet the potential liquidity needs of more than one systemic bank in resolution at the same time. Provision of liquidity support beyond this would require parliamentary and government decisions.

70. The new Riksbank Act provides the statutory basis for the Riksbank to provide general liquidity support or emergency liquidity assistance for financial stability purposes including to a firm in resolution. The new Act also introduces a requirement for the Riksbank to be clear on the motives, monetary or financial stability, when deploying its lending toolkit. It also introduces new requirements on the Riksbank to coordinate with the FI and the SNDO when acting for financial stability purposes, as well as making the Riksbank's ability to lend in foreign currencies explicit in law

Assessment

71. The Riksbank role as lender of last resort entails a responsibility to promote stability in the financial system since this is a prerequisite for a safe and efficient payments system. A stable financial system is also an important condition for the Riksbank to be able to conduct monetary policy effectively. The Riksbank can provide liquidity to the financial system if the need arises, but its existing standing liquidity facilities are narrow in the collateral they can accept relative

²⁹ The SNDO, in its capacity as resolution authority, may, to the extent that the funds in the resolution reserve are insufficient, borrow funds (in the National Debt Office) on behalf of the resolution reserve. A credit limit of a maximum of SEK 100 billion applies in this regard. Likewise, the SNDO may use the resolution reserve to finance liquidity support in the form of guarantees to a limit of a maximum of SEK 200 billion.

³⁰ The NDO, in its capacity as resolution authority, may, to the extent that the funds in the resolution reserve are insufficient, borrow funds (in the National Debt Office) on behalf of the resolution reserve. A credit limit of a maximum of SEK 100 billion applies in this regard. Likewise, the NDO may use the resolution reserve to finance liquidity support in the form of guarantees to a limit of a maximum of SEK 200 billion.

³¹ SNDO would not need to issue government debt when using the resolution reserve to support banks in resolution via guarantees.

to other central banks. The Riksbank's mandate is set out in the Sveriges Riksbank Act (Riksbank Act, 1988:1385). The Riksbank can provide liquidity to the financial system if the need arises.

72. The Swedish lender of last resort arrangements are complicated by the fact that the SNDO also has the capacity to lend to banks in stress or resolution. While the availability of an additional source of potential liquidity to banks in resolution may provide additional reassurance to the financial market, the SNDO's ability to do so may also create ambiguity in the market as to the role of the Riksbank as a backstop liquidity provider. It could undermine clarity as to the role of each authority as a backstop liquidity provider under bank-specific resolution plans. The Riksbank is best placed to lend on a bilateral basis to banks in stress or resolution at speed. In addition, given the need for any authority to develop the operational capacity to lend against loans and other non-standard collateral, it is better to centralise the development of that operational capacity in the central bank.

73. Lending against a wider range of collateral in a crisis, including loans, requires central banks to invest in capabilities to assess such new forms of collateral against credit risk. Developing the frameworks for pricing and defining haircuts for such collaterals takes time and needs to be developed well in advance of a crisis to ensure the central bank's balance sheet can be protected at minimal risk to public funds.

74. The Riksbank must comply with new requirements for coordination and decision-making under the new Riksbank Act. These new requirements will increase the procedural steps and governance arrangements the Riksbank needs to comply with before making a lending decision. The Riksbank should take steps to develop proportionate arrangements to ensure these procedural requirements do not impair the Riksbank's ability to take swift, decisive, and clearly communicated lending decisions in a crisis. Therefore, in order to manage this tension between the speed of decision making and the need for cross-authority coordination, the Riksbank should develop the necessary processes, governance, and analytical capabilities ex-ante to enable it to discharge its functions as a lender of last resort to banks effectively.

Recommendations

75. The Riksbank should be transparent to the market that it is the lender of last resort under the Swedish crisis management framework, including resolution, rather than the SNDO. The role of the SNDO's resolution reserve in lending should not be considered a primary source of liquidity for bank crisis management purposes. Instead, the Riksbank should put in place the public policies and procedures to provide temporary collateralized bilateral lending to solvent banks in stress or resolution. This clarification of roles will enable the Riksbank investment to develop the necessary internal crisis lending and credit assessment capabilities.

76. The Riksbank should improve market transparency by publishing a policy framework describing the central bank's lender-of-last-resort bilateral liquidity facilities' capability for crisis management purposes, including funding in resolution. Such a public policy framework should clarify how banks in resolution could access backstop liquidity support to meet their

obligations as they fall due if private sources are unavailable. Considering the additional authority coordination and decision-making requirements under the new Riksbank Act, the Riksbank should also establish the ex-ante operational capacity to make swift, decisive, and well-communicated collateralized lending decisions in a crisis.

77. The Riksbank should ensure it has internal operational policies and procedures in place to support bilateral liquidity support against a wider range of eligible collateral, including the capability to lend against loans. Building on its existing collateral assessment framework, the Riksbank should specify the collateral eligibility criteria, the information required to credit assess non-securities collateral, including loan collateral if necessary, pricing and haircut frameworks for this broader range of collateral and reporting capabilities on banks needed to support these lending operations³². This expanded lending capability will represent a step change in the Riksbank valuation and credit risk challenges, which will need to be met with a commensurate level of investment in the capabilities to accept non-securities-based collateral. All of this will need to be developed as part of preparation for future crisis lending operations. Such capabilities, once developed, can be complemented by leveraging specialist external advisory support in a crisis.

78. The Riksbank should develop a framework for assessing a bank's viability, as distinct from solvency. Any such bank viability assessment framework should be developed ex-ante in close cooperation with FI and SNDO as part of work to prepare for future coordination crisis management. The FI is responsible for the FOLTF decision and, as a result, will be well placed to advise on the credibility of the bank's recovery actions from its recovery planning process. The SNDO is responsible for determining a failed bank's restructuring plan once stabilized via the application of resolution tools, which is a very relevant input to the Riksbank viability assessment. The Riksbank assessment of bank viability should be informed by advice from the other authorities where available in the time. While each authority will consider the question of firm viability, now and on a forward-looking basis, from a different perspective, and may arrive at different conclusion, it is important for crisis coordination that a common approach is defined ex-ante.

79. Consistent with LOLR best practice, the Riksbank should devise and agree on a procedure with the MoF as to when government guarantees would most likely need to be sought. The Riksbank's viability assessment framework should form the basis for agreeing with the MoF when a state guarantee is necessary to facilitate the Riksbank's bilateral lending for financial stability purposes. Where the Riksbank assesses that the viability of a bank is considered highly uncertain, it would be appropriate for the Riksbank to request a state guarantee for such lending. For example, if there is high execution risk on the restructuring plan of a bank recapitalised via the application of resolution tools, it may be more appropriate for the Riksbank to conduct such lending only with a government guarantee).

³² For example, the Bank of England's Loan Collateral: guidance for participants in the Sterling Monetary Framework provides an example of the types of issues that need to be considered to be ready to lend to banks against a wide range of collateral. In addition, this will also involve developing related internal processes, procedures and documentation, including funding plan templates, solvency and viability assessment templates, collateral preference list and risk control measures.

C. Deposit Guarantee Arrangements

Existing Arrangements and Assessment

80. Consistent with the Swedish implementation of the Deposit Guarantee Scheme Directive (DGSD), all institutions with a license from the FI to take deposits are automatically members of the DGS up to a level of SEK 1,050,000 (approx. EUR 100,000). The DGS covers all private persons, as well as companies, and other legal persons. Financial institutions, public and local authorities are not eligible for compensation under the DGS. The DGS has designed its pay-out processes to be able to achieve a 7-day pay-out target. The DGS has also been working to maintain its 7-day pay-out target in the face of technological developments in the market, and new market entrants like deposit aggregators (DAs) bringing new challenges to the pay-out process (Box 2).

81. SNDO DGS has ex-ante funding arrangements that pre-date the DGSD and is funded significantly above the EU minimum requirement. The DGS levies an average fee of 0.1 percent of covered deposits, but its risk-based levies mean that individual banks contribute between 0.05–0.2 percent. The DGS fund is SEK 48 billion as of the end of 2021, which covers around 2.5 percent of deposits, while the EU requirement is only 0.8 percent. The DGS has a *minimum* target level of 0.8 percent of covered deposits and no *maximum* target level. As a result, the DGS operates well above its minimum target level.

82. The SNDO as the resolution authority can rely on the DGS funds to contribute to the cost of a bank resolution subject to two restrictions pertaining to the use of DGS funds. As per the BRRD³³, the SNDO DGS funds shall not be liable for an amount greater than 50 percent of the target level under DGSD. However, the Swedish DGS can contribute up to 200 percent of the BRRD target level (0.8 percent of total covered deposits), amounting to 1.6 percent of total covered deposits (rather than the BRRD’s 50 per cent cap, i.e., 0.4 percent of total covered deposits). This means that the SNDO DGS capacity to contribute to resolution costs is four times greater than envisaged under the BRRD. Secondly, the SNDO DGS contributions to the cost of a bank resolution cannot leave the DGS worse off than it would have been under normal insolvency procedures (i.e., the no creditor worse off than liquidation or “NCWO” principle). However, these restrictions will not risk leaving any covered deposits without protection, as the protection of those deposits is absolute. If there were a shortfall, funds to cover this would thus need to come from other sources, primarily the resolution reserve.

Recommendations

83. The SNDO, as DGS and resolution authority, should formalize a process for assessing valuation analysis in resolution necessary to identify NWCO insolvency counterfactual losses for the DGS. In December 2022, the SNDO published detailed guidance (expectations) for banks on resolution valuation capabilities, which explains SNDO’s resolution valuation procedures and the

³³ Article 109.5 allows member states to set a maximum DGS contribution higher than the 50 percent of the target level specified.

capabilities banks need to have to support the different valuations to be performed in the resolution process, including the NCWO assessment (preliminary valuation 3). This description of resolution valuation procedures will help support coordination between the SNDO's separate statutory functions as DGS and resolution authority when it comes to assessing DGS fund capacity to contribute to the cost of resolution in a manner that is consistent with creditors' NCWO protections. The SNDO as DGS should leverage the resolution valuations 2 and 3 analysis when assessing whether to release DGS funds to contribute to the cost of resolution. This process should be documented as part of SNDO as DGS's internal governance arrangements.

Box 2. The SNDO DGS and Deposit Aggregators: Overcoming the Challenges

Deposit Aggregators (DAs) are providers of intermediary services which sit between savings account providers and retail customers. They typically keep customers informed of changes in the savings rates available in the different markets and offer convenient service for customers to spread deposits around different banks, including on a cross border basis, to take advantage of these deposit rates and to maximise DGS protection for high balances. DA business models also offer customers a platform to view and manage all their accounts in one place and, in some cases, enable customers to access preferential interest rates.

The DA model presents unique challenges for DGS pay-outs. Deposits placed by DAs on behalf of retail consumers in Swedish banks are eligible for DGS coverage, but banks may not hold all the information on DA accounts that DGS' require on the ultimate eligible depositor necessary to ensure a swift pay-out within seven days or may need to pay-out foreign depositors via a cheque which not all EU jurisdictions accept.

These challenges are greater when banks hold DA funds on behalf of depositors who are resident in a foreign jurisdiction. This is because DGS typically manage the challenges of pay-out for foreign depositors by ensuring that foreign deposit-taking by a domestic bank is conducted from a branch in that foreign jurisdiction. This means that if a pay-out is required, the reimbursement of deposits in that foreign branch are administered by the foreign DGS. On this basis, every DGS focuses on being able to operationalise pay-outs for all deposits in their jurisdictions regardless of whether the local deposits banks with conducted in a branch or a subsidiary. DAs complicate this approach; they deposit funds from foreign depositors in Sweden via their own accounts instead of via a branch in the same jurisdiction as the foreign depositor.

The SNDO DGS recognises that DAs are a fast-growing aspect of a new pan-European market in deposit-taking and the benefit this brings to the development of the EU banking union. To address the challenges presented by DAs, the SNDO DGS has already prevented DAs from holding beneficiary accounts in Swedish banks and instead required the bank to report in their Single Customer View (SCV) file information on the ultimate retail depositors. In addition, the SNDO DGS plans to set a reporting requirement on Swedish banks so that the DAs provide the service bank accounts details, which they maintain on behalf of end-user depositors, even if they are in a foreign jurisdiction. In a pay-out scenario, the SNDO DGS can then use the information reported by Swedish banks in their SCV file to operationalise the pay-out of those foreign depositors via a bank transfer. This will allow them to achieve their 7-day pay-out targets and avoid the use of cheques.

INTERNATIONAL COOPERATION

A. Existing Arrangements

84. Cooperation and information sharing between home and host resolution authority, supervisory and central banks are essential to ensuring the orderly management of a cross border bank experiencing stress or in resolution. Home and host cooperation provide a means for discussing and agreeing on resolution strategies and the planning and coordination of resolvability assessments as part of peacetime preparation. These cooperative arrangements can then be leveraged to coordinate home and host action to implement the agreed plan in a crisis. The parties who need to coordinate are determined by the nature of the banks in a given jurisdiction, including their legal entity structure (i.e., branches or subsidiaries), their size (i.e., systemic importance), and the extent of their international operations.

85. With the implementation of the BRRD, supervisory and resolution colleges have become the primary mechanism for facilitating home and host authority communication and coordinating decision making for banks experiencing a crisis. The SNDO plays an important role in advancing the resolvability of Swedish banks and foreign bank operations in Sweden through its joint decision-making role in resolution colleges. These colleges exist where there is a subsidiary institution in another EEA country. Host authorities for subsidiaries and branches contribute to regular bank-specific meetings to develop the resolution plans, for example, providing views on the critical functions and core business lines that a bank provides in the host country. Host authorities for subsidiaries in EEA countries take part in a joint-decision process with the SNDO as home resolution authority, in accordance with BRRD and the Resolution Act, to agree on the yearly resolution plan, resolvability assessment and set MREL requirements for the group and its subsidiaries. In addition, home and host EU authorities jointly agree internal MREL requirements—to support loss absorption and recapitalisation—for subsidiaries with reference to host authorities' MREL policies as well as the SPE resolution strategy for the group. If joint agreement cannot be reached within four months a decision is referred to the EBA³⁴.

86. In 2016, the SNDO established resolution colleges for the four major Swedish banking groups (Handelsbanken, Nordea Group, Swedbank and SEB Group) for the first time. In 2017, Nordea moved its headquarters to Finland and now carries out its operations in Sweden via a branch and a subsidiary. In 2017, resolution plans and MREL requirements were adopted via the EU resolution college for all Swedish headquartered systemically important cross-border banks.

87. One of the three largest Swedish-headquartered banks (Handelsbanken) also has a subsidiary credit institution in the UK. In the aftermath of Brexit, there are no longer statutory joint decision making (and dispute resolution) processes between the SNDO and the Bank of England, as the UK resolution authority. However, the Bank of England, as the UK resolution authority, has continued to play an active host authority role by contributing to regular bank-

³⁴ <https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/108148>.

specific meetings to develop the group resolution plan. In addition, the Bank of England continues to provide information about internal MREL requirements for the UK subsidiary, which are set with reference to the Bank of England's MREL policy and the SPE resolution strategy for the group. Such cross-border forums have replaced the functions of the EU resolution college for Swedish bank operations in the UK.

88. In addition to supervisory and resolution colleges, the Nordic-Baltic Stability Group (NBSG) countries have played an important role in cross-border coordination, given the interlinkages between their economies and financial systems. Within the NBSG, a new Memorandum of Understanding (MoU) was signed in 2018 by the SNDO, together with the MoF, the Riksbank and the FI and their counterparts in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, and Norway with a view to facilitating cooperation on cross-border financial stability³⁵. This MoU focused work of the NBSG on information sharing and crisis preparedness, including CSE. This close cooperation among Nordic-Baltic countries is necessary given that the Banking Union arrangements do not apply in four (including Sweden) out of five Nordic countries.

B. Assessment

89. There is a continued need for close cross-border cooperation among Nordic-Baltic states and Banking Union authorities. The increased "branchification"³⁶ of some of their respective financial institutions elevates the need for close coordination, particularly with respect to crisis management. This is because there is a significant role for national resolution authorities to implement through the application of national resolution tools based on decisions made by the SRB. Also, a potential role for national central banks to provide backstop liquidity support to individual institutions. For example, while headquartered in Finland, Nordea operations in Sweden make it the largest bank in Sweden by asset size. As a result, Sweden has a very large dependence on the SRB and Finnish resolution authority with respect to the resolvability of Nordea's operations in Sweden and the implementation of an orderly resolution in the event of Nordea's failure. This increases the need for home and host authorities to develop their capacity to implement crisis management actions in a coordinated manner.

C. Recommendations

90. The Swedish authorities should focus on developing crisis management capacity via its supervisory and resolution college arrangements. This is because these groupings have the right

³⁵ <https://www.fi.se/contentassets/5529800727444fb0851249b985883373/samforstandsavtal-mou-finansiell-stabilitet-2018-01-31.pdf>

³⁶ Branchification is a process whereby a banking groups with foreign subsidiaries converts them into branches. It can have implications for (i) the use of the macroprudential toolkit and the effectiveness of the reciprocity framework, (ii) banks' resolution strategies and the scope and coverage of national deposit guarantee schemes (DGSS), (iii) access to emergency liquidity assistance (ELA), (iv) the contagion of shocks and lending spillovers, (v) tax treatment and other regulatory arbitrage opportunities and (vi) the possibility of risk assessment, which is considered to be more difficult for branches.

membership for implementing early intervention, resolution, and liquidity support actions. Colleges are supported with statutory information sharing arrangements under the BRRD to facilitate close home and host cross-border crisis cooperation. The resolution planning work of the college members has also prepared them for the decision-making roles in the crisis, and the responsibilities of its members are aligned with their respective statutory purposes and tools.

91. The SNDO should play a more active host authority role via the resolution college with respect to Nordea’s branch and subsidiary operations in Sweden. This role could include defining clear bank resolvability verification work the SNDO will conduct with respect to Nordea’s activities in Sweden. In addition to its role as a host authority member of the resolution college in agreeing on the group resolution plan and the MREL setting, this active host authority role should focus on monitoring the implementation of bank actions agreed at the resolution college to the extent to which they apply to the bank’s activities in Sweden. This could include ensuring the branch resolution liquidity forecasting capabilities or operational continuity reporting arrangements are sufficient to support the group resolution plan. Such local verification by the SNDO of group-wide resolvability expectations would increase the confidence of resolution college members in the bank’s self-reporting on progress at a group-wide level as well as improve the feasibility and credibility of the resolution plan. This verification and compliance monitoring work at a host level should be closely coordinated with the home resolution authority (e.g., SRB) and be clearly documented in annual resolution college resolution planning work programs that are communicated to banks by the resolution college.

92. The SNDO, the FI and the Riksbank need to consider how the new BRRD college structures impact its cross-border coordination arrangements and ensure their respective work programs are complementary. For example, there will be a continued need to develop the authorities’ capacity to coordinate market-wide stress events, including arranging central bank liquidity facilities (e.g., swap lines) to support crisis management involving failing banks. This work should be taken forward by the Riksbank with its fellow central banks to ensure operational arrangements are in place to enable members to access foreign currencies in a financial stability crisis affecting both financial markets and in managing an individual bank failure. The Nordic-Baltic Stability Group should ensure that such central bank arrangements are tested as part of its crisis preparedness work.

FINANCIAL CRISIS PREPAREDNESS

A. Authorities’ Crisis Management Capabilities

Existing Arrangements and Assessment

93. Advance preparation for contingency planning helps authorities respond to future crisis events occurring within their mandate. It requires an authority to develop well in advance of any crisis the internal processes and procedures, capabilities, and resources to respond effectively to a crisis. Authorities’ crisis capabilities can take the form of internal frameworks to identify

emerging risks, operational contingency plans for managing crises, and crisis governance arrangements. This crisis capacity development requires significant internal planning and management time and is resource intensive.

94. Since the last FSAP, the authorities have taken steps to develop their respective internal crisis management arrangements and capabilities. The Riksbank has made the management group and chief of staff responsible for the coordination of all types of crises. In the event of a crisis, the Riksbank's new procedures require a crisis team to be established and to be led by a senior representative from a relevant department. It has also established a new committee to ensure coordination between internal departments on issues related to crisis preparedness and the development of its internal crisis management capability. The FI has an established practice for identifying and managing banks experiencing stress or at risk of failure. It leverages its existing policy governance for considering crisis management questions as they arise. The SNDO's department for financial stability and consumer protection, which carries the organization's functions as the resolution authority, has developed its capabilities in several areas, including the decision-making process for resolution and developed of a master process for executing its crisis management responsibilities. The department has increased its staffing level to 22. This is budgeted to increase by an additional 3 staff to reflect the SNDO's expanded responsibilities for the CCP resolution. This is an increase from 10 staff in 2016, including two staff for policy development and international relations.

95. SNDO resources need to be commensurate with its functions in crisis and consistent with its operational independence. As resolution authority, the SNDO has a broad range of responsibilities: 1) policy development, including setting resolvability standards for banks, CCPs and other financial institutions brought within the scope of the resolution regime, 2) improving the resolvability of individual banks through resolution planning, and 3) developing its own capabilities to manage crisis including by establishing resolution mechanisms. There is both a domestic and international component to each of these responsibilities. As a result, the SNDO requires sufficient resources both to develop and sustain the effectiveness of the Swedish resolution regime. Looking at jurisdictions with a financial sector of a similar proportion of GDP as Sweden, the resolution authority staffing level ranges from 30 to 100 permanent staff working on resolution policy, resolution planning and resolution implementation³⁷.

Recommendations

96. Greater operational details need to be present in the crisis management framework. The Swedish authorities need to develop their respective internal crisis management arrangements further as they lack operational detail on the actions they are required to take in a crisis. For example, in the case of the SNDO, it needs to develop granular procedures on how it would execute

³⁷ In 2020, the Bank of England's Resolution Directorate has c90 staff after 10 years of operation. In 2019, the Hong Kong Monetary Authority Resolution Office has c26 staff after only 3 years of operation. FINMA's had c25 staff covering recovery and resolution planning after, and at end 2018 the Banca D'Italiz's Resolution and Crisis Management Unit had 51 staff members, expected to increase to about 60. The Central Bank of Ireland resolution division has c30 staff at end 2021.

a bail-in or a transfer in resolution, defining the operational processes and arrangements that would need to be involved in the run-up to resolution, over the resolution weekend, and during the exit from the resolution action. The FI should codify its existing practices for supervising at-risk banks into an established intensified supervisory monitoring or “Watchlist”³⁸ framework. It should also assign within its existing governance arrangements responsibility for the development of its wider crisis management capabilities, particularly when this relates to the development of new supervisory policies, e.g., a framework for assessing FOLTF-sufficiently early financial triggers to inform active recovery planning and the SNDO’s contingency planning. In addition, to be able to coordinate effectively, each authority needs to further deepen internal crisis management arrangements and procedures with respect to their respective functions so that cross-authority coordination arrangements are based on the specific operational needs of each authority in crisis.

97. Resolution authority resources should be seen as permanent, rather than temporary, functions. International best practices in the US and UK shows that perennial work is needed to ensure that bank resolvability is achieved and maintained in the face of financial system change, as part of the on-going assessment of bank resolvability. Without sufficient resources, the authorities may not be able to achieve bank resolvability over a reasonable timeframe and implement crisis management actions with sufficient confidence. As a result, authorities may be forced to draw on solutions that create a risk to public funds. With the recent expansion of SNDONDO resolvability expectations on Swedish banks, the SNDONDO should review its resourcing model to ensure this work is fully resourced between now and the 2024 compliance timeline. Resources should be sufficient to support the active schedule of regular engagements with banks to monitor implementation progress and provide clarification of policy interpretation.

98. The SNDO funding should be independent of the MoF. The MoF should update the funding arrangements for the SNDO operations as resolution authority, so the basis for setting the SNDO’s funding is calculated as a function of the industry resolution levy arrangements. Such a mechanism for identifying the appropriate budget for the SNDO would make it less exposed to the MoF wider public finances priorities related to the annual budgeting processes. This is needed to ensure the SNDO has funding arrangements consistent with its operational independence from government. It would also improve the SNDO’s flexibility to define for itself the resources it deems necessary to discharge its duties both in preparation for, and implementation of, crisis actions. Calculating the SNDO’s funding as a function of the industry resolution levy would also impose the costs of its operations as a resolution authority on the financial institutions that most directly benefit from financial stability. This change in the SNDO funding model should be accompanied by a requirement for transparency about the relationship between the levy and its activities as a resolution authority and how the levy is allocated across different types of banks.

³⁸ A watchlist process is a means of prioritising banks the regulator is most concerned about from the perspective of meeting its statutory objectives and maintain compliance with conditions of authorisation. It is designed to help the regulator’s management to monitor progress made on mitigating risks in these banks.

B. Inter-Authority Crisis Coordination

Existing Arrangements and Assessment

99. Effective authority crisis management requires clearly defined coordination arrangements. These arrangements should define operational detail for implementing agreed crisis management plans. This should ensure each authority's independent action is coordinated closely with others. It should also require each authority to notify others in advance of decisions on the use of the authorities' powers, agreed on procedures and decision-making frameworks to support coordination with other—domestic and foreign—authorities.

100. The FSC has improved collaboration and cooperation among agencies and somewhat increased crisis management capacity. The FSC has tended to be the primary platform and governance for the authorities to share their respective crisis management efforts and identify points where coordination action is necessary to implement a coordinated crisis response. It has also begun to develop documentation which is designed to capture a shared understanding of each agency's respective approaches and roles in a crisis via the documentation of key decision points, information needs and policy positions. The FSC has focused on running CSE as the primary mechanism of developing the cross-authority capacity to coordinate crisis management rather than attempting to develop ex-ante crisis based presumptive paths for their respective actions in a crisis.

Recommendations

101. The FSC members need to develop greater the operational inter-authority crisis management capacity. This needs to go beyond information sharing and building a better-shared understanding of their respective roles in crisis management. The FSC members will need to go beyond the current work of the FSC, which is focused on the establishment of communication and governance arrangements to facilitate cross authority notification, knowledge sharing and mapping of interdependencies. In the first instance, FSC members should focus on conducting consistent systemic impact assessments, solvency, and viability assessments, as well as identifying the underlying sources of information and valuation methodologies that inform key decisions in crisis management.

102. Agreeing on shared methodologies, frameworks, or data sources ex-ante, minimises the risk of time-consuming disagreements during a crisis on questions of inputs or approaches to decisions in a crisis. It would enable cross-authority discussions to focus on the most important questions of substance. Such frameworks should define the authorities' collective expectations on the underlying sources of information, valuation methodologies and, as far as possible within existing legal frameworks, establishes common definitions of systemic impact, viability, and solvency. The authorities use of consistent methodologies does not preclude them arriving at different conclusions when applying them nor does it change the independent nature of their respective assessments as set out in legislation. The use of such frameworks can be done while respecting the independent decision-making responsibilities of each authority.

103. The FSC working groups could be structured to identify the need for other operational frameworks for the implementation of coordinated authority crisis actions, and how such frameworks could be developed. This would be consistent with the FSC MoU references to the authorities should “plan for joint efforts with regard to crisis preparedness”. In addition, the MoU says that “the parties shall strive to identify and remove obstacles and limitations regarding the collection and sharing of information and data” these references to information sharing could be expanded to include wider authority crisis management methodologies and frameworks. Such joint crisis management plans developed by the FSC members will reflect the statutory decision-making roles and responsibilities of the respective authorities in a crisis.

C. Crisis Simulation Exercises

Existing Arrangements and Assessment

104. Financial sector CSE are essential tools for authorities to gather practice decision making in the face of a financial crisis. As discussed in Box 3 below, the CSE should not be a test or exam that can be passed or failed. Instead, CSE should be used to ensure that participants learn lessons from the exercise and practice using an organization’s crisis management plans and procedures.

105. CSEs are an important part of how the authorities develop and maintain crisis management capabilities both within their own organization as well as across authority capabilities. The FSC plays a central role in coordinating across authorities CSE scenario design and implementation. It has been conducting yearly CSEs since 2016 with a focus on the framework for crisis management of banks. Its 2021 exercise simulated a cyberattack on the payment system threatening financial stability. In 2019, the Swedish authorities led, together with the Toronto Centre, the Nordic-Baltic Stability Group (NBSG) members in running a CSE involving about 300 participants based on a complex, cross border bank failure scenario. This NBSG CSE resulted in important lessons being learned, including the challenges associated with achieving the coordination of liquidity between home and host authorities for a cross border bank in stress or resolution. Such CSEs represent a substantial investment by the Swedish authorities in the development of their crisis management capabilities.

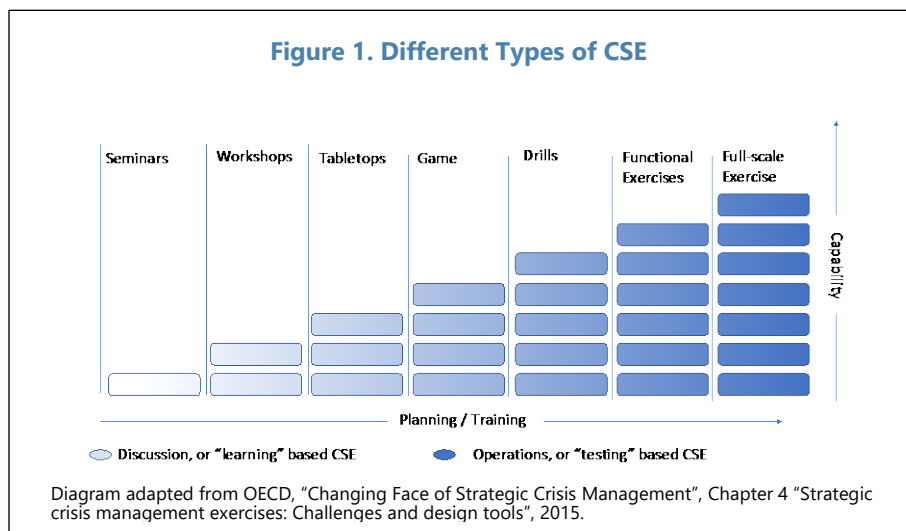
Recommendations

106. The authorities should continue to update the CSE design to evolve with the changes in the financial system and increasing complexity in cross-border crisis management. Careful CSE design will also help manage the risks of unintended outcomes from CSE undermining cross-authority or cross-border cooperation. If CSE design is not tailored to reflect the state of development of crisis management regimes, players may derive meaning from the CSE that influences their action in a real crisis, but which would be inconsistent with the authorities' preferred crisis management strategy. For example, foreign authority players might conclude that internal home authority resolution processes/procedures are incomplete or poorly understood.

107. The members of the FSC should develop a CSE manual that makes clear the different purposes of CSE, depending on different degrees of progress, in implementing the Swedish crisis management regime. Such a CSE manual would help capture best practice established by Swedish authorities’ experience to date and recognise the important role CSE play for the Swedish authorities in developing crisis management capacity. The manual should make clear the different purposes of crisis simulations: teaching versus testing (see Box 3 for definition). Such a crisis simulation manual would also help professionalize the role of CSE in sustaining crisis management capability while managing the risks of unintended outcomes from CSE undermining cross-authority or cross-border cooperation. This can best be achieved by tailoring the complexity of scenarios to the state of development of the authority’s crisis operational processes, procedures, and wider arrangements. See Box 3 for a summary of some points of international best practices on crisis simulation.

Box 3. Crisis Simulation Exercises—Examples of International Good Practice

There are two broad purposes for conducting different types of CSE: learning and testing. Learning-focused simulations are intended to raise awareness of crisis management issues and improve knowledge of the crisis organization, plans, procedures, protocols, etc. Such learning-focused simulations are targeted at discussing and gaming aspects of the crisis management framework and reactions of those individuals responsible for implementing that aspect and related decision-makers. Testing-focused simulations are designed to probe individuals, teams, and organizational preparedness and identify areas of strength or vulnerability. Such testing-focused simulations involve more elements of surprise (e.g., akin to a fire drill), with the scenario generally unknown to the players in advance. Learning and testing focused simulations share the same design parameters (e.g., players involved, level of realism, the openness of scenario, context and setting, player role, timing, etc.) but may make different choices as to how each parameter should be arranged in a CSE.



For example, a testing-based approach to CSE is likely to require crisis processes, protocols and capabilities (e.g., systemic impact assessment frameworks, established valuation approaches to inform

Box 3. Crisis Simulation Exercises—Examples of International Good Practice (concluded)

solvency and viability assessments, operational liquidity facilities, etc.) to largely be complete and known to be functioning by those involved in the CSE. This is because the purpose of the simulation is to see how well such issues are understood by the players and identify areas of strength or vulnerability. Alternatively, a learning-based approach to CSE design can help develop players'

capability in a more targeted way on specific aspects of a team/organization crisis capabilities in isolation, often through discussion (e.g., decision-making frameworks) while other aspects of the approach to managing crisis remain under development. Learning-based CSE is used to develop capabilities and harmonize understanding of decision-maker reaction function in the defined scenario.

If the crisis management framework remains relatively novel for many players (e.g., resolution regime tools have yet to be fully operationalised, etc.) and their operational capability with respect to the nuances of how going and gone concern statutory regimes interact is still developing, then this will constrain the complexity of the CSE scenario in order to avoid overwhelming players with issues they are unfamiliar. Until a crisis management framework is fully operational, learning-focused CSE is typically more appropriate. Failure to recognise this in advance risks incurring the high cost of CSE development, execution, and evaluation without deriving the benefits. It could also result in players deriving meaning from the CSE that is inconsistent with the authorities' preferred crisis management strategy or effective crisis management, e.g., internal processes/procedures are inadequate due to a failure to recognise they are incomplete or poorly understood.

Authorities should generally not attempt CSE involving external parties (e.g., other government agencies, banks or foreign authorities) before the crisis management framework it is based on is fully operationalized and functioning and understood by its own staff. This is needed to avoid negatively impacting external parties' confidence in the authorities' capability to act as an effective partner in a high impact crisis management scenario. However, if a cross-border CSE is considered essential for whatever reason before this precondition can be met, a more learning focused approach should be taken in developing a cross-border simulation with foreign authorities relying on the CSE options (to the left of Figure 1). Such a simulation should focus on an element of the domestic crisis management framework that is well understood by both and important for cross-border cooperation.

D. Legal Protections

Existing Arrangements and Assessment

108. The crisis management authorities should be protected from unfounded litigation. In the context of financial crisis management, legal liability may occur when (i) the supervisory authority fails to take any action notwithstanding the knowledge of serious problems in the bank, (ii) measures were inadequate in response to the problems, or (iii) a shareholder of a bank challenges the appointment of a provisional administrator or (iv) a resolution action which interferes with the private property risks in the public interest. Given the distributional implications of resolution actions and the incentive for private agents to make every effort to challenge them in court to try to avoid

incurring any losses, it is critical that liability accrues only in the event of gross negligence or wilful misconduct on the part of the supervisory agency, central bank and resolution agency, or its employees.

109. Sweden's Tort Law provides a high level of protection for civil servants. Sweden relies on the non-litigious business culture and the legal protection that the agencies' officials and staff enjoy under the Tort Law. However, the law is silent on the indemnification for legal costs; and none of the agencies has pertinent internal rules, policies, and procedures in place.

Recommendations

110. The legal protection of the financial agencies' officials, staff, and agents should be strengthened. Statutory clarity should be provided to potential plaintiffs that a case would have no chance of success unless it is based on criminal activity, gross negligence, or bad faith. This should cover the agencies, their current and former officials, staff, and agents. If employees face personal action and must defend the proceedings, they should have access to resources for defending the proceedings, including having a full indemnity for legal costs. In addition, it should be clarified whether the Tort Law extends this level of protection to (1) the agents (such as lawyers, accountants, auditors, and IT experts) whom the agencies will need to engage, particularly for resolution measures, and (2) the agencies themselves. Operational arrangements should be established to make legal protection effective, covering such issues as the choice and (timing of) payment of legal representation, protection against self-incrimination during internal investigations also to build a case to defend the agencies, and liability and legal aid insurance covering realistic monetary amounts considering the high financial stakes at play in resolution cases.

Annex I. Bail-in Mechanics: Difference in Approaches

1. There are important variations between different jurisdictions' approaches to bail-in mechanics. An authority designing its bail-in mechanism will need to be clear on its approach with respect to these differences. The most material differences to consider when designing a bail-in mechanism are:

- Valuation timelines: Some approaches assume that the final valuations necessary to inform the bail-in can be concluded in a matter of days, while others assume a lengthier valuation process (e.g., 3+ months) is required to arrive at valuation conclusions necessary to inform the final bail-in terms of the resolution.
- Treatment of resolved bank shares: Some authorities assume that all shares in the resolved bank are cancelled, and new shares are issued to be distributed to the formed creditors as compensation. Alternatively, other authorities assumed that existing shares are only suspended for the period until the final terms of the bail-in can be informed by the completed resolution valuation.
- Issuance of new shares: Some authorities propose to require the common securities depository to create new shares on the issuance of the resolution order by the resolution authority. It is assumed that the stock exchange initiates the listing process for the new shares in the trading systems and hence prepares them for trading. Although the new shares have been created legally, a global note is necessary for the technical creation of the shares at the central securities depository. Under this approach, the bank in resolution is responsible for creating the global note. The new shares/global notes will be allocated by the administrator to the former bondholders affected by the bail-in. Other authorities do not require the issuance of new shares under its certificate of entitlement (CE) mechanic.¹ However, as noted above, some authorities envisage cancelling all shares in the resolved bank and requiring it to issue new shares to be allocated to former creditors in exchange for their claim rights. Under this approach, the statutory resolution order would be how the new shares would be listed on the stock exchange and for amending the articles of association of the bank in resolution.
- Issuance of interim securities: Some authorities assume interim securities (i.e., CEs or claim rights) are issued to the resolved bank creditors. These interim securities can be traded in the period between the resolution action and the final terms of the resolution valuation being available to inform the exchange process. For example, in the UK, the issuance of CEs to former creditors of the resolved banks does not involve the acceptance of an offer by those creditors. Therefore, CEs do not need to comply with the Listing Authority or EU Prospectus Directive requirements to publish a prospectus which is typically required on an offer of securities to the

¹ A certificate of entitlement is a registered security issued by a bank in resolution that representing an entitlement to shares, other securities or cash as following the resolution valuation.

public or if securities are being admitted to trading on a regulated market. This is important as it means the CEs can be distributed on the Monday morning after the resolution weekend providing clarity to the market on their economic entitlement in the resolved bank but well before the valuation on which the allocation of that economic entitlement will be based is completed.

- Compliance with change in control/other regulatory requirements: some mechanics more explicitly address how compliance with supervisory change in control and other regulatory requirements (e.g., the FI's role in supervising takeover bids, enforcing compliance with the Takeovers Act, and approving offer documents and prospectuses etc.) can be met, whereas others are less explicit about how their mechanic ensures that the new owners are fit and proper particularly given the challenges in identifying the holders or any interim securities or new shares in advance of any distribution or exchange process is completed.

2. The difference in approach in responding to these considerations is in large part a result of the differences in national legislative frameworks. However, ensuring a common approach to bail-in mechanics will be important to ensuring coordinated home and host cooperation in the resolution of a cross-border bank resolution. In refining its published bail-in mechanics overtime, the SNDO should develop the detail operational processes and procedures to ensure all stakeholder involved in the process can take the necessary supporting actions.