

# Bank Crisis Management

GSE Course in Money and Banking,  
lecture by Chief Economist Hanna Westman

24 September 2024



RAHOITUSVAKAUSVIRASTO  
VERKET FÖR FINANSIELL STABILITET  
FINANCIAL STABILITY AUTHORITY

# RVV is the national bank resolution and deposit guarantee authority in Finland

- The Financial Stability Authority (Rahoitusvakausvirasto, RVV) was established as an independent authority under the Ministry of Finance in 2015.
- RVV is the national bank resolution and deposit guarantee authority.
- As of 2022, RVV is also responsible for managing and developing the National Emergency Account System, which is one of the tools used to secure the continuity of daily payments in case of serious disruptions of society or emergency conditions.
- RVV cooperates closely with other authorities.
  - Domestically, the cooperation is close in particular with the Financial Supervisory Authority (Finanssivalvonta), the Bank of Finland (Suomen Pankki) and the Ministry of Finance.
  - RVV is part of the Single Resolution Mechanism (SRM) and cooperates closely with the Single Resolution Board (SRB) and other national resolution authorities in the banking union as well as resolution authorities in the Nordic countries.
- Today RVV has 27 employees.
- More information about RVV as well as on questions related to bank resolution and deposit guarantee can be found on our home page [rvv.fi](https://rvv.fi).

# Outline – questions addressed during the lecture

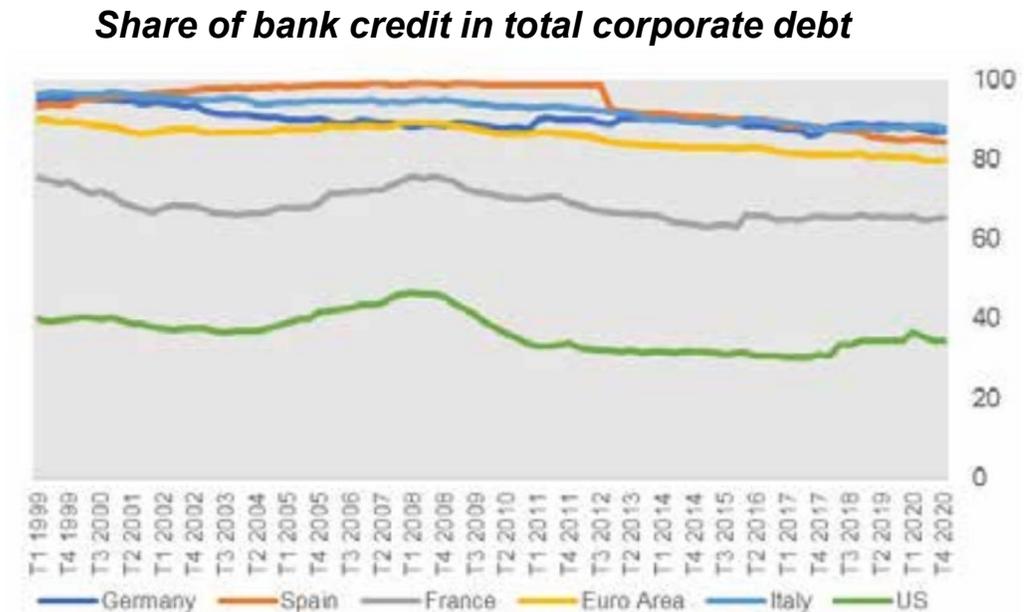
- Why are banks regulated and supervised?
- Why is bailout of banks not a good idea?
- What has been done to end “too big to fail”?
- What is the bank resolution regime?

# Why are banks regulated and supervised?



# Banks have many important tasks in the society

- Banks provide customers with a safe mean to store value in terms of deposit.
  - Banks grant loans to customers for consumption or value creating investments, which on the other hand supports economic growth and prosperity.
  - Banks create liquidity, i.e. money, when granting loans.
  - Banks provide customers with secure and efficient payments services.
  - Banks have an important role in trading, risk management, wholesale funding and asset management services.
- Banks' role is particularly large in Europe, where for example corporates get funding from banks rather than financial markets.



Source: EUROFI Regulatory Update, September 2021 ([www.eurofi.net/wp-content/uploads/2021/09/regulatory-update\\_ljubljana\\_september-2021.pdf](http://www.eurofi.net/wp-content/uploads/2021/09/regulatory-update_ljubljana_september-2021.pdf)).

# Deposit runs can be very rapid, even with deposit insurance, as not all deposits are covered

Bank	Start of outflow	Duration	Size in billions (currency)	Run-off rate	Monthly run-off rate
Northern Rock	14 Sep 2007	Few weeks First 4 days	13 (GBP) 4.6 (GBP)	56% 20%	56% 100%
ING direct (internet bank)	Sep 2008	3 months	4.9 (EUR)	3.1%	1%
Landisbanki, Icesave in UK (internet bank)	April 2008	3-4 days	0.2 (GBP)	4.3%	32.1% - 42.8%
Dexia	End-Sep 2011	1 month	7 (EUR)	8.75%	8.75%
Cyprus Popular Bank	June 2012	9 months	10 (EUR)	40%	4.4%
Banco Popular	1 April 2017	2 months 3 days	18 (EUR) 6 (EUR)	24% 8%	12% 80%
Silicon Valley Bank	9 Mars, 2023	1 day		25 % (62%*)	
Signature Bank	10 Mars, 2023	1 day		20% (9%*)	
First Republic	10 Mars, 2023	7-14 days		57%	

Source: ECB *Liquidity in resolution: estimating possible liquidity gaps for specific banks in resolution and in a systemic crisis*, Occasional Paper Series, November 2020; Ross (2023) *Understanding the Speed and Size of Bank Runs in Historical Comparison*, Economic Synopsis

Note: \* The expected amount of outflows that were scheduled to go out the next business day, but did not actually occur because the banks were closed.

# Covered deposits are paid out by RVV with funds from the deposit guarantee fund

*Maximum of 100 000 euros of one depositor's deposits in one bank.*

*Covers all deposits by private persons and most deposits by companies, associations and foundations.*

*There is currently about 1,2 billion euros in the fund.*

1.



A bank goes insolvent or bankrupt

2.



The Financial Stability Authority (FFSA) makes a compensation decision

3.



Pay-outs begin within seven working days

4.



FFSA receives all information on deposits directly from the bank

5.



FFSA sends compensation decisions automatically to all depositors

6.



FFSA pays compensations to the depositor's new account

# The failure of a bank can have severe consequences on the society and create costs that banks do not pay

- A failure of a bank, particularly if it has a central role in the financial system, has large-scale implications for households and companies as its services would no longer be available and it would no longer grant credit to its customers.
- Problems of one bank easily transmit to other banks directly through e.g. interbank markets or indirectly as trust also in other banks might deteriorate, resulting in banking sector wide problems.
- Application of a normal bankruptcy proceeding is not appropriate to solve a crisis situation in a large bank as the process is too slow given the need to ensure continuity of banking services and as the value of bank assets would deteriorate during the long process.
- Up until the great financial crisis that started in 2008, authorities did not really have any alternative, but to rescue i.e. bailout, failing banks and support them with taxpayers' money.

*There are externalities from banking.*

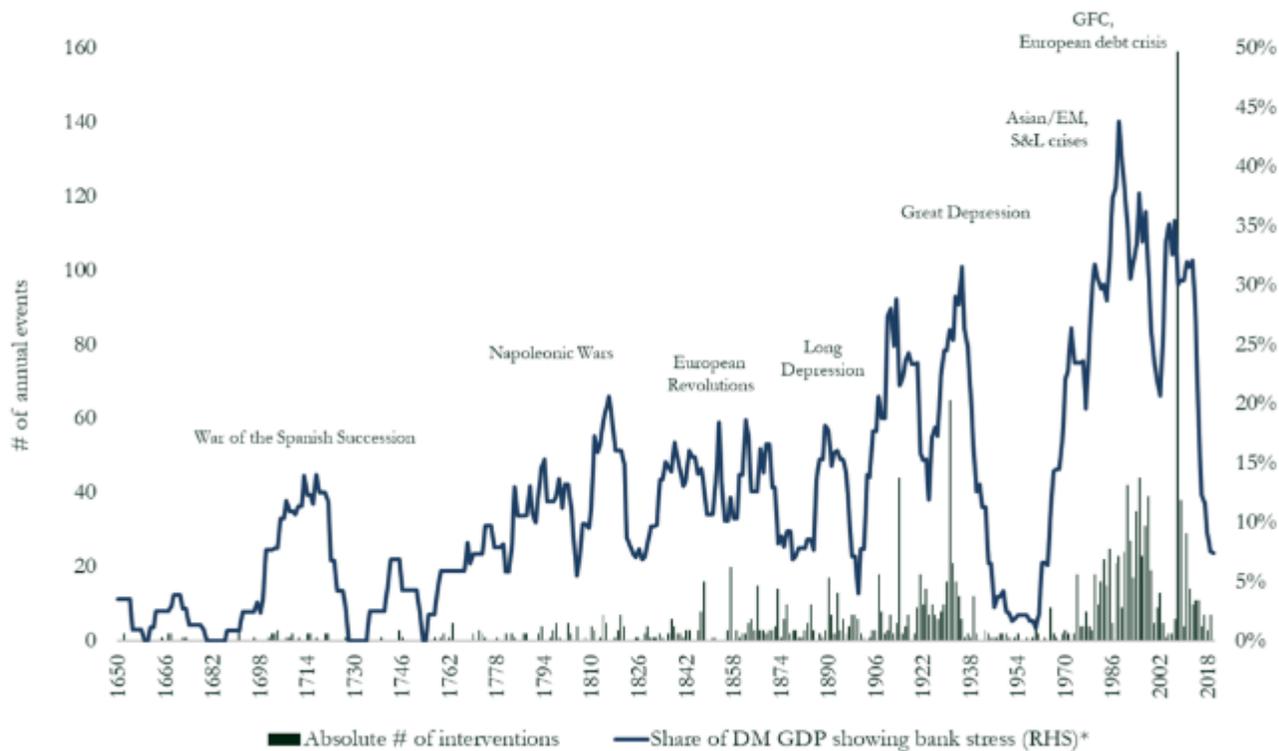
*Previously many banks were "too big to fail"*

# Why is bailout of banks not a good idea?

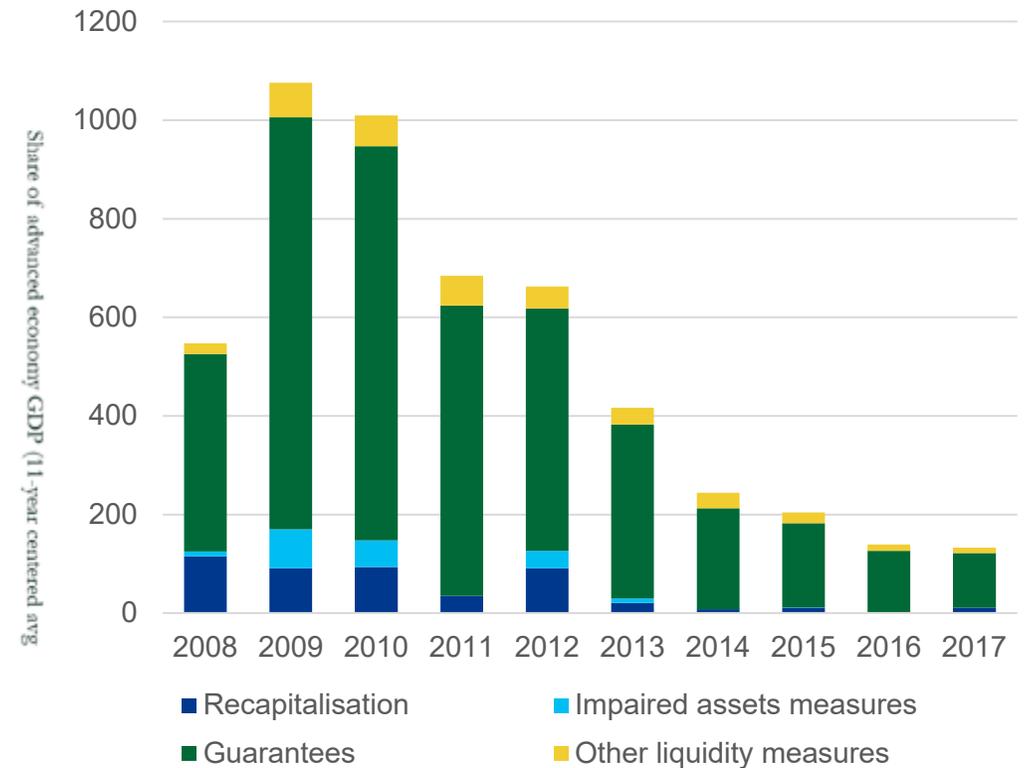


# It has become increasingly costly to save banks thus depriving use of public funds for other purposes

Figure 6: distribution of total interventions, by year, and share of advanced economy GDP exhibiting "bank stress", 1665-2019.



State aid used by banks in the EU (billion euro)



Source: Metrick and Schmelzing (2021) Banking-crisis interventions 1257-2019, NBER Working Paper 29281. The database created by the authors can be found here: [https://data.nber.org/data-appendix/w29281/V\\_Appendix%20C\\_nber11.pdf](https://data.nber.org/data-appendix/w29281/V_Appendix%20C_nber11.pdf). ECB, Liquidity in resolution: estimating possible liquidity gaps for specific banks in resolution and in a systemic crisis, Occasional Paper Series, November 2020.

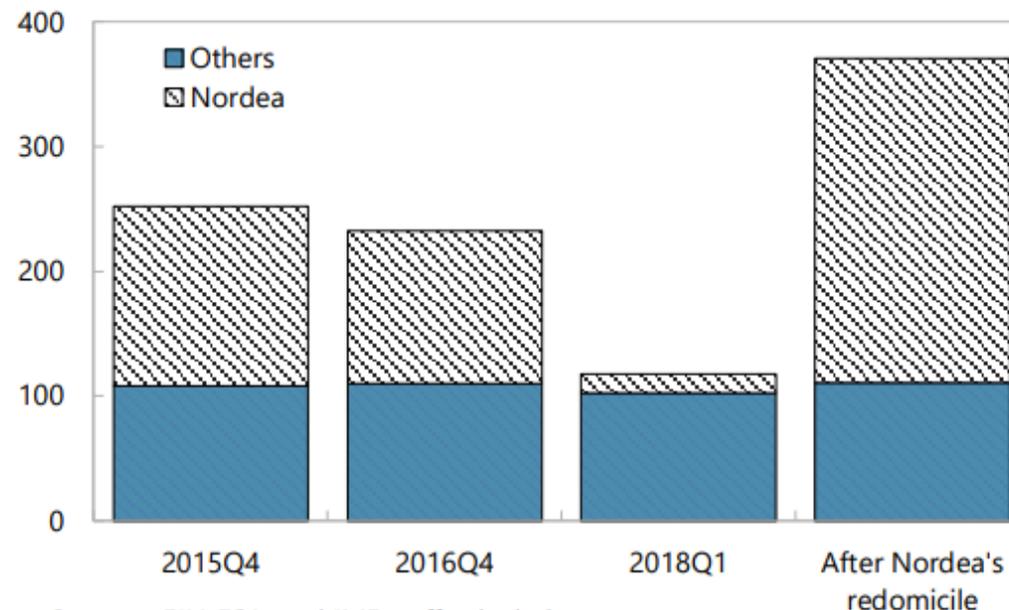
# Some banks are even “too large to bailout” as they outsize their home country

*In end-2023 Nordea assets to Finland's GDP was 185%.*

## Case Nordea

- In January 2017, Nordea merged its subsidiaries with banking operations to the Swedish parent only leaving relatively small subsidiaries in the four Nordic countries.
- In October 2018, Nordea's headquarter was moved from Stockholm to Helsinki.
- The Finnish authorities are responsible for the banking operations in Finland, Sweden, Denmark and Norway as they are branches of the parent company headquartered in Helsinki.

**Size of Finnish Financial Sector**  
(Percent of GDP)



Sources: FIN-FSA; and IMF staff calculations.

Note: Estimates of size after Nordea's redomicile based on 2017Q4 data.

Source: IMF, Finland 2018 Article IV consultation, Country Report No. 19/7, January 2019 ([www.imf.org/en/Publications/CR/Issues/2019/01/15/Finland-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46518](http://www.imf.org/en/Publications/CR/Issues/2019/01/15/Finland-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46518)).

# Expectation of bailout by the government create incentives for rapid growth and excessive risk taking

Banks become even more systemically important for the financial system and must thus be rescued, or bailed out, by state in case of failure.

*Banks became "too big to fail".*

*"Heads, I win – tails, you lose."*

The implicit safety net i.e. anticipation of government guarantee in terms of bailout with taxpayer money, reduces funding costs and monitoring by investors.

Rapid growth, excessive risk taking and indebtedness induced by the implicit safety net increases likelihood of banking crisis.

*Risk is not correctly priced.*

Source: Based on discussion in the Liikanen Report (2012) ([https://ec.europa.eu/info/publications/liikanen-report\\_en](https://ec.europa.eu/info/publications/liikanen-report_en)).

# What has been done to end “too big to fail”?



# Scope and intrusiveness of bank regulation and supervision have increased

## Aim to reduce likelihood of bank failure

- Higher capital requirements and better-quality capital
- New liquidity requirements
- Stricter requirement on governance and risk management
- Improved supervision and stress tests
- Macroprudential supervision and capital buffers based on systemic risk of banks and procyclicality of lending

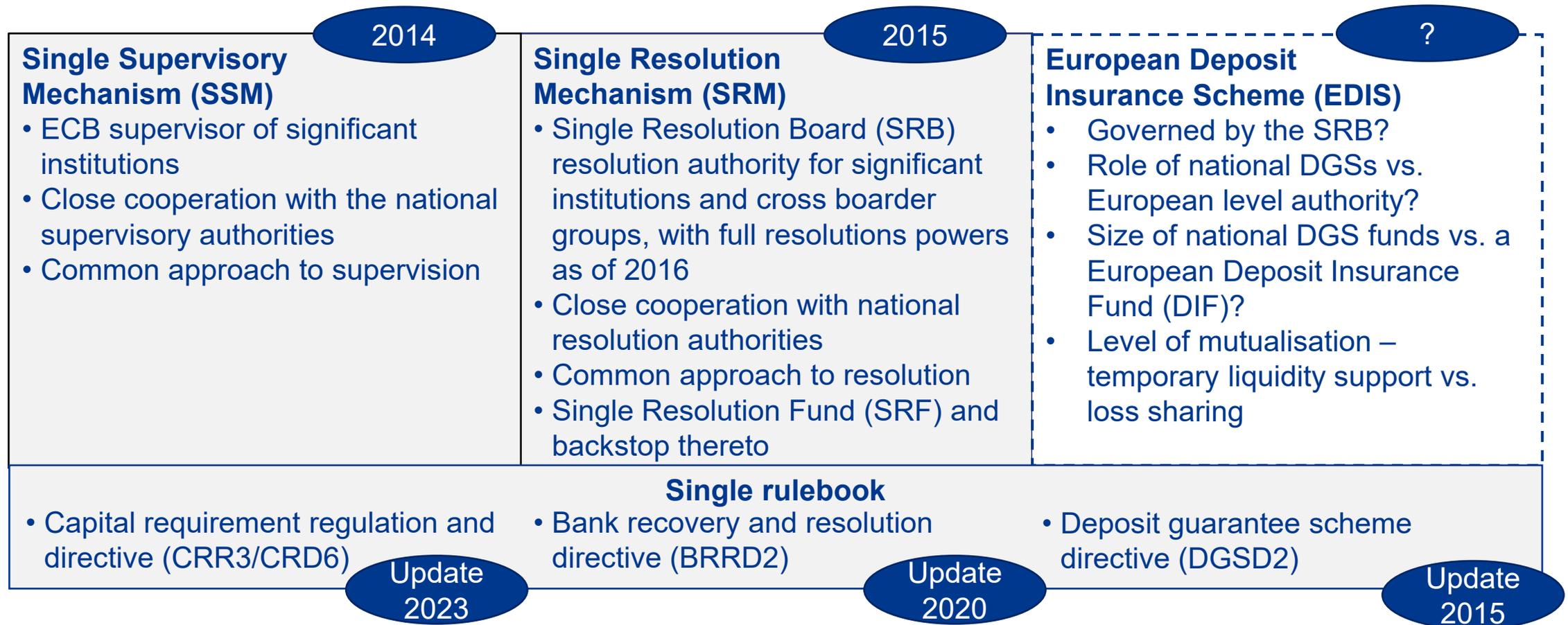
## Aim to reduce impact and cost to society in case of bank failure

- New recovery and resolution regime including funds to which banks contribute with ex-ante fees
- Harmonisation of deposit insurance and improvement of operational capability to manage pay-out



Note: Regulation enforcing structural changes ex-ante has been implemented in US (Volker rule) and UK (based on the Vicker report). The EU initiative inspired by the Liikanen Report (2012) has been withdrawn. Resolution authorities have the mandate to require structural change to ensure resolvability. See also RVV blog “The Liikanen Report and the proposal for a resolution framework – 10 years on” (<https://rvv.fi/en/-/blog-the-liikanen-report-and-the-proposal-for-a-resolution-framework-10-years-on>). More information about the review of the crisis management and deposit insurance directives (CMDI) can be found in the RVV blog “CMDI-ehdotus Rahoitusvakausviraston puntarissa” (<https://rvv.fi/-/blogi-cmdi-ehdotus-rahoitusvakausviraston-puntarissa>).

# The banking union was created on top of the single rulebook to centralise supervision and resolution



Note: More information about EDIS can be found in the RVV blog “Pankkiunionin yhteinen talletussuoja (EDIS) hakee yhä muotoaan” (<https://rvv.fi/-/blogi-pankkiunionin-yhteinen-talletussuoja-edis-hakee-yha-muotoaan>).

# The banking union include the euro area countries and Bulgaria



Note: Banking union members in light blue. National resolution authority mentioned.

# What is the bank resolution regime?



# In the new regime, systemically important banks will be resolved instead of put into bankruptcy

- Resolution is applied to a failing bank if any of the five resolution objectives would be breached in case the bank would be put to bankruptcy. This would happen if ...
  - the bank has critical functions, e.g. a disruption in one or several functions would severely affect customers and substituting services are not available sufficiently rapidly from other banks or other financial services actors.
  - the disruption of the bank's operations would endanger financial stability, e.g. the problems would spread widely to other banks, or the real economy would be affected negatively.
  - the use of public funds would be greater in bankruptcy than in resolution.
  - the depositors and investors are not protected in a bankruptcy as outlined in the legislation.
  - the client funds and client assets in the bank are not protected as outlined in the legislation.
- If the resolution objectives are not endangered, the bank is put to bankruptcy rather than resolution.
- In bankruptcy depositors receive the covered deposits from the deposit guarantee fund, while in resolution pay-out from the deposit guarantee fund is not needed as the banking operations continue without interruption.

# Illustrative examples of the public interest assessment

## Case Silicon Valley Bank, 2023

- The bank was relatively large with total assets over 200 billion and would in the banking union have been regarded as a significant institution under the mandate of ECB and SRB.
- The impact on SMEs of a disruption in the deposit and payment functions was rather large (particularly on a regional level) and the customers would possibly not be able to find alternative providers sufficiently rapidly.
- The indirect contagion risk created by increasing risk of deposit runs in other banks with similar business model was high.
- Hence, resolution rather than pay-out of deposits or transfer of deposits to another bank funded by the DGS, might have been chosen.

## Case Veneto Banks, 2017

- SRB decided that resolution of two banks in Veneto was not in the public interest as the impact of the disruption was not seen to be significant on a national level, i.e. for Italy as a whole.
- In contrast, the Italian government found that bankruptcy had a large impact on a regional level and that there was a need for liquidation aid to support the local society.
- With the suggested changes to the BRRD as proposed in the CMDI, the impact on failure is to be assessed on regional level, and hence, resolution rather than bankruptcy might possibly be applied in a similar situation.

# In resolution, the authority can restructure the assets and liabilities of a bank by applying resolution tools

## Sale of business

Part or all of the shares or other instruments of ownership or assets, rights and liabilities can be sold to a private purchaser.

## Bridge institution

Part or all of the shares or other instruments of ownership or assets, right and liabilities can be transferred to a temporary entity.

## Asset management vehicle\*

Assets, rights and liabilities can be transferred to an asset management vehicle, totally or partially publicly owned, if liquidation of the assets could cause market disruption.

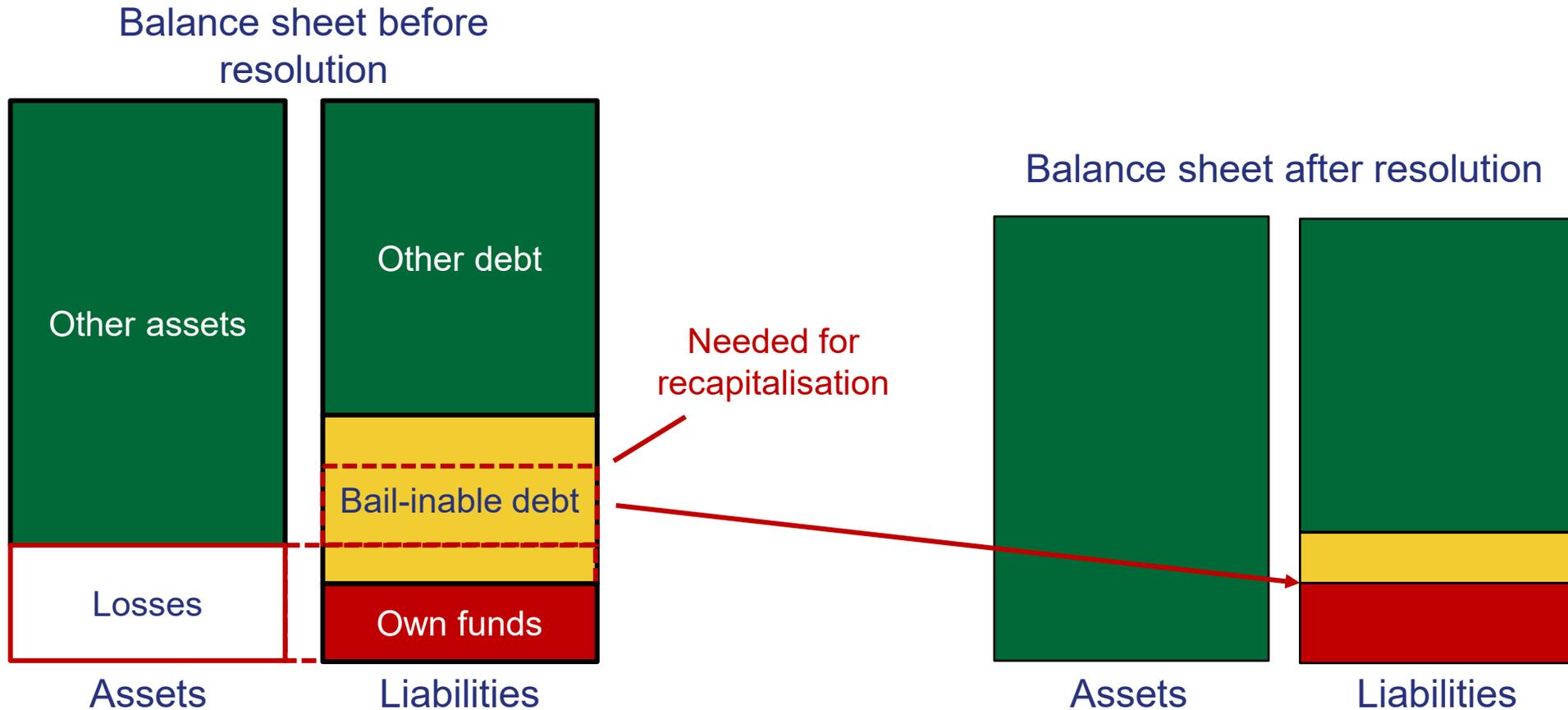
## Write-down and conversion of liabilities (bail-in)

Equity and debt can be written down and converted placing the burden on shareholders and creditors of the bank rather than on the public.

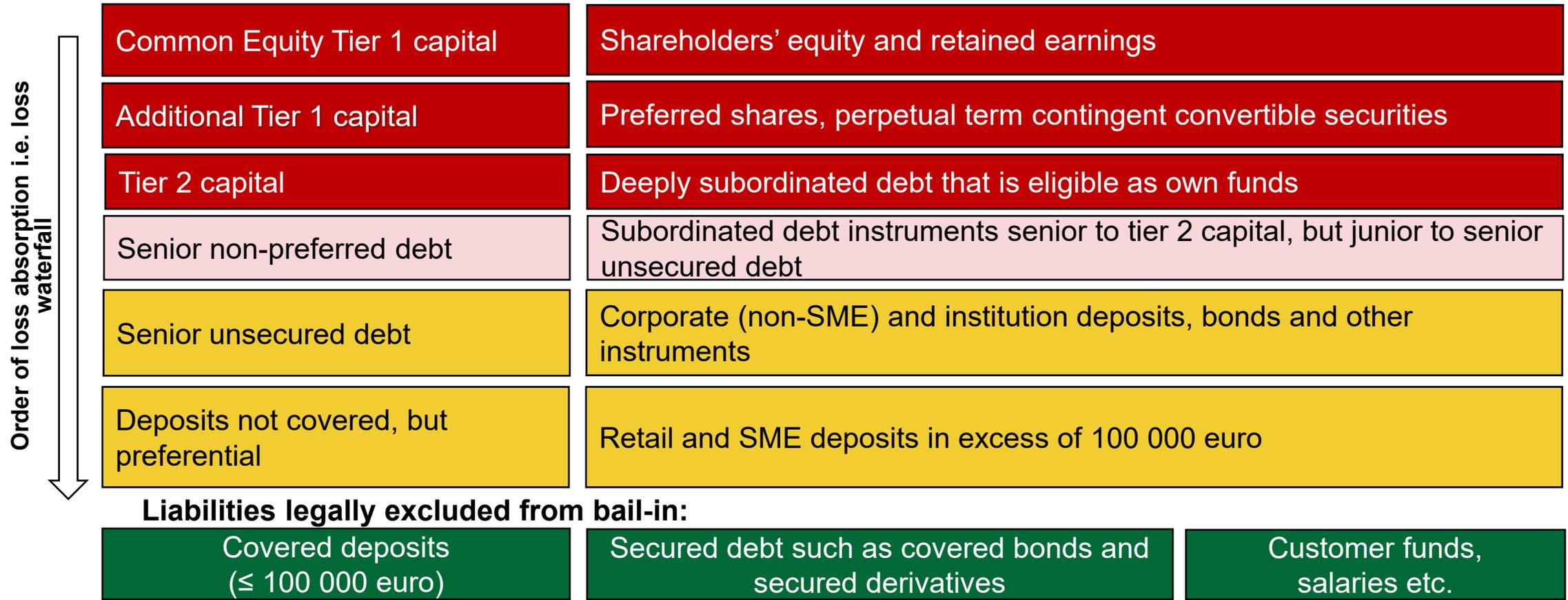
*The new and far-reaching mandate to implement the shift from bail-out by government to bail-in by investors.*

Note: \* The asset management vehicle can only be applied in connection with some other resolution tool.

# Losses are covered and the bank recapitalised through the implementation of the bail-in tool

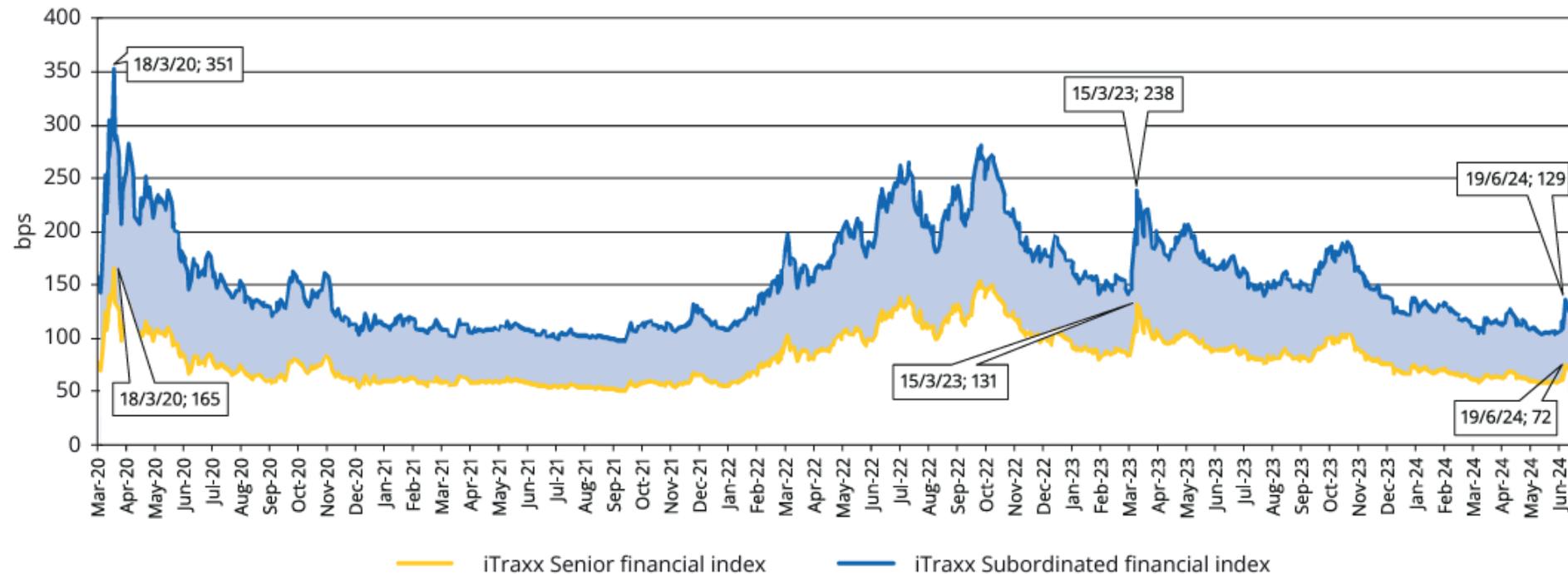


# It is important that the order of loss absorption used when applying the bail-in tool is known by investors



# The risk of default of debt in different credit hierarchy classes is reflected in the cost of funding

Chart 22. Cost of funding (iTraxx Europe Financials)



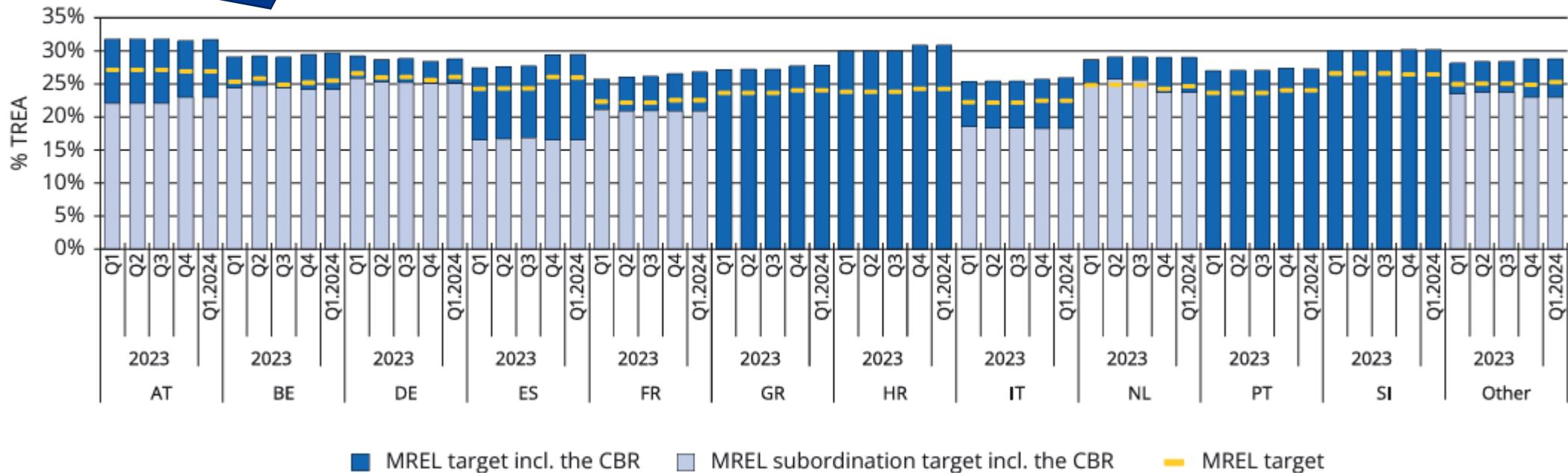
Source: Bloomberg Finance L.P., SRB computations.

Source: SRB MREL dashboard Q1 2024 (<https://www.srb.europa.eu/en/content/mrel-dashboard-0>); See also ECB (2019) Has the new bail-in framework increased the yield spread between subordinated and senior bonds, Working Paper Series 2317

# Minimum requirements of own funds and eligible liabilities (MREL) enable recapitalisation through bail-in

*MREL targets are roughly double the capital requirements.*

MREL final targets (of which subordination) for resolution entities by country and for BU, % TREA



Source: SRB MREL dashboard Q1 2024 (<https://www.srb.europa.eu/en/content/mrel-dashboard-0>); See also Jokivuolle, Vihriälä, Virolainen and Westman (2020), Bail-in: EU rules and their application in the Nordic context, Nordic Economic Policy Review

# Banks need to become resolvable beforehand, but they still have some way to go



Banks should have ...

## Governance

- ... robust processes for:
  - timely and accurate provision of information
  - effective oversight
  - efficient decision making



## Liquidity and funding in resolution

- ... processes and capabilities to:
  - estimate liquidity and funding needs
  - measure and report liquidity
  - identify and mobilise available collateral



## Information systems and data requirements

- ... adequate Management Information Systems to:
  - develop and maintain resolution plans
  - execute a fair, prudent and realistic valuation
  - effectively apply resolution actions



## Separability and restructuring

- ... a structure that supports resolution strategy implementation



## Loss absorption and recapitalisation capacity

- ... enough loss absorption and recapitalisation capacity to absorb losses



## Operational continuity and access to financial market infrastructure

- ... adequate operational arrangements to ensure continuity of services



## Communication

- ... the ability to ensure timely, robust and consistent communication

Resolvability Conditions		2022 Resolvability assessment	2023 Resolvability assessment
Governance	1.1 Management body and senior management involvement	Full progress	Full progress
	1.2 Governance of resolution activities	Full progress	Full progress
	1.3 Quality assurance and internal audit	Full progress	Full progress
Liquidity and funding in resolution	2.1 Loss absorbing and recapitalisation capacity	Substantial progress	Substantial progress
	2.2 Cross-border aspects	Substantial progress	Substantial progress
	2.3 Bail-in playbooks (incl. internal loss transfer mechanisms)	Substantial progress	Substantial progress
Liquidity and funding in resolution	3.1 Liquidity needs in resolution	Substantial progress	Substantial progress
	3.2 Measurement and reporting of liquidity and collateral in resolution	Substantial progress	Substantial progress
Operational continuity & FMI access	4.1/4 Identification and mapping of operational dependencies and FMIs...	Partial progress	Partial progress
	4.2/5 Risk assessment	Partial progress	Partial progress
	4.3/6 Mitigation measures to operational continuity risk (incl. FMIs)	Partial progress	Partial progress
Information systems and data requirements	5.0 Governance for MIS	Substantial progress	Substantial progress
	5.1 Information for resolution planning	Substantial progress	Substantial progress
	5.2 MIS for valuation	Substantial progress	Substantial progress
Communication	6.1 Communication planning	Substantial progress	Substantial progress
	6.2 Governance aspects	Substantial progress	Substantial progress
Separability and reorganisation	7.1 Structure and complexity	Substantial progress	Substantial progress
	7.2 Separability (banks where the preferred tool is sale of business)	Substantial progress	Substantial progress
	7.3 Reorganisation capabilities	Substantial progress	Substantial progress

### Classification:

- Full progress
- Substantial progress where immaterial impediments to resolvability may be identified
- Partial progress where non-substantive impediments to resolvability may be identified
- The main capabilities were being phased-in and remained to be demonstrated at the moment of the resolvability assessment
- Capabilities not yet phased-in at the moment of the resolvability assessment

Source: SRB press release 9.7.2024, SRB publishes third resolvability heat-map (<https://www.srb.europa.eu/en/content/resolvability-track-srb-shifts-testing-crisis-readiness>)

# Banks has contributed to the Single Resolution Fund (SRF), which can be used in exceptional cases

- The target level of SRF is 1% of covered deposits in the banking union countries, which totaled about 75 billion euros in December 2023.
- The target level has been reached.
- Risk-based contributions has been collected from the banks annually.
- In the beginning of 2022 member states decided on a backstop to the SRF.
  - The credit line from the European Stability Mechanism (ESM) is to about double the funding available in resolution.
  - Not all member states has ratified the agreement.
- The SRF can be used for capital and liquidity support to ensure effective implementation of resolution tools.
- There are strict conditions in case SRF funds are used as the bail-in tool is implemented
  - The depth of bail-in need to be at least 8% of total liabilities and own funds (~ total assets) of the bank under resolution.
  - The SRF contribution cannot exceed 5% of total liabilities and own funds (~ total assets) of the bank under resolution.

Note.: More information regarding why contributions are collected from banks can be found in a RVV blog "Varför betalar bankerna miljoner till krisfonder?" (see. [https://rvv.fi/-/blogi-miksi-pankit-maksavat-miljoonia-kriisirahastoihin-?languageld=sv\\_SE](https://rvv.fi/-/blogi-miksi-pankit-maksavat-miljoonia-kriisirahastoihin-?languageld=sv_SE) for Swedish and Finnish version).

# Timely and efficient response to bank failure is possible if rigorous preparations are done beforehand

Bank is failing or likely to fail

## Annual preparatory measures

### Supervisory authority

- Recovery plan outlined by bank

### Resolution authority

- Resolution plan
- Minimum requirement for own funds and eligible liabilities (MREL)
- Measures to ensure resolvability
- Contributions to resolution fund

## Early intervention

### Supervisory authority

- Implementation of measures in recovery plan
- Extended scope of reporting and disclosure
- Changes in strategy and legal structure of bank
- Change of management of bank
- Appointment of an authorised representative

## Resolution

### Resolution authority

- Public interest assessment
- Resolution strategy and selection of tools
- Use of resolution fund

# We rehearse to be prepared for the worst

## Nordic Baltic Crisis Simulation Exercise 2024

20.9.2024 16.03

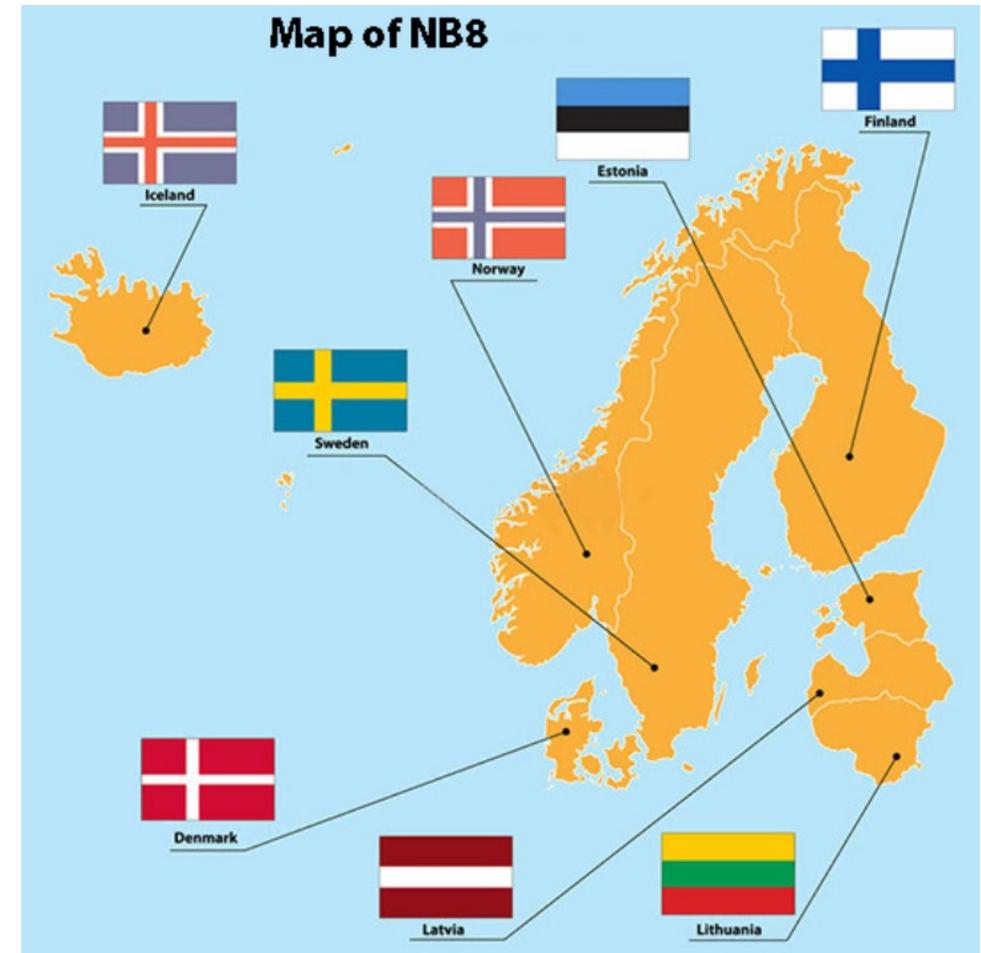
Press release

To test the preparedness for a potential crisis situation, authorities from the Nordic-Baltic countries responsible for financial stability during this week conducted a financial crisis simulation exercise in the Nordic-Baltic region, involving three fictitious banks with cross-border activities. Nearly 450 participants took part in the exercise, representing authorities from Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden, as well as the relevant European Union authorities: European Commission, ECB, Single Resolution Board (SRB) and European Banking Authority (EBA). A staff member of the International Monetary Fund was also invited to participate as an observer.

The purpose of the exercise was to test communication, information sharing and collaboration between the authorities during crisis management in a highly uncertain and time pressured environment. The exercise was designed in line with a crisis scenario where the fictitious banks went through three phases that could be foreseen in a bank crisis management process: 1) the transition from normal business to recovery including addressing liquidity issues, 2) the movement from recovery to resolution, with resolution authorities assuming control of the bank and 3) after resolution, the return of the restructured bank to the market. During the exercise, authorities applied the tools and powers at their disposal according to the EU regulatory framework for banking supervision and crisis management.

Following the successful conclusion of the exercise, authorities will document and share the lessons learnt, and will integrate them into their existing crisis management routines. This will strengthen their crisis preparedness and further enhance the crisis management framework in the Nordic-Baltic region.

*A preparation team established under the Nordic Baltic Stability Group (NBSG) and led by the Danish resolution entity Finansiell Stabilitet was formed in 2023 to prepare the exercise. The team was advised by Oliver Wyman in the preparation of the exercise. The NBSG consists of government ministries, central banks, supervisory authorities, and resolution authorities in the eight Nordic and Baltic countries. In the context of the NBSG, the Nordic and Baltic authorities have agreed to conduct regular financial crisis simulation exercises.*



Source:RVV news (<https://rvv.fi/en/news>)

# To finish



# Was answers to the questions provided?

- Why are banks regulated and supervised? Bank failures create externalities, i.e. significant costs for the society.
- Why is bailout of banks not a good idea? It is expensive, weakens public finances, results in suboptimal allocation of taxpayer money and creates incentives for rapid growth and excessive risk taking by banks.
- What has been done to end “too big to fail”? Bank supervision has become more stringent, regulatory reforms has been implemented and new authorities has been established.
- What is the bank resolution regime? Mandate provided to authorities to restructure a bank’s balance sheet, legal structure and operations as it is failing and take all necessary actions beforehand to make such measures feasible. Measures are taken before hand so that banks and authorities are ready for the worst.

# Thank you!



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FINANCIAL STABILITY AUTHORITY