

Amsterdam Center for
Law and Economics

Bank Recovery Under Pillar II

Conference Report

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Bank Recovery under Pillar II

Academic and Policy Workshop

Program

Friday, 20 June 2025 | *11:45 – 17:15 CEST*

Location | *De Nederlandsche Bank – Frederiksplein 61, 1017 XL Amsterdam*

11:45 – 12:45	*Registration & Light Lunch*	
12:45 – 13:00	***Welcome Address*** ***Klaas Knot*** *(DNB)*	
	Academic presentations	
	Chair: ***Edoardo D. Martino*** *(University of Amsterdam)*	
13:00 – 14:10	***Session I***	
	Financial Resilience as Flood Containment	Does regulatory and supervisory independence affect financial stability?
	Enrico C. Perotti (University of Amsterdam & DNB)	**Nicolò Fraccaroli** (Brown University & World Bank), Rhiannon Sowerbutts and Andrew Whitworth (Bank of England)
14:20 – 15:30	***Session II***	
	Proposals for Reforming the Lender of Last Resort: Implementation and Impact	Where Collateral Sleeps
	Marco Cipriani, Thomas M. Eisenbach, and Matt Plosser (Federal Reserve)	Gary Gorton (Yale University), **Chase Ross** and Sharon Ross (Federal Reserve)
	Policy Panel – Pillar II & bank recovery: policy options	
	Chair: ***Steven Maijoor*** *(DNB)*	
15:45 – 17:00	***Panelists***	
	Karen Braun-Munzinger (SRB) Andrea Enria (BoE)	Charles Goodhart (LSE) Elizabeth McCaul (Dunehillcrest)

1. Introduction

For anyone with even a general interest in the current financial and economic landscape, one fact stands out: bank failures are not distant episodes preserved in memory or textbooks, but tangible events that warrant sustained attention from policymakers and academics alike. The banking crises of 2023 illustrated that once a bank's vulnerabilities become publicly acknowledged, its prospects for survival diminish swiftly. In contrast, resilience and recovery mechanisms, designed to contain the damage that so often appears unavoidable, are far less established in practice. These instruments remain underexamined and underutilised, thereby weakening the credibility of the broader financial stability framework.

For this reason, on June 20th a policy and academic workshop was convened on the sixteenth floor of the newly renovated headquarters of De Nederlandsche Bank (DNB). The event was jointly organised by the and DNB and the University of Amsterdam's Center for Law and Economics (ACLE) and Finance Research Group, under the coordination, of Dr. Edoardo Martino, Assistant Professor at ACLE, and Prof. Enrico Perotti, Professor at the Amsterdam Business School (ABS) and Senior Adviser on Financial Stability at DNB. The event brought together leading international scholars and policymakers to engage in critical discussion on the recent research developments concerning bank resiliance and recovery. The workshop provided a unique interdisciplinary forum to discuss regulatory innovations and to examine the emerging challenges facing the banking system in an increasingly complex macro-financial environment.

A central theme of the conference was the evolving role of Pillar II within the prudential regulatory framework. Particular attention was given to whether supervisors should be equipped with broader powers and tools to address the vulnerabilities of undercapitalized banks within resilience and recovery frameworks. Returning to the earlier example, measures that could have supported resilience during the failures of Credit Suisse and Silicon Valley Bank were, for various reasons, overlooked—effectively forfeiting an opportunity to preserve stability. Discussions in the workshop covered a range of pressing issues, including novel approaches to bank recovery, the strategic use of collateral prepositioning, and the institutional determinants of effective prudential regulation, such as the degree of supervisory independence. These topics were explored with both

analytical depth and policy relevance, reflecting the ongoing dialogue between academic research and practical regulatory design.

In his introductory address, Klaas Knot (DNB President) underscored the importance of robust capital buffers in ensuring financial resilience. Knot also cautioned against conflating regulatory simplification with deregulation, emphasizing the need for streamlined yet effective oversight frameworks. The academic program then proceeded with presentations from four distinguished researchers, each contributing recent work at the intersection of financial regulation and stability. Following that, a behind-closed-doors policy panel was conducted.

The first presentation was delivered by Professor Enrico Perotti (University of Amsterdam), who examined policy tools that can complement capital buffers when these prove insufficient in mitigating liquidity-driven bank runs. Dr. Niccolò Fraccaroli (World Bank and Brown University) followed with an empirical assessment of the relationship between regulatory and supervisory independence and the stability of financial systems. Dr. Marco Cipriani (Federal Reserve Bank of New York) offered a critical analysis of the G30's recent proposals to reform lender-of-last-resort mechanisms, particularly in relation to collateral prepositioning at the central bank's discount window. Lastly, Dr. Chase Ross (Federal Reserve Bank) presented findings on how the placement of prepositioned collateral plays a pivotal role in influencing systemic financial stability.

A concise summary of all papers discussed and remarks made by the attendees of the conference is presented below, followed by some concluding remarks.

2. Financial Resilience As Flood Containment – Perotti (2025)

Prof. Perotti presented the first paper, which aimed at framing the discussion on recovery and resilience. Perotti argued that financial stability should balance ex-ante solidity, in the form of capital buffers, with ex-post resilience, the capacity to respond once such buffers are breached. Using the analogy of dykes against floods, he framed prudential requirements as dyke solidity, bank distress as overflow and regulatory intervention as flood-containment measures.

Perotti illustrated the imbalance in tool usage with the March 2023 bank runs, which exposed supervisory hesitation despite available Pillar II powers. Supervisors delayed action on the likely-to-fail institutions out of fear that intervention could trigger self-fulfilling runs or due to uncertainty over their legal mandate, creating an intervention gap where viable banks drifted into deeper distress, also known as zombie behaviour. This intervention gap undermines the credibility of going-concern tools and increases losses when resolution becomes inevitable, since markets and depositors come to expect that supervisors will refrain from activating recovery instruments until it is too late. As a result, contingent measures are not viewed as credible stabilisers. The delay allows problems to fester and ultimately leads to larger outflows and more disorderly failures.

Dyke Analogy for Bank Distress

In Perotti's central analogy, a dyke facing overflow mirrors a leveraged bank under stress:

Dyke Flow Analogy	*Distressed Bank Analogy*
Occasional overflow.	Monitorable early deposit outflows.
Accelerating overflow.	Eroding confidence and escalating withdrawals.
Uncontrollable overflow.	Insolvency and bailout.

The key engineering parallels Perotti described included:

Dyke Structure Analogy	*Distressed Bank Analogy*
Steeper backwalls which accellerate destructive pull.	Fragile asset quality and liquidity mismatch.
Stepped spillways disrupting pull through turbulence.	Tools that break self-reinforcing withdrawals.
Seepage through the base, requiring effective discharge capacity.	Liquidity mismatches, requiring liquidity management, pre-positioned collateral, and convertible capital instruments.

Perotti distinguished between tools for structural solidity (e.g., leverage limits, quality capital, pre-planned collateral or AT1 conversion) and active resilience (e.g., redemption charges, contingent CoCo conversion, targeted central bank refinancing).

Perotti particularly emphasized redemption charges, which are designed to contain run incentives by imposing a temporary cost on withdrawals during bank distress. By raising the price of early exit, they disrupt the self-reinforcing dynamics of outflows, buy time for supervisory intervention, and help shift the depositor narrative away from panic towards recovery options. Unlike payout suspensions, also known as gates, charges preserve liquidity access while acting as a pseudo bail-in mechanism that stabilises funding without an outright freeze.

Outflow Dynamics and Run Containment

Maintaining theovertopping of a dyke parallel, Perotti described runs as developing in stages. In the initial phase, occasional overflow corresponds to withdrawals by risk-averse or sophisticated depositors reacting to early signs of weakness. If unattended, the flow accelerates along the backwall, gradually eroding its structure, just as mounting strategic uncertainty in banking triggers an escalation phase where even depositors without

immediate liquidity needs rush to withdraw simply because they expect others to do so. Containment requires intervening before this process becomes uncontrollable. Redemption charges, already described in detail above, play the role of emergency measures such as sandbags or stepped spillways, designed to disrupt the self-reinforcing pull of outflows. By imposing a temporary cost on withdrawals, they slow the pace of escalation, buy time for supervisors to organise recovery, and crucially maintain access to liquidity while shifting expectations back toward stabilisation.

Conclusion

Perotti's message is ultimately a practical one: strong capital is not enough if vulnerabilities are left unchecked. What matters for resilience is the ability to step in early, with credible recovery tools that can be triggered quickly and slow the momentum of outflows. By doing so, supervisors can protect the deposit base and preserve confidence before problems spiral into full-blown resolution.

3. Does Regulatory and Supervisory Independence Affect Financial Stability? – Fraccaroli et al. (2025)

Dr. Fraccaroli delivered the second presentation of the workshop, and discussed whether greater independence of regulators and supervisors enhances financial stability. This question is central to the workhop's focus on resilience, since the credibility and, perhaps more importantly, autonomy of supervisory action determines whether shocks are contained early or allowed to escalate into systemic crises.

He began by noting that since the global financial crisis, regulators have been granted more autonomy, yet political interference remains common and evidence on its effectiveness scarce. His work introduces a new index of Regulatory and Supervisory Independence (RSI) which covers 98 countries from 1999–2019, focusing on three dimensions: institutional, regulatory, and budgetary independence.

Measuring Independence

Fraccaroli explained how the index isolates legal provisions insulating regulators from political influence, distinguishing it from existing measures that mix up independence with accountability or central bank autonomy. His index captures who appoints and removes supervisors, their term length, the need for government approval in issuing secondary legislation, and budgetary control.

Main Findings

Using bank-level data for over 2,500 banks and hierarchical linear modelling, Fraccaroli showed that greater independence is robustly associated with improved financial stability, measured by lower non-performing loans (NPLs). The relationship holds across alternative measures such as bank z-scores and return-on-assets volatility, and remains significant under instrumental variables strategies to mitigate endogeneity.

Compared with previous indices, his measure alone displays a consistent, statistically significant link with financial stability outcomes.

Heterogeneity and Interactions

He further examined whether the benefits of independence depend on bank or country characteristics. Results suggest the stabilising effect of RSI

does not vary with bank size, ownership structure or political connections, and is consistent across advanced and emerging economies.

However, the supervisory architecture matters: independence is more effective when the supervisor is the central bank, while excessive concentration of supervisory powers can backfire, risking regulatory capture. Importantly, RSI remains associated with lower NPLs even during systemic crises, though evidence is somewhat weaker than in normal times.

Conclusion

Fraccaroli's findings from this paper are crystal clear: insulating supervisors from political pressures strengthens banking stability. His findings support reforms enhancing de jure independence, though he cautioned that the risk of regulatory capture by the private sector remains. Overall, his presentation emphasised that effective governance of supervisory agencies is a key aspect of financial stability.

A Preamble on Pre-Positioning

The March 2023 bank runs underscored a simple but costly lesson: collateral is only useful in a crisis if it is immediately available to the central bank. This is a point that underscored both of the following presentations and is thus explained as a preamble in this section Without pre-positioning, banks face delays in valuing and transferring assets, losing precious time as outflows accelerate and thus significantly compromising resiliance. By pledging assets in advance, banks insure themselves against the risk of being unable to access central bank liquidity when it is most needed, thereby reducing fire-sale pressures and curbing depositor incentives to run.

4. Where Collateral Sleeps – Gorton et al. (2024)

Dr. Ross in the third presentation of the conference examined the role of collateral pre-positioning in enhancing resilience during runs. By ensuring that usable collateral is immediately available at the central bank, pre-positioning strengthens resilience against sudden liquidity shocks and facilitates faster recovery once stability is restored.

He began with Bagehot's dictum that central banks should lend freely against good collateral to solvent institutions, but stressed that collateral is only useful if it is in the right place. With runs occurring ever faster, as shown in March 2023, banks unable to mobilise assets quickly risk fail regardless of balance sheet strength. Ross highlights how pre-positioning is fundamental to a speedy access to central bank lending. Valuing collateral at the Fed can otherwise take weeks, and moving securities through custodians or the Federal Home Loan Banks creates delays. Yet pre-positioning is not costless. It locks up assets that could otherwise be deployed in private markets, and, crucially, it carries stigma. Banks fear that signalling preparedness to borrow from the discount window will be istelf read as a sign of weakness, making stigma a central issue in the pre-positioning of collateral at the Federal Reserve's discount window ability to grant immediate access to liquidity, a form of run insurance.

Determinants of Pre-Positioning

Using a model and two new datasets - regulatory reports for large US and foreign banks, and manually collected data from over 25,000 SEC filings - Ross analysed what drives pre-positioning. A simple two-period model frames banks' decision as a portfolio choice problem: on the one hand, the costs of pre-positioning - in the form of haircuts, administrative burden,

and stigma; on the other hand, the insurance value it provides. Optimizing this trade-off, banks optimally decide whether and how much collateral to lodge in advance. The model yielded the following outcome: banks pre-position more in bad times and when they hold higher levels of uninsured deposits. They tend to use assets with the lowest value in alternative collateral markets, such as repo, and their choices respond quickly to changes in haircuts and spreads.

Findings

In the empirical analysis of the paper the aforementioned model is validated: banks' pre-positioning is deliberate and shaped by incentives. Uninsured deposits in particular are a strong driver, with higher levels significantly increasing pre-positioning capacity ratios. The funadamental limiting role of stigma in determining prepositioning behaviour is, moreover, elucidated through the distiction of two channels. Firstly, borrowing stigma was presented as the concern that using the discount window signals weakness to markets and counterparties, discouraging banks from borrowing even when eligible. Secondly, pre-positioning stigma was presented the concern that simply disclosing pre-positioned collateral signals that a bank may anticipate liquidity trouble, leading to negative equity market reactions when such disclosures appear in filings.

Ross showed that both stigmas reduce banks' willingness to pre-position, but in different ways. Larger banks, more sensitive to reputation, often avoid pre-positioning altogether. By contrast, some riskier banks actively disclose their pre-positioning to markets, using it as a signalling device, or a way to show regulators and investors that they are preparing responsibly, even if the stigma effect on returns is negative. In this sense, pre-positioning functions both as run insurance and as a potential credibility mechanism.

These dynamics are fundamental for resilience, since the effectiveness of pre-positioning in containing runs depends not only on the collateral posted but also on whether stigma allows it to serve as a credible backstop when stress arises in the first place.

Conclusion

Ross concluded that collateral pre-positioning is a crucial but underappreciated dimension of financial resilience. Many banks "buy insurance" by pre-positioning, though not always at sufficient scale and often keep it opaque, hindering financial stability.

5. Discount Window Prepositioning – Cipriani et al. (Forthcoming)

The final presentation was given by Cipriani, in which he examined banks' collateral pre-positioning at the Federal Reserve's discount window in relation to the G30's January 2024 proposal, which recommends that banks be required to pre-position at least enough collateral at the central bank to cover all runnable liabilities not backed by reserves. As bank runs have become faster and more destabilising, exemplified by the crisis of March 2023, banks should be able to access to central bank liquidity by borrowing immediately, avoiding the delays of pledging collateral during stress.

Data and Methodology

The analysis combined confidential data on collateral pre-positioning (discount window and Bank Term Funding Program), call report data for about 4,500 U.S. banks, and haircut schedules. Cirpiani estimated the lendable value of banks' assets (market value after haircut, applying methods for loans developed by Hirtle and Plosser (2024)) and compared it with runnable liabilities (all liabilities minus insured deposits, subordinated debt, and long-maturity obligations).

Findings

Cipriani reported that around 70% of banks pre-position nothing at the discount window. Only 10% pre-position enough to cover all runnable liabilities. On average, banks' lendable value is 1.4 times their runnable liabilities, suggesting coverage is theoretically possible. However, about 1% of bank, representing 25–26% of total U.S. bank assets, lack sufficient lendable value.

He noted that these results are sensitive to stress conditions. Scenario analyses showed that a downgrade to secondary credit (implying higher haircuts) or a 40% fall in reserves materially reduces coverage capacity. Still, during the March 2023 runs, pre-positioning equal to 30% of runnable liabilities would have sufficed to meet 95% of observed outflows.

Conclusion

Cipriani concluded that collateral pre-positioning is a critical yet underutilised element of banks' access to central bank liquidity. Most banks already hold enough assets in principle, but few operationalise them

through pre-positioning. While the G30 proposal would guarantee full coverage, he suggested that more moderate, well-targeted requirements would better enhance resilience while avoiding excessive burdens. In this sense, reforming pre-positioning practices has the potential to strengthen the system's capacity for both resilience and recovery, by ensuring banks can weather sudden liquidity shocks without resorting to fire sales and by preserving confidence long enough for supervisory tools to be deployed.

6. Concluding Remarks

The conference highlighted the complex and evolving landscape of financial stability, where theory and practice must continuously adapt to new risks. Across the four presentations, a number of recurring themes emerged.

First, effective crisis management requires a balanced framework that combines preventive resilience - through adequate buffers safeguards - with credible ex-post mechanisms that can be activated without delay. Second, independence in governance structures play a critical role in ensuring that supervisors are able to exercise their mandates effectively and without undue interference, while still remaining accountable to broader public interests. Third, the design and placement of collateral in relation to central bank facilities has proven to be a decisive factor in shaping the speed and effectiveness of lender-of-last-resort responses, especially in an era when banking runs can unfold with unprecedented speed.

The discussions underscored the cleavage between the availability of tools on paper and their practical usability in moments of stress. Legal uncertainty, political pressures, and reputational considerations often constrain action precisely when it is most needed. Bridging this implementation gap will be essential to building a more resilient financial system. At the same time, the debate around collateral pre-positioning reflects the ongoing search for regulatory approaches that balance stability with operational feasibility.

Taken together, the conference reaffirmed the importance of continuing dialogue between academics and policymakers. Financial stability is not a static objective but a constantly moving target, shaped by innovation, globalization, and crisis dynamics. Above all, resilience was reaffirmed to be the core of financial stability: the capacity of institutions and frameworks to absorb shocks, promptly adapt under stress, and recover swiftly.By integrating empirical evidence with institutional reform proposals, the event contributed to a richer understanding of how regulatory frameworks can evolve to safeguard stability in the years ahead.

Reference List

Cipriani, M., Eisenbach, T.M., Polosser, M.C. (Forthcoming). Discount Window Prepositioning. *Federal Reserve Bank of New York.*

Fraccaroli, N., Sowerbutts, R., & Whitworth, A. (2024). Does regulatory and supervisory independence affect financial stability? *Journal of Banking & Finance*, 107318. https://doi.org/10.1016/j.jbankfin.2024.107318

Gorton, G. B., Ross, C. P., & Ross, S. (2025). Where Collateral Sleeps. https://doi.org/10.2139/ssrn.4923083

Perotti, E (2024), Policy Insight 136: Financial resilience as flood containment, *CEPR Press, Paris & London.* https://cepr.org/publications/policy-insight-136-financial-resilience-flood-containment