

Non Bank Financial Intermediation and Financial Stability

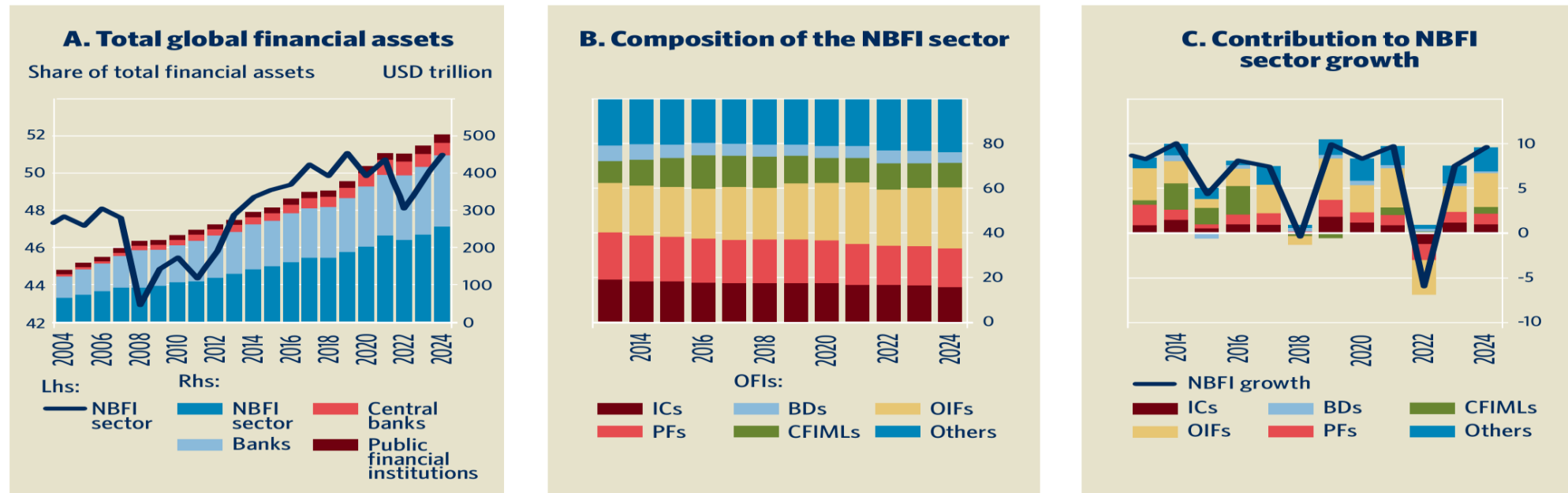
A perfect storm in the making?

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Former Chair, Financial Stability Board

Post-GFC: Rapid Growth of NBFI

FIGURE 1. Panel A: NBFI as a share of total global financial assets increased; Panel B: Composition of the NBFI sector has shifted; Panel C: OIFs were the largest contributor to the increase of NBFI assets in 2024



Source: FSB 2025d.

Note: BDs = broker-dealers; CFIMs = captive financial institutions and money lenders; ICs = insurance corporations; LHS = left-hand side; OIFs = other financial intermediaries; PFs = pension funds; RHS = right-hand side.

Rapid Growth of NBFI: Benefits and Concerns

Benefits

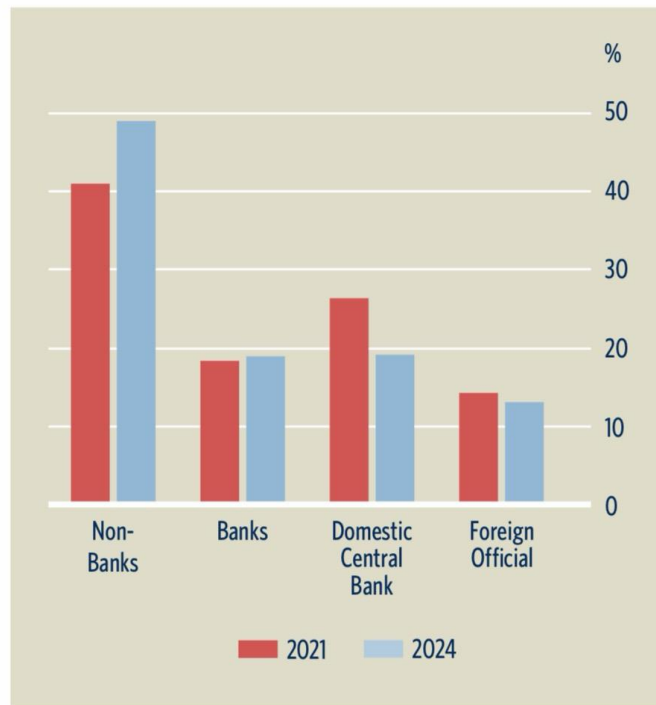
- Broadening Access to Finance
- Diversifying Funding Sources
- Stronger Competition
- Improved Pricing
- Enhanced Financial Services
- Product Innovation
- Risk Sharing
 - Capacity to absorb shocks

Financial Stability Concerns

- Liquidity Mismatches
 - Illiquid assets/runnable liabilities
- Hidden Leverage
 - Not just hedge funds
- Margin and Collateral Calls
 - Amplification of liquidity demand
- Signs of growing vulnerabilities
 - Disruptions to core bond markets
 - Bank funding of private credit

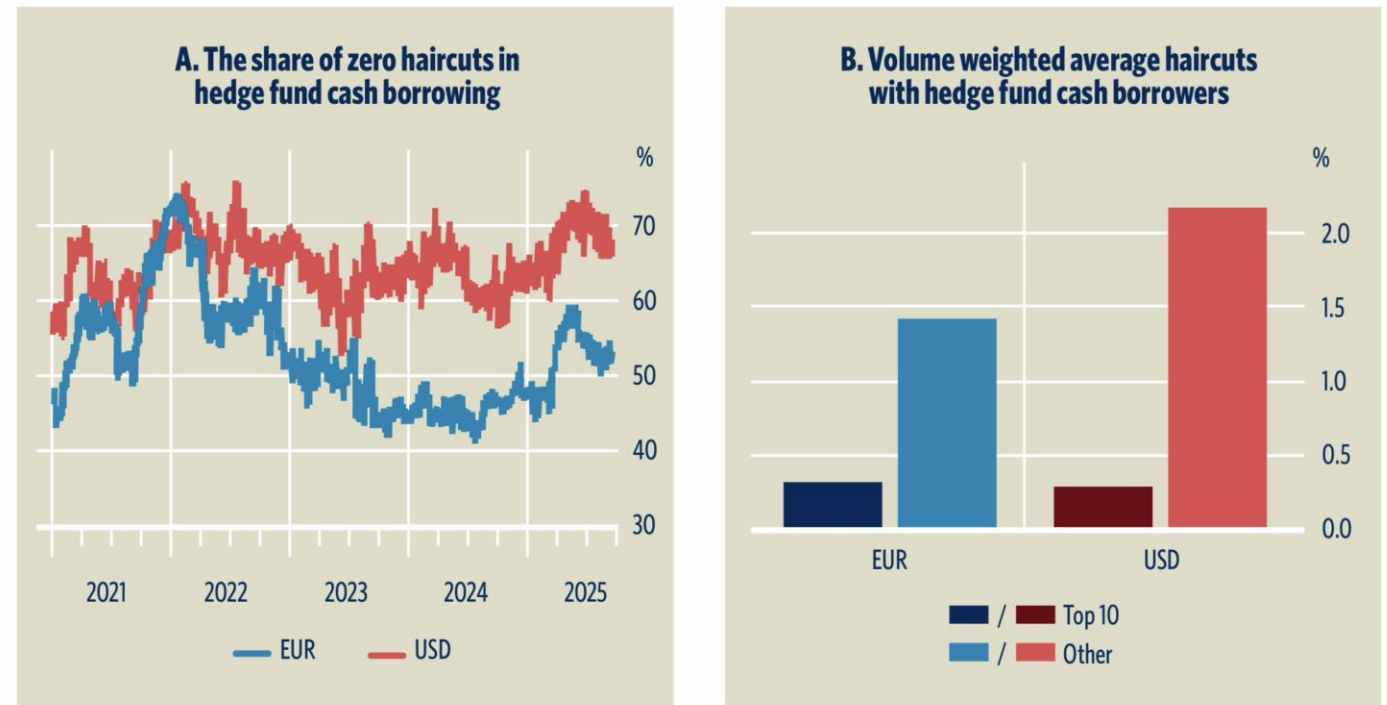
Growing Vulnerabilities in Core Bond Markets

FIGURE 4. Holders of advanced economy government debt (% of holdings)



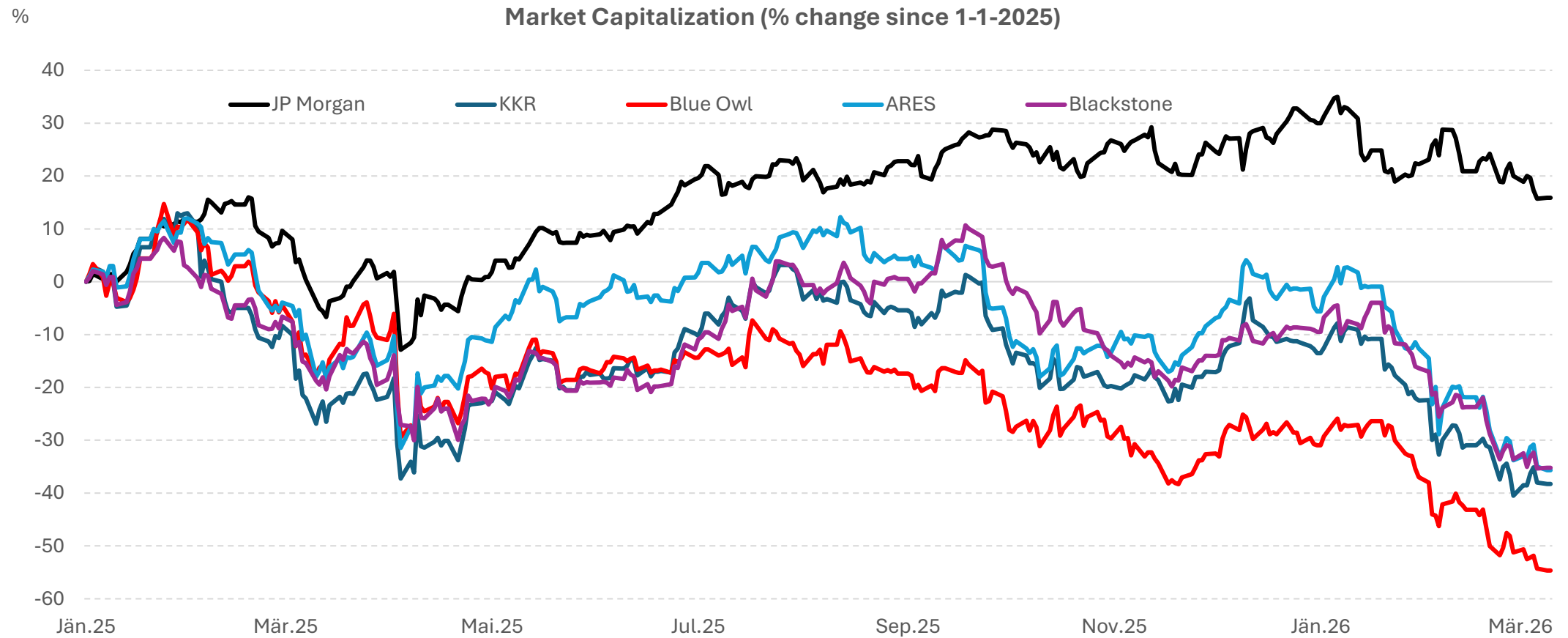
Source: Arslanalp and Tsuda 2014, updated.

FIGURE 6. Low haircuts are concentrated among large hedge funds



Source: Hernández de Cos 2025.

Private Credit: Canary in the Coal Mine?



NBFI is Quite a Heterogeneous Space

TABLE 1: Conceptual framing and examples of systemic risk related to NBFI

	SOURCES OF SYSTEMIC RISK		
Manifestations	Within NBFI		Spilling over to the main system through interconnections
	Leverage (defaults)	Liquidity (shortfalls)	
Channels of systemic impact	Large NBFI defaults, leading to credit losses at banks.	- IFs' liquidity needs. - HFs' PFs, ICs, and other NBFIs' margin and collateral calls.	- Losses at banks and public finance impact. - Market dysfunction.
Past examples	- Shadow banking. - Greensill, Archegos, First Brand, other NFCs, some NBFCs.	- IFs (GFC, March 2020). - PFs (UK LDI crisis). - HFs (various). - Margins (March 2020, March 2022)	- Shadow banking (GFC). - Various core market dysfunctions (GFC, March 2020, March 2022).
Potential future examples	- Losses of ICs, PFs, and NBFCs. - Large NFC losses.	- Large redemptions and liquidity shortfalls (IFs). - Margins, collateral calls (HFs, PFs, ICs).	- Private credit, other large defaults leading to credit losses at banks. - Liquidity needs of IFs, HFs, ICs, and PFs.

Note: HFs = hedge funds; ICs = insurance corporations; IFs = investment funds; NBFCs = nonbank financial corporations; NFCs = nonfinancial corporations; PFs = pension funds.

FSB Roadmap to Strengthen NBFI Resilience

Liquidity Management Practices

- Money Market Fund Resilience (2021)
- Liquidity in Open Ended Funds (2023)

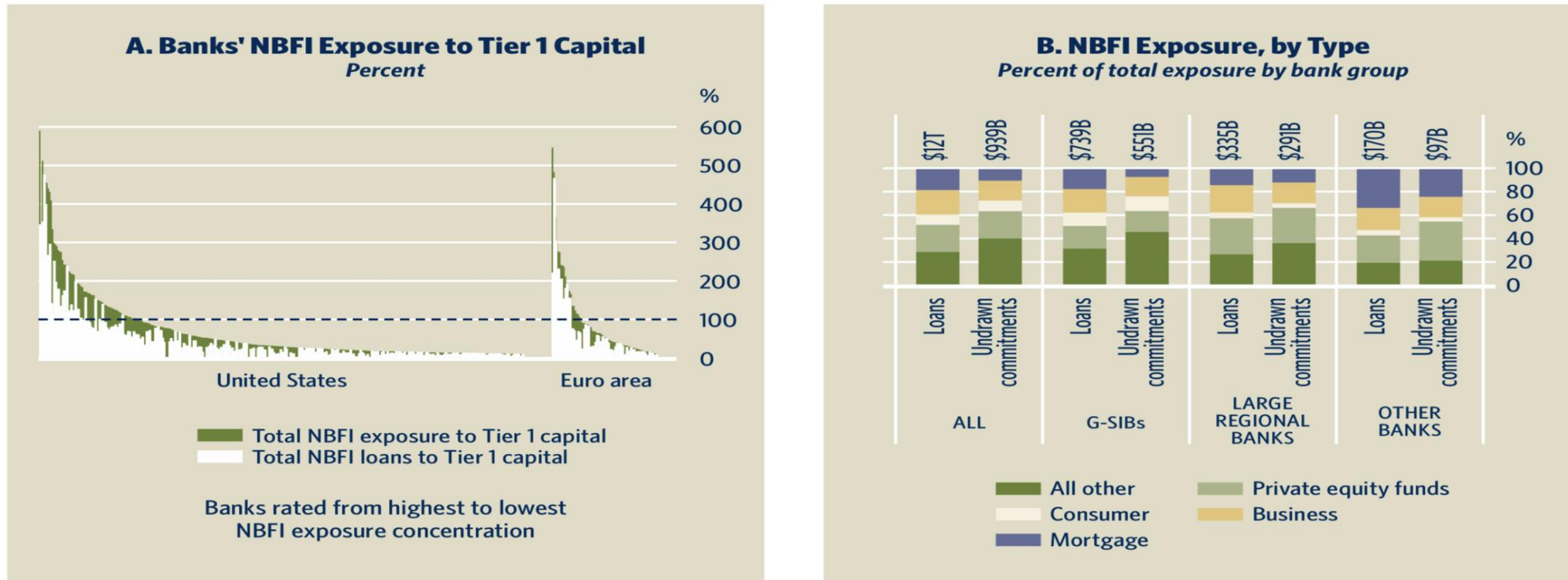
Cross-Cutting Issues

- Liquidity Preparedness for Margin and Collateral Calls (2024)
- Mitigating NBFI Leverage (2025)
- Non-Bank Data Challenges (2025)

➤ Importantly: Little Focus on
Interaction with Banks!

Bank Exposure to NBFIs

FIGURE 7. Bank Exposure to Nonbank Financial Intermediaries



Source: IMF 2025a.

Banks and NBFI: A Rather Symbiotic Relation

TABLE 2: Three broad NBFI forms: examples, main drivers, and sources of systemic risk

Form	Parallel	Substitute	Transformation
<i>Examples</i>	PF and IC traditional products (e.g., pensions, annuities).	IFs (e.g., MMFs investing mainly in sovereign securities).	Private credit, shadow banking. HFs' basis trade.
<i>Likely most important driver(s)</i>	Overall economic and financial conditions.	Technology, financial conditions, and regulations.	Regulations and supervisory practices, technology.
<i>Main type of systemic risk</i>	Leverage (underfunding) to banks, public finance. Sometimes liquidity.	Liquidity, through interconnections to core bond markets.	Interconnections, notably, to banks, via leverage and liquidity.

Source: Based on Acharya, Cetorelli, and Tuckman (2026a; 2026b).

Note: HFs = hedge funds; IC = insurance corporation; IFs = investment funds; MMFs = money market funds; PF = pension fund.

Risk Transformation rather than Risk Migration

(Acharya et al, 2026)

- Traditional thinking on NBFIs dominated by Substitute Form
 - Low-for-long saving rates
 - Waterbed effect of Basel 3
- Bank credit lines rather suggest Transformation Form
 - Credit risk warehoused by NBFIs
 - ‘Coarse’ capital requirements
 - Liquidity risk remains with the bank since banks enjoy
 - Deposit funding advantage
 - Access to central bank facilities

A Comprehensive Policy Agenda

TABLE 3: Policy Responses to Reduce and Manage NBFi-Related Systemic Risks

	Regulatory and Institutional		Other institutional and policy issues
	Liquidity spillovers to core bond and other funding markets	Solvency spillovers to main banking systems	
Preventive	- Have congruent regulations. - Conduct system-wise stress tests, analyzing potential liquidity spillovers. - Improve institutional infrastructure (e.g., CCPs). - Limit leverage by imposing minimum (possibly procyclically-adjusted) haircuts and initial margins. - Ensure all regulatory agencies consider and address systemic risks.	- Maintain counterparty and large exposure limits on banks. - Maintain strict supervision of banks, prime brokers, ICs, PFs. - Conduct system-wise stress tests, analyzing potential solvency spillovers. - Increase the cost of banks' securities financing to some NBFi-types.	- Improve data quality and quantity, ensure greater access by supervisory agencies, disclose more to enhance market discipline. - Monetary policy and fiscal policy to internalize the risk-taking and buildup of vulnerabilities in NBFi.
Remedial	- Avoid open-ended asset purchases. - Ensure effective, broadly accessible (contingent or standing) international liquidity facilities and swap lines for major currencies. - Adopt (contingent) liquidity facilities for some NBFi-types with concurrent tight regulation and oversight.	Greater burden sharing between the private and public sectors in recovery and resolution.	- Communicate clearly when using monetary tools for financial stability. - Deal with monetary and financial stability policy conflicts by careful design of respective programs and facilities.

Notes: green is continuation, i.e., maintaining existing policy and effort; yellow is intensification; red is innovation, i.e., introducing a new policy or action(s); CCPs = central clearing counterparties; ICs = insurance corporations; PFs = pension funds.