

NBFI macroprudential challenges

The Chair opened the discussion by indicating that it should move beyond non-bank financial intermediation (NBFI) in isolation to understand the integral role of NBFI within the broader financial sector. Potential interactions with NBFI should be identified to prevent it from becoming a narrowly defined area of expertise, divorced from broader systemic considerations.

Following the recent significant market movements, the message is cautiously positive, although this optimism will need to be tested in the coming days. It is possible that a financial player is sitting on huge losses. However, there have been limited redemptions and minimal use of liquidity management tools. There are positive inflows into Europe, supported by favourable exchange rate dynamics and European stock exchanges are performing well, in contrast to the challenges on Wall Street. The euro is strengthening, as are other European currencies.

There is a potential for risk propagation within the increasingly interconnected global financial system. A system-wide approach can address the limitations of segregated discussions focusing solely on banks or non-banks, where participants often lack cross-sectoral awareness that can aid in identifying the propagation of risk.

1. A system-wide approach to macroprudential policy

1.1 Gaining a comprehensive view of the financial ecosystem

1.1.1 Understanding NBFI exposures

An industry representative explained the multi-faceted nature of their firm's involvement with NBFI, highlighting its role not only as a wealth management and investment bank, but also as a global asset manager. In addition, NBFIs are funding providers for the firm, as well as clients. This interconnectedness underlines the firm's strong interest in financial stability and the appropriate management of risks arising from NBFI.

The expansion of NBFIs is an evolution of the financial system, and there are shifts in functional roles previously dominated by banks. Since 2010, there has been a 700% growth in private credit markets to more than 2.5 trillion. While this diversification of financial supply enhances resilience and supports economic growth, the expansion has simultaneously increased systemic linkages and introduced evolving financial risks.

The NBFI sector is very broad. It includes pension funds, insurers, and asset managers, as well as other types of players that are subject to various levels of regulation, both in terms of entity and activity and with different risk profiles. A tailored approach is needed, encompassing both prudential supervision and bank risk management, with a focus on a better understanding of systemic risks.

1.1.2 Market turmoil in August 2024 highlights complex NBFI-banks links

The Chair highlighted recent market movements, specifically fluctuations in German bond yields and the unwinding of US dollar-Japanese yen carry trades. A Central Bank official referred to the August turbulence and attributed it to a confluence of factors, including the unwinding of the US dollar-Japanese yen trade and the subsequent margin calls on equity derivatives positions held by NBFIs. Ample liquidity within NBFIs mitigated the immediate turbulence, so the episode was short-lived, but it nonetheless served as a sharp reminder of the need for a deep understanding of market structures, particularly the complex linkages between NBFIs and the banking sector.

Against this background, the Bank of Japan is conducting macro stress tests to assess the financial stability implications of NBFI dynamics and is actively working to incorporate these dynamics into its existing macro stress tests. For example, a severe scenario has been set up to determine what happens when there are large, simultaneous fund redemptions.

1.1.3 The resilience of European money market funds (MMFs) and the potential of tokenisation

An industry representative described the last few days as remarkably balanced, despite the significant upheaval elsewhere. European MMFs total €1.2-1.3 trillion. They have demonstrated their resilience through several unexpected stress tests in recent years, including the COVID-19 pandemic, the Russia-Ukraine conflict and the UK gilt market crisis. This stability can be attributed to the well-defined regulations on liquidity, diversification and quality requirements that have been implemented over the past nine years.

Tokenisation could further enhance the stability of MMFs and thus the stability of the financial system as a whole. In the UK liability-driven investment (LDI) situation, money was moving out of LDI accounts of MMFs, going to a clearing house and returning to MMFs. Tokenised funds would have significantly reduced the risk of disruption from this episode. However, despite the dramatic rise in interest rates, the situation was relatively well controlled. Overall, existing regulations are effective in maintaining fund stability.

1.1.4 Differences within the investment funds landscape are vital for effective macroprudential policies

An official explained that while corporate bond exchange-traded funds (ETFs) can stabilise markets during bank stress, mutual fund outflows may amplify financial vulnerabilities.

Recent BIS research examining the joint manifestation of financial stress at banks and investment funds reveals a nuanced relationship in which ETFs specialised in corporate bonds can act as stabilising forces during periods of high market pressure on banks, due to their business model, where in stressed conditions, authorized participants step in to limit discrepancies between the share price of the ETFs

and the value of their underlying portfolios. Furthermore – in contrast to MFs – it is standard practice to redeem bond ETF shares in exchange for securities, rather than cash. Conversely, outflows from corporate bond mutual funds can contribute to tightening market conditions when banks are already facing challenges. Recognising the differences within the investment fund landscape is crucial to informing effective macroprudential policy. Some of the characteristics of ETFs allow them to contribute to the mitigation of first-mover advantage and liquidity mismatch problems.

Research on private credit, which has experienced tremendous growth, has shown a growing trend towards attracting retail investors, which, while potentially beneficial in terms of matching assets and liabilities, also introduces new liquidity mismatches. Private credit funds have increased leverage and broadened their investor base towards retail investors, creating potential vulnerabilities.

1.2 Regulated and unregulated NBFIs

1.2.1 For regulated NBFIs, effective risk management starts with regulatory compliance

An industry representative emphasised that for regulated NBFIs with global reach that include legal entities in multiple jurisdictions, diverse asset investments and geographically dispersed investment activities, risk management begins with compliance. This gives regulators access to comprehensive information on the activities and positions of regulated entities across all operating regions. Enhanced supervision of unregulated NBFIs to address potential vulnerabilities and the implementation of system-wide exploratory scenarios, such as those undertaken by the Bank of England, are important to optimise risk mitigation within the financial system and protect customers.

Due to regulation, reports required for regulated NBFIs such as regulated asset management companies as well as regulated investment funds are produced for regulators, beginning with securities regulators, but also extending to national central banks within the eurozone. These security regulators receive information regarding positions, including on derivative over-the-counter (OTC) markets, specifying whether transactions are cleared or non-cleared. This process facilitates risk management while simultaneously providing regulators with access to comprehensive information concerning all activities undertaken by the organisation. Such transparency is vital not only for the company but also ultimately benefits clients through compliance and responsible behaviour.

1.2.2 Prioritising regulation and supervision of unregulated NBFIs and system-wide stress testing

A further consideration is that regulation carries the potential for sanctions. Regulators possess the authority to sanction regulated entities. The current concerns with NBFIs centre on the risk of concentration. To improve systemic stability, there are two complementary approaches. Regulators or policymakers could focus on enhancing understanding of the non-regulated NBFIs segments, thereby gaining insight into previously unknown players and activities. Secondly, mirroring the approach adopted by the Bank of England, a system-wide exploratory scenario can be implemented to comprehensively capture

overall market activity. Both strategies should complement each other in order to optimise risk reduction within the system, protecting not only the industry and clients from potential vulnerabilities.

1.2.3 The need for international oversight

An official highlighted an often overlooked aspect of the financial landscape is the substantial volume of FX swaps currently outstanding globally, estimated at USD 100 trillion. The largest and fastest-growing component of this market is the segment involving other financial institutions, which has tripled in size since 2009; these FX swaps are essential for facilitating cross-border hedging activities and providing funding mechanisms but often entail a mismatch in hedging maturities. They can also be used for borrowing purposes. This huge market shows extensive involvement of NBFIs and operates across international borders, precluding the possibility of isolated national supervision or monitoring.

US broker-dealers, together with their parent banks, play an important role as a major source of funding for hedge funds through repo markets and for internationally active asset managers and pension funds through FX swaps. Banks also contribute to this dynamic by extending lines of credit to hedge funds, thereby enabling the rapid reallocation of capital globally. The events of August last year provided a telling example of how even minor news stories can trigger significant market movements, although these movements were subsequently corrected within 24 hours. This episode highlighted the inherently international nature of these activities.

1.3 An integrated approach

1.3.1 Enhancing financial stability through system-side exercises

An industry representative stated that system-wide risk assessments help to understand second-order effects in market developments that are important for financial stability. Regulatory interventions should be targeted at the sources of identified risks rather than channelled through banks. There is a role for a targeted macroprudential approach to complement firm-specific risk assessments. The global nature of these risks should be emphasised, requiring international cooperation and coordination to address them effectively.

An official reminded the audience of the need for an integrated approach to understanding financial stability. This analysis should go beyond simply looking at banks and non-banks together. There should be a deeper understanding of the evolving linkages between different types of non-bank entities and their interactions with traditional banking institutions. The term 'NBFI' itself may be increasingly unhelpful, as the inherent heterogeneity within the sector, for example in terms of balance sheets and business models, often leads to ambiguous discussions. Linkages continue to change rapidly, making the need for a holistic view all the more urgent.

1.3.2 System-wide exploratory scenarios (SWES) and the need for a contingent non-bank repo facility

A Central Bank official reiterated the value of adopting a system-wide perspective to improve the monitoring of non-bank risks. Stress testing should look beyond

individual institutions to whole markets, focusing on how liquidity and leverage interact and combine to cause problems through correlations and concentrations in the market. Achieving this is challenging because it is behaviour that is being tested. The Bank of England's SWES aimed to test market behaviour by avoiding the static approach of typical stress tests, such as looking at the balance sheet and seeing how it would change based on changes in credit risk, for example, while avoiding questions about what institutions do and how those actions affect a market clearing price.

In order to test, rather than assume, the behaviours that would occur, it was necessary to have numerous market participants. The focus was on the most important markets for UK financial stability, so more than 50 entities across the gilt and corporate bond markets participated, including those not directly regulated by the Bank of England or the Financial Conduct Authority (FCA). The exercise simulated a global shock that exceeded any previously observed in terms of speed, breadth and persistence. This allowed an assessment of the risks emanating from non-banks to banks and vice versa and, crucially, how these behaviours combined to affect the gilt and corporate bond markets.

The results, published at the end of last year, indicated greater resilience within the non-bank sector compared with previous assessments, and this finding is supported by recent market stability. However, the exercise also revealed the location of sensitivities, including within repo funding, which have been identified as critical to maintaining the core functionality of the market. Significant discrepancies in market participants' expectations of repo availability and margin calls were uncovered, suggesting areas for industry improvement. For example, some expected margin calls to be nine times higher than they were, indicating that there is still work to be done.

The SWES proved valuable not only for stress testing markets, but also for informing policy development, identifying key data gaps and fostering a deeper understanding of systemic interdependencies.

The underlying assumption that drove the SWES initiative was that the balance between banks and non-banks had fundamentally shifted over the previous decade or more, creating a risk that the existing toolkit, which is primarily focused on providing liquidity to banks, might not be effectively recycled to the non-bank system in times of stress. The SWES confirmed this risk.

The resulting non-bank repo facility is initially available to pension funds, insurers and LDI funds, with applications being accepted from January. This contingent facility is designed to provide liquidity when needed without interfering with market forces; it would be activated in a stress event if repo markets became impaired, allowing participants to access funding without being forced to sell assets, thereby reducing the risk of broader market disruption. Such a backstop is important in a world where liquidity cannot be assumed to be recycled from central banks through banks to non-banks.

Following the UK LDI crisis in late 2022, entity-based leverage limits were introduced for LDI funds, taking advantage of the relatively simple business model and

associated risks to establish a threshold of resilience to gilt movements. More complex business models may not lend themselves as easily to such simple regulatory interventions.

1.3.3 Principles for designing a system-wide interaction of macro and micro policies at national and EU level

A regulator confirmed that a system-wide stress exercise is being developed in Paris, with significant inspiration from the Bank of England's SWES. The intention is to conduct a cooperative system-wide exercise involving banks, asset managers and insurance companies, with dialogue between the authorities and the industry both to design the scenario and to discuss its results.

The exercise is designed as a bottom-up process in which the authorities inject a shock into the financial system and observe how it propagates across different industry participants. This approach aims to identify critical pressure points and comprehensively map the intricate interconnections within the financial landscape.

A key objective is to identify areas where information is missing or incomplete. There are many known unknowns due to a lack of data, and there is fragmentation of data across different European authorities. There is a need for improved sharing mechanisms to facilitate more effective surveillance. There are significant data gaps and relevant information is not being collected, so a method for collecting it is needed.

A key element is the relationship between micro and macro. A dedicated financial stability group was set up to ensure a holistic approach to risk assessment. This team is central to the design of the stress test, drawing on experience from both micro and macro perspectives.

1.3.4 International cooperation

An official emphasised that the issues were fundamentally international in nature and therefore required a robust framework for global cooperation. There has been a significant increase in cross-border claims and liabilities between banks and NBFIs in recent years, particularly for US dollar claims and liabilities. In support of this observation, the Financial Stability Board's (FSB) report on NBFIs points to a corresponding increase in hedge fund exposures at the global level.

The Chair reported that 120-150 million data points are taken into the ESRB every night. Although a significant volume, there are still challenges in terms of data availability and data quality.

2. Balancing reduced reporting burden with need for comprehensive data

2.1 Challenges and stakes

2.1.1 Accessing and managing data

A Central Bank official reported that within Japan there are significant challenges in accessing data, especially for NBFIs operating outside Japan. The Bank of Japan is

seeking to supplement the results of macro stress tests with information from ongoing market intelligence activities. The Bank of England's SWES is impressive, particularly its game-theoretic approach and, crucially, the broad participation of major NBFIs in the exercise. There are considerable difficulties in replicating such a sophisticated system in a global context, but the SWES approach sheds valuable light on how best to address NBFIs issues in the future.

An industry representative suggested that the availability of data is not necessarily lacking but rather requires effective internal management within securities regulators or central banks. While external data sources are plentiful, the ability to process and derive meaningful insights from this information is paramount, so integrating the data with internal tools is essential, as well as standardising data reporting templates among securities regulators and among central banks at worldwide level (to make them fully manageable and useable for data sharing on a cross-sectoral and cross-border basis).

2.1.2 Fill the data gap

A Central Bank official emphasised that while there is extensive data on positions, there is a critical data gap on risk. SWES is designed to fill this gap by working with industry participants. It is the same data that private companies use to assess their risks, so it is not esoteric data that is being asked for. Through the SWES, it was identified that around a third of US basis trading was based on participants in the stress test, prompting further investigation into the potential impact of margin calls on US basis trading on the gilt market. The results showed a significantly larger impact than the same event within the gilt market itself, highlighting the importance of understanding cross-border spillovers and their systemic implications.

2.2 Ways forward

2.2.1 Improving coordination to prevent redundant and costly data requests

An industry representative explained that their organisation receives an abundance of data from a variety of sources. The industry is willing to provide all requested data to the national competent authority, but the expectation is that the information will then be shared with other relevant authorities without duplicating the submission process, particularly where there are repeated requests for the same data in slightly different formats. Such practices are costly, unnecessary and ultimately do not improve the effectiveness of regulatory oversight.

2.2.2 Pragmatic international cooperation to improve data sharing and oversight

A Central Bank official noted that Japan has been proactive in implementing the FSB's recommendations on repo data, providing full access to transactions conducted in Japan when a counterparty is located in its jurisdiction. However, cross-border transactions pose significant difficulties. For example, if a US-based NBFIs conducts a repo transaction using Japanese government bonds as collateral through a subsidiary in Japan, full data transparency is compromised. In such scenarios, while the transaction between the booking entity and the US subsidiary can be fully accessed,

access to data relating to transactions between the US-based NBFIs and a US booking entity is not possible.

Ideally, there would be universal implementation of the FSB recommendations and enhanced information sharing between jurisdictions, but if that is not practical, then a pragmatic approach should be taken. The nature of the data available needs to be understood. Then the public and private sectors, including NBFIs, need to work together.

2.2.3 Enhancing retail investor insight, cross-border data sharing, and reporting

A long-standing request has been for more detailed information on end investors in funds, particularly on the retail side, in order to better anticipate their risk management behaviour. It is hoped that the ongoing review of Undertakings for Collective Investment in Transferable Securities (UCITS) and the Alternative Investment Fund Managers Directive (AIFMD) will streamline reporting requirements through constructive dialogue between industry stakeholders, regulators and central banks. There are concerns about cross-border data sharing between regulators and supervisors, which may require some standardisation of data. This issue has already been discussed by the European Securities and Markets Authority (ESMA) in relation to AIFMD data, as there is a mismatch in the format of data shared at EU level.

2.2.4 The call for new tools

A regulator emphasised that the data issue is fundamentally global in nature and transcends jurisdictional boundaries. While data sharing at the local and European level is generally adequate, challenges remain in terms of data ownership, operational systems and technical issues. International cooperation is crucial, particularly as a large proportion of NBFIs are non-regulated funds domiciled outside Europe and originate in the US. The FSB has a working group to address international cooperation, and at the European level, ESMA and the ESRB are addressing these issues.

Regarding governance, a high-level task force was established by the euro system last year to address NBFIs issues and to propose common measures, including data collection, stress testing and new tools for authorities. A key proposal was a liquidity management tool that could be used ex ante by national authorities in the event of a build-up of liquidity mismatches in a cohort of funds. In addition, ESMA could use the tool across the EU or to complement the actions of national supervisors, and the ESRB would be an advisor.

To move forward, there is a need to reorganise the macroprudential governance framework at the EU level. There are extensive discussions on extending the supervisory powers of ESMA. What is needed is not only tools, but also the right set-up to use these tools efficiently.