

NBFI MACROPRUDENTIAL CHALLENGES



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A system-wide approach to macroprudential policy

In today's interconnected financial landscape, the financial activities that banks and non-banks perform are intricately linked, with each relying on the other for effective functioning. As market structures become increasingly integrated, the role of non-bank financial intermediaries, such as asset managers and investment firms, naturally expands into activities traditionally performed by banks. Conversely, several European banks have a strong focus on asset management as part of their business operations. This diversifies the financial landscape by providing alternative channels for financing and risk management, thus supporting the EU's broader economic objectives.

As financial sectors in the EU and across the globe become more integrated, two potential outcomes emerge. On the one hand, integrated markets can allocate risks to areas where they can be managed more effectively or absorbed more readily if they materialise. This could enhance the overall resilience of the financial system. On the other hand, integration can also become a channel of contagion, amplifying and propagating financial shocks across various entities and markets, and threatening overall financial stability. The challenge for policymakers and regulators is to maximise the benefits of effective risk allocation while mitigating the potential for widespread contagion and risk amplification.

There are two possible approaches to achieving effective risk allocation without inadvertently creating channels for contagion. One option is to ring-fence certain entities and activities, thereby closing contagion channels. The alternative is adopting a system-wide approach to regulation, emphasising comprehensive oversight and coordination across all financial actors, including both banks and non-banks.

Ring-fencing was a primary strategy for regulators in response to the global financial crisis. The United States introduced the Volcker Rule, prohibiting banks from engaging in proprietary trading and from owning interests in hedge and private equity funds. Likewise, the United Kingdom implemented ring-fencing regulations, requiring large banks to separate retail banking operations from riskier investment activities. These measures aimed to insulate essential banking activities from potential contagion from other activities. Similar regulations within the EU, as recommended by the Liikanen Report, were not implemented.

An alternative approach to ring-fencing is the system-wide approach to financial regulation, which prioritises comprehensive oversight across the entire financial ecosystem, targeting both entities and their specific activities. A key aspect of this approach is its consideration of the vulnerabilities and risks tied to the business model of each type of entity. For example, while long-term lending exposes banks to liquidity risk, this is less the case for life insurers, which tend to have longer-term liabilities. Consequently, the regulatory framework for banks imposes stricter controls on liquidity risk compared to that for insurers. At the same time, the system-wide approach also considers situations where vulnerabilities and associated risks are independent of the business models of the entities undertaking the activity. For example, if a credit boom drives up property prices and creates household over-indebtedness, macroprudential measures such as restrictions on loan-to-value ratios would need to apply consistently, regardless of whether loans originate from banks or insurers.

The system-wide approach debunks the myth that regulators are trying to impose banking regulation onto non-banks.

The system-wide approach debunks the myth that regulators are trying to impose banking regulation onto non-banks. By combining the traditional perspective of looking at different types of entities with a focus on the activities that banks and non-banks engage in, this approach provides a unified framework based on both micro- and macroprudential regulation. A system-wide macroprudential approach demands consistent regulation of all entities engaging in similar economic activities, proportionate to their actual or potential contributions to systemic risk. This ensures regulatory costs are distributed fairly, discouraging the shift of activities and risks into less regulated or more opaque areas of the financial system.



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Toward understanding the financial stability implication of NBFIs

The growing presence of Nonbank Financial Intermediaries (NBFIs) in the global financial market and the recurrent stress events involving their activities have remained one of the top policy interests for financial authorities over the past several years. The challenge lies in effectively mitigating systemic risks, while preserving the benefits of fueling economic growth through the provision of risk capital. Given the diverse and often opaque nature of NBFi business models, understanding their inherent risks poses supervisory challenges. The market volatility event of last August was a sharp reminder of the need for a comprehensive understanding on the behavior of market participants, including NBFIs, to ensure financial stability.

Effective oversight of these opaque risks requires a proactive, reverse-engineering type of thinking that starts with envisioning an optimal prudential approach. To that end, in an ideal world, supervisors perhaps want to have the following toolkits: (1) a comprehensive understanding of potential contagion channels across asset classes and jurisdictions, (2) a real-time monitoring of these identified channels, particularly concerning hedge fund positions, and (3) enhanced international cooperation to prepare for potential shocks. How far is the current state of play from the ideal?

Firstly, regarding analyses on contagion channels, the FSB and the Basel Committee have made efforts to identify and understand the linkages of banks with NBFIs through leverage and liquidity provision. Nevertheless, our understanding remains far from ideal. For example, potential contagion channels are not fully understood especially for the rapidly growing schemes, such as private credit funds and synthetic risk transfer. In this regard, the Bank of England's recent System Wide Exploratory Scenario exercise, with its game-theoretic approach and engagement with wider market participants, is a well-conceived initiative, which provides us with insights into how NBFIs interact with other market participants. While significant hurdles exist in applying such an approach to capture cross-border channels, the exercise also highlights that enhancing analytical capabilities and international cooperation with the industry is a key to success.

Secondly, concerning real-time monitoring, the gap with the ideal is significant. A major obstacle is data limitations, particularly for private funds. The current available data suffers from significant time lags of several months and necessitates reliance on indirect indicators, such as profit/loss sensitivity to market fluctuations. This reliance on delayed and indirect information poses a considerable challenge to comprehensive and timely risk assessment of their behavior. There are no quick solutions to these data challenges. What we can do is to steadily and diligently address the necessary tasks step by step toward the goal together with financial authorities and private sectors. It is crucial to begin by organizing existing

data and accurately assessing the current state of data access. From there, identify the key data required for effective monitoring, identify specific data collection challenges, and work systematically to address them.

Finally, while the heterogeneous nature of NBFIs' presence and business models across jurisdictions requires a tailored approach, improving global coordination through international cooperation is crucial for enhancing our preparedness for future shocks. For instance, in Japan, where NBFIs account for a relatively small market share of 30%, insurance companies, broker-dealers, and mutual funds are key players. In such a market structure, close monitoring of the liquidity management of such players is essential. In an event of stress, the potential liquidity provision via banks to the market may be one possible prudential response. However, given the influence of globally active investment funds and other NBFIs, cross-jurisdictional coordination is indispensable. For instance, given the increasing presence of global investment funds in the real estate market in Japan, their portfolio rebalancing activities could lead to significant market price corrections triggered by overseas developments.

Effective assessment requires NBFi data and international cooperation.

As NBFIs continue to expand their footprint, financial authorities in major jurisdictions need to enhance international cooperation more than ever before. Again, collaboration with industries is a key to success. The Bank of Japan will commit to contributing to the development of an ideal prudential policy through research and active engagement in international discussions.



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Enhancing financial stability through system-side exercises

The Bank of England's system-wide exploratory scenario (SWES) exercise, published late last year, is the first of its kind globally. It marks a key step forward in enriching our understanding of the resilience of the UK financial system. The system-wide approach also holds important lessons for improving risk surveillance for non-bank risks.

The focus was on core UK sterling markets – crucial for financial stability and the channelling of finance to households and businesses. Importantly it was not a test of individual institutions – we wanted to do something with the industry, not to them. More than 50 banks, central counterparties (CCPs), insurers, and all types of funds and pension schemes involved in core UK sterling markets participated in the SWES. This enabled us to test – not just assume – these participants' behaviours in stress, and the drivers behind those behaviours. We designed the scenario to play out daily over two weeks, and the SWES itself to run over two rounds. This allowed us to see two sides of trades and add up the market flows.

In the scenario, sharp increases in risk-free rates and credit spreads, combined with falling asset prices cause significant losses for many SWES participants. Amongst the wealth of findings from the exercise, four financial stability conclusions stood out.

First, financial participants' collective actions amplified the initial shock. The SWES demonstrated market participants' actions may be prudent individually, but collectively can produce procyclical outcomes. We saw that non-banks often quickly seek to rebuild buffers, including headroom over regulatory requirements, leading them to act in ways that can drain liquidity and cause the initial shock to cascade to other parts of the system.

Second, actions taken by UK authorities and market participants have improved gilt market resilience. Following the SWES shock, reported gilt sales were broadly balanced by purchases, suggesting that gilt market resilience has increased since the LDI episode in late 2022.

Third, repo market resilience is central to supporting core UK markets. The SWES demonstrated the centrality of the gilt repo market in helping to absorb the impact of the shock, but that its capacity in stress is limited. Many firms in the SWES rely on repo to manage liquidity or monetise assets. But banks were at times unwilling to provide additional repo financing or roll maturing repo, despite their capacity to do so. The Bank of England recently launched a contingent non-bank institution repo facility (CNRF), which is a discretionary backstop open to eligible pension funds, insurers and LDI funds to support gilt market functioning in the event a stress poses risks to financial stability.

And fourth, the sterling corporate bond market comes under severe pressure. Corporate bonds are sold in a correlated and relatively price insensitive way in the SWES. The speed of selling in the sterling corporate bond market exceeds purchasing capacity. This dynamic in the sterling corporate bond market could impair its effectiveness as a source of liquidity for financial institutions and, if it were to persist, financing for the real economy. UK authorities are planning to take actions to better understand and mitigate some of these risks.

More broadly, the SWES revealed mismatches in expectations between firms that would not have been visible via sector-specific exercises, or would have only become visible to regulators and firms during an actual stress event. Looking at these insights, the SWES exercise proves itself a valuable surveillance tool for the Bank of England and firms alike in understanding and mitigating systemic risks ex ante.

Applying a system wide lens is a new and effective way to identify non-bank risks.

For other authorities that may wish to conduct similar exercises as part of their surveillance of the financial system, I would encourage them to consider three design features: (i) take into account complex firm behaviours, by actively engaging firms; (ii) be collaborative – participants have a lot of expertise to offer; and (iii) capture dynamic interactions, via the number of rounds or other features, and through feedback to participants about situations where their expectations may not be met.

We believe there would be benefits of conducting similar exercises internationally to enhance data quality and surveillance capacity. The Bank of England is already working with international partners, and we would be happy to share further insights with anyone that is interested.



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Taking a macroprudential approach to the NBFI sector: progress and challenges

Since the global financial crisis, a major evolution in the financial system worldwide has been the growing importance of non-bank financial intermediation (NBFI). Nowadays, it represents 49.1% of total global financial assets, according to the Financial Stability Board. The NBFI ecosystem is heterogeneous and includes a diverse set of financial activities and entities, (e.g. investment funds, family offices, pension funds, insurance companies, and other non-bank entities).

Like all forms of financial intermediation, these entities can carry financial vulnerabilities, which can contribute to a build-up of systemic risk. To better address the risks surrounding the NBFI sector (e.g. liquidity mismatches and excessive use of leverage), taking a macroprudential approach, which comprises tools and methods to prevent and address system risk, is essential. However, given the wide range of entities and activities that the NBFI sector covers, replicating the approach taken for the banking sector is not a valid option. Moreover, a macroprudential perspective on NBFI needs to embrace both an entity- and activity-based approach.

Some NBFI entities are already regulated, for instance insurance companies and a variety of investment funds. Investment funds' current regulatory framework, however, concentrates on investor protection and market integrity. To build resilience ex ante, these microprudential frameworks need to be complemented to include the potential impact that non-banks have on the broader financial system and the overall economy.

Lastly, addressing the NBFI sector vulnerabilities would not only make it more resilient, but also limit risks facing the banking sector, due to their increasing interconnectedness.

Given its deeply rooted interest in financial stability, the Eurosystem contributed a common response to the targeted consultation on macroprudential policies for NBFI conducted last year by the European Commission.

First, the Eurosystem response argues in favour of a swift implementation of the international reforms for regulating NBFI that have recently been agreed (i.e. FSB recommendations regarding money market funds and open-ended funds resilience).

Furthermore, the Eurosystem proposes the introduction of an explicit macroprudential tool to mitigate the risks that can arise from structural liquidity mismatch in Open-Ended Funds (OEFs) ex ante.

In addition, a vast majority of respondents to the Commission consultation – including the Eurosystem, but also the industry – shares the view that European system-wide stress testing

would be useful. Indeed, such tests seek to explore the response of a diverse set of market participants to adverse shocks and the potential implications of such collective responses for the functioning of core markets. Therefore, they allow for a better understanding of the propagation of shocks.

They can also help to identify remaining data gaps: data are a critical enabler for assessing potential vulnerabilities in the NBFI sector. While various authorities across Europe are collecting data, existing mechanisms for accessing and sharing data are insufficient.

Finally, an effective governance framework is an important building block for strengthening the macroprudential perspective in the regulation of NBFI. This can be achieved, in Europe, by enhancing the mechanisms for coordination between authorities. Adopting similar macroprudential policy measures across jurisdictions where needed, via reciprocity, should be a key element of this. An additional mechanism would be to grant the responsible authority, the European Securities and Markets Authority in the Eurosystem proposal, (“top up”) powers to request the implementation of macroprudential measures – in collaboration with national authorities and after consulting with the ESRB – if there is a need to do so.

To address the risks surrounding the NBFI sector taking a macroprudential approach is essential

In this context, the Banque de France and the Autorité de contrôle prudentiel et de résolution (ACPR) are actively involved in initiatives to develop a macroprudential approach to NBFI. In particular, together with the AMF, we are launching a pilot, bottom-up system-wide exercise to assess how market participants react to adverse shocks and how their collective actions might affect system-wide risk. We also strongly advocate for prompt progress in sharing existing data, a prerequisite to better apprehend and closely monitor the developments in this sector. Lastly, since NBFI stakeholders are an important source of financing, we argue that strengthening the sector's resilience is complementary to the progress of the Savings and Investments Union, and we must be careful not to oppose these two agendas.



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How money market funds and NBFIs shape the economy

Non-Bank Financial Institutions (NBFIs) have become increasingly important in the global financial system. They encompass a wide range of financial entities, including insurance companies, pension funds, hedge funds and money market funds (MMFs). Unlike banks, NBFIs do not engage in banking activities such as accepting deposits or providing loans. Instead, they offer specialised financial services that complement the banking sector. MMFs are investment funds that invest in short-term, high-quality debt securities. They provide an efficient means for institutional and retail investors to access short-term funding markets and low-cost short-term financing to the public and private sector.

MMFs are a type of mutual fund that invests in short-term, high-quality debt instruments such as Treasury bills, commercial paper and certificates of deposit. They operate by pooling funds from multiple investors to purchase a diversified portfolio of short-term securities, thereby spreading risk and providing liquidity. Shareholders share pro rata in the income earned on the pool of assets.

MMFs aim to provide investors with a safe place to invest easily accessible, cash-equivalent assets at a market-based yield. MMFs began in the United States in the 1970s as an interest yielding alternative to bank deposits. In Europe, MMFs have grown significantly over the past few decades, becoming a crucial component of the financial system. Today, EU MMF assets total in excess of € 1.1 trillion, with over half invested in low volatility net asset value (LVNAV) MMFs and the remainder in variable net asset value (VNAV) and Constant Net Asset Value, Public Debt MMFs. European MMFs are issued mainly in euro, sterling, and US dollars.

LVNAV MMFs have become a fundamental vehicle for cash management for an array of investors, such as corporates, local authorities, insurance and pension funds, higher education, charities and local governments. They are a valued product (representing more than half of EU MMF assets) that has served investors, issuers, and markets incredibly well since their inception.

MMFs play a vital role in providing liquidity to the financial system. By investing in short-term debt instruments, MMFs offer issuers, such as corporations and governments, a reliable source of short-term funding. This liquidity is essential for the smooth functioning of financial markets and the broader economy.

MMFs also contribute to the development of capital markets by enhancing market efficiency and stability. By providing a liquid and low-risk investment option, MMFs attract a broad range of institutional and retail investors. This increased participation helps deepen capital markets and improve liquidity, which is particularly important during periods of market volatility or stress.

The regulatory environment for MMFs in Europe has evolved significantly in recent years. Following the global financial crisis of 2008/9, the EU adopted a dedicated regulatory regime for MMFs that enhanced the safety and resilience of MMFs and provided immediate and observable benefits during the turbulent markets of March 2020, caused by the COVID-19 Liquidity Crisis. Although the short-term funding markets experienced significant challenges then, MMFs proved incredibly resilient; no MMF needed to suspend redemptions or impose fees and/or gates in 2020, nor when facing a raft of other once in a lifetime market dislocations, such as Russia's invasion of Ukraine with its cataclysmic effects on energy prices, global inflation, and interest rates.

The development of NBFIs, particularly MMFs, has significantly improved the financing of economies.

Notwithstanding the successful management of MMFs, the data does support the argument for specific reform enhancements which could be implemented to enhance the safety and resilience of MMFs. For example, the delinking of minimum liquidity thresholds and the imposition of liquidity management tools will allow MMFs to utilise all their available liquidity as intended. We are supportive of a data-driven approach to regulation that will enhance the safety and resilience of MMFs and allow the existing MMF structures to continue, including the stable NAV feature of LVNAVs.

The development of NBFIs, particularly MMFs, has significantly improved the financing of economies and contributed to the development of capital markets in Europe. MMFs provide essential liquidity to the financial system, support short-term funding needs and enhance market efficiency and stability. Looking ahead, the MMF sector is expected to continue growing, driven by demand for safe and liquid investment options. However, challenges remain, including the need to balance regulatory requirements with the need for innovation and competitiveness.



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Non-bank financial intermediation: Which improvements to manage the risks?

Obviously securities regulators and prudential supervisors are fully legitimate in reflecting upon reducing the potential systemic risks embedded in financial markets. When identifying market participants, they make a clear distinction between banks and non-banks. Furthermore, regulators and supervisors have more recently recognized that, among Non-Bank Financial Intermediation entities (i.e. NBFIs), various types of players and products co-exist, in particular Regulated NBFIs (such as Regulated Asset Management Companies and Regulated Funds) as well as Non-Regulated ones (such as Archegos, which appeared not to be scoped by the US Investment Advisers Act).

Overall, today, where do the main systemic risks lie (apart from the banking area) in the non-banking area and how to tackle them?

First of all, among NBFIs as entities, the danger is centrally where the entities are not identified by regulators or supervisors: from that basis, they can act on financial markets without any prior licensing or further monitoring of their consolidated activities by regulators or supervisors. Such non-identified NBFIs, by not being regulated, may develop without any early notice by regulators or supervisors.

Second, among those non-identified NBFIs, it is where they develop significantly leveraged activities (being through either borrowing or use of derivatives) that the top systemic risks arise. It was typically the case for Archegos, which cumulated a non-regulated status with highly leveraged activities. Their banking counterparties on OTC markets were interacting with them (in the limits of information they received from them and partial visibility they had from their activities), but no regulator or supervisor was consolidating their activities and positions. In fact, regulators and supervisors may benefit from the potential capacity to have an overall view of activities on financial markets, but only if they receive reporting from market participants - which is not the case for non-regulated ones. They may initiate targeted investigations too (including towards non-regulated entities), but with various legal limitations depending on jurisdictions.

We are therefore providing for a few suggestions regarding possible further regulatory actions:

- Enlarge the spectrum of NBFIs covered by regulatory frameworks. In the EU, Regulated Asset Management Companies and Regulated Funds are already fully known by regulators, through upfront licensing as well as reporting obligations, which allow for a consolidated and exhaustive view of their activities - including on OTC markets. That reporting by regulated asset management companies and regulated funds is even enhanced in the eurozone, through

a dual reporting to securities regulators as well as central banks. Following a similar approach for categories of currently non-regulated NBFIs would obviously reduce the non-identified systemic risks that they may represent for financial markets;

- Prioritize the regulatory actions on the use of High Leverage by Non-Regulated NBFIs. For instance, within the current EU regulatory framework applicable to Regulated Funds, in case of significant leverage (i.e. above 300% of Net Asset Value), enhanced reporting to regulators is required. For currently Non-Regulated NBFIs, there is no similar reporting to regulators or supervisors;
- Exercises like System-Wide Exploratory Scenarios, such as the one carried out in the UK recently, may also contribute to bring supervisors with a better view of market participants' activities and related systemic risks. They might be successfully replicated in other jurisdictions, including in European ones - as long as being done reasonably and proportionally;
- On OTC markets, the recent enhancement of counterparty risk assessment Guidelines by the BCBS is definitely welcome, but its implementation should be prioritized vis-à-vis non-regulated NBFIs, as their activities are not consolidated by supervisors or regulators (contrary to regulated NBFIs);
- Last but not least, more widely, a better data sharing between regulators and supervisors at national levels as well as on a cross-border basis would definitely improve that consolidation of knowledge and monitoring of what happens on financial markets overall.

Prioritize the regulatory actions on the use of High Leverage by Non-Regulated NBFIs.

Through those non-exhaustive types of regulatory and supervisory actions, regulators and supervisors would definitely improve their monitoring of potential systemic risks embedded in the least known side of the NBFI market - to the ultimate benefit of Regulated NBFIs and their clients.



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NBFI risks require a multifaceted response

According to the European Commission, around 41% of EU financial assets – just over EUR 42 trillion – are held by non-bank financial intermediaries (NBFIs). Globally, FSB data shows this share to be even higher at 49%, representing almost USD 240 trillion as of the end of 2023, a figure that has doubled in just over a decade. Diverse sources of finance are positive for the European economy’s resilience but the fact that NBFIs have contributed to some of the recent stresses in the financial sector tells us that this rapid expansion brings new risks too.

NBFI is a broad term that encompasses a diverse range of firms, from highly regulated insurance companies through to some lightly regulated funds or entities. The regulatory focus is rightly on those entities outside of comprehensive regulatory frameworks, such as Solvency 2, MiFID or the AIFMD, where some NBFIs have features that can weaken financial resilience. Regulators have found that excessive leverage, liquidity mismatches or interconnectedness can cause an economic shock to be amplified in the financial system, rather than absorbed by it. The issue is complex because the actions that cause this amplification may be rational. As the Bank of England’s System Wide Scenario Assessment (SWES) noted, firms take actions that are individually prudent but “collectively...can result in procyclical outcomes”.

How, then, should EU policymakers respond to these risks? The starting point must be to increase transparency. If risks have moved within the financial system, then the market and policymakers need to be sighted, and risks need to be subject to appropriate regulation. A lot of data is already reported in the EU, including by NBFIs. Policymakers should review if there are gaps and if that’s found to be the case, seek more data from NBFIs directly. This should also involve making sure that reported derivative and Securities Financing Transaction (SFT) data is used effectively and shared with relevant authorities, including those with a macroprudential remit. This requires join up and coordination between EU authorities. Given that NBFI markets are global, efforts should also be made to share more data internationally.

Another area where transparency can be improved is private disclosures between leverage users and their leverage providers, which can vary in depth and quality. Promoting consistency – ideally through best practice – will give banks better sight of a counterparty’s risk profile and support risk management.

Better information about NBFI risks allows targeted interventions. While strong bank counterparty risk management is vital, it cannot be the whole solution to dealing with risks originating from outside of the banking sector. Targeted and proportionate interventions are needed.

Yield buffers on Liability Driven Investment (LDI) funds or the leverage limits that can be imposed on alternative investment funds under the AIFMD are examples of entity-level interventions that respond to clearly identified sources of risk and the entities exposed to them. This is a good model for intervention that avoids penalizing lower risk firms or banks. Addressing procyclicality is challenging but the EU should consider the output of the international workstreams on increasing NBFI margin preparedness and the transparency and responsiveness of initial margin in centrally cleared markets.

**Diversity of finance is positive
but the rapid expansion of
NBFIs brings new risks too.**

Beyond this, the Bank of England’s SWES exercise warrants reflection. It was not a stress test but a system level assessment, which yielded important, qualitative insights. The EU should consider if a similar method can be developed that focuses on better understanding behavior.

Finally, we cannot ignore the elephant in the room. Banks play a vital intermediation role that helps absorb market shocks. Post-GFC regulation has weakened this, potentially increasing market volatility. In the US, the Fed has said that it plans to review the Supplementary Leverage Ratio to support Treasury market functioning. As with every market evolution, the expansion of NBFI needs to be accompanied by a firm understanding of the implications for financial stability; if banks have retreated from certain activities because of regulation and this has weakened the resilience of the system, then this needs to be addressed at source.